# 11.0 LANDSCAPE & VISUAL IMPACT ASSESSMENT

# 11.1 INTRODUCTION

This section of the EIS assesses the potential landscape and visual impact of the proposed Islandmagee Storage Project on the landscape and visual resources of the area. The landscape and visual impact assessment report seeks to:

#### (a) Establish the baseline conditions

Record and analyse the existing character, quality and sensitivity of the landscape and visual resource. This should include elements of the landscape such as:

- the landform;
- the land cover including the vegetation, the slopes, drainage, etc;
- the landscape character;
- current landscape designations and landscape planning policies;
- the site visibility (short, medium and long internal and external views).

#### (b) Analyse baseline conditions

Comment on the scale, character, condition and the importance of the baseline landscape, its sensitivity to change and the enhancement potential.

Complete a visual analysis (illustrated by photographic material) describing characteristics, which may be of relevance to the impact of the design and to the method of mitigation.

#### (c) Describe the development

- (d) Identify the Impacts of the Development on the Landscape and Visual Resource Identify the landscape and visual impacts of the development at different stages of its life cycle, including:
  - Direct & indirect landscape impacts of the development on the landscape of the site and the surrounding area;
  - Visual impacts including the extent of potential visibility, the view and viewers effected, the degree of visual intrusion the distance of views and resultant impacts upon the character and quality of views.

### e) Assess the significance of impacts

Assess the significance of the landscape and visual impacts in terms of the sensitivity of the landscape and visual resource, including the nature and magnitude of the impact.

#### f) Propose mitigation

Detail measures proposed to mitigate significant residual detrimental landscape and visual impacts and assess their effectiveness.

### g) Assess acceptability

Assess the ability of the landscape and visual resource to absorb the proposed development.

# 11.2 STATEMENT OF AUTHORITY

RPS Planning & Environment is a multidisciplinary environmental consultancy specialising in Landscape Design, Environmental Assessment, Environmental Auditing, Architectural Design, Acoustics, Air Quality, Ecology and Water Quality. We are one of Ireland's largest and most experienced environmental consultancies. The evaluation of landscape and visual impact is a key aspect of many environmental impact statements, planning studies and feasibility studies that RPS have completed in recent years, for example, numerous mineral developments, road schemes, flood alleviation, housing, recreation, tourism developments. RPS has completed numerous landscape and visual impact assessments for a wide range of relevant developments in UK and Ireland.

# 11.3 METHODOLOGY

The methods used in this assessment are derived from the 'Guidelines for Landscape and Visual Impact Assessment' by The Landscape Institute and Institute of Environmental Assessment (2002). The document recommends baseline studies to describe, classify and evaluate the existing landscape and visual resource focusing on its sensitivity and ability to accommodate change. The guidelines are not intended as a prescriptive set of rules but rather offer best practice methods and techniques of LVIA. The existing landscape and visual context of the study area was established through a process of desktop study, site survey work and photographic surveys. The proposal was then applied to the baseline conditions to allow the identification of potential impacts, prediction of their magnitude and assessment of their significance. Mitigation can then be identified to reduce as far as possible any potential landscape and visual impacts.

### 11.3.1 Landscape Assessment Terminology

The study area has been divided into landscape character areas. Each landscape character area has been assessed in terms of value, quality and sensitivity to change of the type proposed by this development. In this section the key criteria used for the landscape assessment are described.

### (a) Landscape Assessment Definitions

Landscape Resource: The combination of elements that contribute to landscape context, character and value.

*Landscape Value:* The relative value or importance attached to a landscape that expresses national or local consensus because of intrinsic characteristics.

*Landscape Character:* The distinct and homogenous pattern that occurs in the landscape reflecting geology, landform, soils, vegetation and man's impact.

#### (b) Landscape Quality

For the purpose of this assessment, landscape quality is categorised as:

*Exceptional Quality:* Areas of especially high quality acknowledged through designation as AONB's or other landscape based sensitive area. Of landscape significance within the wider region or nationally.

*High Quality:* Areas that have a very strong positive character with valued and consistent distinctive features that give the landscape unity, richness and harmony. Of landscape significance within the district.

*Medium Quality:* Areas that exhibit positive character but which may have evidence of alteration/degradation or erosion of features resulting in a less distinctive landscape. May be of some local landscape significance with some positive recognisable structure.

*Low Quality:* Areas that are generally negative in character, degraded and in poor condition. No distinctive positive characteristics and with little or no structure. Scope for positive enhancement.

#### (c) Landscape Sensitivity

Landscape sensitivity to the type of development proposed is defined as follows:

*High Sensitivity:* High visual quality landscape with highly valued or unique characteristics susceptible to relatively small changes.

*Medium Sensitivity:* Medium visual quality landscape with moderately valued characteristics reasonably tolerant of changes.

*Low Sensitivity:* Low visual quality landscape with common characteristics capable of absorbing substantial change.

#### (d) Magnitude of Landscape Resource Change

Direct resource changes on the landscape character of the study area is brought about by the introduction of the proposal and its effects on the key landscape characteristics. The following categories and criteria have been used:

*High magnitude:* Total loss or alteration to key elements of the landscape character which result in fundamental and / or permanent long-term change.

*Medium magnitude:* Partial or noticeable loss of elements of the landscape character and / or medium-term change.

*Low magnitude:* Minor alteration to elements of the landscape character and / or short-term/ temporary change.

Substantial

No Change: No change to landscape character.

# (e) Significance of Landscape Impact

The level of significance of effect on landscape is a product of landscape sensitivity and the magnitude of change in landscape resource. Where landscape sensitivity has been predicted as high and the magnitude of change as high or medium (or when magnitude of change is high and sensitivity is high or medium) the resultant impact will be significant in terms of EIA Regulations. This is illustrated in Table 11.1.

Table 11.1 Significance of Lanuscape impact				
Magnitude of landscape resource change	Landscape Sensitivity			
	Low	Medium	High	
No Change	No Change	No Change	No Change	
Low	Slight	Slight/Moderate	Moderate	
Medium	Slight/Moderate	Moderate	Moderate/Substantial	

#### Table 11.1 Significance of Landscape Impact

### 11.3.2 Visual Assessment Terminology

High

The following describes the key criteria used in the visual assessment.

Moderate

#### (a) Visual Assessment Definitions

*Visual Quality:* Although the interpretation of viewers' experience can have preferential and subjective components, there is generally clear public agreement that the visual resources of certain landscapes have high visual quality. The visual quality of a landscape will reflect the physical state of the repair of individual features or elements.

