6.0 LANDSCAPE

6.1 Introduction

- This section addresses the likely impact of the proposed development on the immediate and wider landscape. There are two aspects to this assessment; firstly the physical impact of the proposed treatment works upon the estuarine landscape of the River Bandon; and secondly the visual implications of the development in terms of the potential visual intrusion when viewed from properties and public amenity areas within the visual range of the proposed development (see Figures 6.1 to 6.6 and Plates 10 to 18).
- A process involving site surveys, desktop study and photographic surveys of the area has been used to assess the proposed development site. Potential impacts were identified and assessed in terms of their significance and magnitude.
- 6.1.3 Methods of mitigation to resolve both forms of impact are addressed and the residual impacts described.

6.2 The Existing Landscape Context

Strategic Landscape Designations

- 6.2.1 The proposed waste water treatment plant's situated to the west of the urban area of Kinsale on the northern bank of the River Bandon (Figures 6.1 and 6.2). The River Bandon estuary is an area of high quality landscape character and has been designated as an area of visual scenic importance within the South Cork Development Plan 1996. Due to the visual importance of the area it has a long list of planning designations:
 - ♦ The Bandon valley and river mouth are listed in the inventory of Outstanding Landscapes of Ireland (1997)
 - The western side of the Kinsale marsh and the northern riverbank west of the marsh area designated as scenic coastline as are the southern banks of the River Bandon.
 - ♦ The site also lies within certain views designated as important viewpoints (County Cork Development Plan). The relevant views are: from Commoge townland (Plate 13), the south-west corner of Compass Hill looking across the marshes to the hillside beyond and the slopes down to the river (Plate 15).
 - ♦ The Inishannon Kinsale coast road (R606) that forms the southern boundary of the marsh has been designated by Cork County Council as a scenic route i.e., views from the route are to be preserved or enhanced.
 - ♦ The South Cork Development Plan 1996 acknowledges that the proposed waste water treatment plant will need to be sited on a level area by the coast, but does not expect the development to cause a significant visual impact.

Landscape Description

- 6.2.2 For the purpose of this assessment the study area is contained within the potential extent of views of the proposed site. This is known as the site's visual envelope (see Figure 6.3). The visual impact assessment and photo-location points are also shown (see Figure 6.4).
- 6.2.3 The character of the landscape within the visual envelope consists of a rolling fertile lowland topography where the dominant landscape feature is the meandering estuary and ria (flooded valley) of the Bandon River. The principal land use is agricultural where the fertile lowlands are enclosed by native hedgerows and tree belts. Recently urban expansion of Kinsale has followed ridgelines where the expansive views across the marshes and the estuary have been exploited.
- 6.2.4 The site is located on the lower western slopes of the high ground, which surrounds the inlet to form a bay. The inlet is a shallow marsh surrounded on three sides by hills. Across the mouth of the bay the Inishannon Kinsale road separates the marsh from the Bandon estuary. The depth of the marsh is controlled by sluice gates and, therefore, is not fully tidal. The marsh also contains man made structures, which affect the shape and extent of the marsh.
- 6.2.5 To the east of the inlet is the prominent headland of Compass Hill. The western slopes of the hill are still agricultural with a well defined pattern of mature hedgerows and tree belts. However, detached residential properties are encroaching along the lower south western slopes and along the ridge of the hill. The eastern margins of the inter opposite the proposed site are covered by dense alder woodland and scrub, which form a major part of the tree cover within the area.
- 6.2.6 Across the River Bandon, 500 m to the south, the land again rises steeply with scrub and bracken on the lower slopes giving way to open pasture and fields on the gentler middle and upper slopes.
- Where the Inishannon-Kinsale road crosses the mouth of the inlet it forms an 6.2.7 embankment, which links the two headlands. To the west of the inlet adjacent to the road there is an existing factory constructed to simple modular form. Now derelict, the building is gradually deteriorating in appearance and detracts from the overall scenic value of the landscape. The waste water treatment plant will be situated on the lower sections of the two large fields to the north-west end of the The remains of a stone wall and broken hedge line containing a large number of mature trees, predominantly ash, separates the site from the marsh. The north west boundary of the site is formed by a thick hedgerow and dense tree line effectively screening all views in and out of the site from that direction. The southwest boundary of the site will run horizontally across the middle of the fields where the gradient of the slope begins to increase as the field rises. The top of the field is bounded by a broken hawthorn hedge and wire fence with occasional trees. A thick high hedgerow forming a solid tree line forms the remaining northeast boundary.

