

12. LANDSCAPE AND VISUAL IMPACT

12.1 Introduction

The overall landscape character of the site and its surroundings can be determined as a result of the relationship between landform, landcover, landscape elements and climate.

Landscape is never static and is in a constant state of change. Change results from both natural processes and human activities. All landscapes have a relative sensitivity to change, which is known as 'landscape capacity'. The introduction of a new feature into an existing landscape (even if the impact is of a temporary nature) inevitably brings about some degree of change.

The capacity of the landscape to accommodate change, without deterioration or loss of its essential landscape character and quality, is as varied as the range of different landscape types themselves. Assessing the impacts of such change requires a clear understanding of the landscape character of the study area and its surrounding landscape.

The existing landscape character of the area and its environs is central to the issue of identifying whether or not a particular landscape can accommodate the proposed development without detriment. The study concentrated on the landfall and Sruwaddacon crossings, as field facilities and the pipeline are entirely underwater, or buried onshore.

12.2 Study Methodology

A landscape and visual assessment of the proposed Corrib landfall forms an integral part of the EIA of the proposed development.

The landscape and visual impact assessment assesses the following:-

1. Landscape impacts, including:
 - direct impacts upon specific landscape elements within and adjacent to the landfall and crossings;
 - effects on the overall pattern of the landscape elements which give rise to the landscape character of the area and its surroundings; and
 - impacts upon any special interests in and around the area.
2. Visual impacts:
 - direct impacts of the landfall upon views in the landscape; and
 - overall impact on visual amenity.

As a matter of best practice, the assessment has been undertaken in accordance with the advisory guidelines set out in the document-"Guidelines

for Landscape & Visual Impact Assessment”, published by The UK Landscape Institute and Institute of Environmental Assessment (1995).

Both the landscape and visual assessments include baseline studies which describe, classify and evaluate the existing landscape and visual resources, focusing on their sensitivity and ability to accommodate change.

The assessment was undertaken in July 2000, and information was gathered from the following:

- consultations with the client regarding the landfall and Sruwaddacon Bay crossing proposals; and
- site visits and fieldwork to confirm data derived from available mapping and to identify and assess potential impacts.

In conjunction with the landscape survey and assessment of the study area, a visual survey has been undertaken in order to assess the potential visual impact of the proposed landfall and Sruwaddacon crossings. If the landscape is to absorb the development successfully, it must be integrated in a way that protects, and where possible enhances the visual appearance of the landscape.

In order to determine the critical viewpoints of the landfall and the crossings, whether in the immediate locality or further afield, a survey along the beach was undertaken. The principal, and most minor roads within the surrounding area were travelled. Particular attention was paid to the existing residential properties and public open spaces.

It should be noted that the visual survey was undertaken during the summer. During the winter months, there will be a reduction in deciduous vegetation, however, the local landscape comprises essentially evergreen vegetation.

12.3 Receiving Environment

12.3.1 Offshore

The Corrib Field is beyond the horizon and the facilities are all underwater. Therefore, there will not be any impacts upon those views from the coast designated as ‘Highly Scenic Views’ within the Mayo County Development Plan 1992.

12.3.2 Nearshore

The landscape character of the nearshore area of Broadhaven Bay is one of wild, exposed, windswept shoreline, with a small number of sandy bays separated and contained by steeply rising boulder clay hills.

The views across the nearshore have been designated as ‘Highly Scenic Views’ within the Mayo County Development Plan 1992. The overall character of the coastline is one of a large scale exposed landscape/seascape,

a balanced and harmonious area of high scenic value. It is a constantly changing landscape, with constant activity including tidal and boat movements.

12.3.3 Landfall and Sruwaddacon Estuary

The landscape character of the area, within which the Corrib pipeline landfall is proposed, is essentially an expansive and exposed landscape, with distant panoramic views available. The views across the estuary have been designated as 'Scenic Views' within the Mayo County Development Plan 1992. Views are essentially long distance in all directions towards the open sea or inland towards the surrounding mountains. The landscape character at the proposed landfall location comprises a wide sandy beach, with frequent outcrops of low level rock. The rear of the beach is defined by a low (2-3 m high) 'cliff' composed of boulder clay with the crest of the cliff vegetated with marram grass. Behind the cliff, the land cover is composed of a number of differently sized fields of gently sloping improved grassland.

From the proposed landfall point, the pipeline route is aligned in a south-easterly direction, across the fields to the rear (south) of an extensive dune grassland system, well vegetated with marram grass. After passing through the grassland, the route continues towards the mouth of Sruwaddacon Bay, crossing a field of wet marshy grassland before entering the estuary in close proximity to an area of saltmarsh. The downstream crossing of the Sruwaddacon estuary will cover a distance of 450m in a south-easterly direction.

Immediately after crossing the Sruwaddacon, the proposed pipeline will cross a further low boulder clay 'cliff', close to an area of saltmarsh vegetation, before passing into a large field of semi-improved grassland. The pipeline route continues essentially in a south-easterly direction adjacent to the northern shore of the estuary, crossing numerous fields of improved grassland and blanket bog. (A detailed description of the proposed pipeline corridor is included in **Section 19** to this EIS). After a distance of approximately 3.4 km, the route turns due south to cross the upstream section of the Sruwaddacon estuary. The northern shoreline is composed of semi-improved grassland and the southern shore is vegetated by a narrow strip of saltmarsh vegetation backed by an extensive area of coniferous plantation. The upstream crossing of the Sruwaddacon will cover a distance of approximately 250 m.