Moderate/Substantial

Due to the subjective value of the evaluation there is no comprehensive official process for identifying visual quality. The visual quality of this evaluation has been carried out by one landscape architect and verified by another.

*Visual Character:* When a viewer experiences the visual environment, it is not observed as one aspect at a time, but rather as an integrated whole. The viewer's visual understanding of an area is based on the visual character of visible features and aspects and the relationships between them. The visual character is descriptive and not evaluative.

*Visual Resources:* The visual resources of the landscape are the stimuli upon which actual visual experience is based. They are a combination of visual character and visual quality.

### (b) Viewer Sensitivity

Viewer sensitivity is a combination of the sensitivity of the human receptor (for example resident; commuter, tourist; walker; recreationist or worker) and viewpoint type, location or activity of viewer (for example house, workplace, leisure venue, local beauty spot, scenic viewpoint, commuter route, tourist route or walkers' route). Consideration must also be given to the importance of the view that may be determined with respect to its popularity, designation/protection or by the numbers of people affected. Sensitivity can be defined as follows:

*High sensitivity:* for example users of an outdoor recreation feature which focuses on the landscape; valued views enjoyed by the community; tourist visitors to scenic viewpoint.

*Medium sensitivity:* for example users of outdoor sport or recreation which does not offer or focus attention on landscape; tourist travellers.

*Low sensitivity:* for example regular commuters, people at place of work (excluding outdoor recreation).

#### (c) Visual Resource Change Magnitude

The magnitude of change in visual resource results from the scale of change in the view with respect to the loss or addition of features in the view and changes in the view composition. Important factors to be considered include; proportion of the view occupied by the proposed development; distance and duration of the view. Other vertical or built features in the landscape and the backdrop to the development will all influence resource change. Visual resource change magnitude can be defined as follows:

*High magnitude:* Where changes to the view significantly alter (negative or beneficial) the overall scene or cause some alteration to the view and/or for a significant length of time.

*Medium magnitude:* Where some changes occur (negative or beneficial) in the view, but not for a substantial part of the view and/or for a medium length of time.

*Low magnitude:* Where only a minor alteration to the view occurs (negative or beneficial) and/or not for a significant length of time.

No change: No discernible deterioration or improvement in the existing view.

### (d) Significance of Visual Impact

Significance of visual impact can only be defined on a project by project basis. The principal criteria for determining significance are magnitude and sensitivity of the receptor. A higher level of significance is generally attached to large scale or substantial effects on sensitive receptors.

Where visual sensitivity has been predicted as high or medium, and the magnitude of change as high, (or where the magnitude of change has been predicted as high and the visual sensitivity has been predicted as high or medium) then the resultant impact will be significant in terms of EIA Regulations.

Table 11.2 illustrates significance of visual impact as a correlation between viewer sensitivity and visual resource change magnitude.

Visual resource	Viewer Sensitivity			
change magnitude	Low	Medium	High	
No change	No change	No change	No change	
Low	Slight	Slight/moderate	Moderate	
Medium	Slight/moderate	Moderate	Moderate/Substantial	
High	Moderate	Moderate/Substantial	Substantial	

 Table 11.2
 Significance of Visual Impact

Positive effects upon receptors may also result from a change to the view. These may be through the removal of negative features or visual detractors, or through the addition of well designed elements, which add to the landscape experience in a complementary, positive and stimulating manner.

# 11.3.3 Theoretical Zone of Visual Influence (ZVI)

The visual assessment is assisted by the production of a ZVI. The ZVI is the area within which views of the site and/or the development can be obtained. The extent of the ZVI is primarily determined by the topography of the area.

The ZVI is refined by field studies to indicate where relevant forestry, woodlands, hedges or other local features obscure visibility from the main roads, local viewpoints/landmarks and/or significant settlements and it is through such field studies that prediction of landscape and visual impacts take place.

Using terrain-modelling techniques combined with the specification of the proposal, a map is created showing areas from where the proposed development would be seen. As the ZVI relies on topography the resultant ZVI is a worse case scenario. The ZVI for the proposed development is illustrated in Figure 11.1. Areas within the ZVI are then visited to determine the actual visual impacts.





# 11.3.4 Photomontages

Viewpoints are chosen from which the development will be potentially visible. The points are chosen to give a representative sample of views of the proposed development within the landscape from a range of distances and directions. Viewpoints frequented by members of the public such as public rights of way, car parks and popular viewpoints are usually chosen, along with views from nearby roads.

Six representative viewpoints have been selected around the proposed site. The viewpoints were selected to reflect typical views obtained of the proposed development during construction and operation stages. The viewpoint locations are illustrated in Figure 11.2 while the views are illustrated at the end of this Chapter.

# 11.4 A STATEMENT OF SOURCE MATERIAL

- DOE NI, Larne Area Plan 2010, HMSO;
- DOE NI, NIEA Northern Ireland Landscape Character Assessment; Larne 99/7;
- DOE NI Planning Policy Statement 6 Planning, Archaeology & the Built Heritage; and
- Draft Planning Policy Statement 21 Sustainable Development in the Countryside;
- The Landscape Institute and Institute of Environmental Management and Assessment, Guidelines for Landscape and Visual Impact Assessment, 2002.

# 11.5 BASELINE LANDSCAPE SETTING

### 11.5.1 Landscape and Visual Context

The proposed development is located adjacent to the existing Ballylumford Power Station that is located on Islandmagee, east of Larne and on the eastern shores of Larne Lough. The Power Station and its associated chimney are significant features in the surrounding landscape and are visible over a wide area within Larne Lough and further afield. Larne Harbour is a major seaport with regular ferries and freight ships coming and going creating movement within the landscape. The port activities dominate the eastern side of Larne town and there is little visual link between the town centre and the harbour. The topography rises steeply to the west of the town centre from where longer distant views are available across the harbour and towards the applicant site. Linear development extends south from Larne along the A2 coast road with a small village at Glynn located on the western shore of the Lough that has with east views towards the applicant site. Magheramorne is a small hamlet further south from Glynn also on the A2. The peninsula of Islandmagee lies to the east of Larne Lough and provides shelter to the Lough with a distinctive rounded ridgeline running northwest to southeast. Tall electricity masts cross Islandmagee and are prominent in views from across the Lough. Views within Larne Lough are enclosed by surrounding topography although views length wise along the Lough are available for up to 8km. Distinctive escarpments of the Antrim Plateau define the rising ground to the western shores of the Lough behind Glynn and Magheramorne. Elevated views are available across the Lough from the small number of roads that rise from the low-lying A2 across these western

escarpments. The eastern side of Islandmagee is rugged and scenic in nature with attractive Bays (Browns Bay and Drains Bay) and tall cliffs fact that were historically exploited by Victorians through the construction of the Gobbins Cliff Path. Rural dwellings and farms are prominent and scattered through the landscape surrounding the development site on both sides of the Lough.

