



An
Bord
Pleanála

Inspector's Report ABP-305442-19

Development	Dursey Island Cable Car and visitor centre.
Location	Ballaghboy, on the Beara Peninsula, West Cork and Dursey Island.
Applicant(s)	Cork County Council.
Type of Application	Approval under Section 226.
Observer(s)	Alan O'Connor, An Taisce, Bird Watch Ireland Donal O'Sullivan Friends of the Irish Environment John Conway Louth Environmental Group Mary O' Sullivan Patrick Sullivan Geological Survey Ireland

Department of Culture, Heritage and
Gaeltacht (Nature Conservation)
(NPWS)

Fáilte Ireland

Transport Infrastructural Ireland.

Date of Site Inspection

1st and 5th February 2020.

Inspector

Patricia Calleary

DECISION QUASHED

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DECISION QUASHED

1.0 Introduction

- 1.1. This case relates to an application made by Cork County Council, seeking approval under Section 226 of the Planning and Development Act, 2000, as amended, for the decommissioning of the existing Dursey Island cable car and the construction of a new dual cable car system and other development onsite. Full details are set out of the public notices and summarised under Section three of this assessment below. A parallel application with a file reference: ABP-305719-19 was also received by the Board from Cork County Council, seeking the confirmation of a compulsory purchase order (CPO) to facilitate the delivery of road improvement works associated with the primary development at the cable car site. Two initial objections to the CPO application were subsequently withdrawn, therefore, the Board has no further role in that application.

2.0 Existing Environment and Site Location

- 2.1. The site of the proposed development lies directly adjacent to the existing Dursey Island Cable Car, which is located at the western tip of the Beara Peninsula in west County Cork. The site also takes in an eight kilometre stretch of the R572 regional road, located between the cable car site and the R572-R575 junction at the Bealbarnish Gap to the east. The mainland-side of the cable car site is located in the townland of Ballaghboy, on the Beara Peninsula and is directly accessed off the end point of the R572. The site is approximately 12km from the village of Allihies, 22km from Castle townbere townland and 145km from Cork City.
- 2.2. The existing cableway comprises two pylons, a single cable car which travels on a steel ropeway, a mainland-side driving station, which houses the operator, cableway hauling mechanism and welfare facilities, an island-side return station, landing platforms with steel guardrails on both the mainland and island sides, an informal visitor car park on the mainland, which provides space for 70 cars and a small residents' car park on the island which provides space for approximately ten cars.
- 2.3. The site is situated on the coastline and comprises a rugged, undulating open landscape overlain by thin soils. Dursey Island is one of seven inhabited islands located off the west coast of County Cork. It is situated at the western tip of the Beara Peninsula, separated from the mainland by Dursey Sound, a narrow rocky

tidal channel in the Atlantic sea. The island has a stated area of approximately six square kilometres and it measures approximately 6.5km in length and 1.5km in width. On the mainland, the topography of the area rises steeply from the coastline, continuing upwards towards a local hill approximately 300m in from the coast. Dursey Island follows a similar topography and has a raised central spine. The surface is uneven with rock outcrops and thin soils.

- 2.4. Currently, the existing cable car, a small structure with capacity to transport six persons, serves two inhabitants of Dursey island and others who have farming lands and properties on the islands and also visitors to the island. It is stated that the current number of visitors (2017/2018) using the cable car to make the journey to Dursey Island is approximately 20,424 visitors per year.

3.0 Proposed Development

- 3.1. The proposed development comprises the decommissioning of the existing cable car and associated structures, and the construction of a new larger dual cable car facility. On the mainland, it is also proposed to construct an interpretive exhibition space ('Visitor Centre'), an 84-seater café, a new mainland station, an on-site wastewater treatment system and a groundwater supply borehole. On Dursey Island, a new station and associated welfare facilities, waiting area and on-site wastewater treatment system are proposed.
- 3.2. The proposed cableway would run parallel to the existing cableway alignment and it would measure 375m in length. The mainland pylon and the existing cable car itself would be retained on-site as a feature of the original structure. The existing cable car travels at a speed of 0.9 m/s. It is proposed that the outward journey to the island, while capable of travelling faster, would operate at 1 m/s and the journey time would take between five and six minutes to allow visitors to enjoy the recreational experience and views across Dursey Sound. The return journey and during times when it operates for island residents and farmers only, the cable car would be operated at a faster speed of 6 m/s.
- 3.3. Each of the two cable cars would provide capacity for 15 persons. It is stated in a footnote (no.3) on page 15 of Chapter 4 (Description of Proposed Development) of the EIAR that the new cableway could transport approx. between 3,400 and 6,600

persons per day in typical operating hours. However, it is proposed to apply a cap on the visitor numbers such that an annual maximum of 100,000 would be permitted onto the mainland facility and visitor centre and of those, 80,000 would be permitted to make the journey to and from Dursey Island. In addition, a maximum monthly visitor number of 12,835 would be permitted to travel to and experience Dursey Island.