- 6.2.8 The site is split down the middle by a high stone wall, which deteriorates on the lower slopes and is replaced by a line of hedgerow trees.
- 6.3 Impact

The Development Proposals

- 6.3.1 The proposal for a waste water treatment plant to service the Kinsale area are described in the Project Description section of the Environmental Impact Statement. Drawings of the site and landscape proposals are shown in Figures 6.5 and 6.6.
- 6.3.2 The waste water treatment plant comprises a range of holding tanks, aeration basins and clarifiers. These need to be level and require the site to cut into the hillside. To this end, the majority of the treatment tanks are set into the ground and will not intrude much above ground level. The three buildings, the control house, the inlet works/sludge dewatering, and workshop will be single storey and constructed from materials sympathetic to the landscape.
- A new access road will be required to gain entry to the site and will enter the site from the north where an existing lane runs down from Kinsale to the fields above the marsh.
- 6.3.4 The majority of existing trees and hedgerows will be retained on the boundaries of the site and further planting will be carried out as shown in the proposed landscape masterplan (Figure 6.5).

Landscape Impact Assessment

- 6.3.5 The site is located on the boundary of two different landscape types:
 - The marsh to the immediate southeast.
 - ♦ The rolling agricultural lowland with the network of hedgerows and tree belts on the edge of which the site is located.
- 6.3.6 Further still beyond the site are the landscape character types of urban fringe to the north and the estuarine features of the River Bandon to the south.
- 6.3.7 The infrastructure and buildings of the proposed waste water treatment plant would be out of character with the surrounding landscape for the following reasons:
- 6.3.8 The lower slopes of Cappagh where the proposed development would be located are free from any form of development. The buildings encroaching upon the ridge from the north are individual, detached residential properties and therefore of a small scale. The larger scale of the waste water treatment plant will have a negative impact on the agricultural "green field" character of the hillside.
- 6.3.9 The low height of the proposed buildings sunken into the hillside, while allowing the development to remain indiscreet will affect the gently sloping character of the hillside. The predicted landscape impact to the hillside will be substantial.

- 6.3.10 The marshes of the inlet are not entirely free of man made structures and the degree of impact is further offset by the existing negative impact of the adjacent factory on the Innishannon road. Neither the site nor the access road will physically encroach upon the marsh, and the retention of existing hedgerows will help lessen the impact upon the marshes. The predicted landscape impact to the marshes will be moderate.
- 6.3.11 The distance between the proposed development and the urban fringe of Kinsale is buffered by thick hedgerows and small fields. The impact is further reduced due to the intervening land used for sports fields and due to the large scale of the school building. The predicted landscape impact to the urban fringe of Kinsale will be slight.
- 6.3.12 The impact upon the River Bandon estuary is also lessened by the distance and buffering effects of the hedgerows and by the intervening retail premises. The predicted landscape impact to the River Bandon will be slight.

Visual Impact Assessment

Visual Envelope and Criteria for Assessing the Visual Impact

- 6.3.13 The Visual Envelope (Figure 6.3) illustrates the zone of visual influence of the development, that is all the places where the waste water treatment plant would be visible from. It is important to distinguish between visibility and visual impact. For the purpose of this assessment, the visual impact of the development has been carried out in accordance with Volume 11 of the Design Manual for Roads and Bridges 1994 (DoT, 1994) and is divided into four categories:
 - ♦ Substantial adverse impact where the scheme would cause a significant deterioration in the existing view.
 - ♦ Moderate adverse impact where the scheme would cause a noticeable deterioration in the existing view.
 - ♦ Slight adverse impact where the scheme would cause a barely perceptible deterioration the existing view.
 - No change no discernible deterioration in the existing view.