# 11.5.2 Landscape Character

The study area can be described by use of two distinctive character area as follows:

- Larne Coastal Landscape
- Elevated Agricultural Landscape
- Larne Urban Landscape

*Larne Coastal Landscape:* The shoreline of Larne Lough rises steeply to form rounded hillsides to the east at Islandmagee and escarpments to the west. The A2 road hugs the western shore of the Lough and is a promoted tourist route as part of the A2 coastal route between Belfast and Londonderry via attractions such as Giants Causeway. The escarpments to the west are frequently wooded in small incised river valleys and form an attractive backdrop to the coastal zone. Ballylumford Power Station is a prominent landmark within this landscape. Tall electricity masts cross the landscape on Islandmagee on its western side. The eastern side of Islandmagee is generally free from conspicuous manmade influences and, with rocky inlets and cliffs, is scenic in nature. This scenic nature is exploited by visitor amenity areas at Browns Bay and Drains Bay. A large quarry at Magheramorne dominates views to the west from parts of Islandmagee. The dominant land use is agriculture but housing is frequent throughout. Vegetation cover is low especially on Islandmagee where scattered housing is conspicuous in views from across the Lough. Larne Lough is tidal with exposed mudflats at low tide that alters the appearance of the landscape on a daily basis.

Overall, this landscape has been assessed as of "Medium" Landscape Quality as it has areas that exhibit positive character but also has evidence of alteration/degradation or erosion of features resulting in a less distinctive landscape with frequent human influences.

Larne Coastal Landscape has a medium sensitivity to change.

*Elevated Agricultural Landscape:* Elevated open countryside extends west of Larne, Glynn and Magheramorne above the escarpment on the western shore of Larne Lough and offers long distance views east across the Lough. The topography undulates with frequent small glens and incised valleys between taller hills such as Black Hill near Glenoe. This landscape is rural in character with upland agricultural land use dominant. Electricity pylons cross this landscape and are a significant man made feature prominent in views from many locations. This landscape consists of small to medium sized fields that are defined by strong hedgerows with trees that provide locally a sense of enclosure but generally this is an open landscape where new development would be prominent. Scattered rural housing and

farmhouses are visible in this landscape particularly when viewed from elevated roads looking across small glens and valleys.

Overall, this landscape has been assessed as of "High" Landscape Quality as it has a very strong positive character with valued and consistent distinctive features that give the landscape unity, richness and harmony.

The Elevated Agricultural Landscape Character Area has a medium sensitivity to change.

*Larne Urban Landscape:* Larne is located on a broad strip of low-lying land on the eastern edge of the Antrim basalt plateau. This low-lying land is narrow, being about 2-3km wide and hugs the shoreline of Larne Lough. This landscape has been heavily developed by man and housing and the harbour development is prominent throughout. The A2 coastal route extends across this landscape offering views east across Larne Lough for much of its length north and south of the Larne. The harbour activities dominate this landscape and are a significant influence on the character of Larne town. Housing spreads west on rising escarpments that offers views east across the town towards Larne Lough. Housing also spread south along the A2 as far as Glynn.

Overall, this landscape has been assessed, as of "Low" Landscape Quality as it has frequent prominent urban infrastructure influences, is degraded and lacks harmony.

The Larne Urban Landscape Character Area has a low sensitivity to change.

# 11.5.3 Planning Designations

This section reviews landscape designations in Northern Ireland relevant to the application site. A brief explanation of these has been given below:

### Areas of Outstanding Natural Beauty

These are designated either under the Amenity Lands Act (Northern Ireland) 1965 or the Nature Conservation and Amenity Lands (Northern Ireland) Order 1985. These cover huge areas of land, embracing a range of landscape types including limestone cliffs, sweeping moorlands and important geological landforms. They also include farmland, forest, lakes, coastline and settlement. They are generally subject to planning conditions. The proposed site does not lie within an area designated as an AONB.

The neatest AONB to the proposed site is the Antrim Coast and Glens AONB. The Antrim Coast and Glens AONB is located at its nearest 4.4km north west of the proposed site. The Larne Area Plan 2010 describes the Antrim Coast and Glens AONB as "a landscape of exceptional value which must be protected from inappropriate forms of development".

### Larne Area Plan 2010

Development Plans set out the broad land-use and policy framework for the physical development of designated areas for a specified duration of time. The site is located within

the Larne Borough Council Area. Accordingly the relevant development plan is the Larne Area Plan 2010. The contents of this document have been assessed to establish whether there are any landscape designations relevant to the assessment.

# Countryside Policy Area (CPA)

According to the Policy NV4 of the Larne Area Plan 2010 the entire Islandmagee Peninsula is designated as a Countryside Policy Area. These areas are established through the development plan process to, inter-alia;

- safeguard the countryside from inappropriate development;
- protect areas under pressure from development,
- protect the visual amenity of areas of landscape quality; and
- maintain the rural character of the countryside.

Larne Area Plan 2010 states that the Islandmagee Peninsula and the countryside to the south and southwest of Larne town outside the Green Belt are under threat from excessive or inappropriate development that could adversely affect their rural character.

Development proposals within Countryside Policy Areas will be assessed against prevailing regional policy. At present prevailing policy relating to CPA designation is currently contained within *Draft Planning Policy Statement 21 – Sustainable Development in the Countryside.* This replaces those relevant policies contained within the *Planning Strategy for Rural Northern Ireland.* Policy CTY 1 of draft PPS21 states that planning permission will be granted in the countryside for industry and business uses in accordance with PPS4 – currently under review.

### Local Landscape Policy Areas (LLPA)

*Planning Policy Statement 6 – Planning, Archaeology & the Built Heritage,* asserts that Local Landscape Policy Areas will be designated at those locations considered to be of greatest amenity value, landscape quality or local significance and therefore worthy of protection from undesirable or damaging development. Typically, these may include among other features, archaeological sites and their surroundings, attractive vistas, localised hills and other areas of local amenity importance.

There are no Local Landscape Policy Areas designated by the Larne Area Plan 2010.