- 3.4. It is also proposed to replace the existing car park comprising 70 spaces with a new car park comprising 100 spaces and one bus/coach space. Road improvement works on the R572 approach road in the form of ten passing bays and one visibility splay are also proposed. The erection of four Variable Message Signs (VMS) at locations along the approach roads to the site (Bealbarnish Gap, R572 at Castletownbere, R575 at Eyerics Cross and N71 at Glengarriff) are also proposed.
- 3.5. The construction phase would last for 18 months, during which time the construction site compound would be sited on the mainland with a smaller storage compound proposed to be sited on Dursey Island.
- 3.6. It is proposed to decommission the cableway and visitor centre at the end of its serviceable life, and the materials would be re-used or recycled where possible and where not possible, any remaining waste would be disposed of to an authorised waste facility.
- 3.7. The approval application was accompanied by the following documents:
 - Preliminary Environmental Impact Assessment Examination Report;
 - Environmental Impact Assessment (EIAR) including three volumes;
 - Natura Impact Statement (NIS);
 - Set of 10 Drawings in A1 format.
- 3.8. The proposal also requires a Foreshore Licence and it is stated that in this regard an application for this has been made to the Department of Housing, Planning and Local Government's Marine Planning and Foreshore Unit.

4.0 Consultation

4.1. Observers

4.1.1. The following is a summary of the issues raised in submissions received from observers.

- concern is expressed for proposals to increase the car parking provision and to enlarge the footprint of the site, which it is stated would result in a negative effect on the environment and would be contrary to climate change objectives.
- climate change has not been adequately addressed and no estimation of the volume of greenhouse emissions during the construction or operation phase has been set out.
- concerns raised regarding potential impacts to the natural environment and to the Beara Peninsula Special Protection Area (SPA) (Site code 004155), in particular the Chough wild bird species.
- it is submitted that the scale of the development is excessive and would generate a traffic hazard on the local road network.
- concerns are raised by two observers who object to proposals for passing bays along the approach road.
- BirdWatch Ireland state that they do not support the conclusion in the NIS that there would be no significant effects on the population of Chough, a highly protected bird species.

4.2. Submissions received from Prescribed Bodies

4.2.1. The Board received written submissions from prescribed bodies and the principal points set out are summarised below.

Department of Culture, Heritage and Gaeltacht (Nature Conservation)

- Durse Island is an important site for Chough bird species;
- the proposed development, including mitigation measures, would not adversely affect the integrity of any European site, protected species or biodiversity generally, subject to an additional precautionary mitigation measure to guarantee that a potential nest site (Chough species) identified in

a building on the island is not subject to disturbance by visitors to Dursey Island;

Fáilte Ireland

- expresses its support for the project;
- its delivery would provide visitors with a world class experience of Dursey Island;
- the project can be delivered in an environmentally-responsible manner;
- the cable car system would allow managed access to the island and ecological and environmental impacts would be minimised;

An Taisce

- recognises the importance of upgrading the cable car facility to serve the island community, but states that the scale of the development with a 300 person per hour movement capacity is excessive;
- no justification has been provided for the significant increase in passenger capacity;
- proposal should be assessed under the United Nations (UN) Sustainable Development Goals;
- a visitor plan is not currently in place and, accordingly, approval of such a large tourist development would be premature;
- would give rise to adverse impacts on the Beara Peninsula SPA and its qualifying interests, contrary to European law;
- proposal would exacerbate unsustainable private car based tourism in West Cork, giving rise to traffic impacts on the narrow local road network and an overarching adverse impact on climate;

Transport Infrastructure Ireland (TII)

- no specific observations in relation to the principle of the development;
- in relation to the use of VMS on national roads, reference should be made to TII standards and states it would not be supportive of a VMS at the junction of

the N71/R572 for reasons of having potential to cause inappropriate distraction and confusion to road users;

- additional parking could be utilised at the multiplicity of other attractions and towns with available parking on the Beara Peninsula;

Geological Survey of Ireland (GSI)

- acknowledges correspondence and offers help with interpretive signs in the visitor centre on geological features seen around the island.