Factors Affecting the Visual Impact

- 6.3.14 The degree of visual impact is affected by a number of different factors:
- 6.3.15 The Scale and Mass of the Development: The mass of the development would be larger than any other buildings in the surrounding landscape. The scale of the development seen in elevation would be relatively minor when seen from above, (as in Compass Hill) the scale would be greater than any existing developments in the area.

- 6.3.16 The Landscape Context. The proposed development has been assessed in relation to its surroundings. The angle of view and relationships to topography and foreground and background elements can affect the degree of impact. Varying the viewpoint can also alter the effectiveness of screening elements, e.g. land form and vegetation.
- 6.3.17 Distance. As a general rule, the greater the distance of the viewpoint from the site the less impact. The elevation of the viewpoint has also been taken into consideration.
- 6.3.18 Observer Group. Whether the observer is moving at speed along a road or receiving direct views from the living room of their home would vary the degree of impact.

Visual Influence

6.3.19 The zone of visual influence is set out in Figure 6.3. It illustrates how the topography of the land is the major element in determining the visual envelope. As this site is set low in a bay the surrounding hills have clear views down to the site. The exception to this would be Cappagh where the slope of the hill would screen the majority of the site. Vegetation, which is retained, also affects the visual influence, as do buildings which screen views to the site.

Visual Impact Assessments from Viewpoints within the Visual Envelope

Figure 6.4 shows the locations of the viewing points

Cappagh

- One farm building and one modern bungalow built halfway up the hillside to the north of the site will have views over the top of the existing hedgerows and directly to the site (Plate 10). The view, which takes in the development site and the marshes across to Compass Hill and the River Bandon, will be significantly changed. The visual impact will be substantial.
- 6.3.21 Five properties along the ridge directly overlooking the field will have views of the site through the existing vegetation, but as the site is so low any trees on the hillside break up the views. The main views are across the inlet to Compass Hill and the River Bandon; the development will be noticeable. The visual impact will be moderate.
- 6.3.22 Properties further back on the hill have no view down to the inlet and therefore will experience no change.

Harbour Heights and Abbeycourt

6.3.23 Ten properties in Harbour Heights, forming the front row facing south, have views across the inlet to Compass Hill, the River Bandon and southern banks (Plate 11). The proposed development will be visible through the existing vegetation, particularly in winter. The visual impact will be moderate.

River Meadows Estate

6.3.24 Views south from the terraces at River Meadows estate are not elevated high enough to have clear views over the existing trees, growing to the north of the site (Plate 12). The development would only be visible through the trees and when the roofs appeared above the tree line. The housing north of River Meadows does not have views to the site. The impact for River Meadows is moderate; all housing behind will experience no change.

Presentation School

6.3.25 Views from the school look south across the inlet to Cappagh and the River Bandon beyond. Existing vegetation will provide screening but gaps in the hedge and tree line will make the site noticeable. The visual impact is moderate.

Ballinacubby Estate

6.3.26 Properties within this estate and the streets beyond have no clear view of the site and experience no change.

Compass Hill

- 6.3.27 Eight properties situated at the southern end of Compass Hill (Plate 13), including several catering for bed and breakfast, have views across the inlet to the site. Newly developed properties on the lower slopes have partially screened the view for properties behind and will experience the greater impact (Plates 14 & 15). The impact for these properties is substantial.
- 6.3.28 The road around Compass Fill is a tourist route and is highly appreciated by residents and tourists for its amenity value (Plate 15). There are a number of benches on the route and the impact to the pedestrian user will be substantial, to the car user the impact will be moderate due to the transient nature of the viewpoint and screening effects of roadside vegetation.
- 6.3.29 One property with a clear view to the site on Compass Hill (Plate 14) will also experience a substantial impact.
- 6.3.30 On the lower western slopes to the centre of Compass Hill three properties have views over the alder woodland to Cappagh (Plate 16). The woodland does not entirely screen the lower slopes of Cappagh and the development will be partially visible. The impact will be moderate.
- 6.3.31 The views listed from Compass Hill as protected will also experience a substantial impact.