12.4 Characteristics of the Proposed Development

12.4.1 Drilling

Drilling activities will be located beyond the horizon, therefore, there will be no impact on the landscape character.

12.4.2 Field Facilities

These will all be situated on the seabed at approximately 350 m water depth; consequently, there will be no impact upon the landscape character.

12.4.3 Pipeline, Umbilical and Discharge Pipeline

The pipeline will terminate in a special underground facility a short distance behind the actual landfall location. The facility will contain an 'isolation valve', and will be located within the area behind the landfall before the downstream Sruwaddacon crossing, where access can be arranged to have minimal impacts.

The facility will be an enclosure set below the ground and will measure approximately 6 m x 6 m x 3 m depth. Above ground, the facility will be protected and defined by a security fence, which will incorporate an anti-climb device on the top. The security fence will be finished in a colour coating that will blend with the local landscape and screened with planting if appropriate.

12.5 Potential Impacts of the Proposed Development

12.5.1 Offshore

Drilling activities will be located beyond the horizon, therefore, there will be no landscape or visual impacts.

12.5.2 Nearshore

During the period of construction, there will inevitably be a significant increase in activity in the nearshore areas within Broadhaven Bay, including the mooring of a large pipelay vessel, workboats etc. The introduction of these vessels will result in short term, but significant, visual impacts on 'Highly Scenic Views' into the usually quiet Bay.

12.5.3 Landfall and Sruwaddacon

12.5.3.1 During Construction

At the landfall location, the proposed development will only impact the landscape in the short-term, during construction and for a short period afterwards. The pipeline will be buried throughout its onshore length.

In the vicinity of the landfall location, the principal landscape features which will be affected by the proposed development, will be the beach itself, the boulder clay 'cliff' to the rear of the beach and the improved grassland where the underground isolation valve is located. During the construction period, the disruption to the beach and the subsequent impact on the beach will be the most significant. The earthworks associated with the

construction of the landfall trench and valve station will result in short term significant landscape and visual impacts upon 'Scenic Views'.

At both the upstream and downstream crossings of the Sruwaddacon, the excavation works for the pipeline will require the localised removal of existing vegetation along the shoreline of the estuary. This vegetation will be retained as far as possible for subsequent reinstatement. The earthworks associated with the construction will cause temporary, but significant landscape and visual impacts upon 'Scenic Views'.

12.5.3.2 *During Operation*

Following the reinstatement of the landfall site, pipeline corridor and estuary crossing points using appropriate techniques, no impacts on the landscape during the operational life of the development are anticipated as everything will be buried.

The only long term visual impact will be from the wire mesh security fencing which surrounds the proposed underground facilities installation in the fields to the rear of the landfall location. The fencing will be an incongruous feature within the local landscape and will be screened with shrubs if necessary.

12.6 Do-Nothing Scenario

If the proposed development does not proceed, the landscape character, which is generally open and exposed with distant panoramic 'Highly Scenic Views' and 'Scenic Views', would remain unaltered.

12.7 Mitigation Measures

12.7.1 *Offshore*

There will be no landscape or visual impacts from the offshore facilities, therefore, no mitigation measures are proposed.

12.7.2 *Nearshore*

There will be some visual impacts from the nearshore activities, as a result of the activity of large lay barge vessels. However, it is not possible to mitigate the impact of these short term, temporary, impacts and therefore, no mitigation measures are proposed.

12.7.3 *Landfall and Sruwaddacon*

One of the objectives of reinstatement of the landfall construction site and estuary crossings is to return the visual integrity of the landscape, as closely as possible, to its previous condition. Over the past twenty years, reinstatement techniques at sensitive landfall locations in similar conditions

to those evident at Broadhaven Bay have evolved and improved, so that high standards can now be achieved.

The proposed development will include the construction of one special facility close to the landfall site. This feature will be housed within an underground chamber, and surrounded by security fencing. The security fence will be finished with a colour coating that will blend into the surrounding landscape (dark green/dark brown).

12.8 Predicted Impact of the Proposed Development

12.8.1 Offshore

There are no predicated impacts with regard to landscape and visual impacts from the offshore facilities.

12.8.2 Nearshore

The predicated impacts of the nearshore activities, including the temporary mooring of large lay barge vessels, workboats, etc., will result in visual impacts on 'Highly Scenic Views' into the usually quiet bay. No mitigation measures can be proposed to reduce the potential for visual impact, however, the impacts will be short-term.

12.8.3 Landfall and Sruwaddacon

The predicted impact associated with pipeline construction and operation on the landscape is as described under potential impacts in **Section 12.5.3**.

12.9 Monitoring

A detailed landfall restoration plan, including monitoring procedures, will be prepared in consultation with Dúchas and Mayo County Council. The procedures will include a pre-construction photographic survey to record ground conditions. The photographs will then be used to assist in designing the reinstatement programme. A two-year monitoring programme is proposed to ensure that areas of reinstated grassland become successfully re-established.

12.10 Reinstatement and Residual Impacts

After construction, the degree and duration of any visual impact will be determined by the nature of the landscape crossed. One of the objectives of reinstatement of the landfall site and the estuary crossings is to return the visual integrity of the landscape, as closely as possible, to its previous condition.

The same objectives would apply at the time of decommissioning of the development. If the pipeline were to be removed, the area would again need to be reinstated.