4.3. Response to submissions

- 4.3.1. Following submissions by observers and prescribed bodies during the course of the application, a written response from the Local Authority was received by the Board on the 5th day of February 2020 and the response is referenced, where relevant, as part of the assessment below.

5.0 Planning History

- 5.1. It is stated that the cable car was initially erected in 1969 and that it was subsequently replaced in part/upgraded in 1981 and again in 2004. The pylons were replaced with two new galvanised steel structures in 1977. Apart from these upgrades, and the replacement of serviceable components, many of the original components are stated to continue to remain on site. There is no other planning history recorded on or proximate to the site.

6.0 Policy Context

6.1. National and Regional Policy

- 6.1.1. National and regional policy of relevance, which is considered in the planning assessment, is largely set out in the following documents:

- Project Ireland 2040: National Planning Framework (2018) and the National Development Plan (2018-2027)
- Climate Action Plan 2019
- National Biodiversity Action Plan 2017-2021
- Rural Development Plan (2014-2020)

- Realising Our Rural Potential – Action Plan for Rural Development (2017)
- People, Place and Policy – Growing Tourism to 2025 (2015)
- Building on Recovery - Infrastructure and Capital Investment (2016 – 2021)
- Guidelines on Landscape and Visual Assessment Landscape Institute (GLVIA) 2013
- Regional Spatial & Economic Strategy for the Southern Region.

6.2. Local Policy

6.2.1. Local statutory planning policy for the subject site is contained within the **Cork County Development Plan 2014-2020** and the **West Cork Municipal District Local Area Plan (2017) (WCMD LAP)**.

6.2.2. Other plans of particular relevance include:

- West Cork Islands Integrated Development Strategy (2010)
- Cork Tourism Strategy 2016: Growing Tourism in Cork – A Collective Strategy
- Cork County Council Climate Adaption Strategy 2019-2024
- County Cork Biodiversity Action Plan 2009 – 2014¹
- Kerry County Development Plan 2015 – 2021
- Cork County Draft Landscape Strategy 2007

7.0 Environmental Impact Assessment

7.1. Introduction and Statutory Provisions

7.1.1. An Environmental Impact Assessment Report (EIAR) accompanied the application. It is laid out in three volumes including:

- Volume 1 – Non-Technical Summary
- Volume 2 – EIAR Main Text
- Volume 3 – EIAR Figures and Drawings

¹ While the date of the Biodiversity plan period is passed, it is referred to under the Cork County Development Plan Objective HE 1-1: Continue to implement the County Biodiversity Action Plan.

- 7.1.2. The main volume (Volume 2) is set out in Chapters including Chapter 1 (Introduction), Chapter 2 (Need for the Proposed Development), Chapter 3 (Alternatives Considered) and Chapter 4 (Description of the Proposed Development). Chapters 5 to 16 inclusive examine the various environmental factors both as a baseline and with the development in place and provide an outline of predicted impacts and measures proposed to reduce or remove any significant negative impacts (mitigation measures). Chapter 17 provides a description of the interactions, which are stated to be likely to occur between the environmental factors and this chapter also considers cumulative impacts and the vulnerability of the project to risks of major accidents and/or disasters relevant to the project concerned. A schedule of proposed mitigation measures is provided in Chapter 18. While certain limitations were noted throughout the EIAR, it is stated that no particular difficulties were encountered that would have precluded the ability to assess the potential significant impacts of the development.
- 7.1.3. Details of stakeholder consultations undertaken are provided in Chapter one (Introduction). Non-statutory public consultation events were also held on the 27th March 2019 in the Eccles Hotel in Glengarriff and on 23rd April at Lehanmore Community Centre. At each of these events, interested parties were invited to submit any comments on the proposed development. Additionally, 75 statutory and non-statutory consultees were invited to submit comments on an EIA Scoping Report developed.
- 7.1.4. I am satisfied that the information provided in the EIAR is sufficiently complete and up to date and that the EIAR has been prepared by competent experts to ensure its completeness and quality. The information contained in the EIAR and supplementary information provided by the applicant, adequately identifies and describes the direct, indirect and cumulative effects of the proposed development on the environment and complies with the requirements of the Planning and Development Regulations 2001-2020 and the provisions of Directive 2011/92/EU as amended by Directive 2014/52/EU.

7.2. Consideration of Reasonable Alternatives

- 7.2.1. Alternatives considered are set out in Chapter 3. During the preliminary design stage of the proposed development, four cableway technology options and three cableway

alignment options were considered. Four cableway technology options and three alignment options were considered.