### Historic Parks, Gardens and Demesnes

*Carnfunnock Country Park, County Antrim (Registered Site).* This demesne was originally created around Carncastle Lodge, a mid-19th Century house which no longer exists but evidence of its style remains in the two ornate listed gate lodges. The site overlooks the sea to the east on rising ground, affording fine views. The walled garden was refurbished in 1957 and has been developed as a public amenity since that time. Larne Borough Council have developed the site as a Country Park with walks and visitor attractions. Carnfunnock Country Park is located approximately 7km north west of the proposed site.

*Chaine Park, Larne, County Antrim (Registered Site).* The park lies on a steep slope going down towards the sea, facing east. The site was donated to the people of Larne in the 1920s and the design and layout date form that time. The site has meandering paths with steps,

bedding and seats. The park is located approximately 3km to the north west of the proposed site.

*Magheramorne House (Hotel), County Antrim (Registered Site).* The present house on the site was built in the 1880s and replaces an earlier house of 1817. It is listed as is the lodge and outbuildings. There is evidence of planting from both eras but the layout of the grounds is essentially in the style of the late 19th century, though there has been further upgrading in the 1930s. The house is set on a fine site in a declivity with views to the northeast over Larne Lough. Magheramorne House is located approximately 2km to the south of the proposed site.

Red Hall, Ballycarry, County Antrim (Registered Site). The wooded demesne at Red Hall is laid out on an axial plan typical of sites dating from the 17th Century. The house, enlarged from its 1627 origins, stands at the apex of straight avenues leading from north to south and from east to west. There is an oak avenue, a lime avenue leading to the church of 1828 and a late 19th century Wellington avenue. The demesne, on ground rising to the west from the Lough, still enhances the area today. Terraced lawns at the house are reminiscent of the Victorian era. The walled garden is close to the house and is part cultivated with fruit trees. There is a stone building, possibly built as a summerhouse. The lodge on the Larne Road and a tower are listed. Red Hall is located approximately 7km to the south east of the proposed site at Ballycarry.

# 11.5.4 Northern Ireland Landscape Assessment Series

The proposed project falls within the NIEA Northern Ireland Landscape Character Assessment 99/7. The document aims to provide a broad overview of landscape character, diversity and forces for change including advice on how to address the effects of new development in the landscape. The document is seen as a "common point of reference" for statutory agencies.

The NIEA Northern Ireland Landscape Assessment document states that the proposed site is located within the "Islandmagee" landscape character area, adjacent to the Islandmagee Area of Scenic Quality.

The document states that Islandmagee comprises a series of ridges which run north-south, culminating at sheer basalt cliffs along the eastern coastline while to the west are farmed valley slopes. NIEA state that the area has a distinct, regular field pattern on hills, established by prominent hedges while Ballylumford Power Station, with three stacks and steam plume provide a strong visual focus. Pylons are also prevalent along the valley and across the skyline.

NIEA state that the landscape has a diverse land cover, strong field pattern, elevated views ad well sited and designed houses. Any development should be undertaken with respect and consideration for these elements, which are key to the landscape's character.

NIEA state that landscape sensitivity is high due to the area's high scenic quality, landscape and nature conservation designations. In addition, the remote character of the peninsula and the openness of the valley bottom is said to render any development within it highly visible. Pylons are stated as detrimental to some views, presenting a confusing array of vertical structures within the flat valley, while natural landforms may create opportunities for accommodating development nodes. This should be undertaken with respect for the scale of the existing waterfront and beach.

# 11.5.5 The Ulster Way/Long Distance Footpaths and Amenity

The Ulster Way is a nationally recognised long distance footpath that was designated under the Access to the Countryside (NI) Order 1983. The Ulster Way is protected and maintained by the relevant District Council through which it passes, and is promoted as a national walking route by the Northern Ireland Tourist Board and Local Councils.

The proposed site is not located near to the Ulster Way. The Ulster Way (Glenarm to Ballynure incorporating Antrim Hills way section) is located approximately 10km west of the site as it runs through Woodburn Forest area at its nearest to the proposed site.

# 11.6 SUMMARY OF THE PROPOSED DEVELOPMENT

A description of the salient points are stated here for the purpose of assessing landscape and visual effect.

A full description of the scheme is provided in Chapter 4.0 Project Description. The scheme entails creating an underground gas storage facility at Islandmagee, Co. Antrim. Gas will be stored underground, beneath the eastern side of Larne Lough in caverns created within salt layers from the Permian geological period. The complex of above-ground facilities for the proposed development is primarily located in farmland adjacent to the existing power station. However an additional element (sea water intake and pumping station) is located on the eastern side of the Islandmagee peninsula. Extensive sub-surface pipelines will be installed to interconnect the scheme elements. The construction phase will require the temporary use of a drilling rig on its associated well pad.

# 11.7 LANDSCAPE AND VISUAL ASSESSMENT

### **11.7.1 Description of the Sources of Impact**

The principal sources of landscape and visual impact of such a development include:

- i) disturbance during construction and operation
- ii) movement in the landscape during construction
- iii) erection of limited new elements in the landscape
- iv) vegetation removal and reinstatement

#### 11.7.2 Landscape Character Impacts during Construction Stage and Commissioning

The construction of the proposed pipelines, main compression, metering and dehydration facilities and the associated leaching plant and sea water intake facilities will be directly located within the Larne Coastal Landscape Character Area. The Larne Coastal Landscape Character Area (LCA) has been identified as having a medium sensitivity to change. The proposal is not located directly within the Elevated Agricultural LCA or the Larne Urban LCA.

The construction stage of the Islandmagee Storage Project will result in a number of new elements (many being of a temporary nature) within the broadly agricultural landscape adjacent to Ballylumford Power Station. The connecting pipelines required for the scheme will all be located below ground. The installation of these pipelines will necessitate the excavation of a trench across this landscape from the eastern shoreline of Islandmagee across the ridgeline to the new constructed facilities on the western shoreline of Islandmagee (the eastern side of Larne Lough). A temporary construction set-down area will be used, located northeast of the existing power station. The construction activities will, in part, be temporarily prominent and the movement associated with vehicles and cranes will influence the surrounding landscape that is essentially static. In particular the drilling rig at the well pad will be a prominent influence across this landscape for a wide area. The construction phase activities will be read in the context of the adjacent prominent power station, a fact that slightly decreases the potential change in landscape resource which would have been higher at another location on Islandmagee. The construction activities are also read in the context of the tall electricity pylons that run down the eastern side of the Lough shore. Finally, the construction activities are predominantly read against the background of hills reducing prominence when compared to the very limited potential for skyline impacts.