Inishannon Road

6.3.32 The Inishannon Road, recognised as a scenic route offers clear views to the site, particularly as one rounds the base of Compass Hill after passing the new bridge (Plate 17). The low elevation of the viewpoints along the road reduces the potential visual impact, as the development is generally set into the ground. The

factory in between the site and the road further offsets the potential impact. The visual impact is, therefore, slight.

Southern Bank of the River Bandon

6.3.33 The situation for the residents on the north facing slopes of the south bank is similar to those on Compass Hill (Plate 18). The trees in the hedge of the southern boundary offer some screening, as do the trees on the perimeter of the marsh. The effects of distance are more pronounced so the visual impact would be moderate. The existing factory site, which currently impacts upon the landscape, will offset the negative impact.

6.4 Mitigation

- 6.4.1 The design precedent for the mitigation proposals (Figures 6.5 and 6.6) are taken from the surrounding landscape, both to the east of the inlet and southern banks of the River Bandon. This will assist the integration of the scheme within the river environment.
- 6.4.2 To protect the existing trees in the western boundary and extend and enhance the embankment forming the northern boundary, the structures along the top of the proposed scheme could be moved easterly and southerly.
- 6.4.3 The embankment formed by cutting into the hill should be extended to make it shallower, rounded off and graded back into the existing slope.
- 6.4.4 All existing hedgerows and trees should be retained and enhanced, with additional hedgerow tree planting and tree surgery work to existing trees.
- A new hedge should be planted to the northern boundary to continue the field pattern.
- 6.4.6 The southern boundary should be heavily planted with a wooded belt to tie in with stands of trees further to the west of the inlet.
- As stated earlier, the location of the proposed site on the boundary of two landscape types provides the opportunity to undertake transitional planting between the two landscapes. In this case from woodland copse to wetland scrub. Alder and willow planted along the margin of the sewage works site adjoining the marsh would reflect the woodland on the far side. The access road should also be screened by alder woodland, thus the top of the marsh will be linked with a belt of woodland.
- 6.4.8 Planting on the northern side of the access road will tie in with tree cover in the hedgerows and screen the road.
- 6.4.9 The wooded theme should be continued on the site in the large areas free from development, and in narrow areas a thorn and hazel scrub should be planted. The scrub could be coppiced on a rolling programme to retain a vigorous and neat appearance.

- 6.4.10 This type of vegetation is typical of the Bandon River corridor and precludes the use of extensive mown grass areas, which would only emphasise the man made structures and appear incongruous within the arable field pattern.
- 6.4.11 The colour and surface treatment of the infrastructure and buildings should be selected to tone with the proposed woodland scheme. Special attention should be paid to the roofs of the buildings.

6.5 Residual Impact

- 6.5.1 Within 10 years of the establishment of the woodland planting the visual impacts from the various viewpoints will be reduced as follows:
- 6.5.2 The alder and willow wetland scrub will have achieved a substantial height to effectively screen the site from the marsh, lower slopes of Compass Hill and the Inishannon Road. From these viewpoints the visual impact will be reduced to no change.
- 6.5.3 From Cappagh, Harbour Heights, River Meadows, and Presentation School the hedgerows and woodland planting will be effective in screening the site and the visual impact from the above will be reduced to no change.
- 6.5.4 From the viewpoints on Compass Hill views into the site cannot be screened, however the hazel and thorn scrub will help to break up the regular features of the infrastructure, and thus reduce the perceived scale and mass of the development reducing the visual impact to moderate.
- 6.5.5 In 20 years the woodland planting will have reached a state of maturity that will benefit the ecology and be an attractive element within the river environment.
- All views of the sewage treatment works will be screened except from Compass Hill where the proposed woodland will compensate for the partial visibility of the site. The visual impact will be reduced to slight.

