Overall, the magnitude of landscape resource change during construction of the Islandmagee Storage Project will be high. This LCA has a medium landscape sensitivity. The significance of landscape impact during the construction stage is substantial/moderate negative but temporary.

### 11.7.3 Visual Impacts during Construction Phase and Commissioning

The key visual receptors during the construction stage are viewers from local residential properties and views from local roads.

### Properties on Ballylumford Road

Ballylumford Road extends along the B90 road on Islandmagee. There is linear development along the road, southeast of the existing power station. The majority of these properties are on the eastern side of the road facing towards Larne Lough. Due to the steep nature of the hillside, falling west to the lough and the elevated nature of properties along this road, there are limited views of the existing power station and shoreline of the lough. During construction there will be a noticeable increase in traffic along the Ballylumford Road. The sea water and brine pipelines will cross this road, but the crossing itself is likely to be trenchless. The ground level construction activities will be well screened by topography, despite the close proximity of most dwellings. However, there are two properties immediately southeast of the construction site for the leaching plant that will have significant visual impacts. There are seven dwellings on the western side of the Ballylumford Road that will have direct views over the top of the drilling rig at the wellpad, where moderate visual impacts are predicted.

### Properties on Quarterland Road

Quarterland Road extends from the Ballylumford Road to Browns Bay. Most properties on this road are set within good tree cover that restricts views. There will be limited construction activity visible from these properties due to distance, intervening vegetation and topography. The predicted construction stage visual impact for properties on Quarterland Road is slight.

# Properties on Ferris Bay Road and small lane to Quarterland Road

These roads are located north of the existing power station and have dwellings along their lengths. The only construction stage activity in close proximity is the temporary construction set down area on the site of existing hardstanding. The dwellings are reasonably distant from this site and slight/moderate visual impacts are predicted.

### Properties on Browns Bay Road

Most dwellings along this road are well set back from the road. Construction traffic will use this road during pipeline works and construction of the intake pumping station. The pumping station site is well screened from all properties. The predicted construction stage visual impact for properties on Browns Bay Road is slight.

### Properties on A2 and at Glynn/Magheramorne

On the west side of Larne Lough there are a wide range of dwellings along the A2 and at both Glynn and Magheramorne with potential visibility of the construction activities. All such dwellings are at least 2km distance from the construction activities which, as a result, will not be prominent. The drilling rig at the wellpad will be a new temporary feature in some views of the landscape. It will also be illuminated at night time for safety reasons, thereby increasing the period of visibility. However, the drill will not be prominent in views due to distance and overall the predicted construction stage visual impact will be slight/moderate.

# 11.7.4 Zone of Visual Influence (ZVI)

The ZVI for the proposed Islandmagee Storage Project is illustrated in Figure 11.1. The ZVI illustrated is theoretical and the existing minor undulations in topography, buildings, vegetation, etc. can significantly alter the extent of view at a local level.

Due to the location of the proposed project, on the elevated side slopes of Islandmagee overlooking Larne Lough, there are potential views of the proposed above ground facilities over a large area to the west and southwest of the site. The rising topography of Islandmagee does have a major benefit by preventing views of the proposals from the majority of Islandmagee and its more scenic landscapes. The rising escarpments on the west of the Lough define the western limit of potential views although the occasional glen cuts through the escarpments (especially where roads are present) and do offer longer distant views from the uplands to the west of the escarpments. The actual visual impacts within the ZVI are discussed in detail below in section 11.7.4.

# **11.7.5 Operation Phase Landscape Impacts**

The proposed above ground facilities of the Islandmagee Storage Project will be directly located within the Larne Coastal Landscape Character Area. The Larne Coastal Landscape Character Area (LCA) has been identified as having a medium sensitivity to change. The proposal is not located directly within the Elevated Agricultural LCA or Larne Urban LCA.

The construction of the Islandmagee Storage Project will result in a number of new built elements within the broadly agricultural landscape adjacent to Ballylumford Power Station. The connecting pipelines required for the scheme will be located below ground and once successfully reinstated will not influence the landscape character with the exception of the construction stage impacts that are discussed above. The new physical elements have inbuilt mitigation measures such as selection of colours and finishes to facades as well as careful site location and use of the topography to reduce landscape impacts and avoid as far as possible development breaking the skyline. As the proposals are located on the rising topography of Islandmagee, the green hillside has the benefit of absorbing the development when viewed from the wider landscape within the Lough. The proposals are also read in the context of the adjacent prominent power station, a fact that decreases the potential change in landscape resource - this would have been higher if another location on Islandmagee has been chosen. The new built elements are also viewed in the context of the tall electricity pylons which run down the eastern side of the Lough shore. The constructed sea water intake pumping station is well located at the bottom of existing cliffs and will not be a feature of the wider Islandmagee landscape.

Overall, the magnitude of landscape resource change during operation of the gas storage project will be low. This LCA has a medium landscape sensitivity. The significance of landscape impact during the operational stage is slight/moderate negative.

### 11.7.6 Operation Phase Visual Impacts

### 11.7.6.1 Visual Impact for residential properties

### Properties on Ballylumford Road

Ballylumford Road extends along the B90 road on Islandmagee. The majority of these properties are on the eastern side of the road facing towards Larne Lough. Due to the steep nature of the hillside, which falls west to the lough and the elevated nature of properties along this road, there will be very limited views of the facilities during the operation phase. However, there are two properties immediately southeast of the operational leaching plant that will have significant visual impacts. Once the drilling rig has vacated the wellpad during the construction phase, the wellpad will not be a visible feature from any dwellings. The vent will be read with the existing stacks at the power station. Overall the remainder of properties along this road will not have significant visual impacts.

#### Properties on Quarterland Road

Quarterland Road extends from the Ballylumford Road to Browns Bay. On completion of the works and reinstatements due to intervening topography and vegetation there will be no views of the operation phase facilities from dwellings on the Quarterland Road.

#### Properties on Ferris Bay Road and small lane to Quarterland Road

Both of these roads are located north of the existing power station and have dwellings along their lengths. On completion of the works and reinstatements, due to intervening topography and vegetation there will be no views of the operational stage facilities from dwellings on either of these roads.

#### Properties on Browns Bay Road

Most dwellings along this road are well set back from the road. Following reinstatement of the pipeline route and the construction of the intake pumping station there will be no visible component of the operation phase facilities visible from any property along the Browns Bay Road.

#### Properties on A2 and at Glynn/Magheramorne

On the west side of Larne Lough there are a wide range of dwellings with potential visibility of the construction phase activities along the A2 and at both Glynn and Magheramorne. The main gas plant facilities, leaching plant, vent and wellpad will all be potentially visible from a range of dwellings on the A2. However, due to the distance of the view and the fact that the extensive facilities at the existing power station are prominent in views, only slight visual impacts are predicted for properties with a view.

#### 11.7.6.2 Views from Class A Roads

The only Class A roads where views of the proposals are potentially available are the A2 and A8 roads.

The A2 road extends from Belfast to Larne and beyond being located 2km west of the proposed site. There are intermittent eastward views out from the A2 as it passes along the western shoreline of Larne Lough. The A2 is a recognised tourist route and along this section it has a slightly urban character with frequent linear development from Magheramorne to Larne. As illustrated in Photomontage Viewpoints 1 and 3 the proposals will be visible in views from the A2. The proposals are read against the backdrop of the hills and at 2km distance are not prominent. The most significant fact is that the proposals are read with the existing Power Station and its associated facilities. From most viewpoints on the A2, it will be difficult for the casual observer to notice any change in the existing visual resource. The viewer sensitivity is medium. The magnitude of visual resource change is low. The significance of visual impact for the operational stage of the proposal on A2 is slight/moderate negative

The A8 road extends from Belfast to Larne Harbour. As illustrated in Photomontage Viewpoint 5 a partial view of the proposals is available from the A8. However, the new facilities are well screened by existing development and will be extremely difficult to discern

from the power station. The viewer sensitivity is low. The magnitude of visual resource change is low. The significance of visual impact for the operational stage of the proposal on A8 is slight negative

### 11.7.6.3 Class B roads

The nearest B class road to the proposals is the B90 Ballylumford Road. The B90 roads passes directly next to the leaching plant facility and alongside the main gas plant facilities and well pad. The road is elevated with a low earth bank and hedgerow along its length and as the wellpad and main gas plant facilities are lower lying they will be barely noticeable from the road. The leaching plant is directly visible for a very brief but prominent view. The viewer sensitivity is medium. The magnitude of visual resource change is low. The significance of visual impact for the operational stage of the proposal on B90 is slight/moderate negative

#### 11.7.6.4 Viewpoints and Photomontages

Please refer to Figure 11.2 for viewpoint locations. Photomontages are presented at the end of this Chapter.

### Viewpoint 1:

*Viewer sensitivity:* This view is available to local commuters and residents and to those following the Antrim Coast tourist drive. The viewer sensitivity is medium.

*Existing visual resource:* This view is from the eastern edge of the busy A2 Road and the foreground of the scene is dominated by a coastal lagoon separated from the wider expanse of Larne Lough by a railway embankment. In the middle distance the rolling hills of Islandmagee peninsula extend upwards from the Lough shores. Large chimney stacks and industrial buildings located at Ballylumford Power Station are prominent to the left of the view. Electricity pylons and overhead cables are visible atop Islandmagee.

*Predicted view:* The main gas plant facilities, vent and leaching plant will be visible constructed on a platform on otherwise sloping ground at Islandmagee. The facilities are read with the existing power plant and tall electricity pylons. The proposed 40 metre high vent stack and associated access roads to serve the facilities does not break the skyline. The main gas plant facilities will extend the portion of the scene that contains man-made elements. Despite the presence of existing vegetation to the rear of its proposed location, a portion of this plant will constitute skyline development. Rising landscape to the rear of the vent stack provides a backdrop whilst the access roads will only constitute a minor alteration of the view. The visual impacts of the proposals are offset significantly by the presence of Ballylumford Power Station which continues to dominate.

Magnitude of change: The magnitude of visual resource change is assessed as medium.

Significance of Visual Impact: The predicted significance of visual impact is moderate.

# Viewpoint 2:

*Viewer sensitivity*: The view is available to local residents of the village of Glynn – specifically those of Glenvale Park - commuters travelling the A2 and to those travelling toward the recognised scenic sections of the Antrim coast road. A number of terraced properties in Glenvale Park face directly onto this view. The viewer sensitivity is medium.

*Existing visual resource:* This viewpoint is located on the northern fringes of the village of Glynn along the A2 from Belfast to Larne. The playing fields and associated facilities of the local rugby club – comprising of posts, floodlights, advertising hording – make up the foreground of the view. Low level and intermittent vegetation defines the curtilage of the pitches. Views are available towards Islandmagee in the near distance across Larne Lough. Ballylumford Power Station and its associated infrastructure are imposing elements in the view and on the skyline. Electricity pylons cross the landscape and skyline at Islandmagee.

*Predicted view:* Despite a backdrop of rising land, the main gas plant facilities will constitute a new visual feature atop its manufactured plateau on Islandmagee. The cold vent will be insignificant when viewed at this vantage point. It is predicted that the roof of the sea water and brine pumping building – northeast of the main gas plant – will marginally break the skyline. The proposals read as an extension of the existing power station and are predominantly read against the hillside. The power station creates precedence in the landscape for development of this nature and will continue to dominate the scene, off-setting the potential impact of the proposal.

Magnitude of change: The magnitude of change in visual resource is predicted as medium.

Significance of Visual Impact: The predicted significance of visual impact will be moderate.

#### Viewpoint 3:

*Viewer sensitivity:* The view is available to commuting traffic to and from Larne. It is located along part of the A2 Antrim Coast Road although on a less scenic section, south of Larne Town. The view sensitivity is medium.

*Existing visual resource:* This view is available from a gap in the hedge near a set of traffic lights on the A2, near to the location where the A2 crosses over the railway line. The view is across the Lough towards Islandmagee. The view could be characterised as "urban fringe" containing both rural and strongly urban elements. Ballylumford Power Station dominates the view. Electricity pylons and overhead power lines are visible against the skyline as they cross Islandmagee.

*Predicted view:* When viewed from this location the rising landform at Islandmagee will provide a backdrop against which to integrate the main gas plant facilities and vent stack. The sea water and brine pumping facilities will marginally break the skyline. Ballylumford Power Station creates precedence in the landscape for such industrial development and will

continue to dominate the scene, off-setting the potential impact of the proposal. The proposals result in the portion of the view containing man-made structures will be extended.

Magnitude of change: The magnitude of change in visual resource is assessed as medium.

Significance of Visual Impact: The predicted significance of visual impact will be moderate.

### Viewpoint 4:

*Viewer sensitivity:* This view is available to local commuters, some residents on the western side of the A2 on the southern approach to Larne and those travelling along the Antrim Coastal Route. The viewer sensitivity is low.

*Existing visual resource:* This view across Larne Lough is available at a portion of wasteland (used as an occasional parking area) immediately east of the A2 and on the southern approach to Larne town. The power station and industrial development located at Curran Point, and beyond this at Islandmagee dominates the scene. Rolling agricultural fields comprise the rural landscape further south.

*Predicted view:* The southern portion of the main gas plant facilities will be visible beyond the industrial structures at Curran Point and Islandmagee. The brine and sea water pumping facilities will marginally break the skyline. The proposed facilities will cause a minor alteration to the existing visual resource. Existing facilities will remain much more imposing in the scene.

Magnitude of change: The predicted magnitude of change in visual resource is low.

Significance of Visual Impact: The predicted significance of visual impact will be slight.

#### Viewpoint 5:

*Viewer sensitivity:* This viewpoint is located along the A8 Larne Harbour Highway dual carriageway. It is available predominantly to local traffic and those using the facilities of the Port of Larne. The viewer sensitivity is low.

*Existing visual resource:* The scene is dominated by a large dual carriageway leading towards the Harbour Roundabout. Existing residential terraces comprise a portion of the scene to the right of the view, whilst industrial development dominates the remainder. Large chimney stacks, road lighting and distant pylons at Islandmagee are imposing vertical elements in the scene. A small portion of agricultural land is visible in the centre of the scene on Islandmagee.

*Predicted view:* It is anticipated that the main gas plant facilities will be visible on existing agricultural land in the centre of the scene well screened by existing development. Rising agricultural lands will provide a backdrop to these facilities. The roof of the brine and sea water pumping facility will be partially visible although insignificant in the scene. Overall, the

existing scene is dominated by imposing adjacent residential and industrial development. The proposed facilities will be partially hidden when viewed at this location and appear as a natural extension of the existing infrastructure.

Magnitude of change: The magnitude of change in visual resource is low.

Significance of Visual Impact: The predicted significance of visual impact will be slight.

#### Viewpoint 6:

*Viewer sensitivity:* This view is located on a local the road on Islandmagee headland predominantly used by used mainly by local traffic and those tourists/day trippers using facilities located at Browns Bay Beach. The viewer sensitivity is medium.

*Existing visual resource:* This view is available when travelling southeast on the B90 – Ballylumford Road and east/southeast of the existing power station. The existing view is comprised of rising agricultural fields located on a roadside bend. The view is interrupted by roadside gorse hedgerows, whilst mature trees are set against the skyline providing and enclosed view.

*Predicted view:* The north-facing gable elevation of the proposed brine/sea-water pumping shed will be prominent in the otherwise rural scene. It is predicted that the facility will resemble similar agricultural sheds in the area. This view will only be available fleetingly to southeast bound traffic. The photomontage assumes that no landscape planting has been provided but provision of planting would blend the new building with its surroundings.

Magnitude of change: The magnitude of change in visual resource is medium.

Significance of Visual Impact: the predicted significance of visual impact will be moderate.

### *Viewpoint 7 – Construction Phase:*

*Viewer sensitivity:* The view is from the same location as Viewpoint 3, but the angle of view is extended to the south east. This view is available to commuting traffic to and from Larne. It is located along part of the A2 Antrim Coast Road although on a less scenic section, south of Larne town. The view sensitivity is medium.

*Existing visual resource:* The existing view is rural and toward the southeast across the wide open expanse of Larne Lough. Islandmagee peninsula rises from the Lough in the middle distance. The landscape is comprised of a patchwork of agricultural fields and a large portion of overgrown scrubland. Electricity pylons are visible on the skyline.

*Predicted view at Construction Stage:* The proposed wellpad, with a footprint measuring 110 x 45 metres will be visible in the corner of a low lying agricultural field immediately adjacent to the shore. The drilling rig will only be present temporarily during the construction period, initially for approximately seven weeks in Year 1 whilst the initial well is drilled to acquire rock

mechanical information for the detailed design. Subsequently the rig will return in Year 3 of construction to drill the remaining six wells. The rig will be a new tall vertical element in the landscape and will be illuminated at night. The drilling rig does not break the skyline and is read against the backdrop of the hillside. The colour of the drilling rig (white or light grey) does make the equipment more visible, but at this distance it is not overly prominent.

Magnitude of change: The magnitude of change in visual resource is moderate.

*Significance of Visual Impact:* the predicted significance of visual impact will be moderate but temporary.

### *Viewpoint 7 – Operation Phase:*

*Predicted view during Operation Phase:* The proposed wellpad, with a footprint measuring 110 x 45 metres will be visible in the corner of a low lying agricultural field immediately adjacent to the shore. The rig will not be present during the operation phase but may occasionally be required to return for short periods over the lifetime of the project to perform maintenance. All of the infrastructure at the wellpad site will be buried beneath ground level, leaving the wellpad only visible as a flat area of hardstanding. The wellpad will blend with adjacent land uses and not be prominent.

Magnitude of change: The magnitude of change in visual resource is low.

*Significance of Visual Impact:* the predicted significance of visual impact will be slight/moderate.

### *Viewpoint 8 – Construction Phase:*

*Viewer sensitivity:* This view is available to local commuters and residents and to those using the Antrim Coast tourist. The viewer sensitivity is medium.

*Existing visual resource:* This view is from the eastern edge of the busy A2 Road. The foreground of the scene is dominated by a coastal lagoon separated from the wider expanse of Larne Lough by a railway embankment. In the middle distance the rolling hills of Islandmagee peninsula extend upwards from the Lough shores. The southern portion of Ballylumford Power Station is visible to the left of the view. Electricity pylons and overhead cables are visible atop Islandmagee.

*Predicted view:* The proposed wellpad will be visible in the corner of a low lying agricultural field immediately adjacent to the Lough shore. The drilling rig will be clearly visible and night time illumination will extend visibility. The drill does not break the skyline although its colour does make it more apparent.

*Magnitude of change:* The magnitude of change in visual resource is medium.

IBE0096/EIS01/March '10

Significance of Visual Impact: The predicted significance of visual impact will be moderate but temporary.

### Viewpoint 8 – Operation Phase:

*Predicted view:* The proposed wellpad will be visible in the corner of a low lying agricultural field immediately adjacent to the Lough shore. The drilling rig will no longer be present and the hardstanding and fencing will not be overly prominent.

Magnitude of change: The magnitude of change in visual resource is low.

*Significance of Visual Impact:* The predicted significance of visual impact will be slight/moderate.

### 11.7.6.5 Ulster Way/ Long Distance Paths and Amenity

The Ulster Way is located approximately 10km west of the proposal at Woodburn Forest. Due to a combination of forestry and topography it will not be impossible to observe any aspect of the Islandmagee Storage Project from the Ulster Way and no visual impacts are therefore predicted.

### 11.7.6.6 Impacts on Planning Designations

### Areas of Outstanding Natural Beauty

The neatest AONB to the proposed site is the Antrim Coast and Glens AONB. The Antrim Coast and Glens AONB is located at its nearest 4.4km north west of the proposed site. Due to distance and intervening topography and built development it will not be possible to view the proposals from the AONB.

### Local Landscape Policy Areas (LLPA)

As stated in Section 11.5.3 Planning Designations, there are no LLPA designations contained within the Larne Area Plan 2010.

### 11.7.6.7 Impacts on Historic Parks, Gardens and Demesnes

A review of the NIEA Register of Historic Parks and Gardens has established that the nearest registered site is located west of the proposed site at Magheramorne at 2km from the site. This site is surrounded by mature woodland. Where views out from the setting of the main house are available the existing Power Station is prominent. Glimpse views from the designated site will be available particularly in winter months. The proposals will not be prominent and in fact will be difficult to discern at a distance of 2km. There will be no significant visual impact of the designated site.

# 11.8 DESIGN RECOMMENDATIONS AND MITIGATING MEASURES

### 11.8.1 Mitigating Measures

EIA Regulations require an assessment of measures envisaged to prevent, reduce and where possible offset any significant adverse effects. Mitigation measures are those taken to help reduce the impacts arising from any visually intrusive or insensitive elements within the existing landscape setting.

#### Landscape Mitigation Aims and Objectives

- To physically and visually integrate the proposed scheme and associated features into the surrounding landscape.
- To provide screening to minimise visual intrusion and to reduce any significant negative aspects regarding the visual impact of the proposals on sensitive receptors.
- General Objectives
- Provision of hedgerow planting with trees to reinstate fields boundaries where crossed.
- Hedge planting along roadsides of new access roads and around perimeter fencing of facilities.
- Retention and protection of the existing trees as far as possible.
- Creation of a quality woodland landscape setting for the Sea Water and Brine Pumping Facilities to allow it to blend with its surroundings.
- Selection of green coloured finishes to facades of new facilities and fences to be read with the hillside in the majority of views.

#### 11.8.1.1 Woodland Framework Planting

A native woodland planting framework will be created on the side slopes of the plateaus to assist with reduction in visual impact and create an attractive environment within the site to blend it within the agricultural landscape. Species will be native, suitable for an exposed coastal location and reflect those found in adjacent woodland and hedgerows. Planting belts along boundaries will include semi-mature trees to help reduce the scale of the proposal and to introduce it to the surrounding rural landscape.

#### 11.8.1.2 Management and Maintenance

Maintenance of the landscape works will be an integral part of the on-going site management. This will include a defects liability period during which any defective plant material is to be replaced. Litter picking and weed control shall be carefully monitored during the early growing seasons of the landscape maintenance contract. Contractors will comply with all health and safety standards, in particular with regard to maintenance works during the operational phase of the scheme.

#### 11.8.1.3 Retention of Existing Trees

All woodland and trees to be retained will be fenced off prior to construction in accordance with BS:5837 2005 '*Trees in Relation To Construction*'. All existing individual trees and hedgerows will be protected and retained as far as possible.

Further, some general measures recommended in Section 11.8.2 will have some affect in reducing the impacts.

#### 11.8.2 Design Recommendations

The design evolution of the proposed project has been undertaken to enable incorporation of the following design recommendations:

- sensitive use of local materials for constructed elements (hardstands, buildings, fences etc);
- careful integration of constructed elements with existing elements, such as access tracks and temporary construction areas, etc;
- careful grading and reinstatement proposals, indicating screening measures to obtrusive built elements;
- appropriate materials and colour of security fencing and ground level buildings (dark green);
- high quality of finish to access roads, gates, fences and general site housekeeping designed to complement local styles and materials.

All excavated organic material should be stored carefully for reinstatement work within the site.

Good site design, use of an environmental management plan during the construction phase and incorporation of mitigation measures identified above will assist in mitigating the impact of ancillary works.

# 11.9 RESIDUAL IMPACTS

A landscape and visual impact assessment has been completed for the proposed Islandmagee Storage Project.

The proposals are located on the eastside of Larne Lough spreading eastwards across Islandmagee. The landscape character at this location although rural in nature is dominated by the existing Ballylumford power station and frequent tall electricity masts.

With regard to construction phase impacts, the proposed connecting pipelines and the scheme's above-ground facilities are directly located within the Larne Coastal Landscape Character Area. Due to the extent of the activities and elevated location at the lough side substantial/moderate landscape impacts will occur but will be temporary in duration.

When visual impacts during construction stage were assessed, it was found that the majority of properties with potential views of the proposed activities will not be significantly affected. A total of two properties on Ballylumford Road in close proximity to the construction of the sea water and brine pumping facility will be significantly affected. All such visual impacts will be temporary in duration.

The operation phase landscape impact assessment has established that due to the low level of influence of the proposals at this stage, no significant landscape impacts are predicted.

An assessment of the visual impact on residential properties during the operation phase has established that no significant visual impacts will occur.

When views from Class A roads are considered, no significant visual impacts will occur for the A2 or the A8.

When views from B class roads are considered, no significant visual impacts will occur for the B90.

A total of six viewpoints have been assessed using photomontages to illustrate the visibility of the new proposals from each viewpoint. No significant visual impacts have been predicted for any of the six viewpoints.

With regard to impacts on designated landscapes, the assessment has established that the proposals are not located directly within any designated landscape and has no potential impact on Historic Parks, Gardens and Demesnes.

No significant visual impacts are predicted for views from the Ulster Way.

A range of mitigation measures have been proposed including landscape planting consisting of a native woodland framework. Retention and protection of existing trees and hedgerows as far as practicable and reinstatement of existing and new hedgerows is also recommended. The new facilities will be coloured dark green to blend with their surroundings on the hillside.

Overall, the broader landscape character area and visual context around the proposed Islandmagee Storage Project identified has the capacity to absorb a development of this scale and the proposal is acceptable in landscape and visual terms.

The photomontages which have been prepared to illustrate the visibility of the proposed gas storage scheme are presented overleaf. Please note that the photomontages do not include any of the mitigation woodland framework planting.

# PHOTOMONTAGES




































This page has been left intentionally blank.