- 7.2.2. In relation to the architectural design options, five options, Options 1, 2a, 2b, 3 and 3a, were developed. Option 3a was subsequently refined to develop three further options, Options 3b, 3c and 3d, following issuing the Options report. In order to determine the most suitable option to advance, Options 1, 2a, 2b, 3 and 3a were appraised by using a multi-criteria analysis (MCA) approach. Since Options 3b, 3c and 3d were developed following the issuing of the Options Report, these options were not included in the MCA. However it is submitted that they would have scored similarly to Option 3a in all criteria as they were in fact variations of Option 3a.
- 7.2.3. The MCA evaluated the options with respect to the criteria: environmental merit, aesthetic merit, technical merit, buildability and disruption impact, durability and maintenance requirements, capital construction costs, economic viability and project risk. The results of the MCA are set out in Table 3.9 of Chapter 3 of the EIAR. Option 3a was ranked as the most preferred option overall arising from the MCA and this option was subsequently advanced for the proposed development. It is stated that the design has since evolved following feedback from various stakeholders including the Project Steering Group, Fáilte Ireland and from public consultation events.
- 7.2.4. As highlighted in submissions, no alternatives were put forward in relation to visitor capacity and numbers of visitors who would be permitted to attend the cable car site on the mainland and to make the journey to Dursey Island. While four cableway technologies were considered, a proposal for a smaller scale cable car, as a replacement to that which currently exists to serve both the remaining island community and a level of sustainable tourism was not explored.
- 7.2.5. Alternatives reference that a satellite car park with a shuttle bus service linking the Centre with the Beara Peninsula Ring Road could be provided at the east of the site. This proposal was not progressed further or evaluated as an alternative design option in the aforementioned MCA. No alternatives addressing sustainable transport modes were advanced.
- 7.2.6. Overall, I am not satisfied that all reasonable alternatives have been identified and adequately considered.

7.3. Assessment of Environment Effects

7.3.1. The likely significant effects of the development are considered below under specific headings, which collectively address the factors set out in Article 3 of the EIA Directive 2014/52/EU as follows:

- Population and human health;
- Biodiversity, with particular attention to species and habitats protected under Directive 92/43/EEC and Directive 2009/147/EC;
- Land, soil, water, air and climate;
- Material assets, cultural heritage and the landscape;
- The interaction between these factors.

7.3.2. The assessment is based on the information provided by the applicant, including the EIAR and the submissions received in the course of the application from the prescribed bodies and observers, and the subsequent response to submissions received from the Local Authority as the applicant in this case. The assessment also includes information gathered during my site visits and my review of various relevant plans and documents and consideration of the applicants NIS.

7.3.3. At the outset and for the benefit of the Board, I have compiled a table below (Table 1) setting out a comparison of the existing and proposed cable car parameters, including cable car type/design, journey speed, passenger carrying capacity and visitor numbers. These parameters are referenced throughout the applicant's EIAR and NIS and are also referred to as relevant in my assessment.

Table 1: parameters for the existing and proposed cable car, passenger carrying capacity and visitor numbers

Parameters	Existing Cable Car	Proposed Cable Car
Type/Design	Single cable car system	Dual cable car system
Journey Speed	0.9 m/s (outward and return journey)	1 m/s outward and 6 m/s return (visitors) and 6m/s for outward and return journey for island inhabitants and island farmers
Passenger carrying capacity for single journey	6 persons	15 persons per cable car (30 in total as a dual cable car system proposed)
Daily Passenger Carrying capacity	Not stated but maximum visitor numbers reach capacity in summer as queuing is common.	Stated in EIAR that the new cable car could transport between 3,400 and 6,600 per day. (caps are proposed, see below)
Monthly Visitors to cable car site on mainland	Current numbers arriving to mainland cable car site only (i.e. those not making the journey to Dursey island) are not stated	No cap on monthly numbers (within annual cap) arriving to the mainland site only is set out.
Monthly Visitors to Dursey Island	4,950 per month	Monthly visitor numbers to the island would be capped at 12,835
Visitors across the peak season of July and August to Dursey Island	9,900 (estimated from monthly figures above)	25,670 (estimated from monthly figure above)
Annual Number of Visitors to Mainland site	Current numbers to the mainland only are not set out	Visitor numbers to the mainland would be capped at 100,000
Annual Number of Visitors to Dursey Island	20,424	Visitor numbers would be capped at 80,000

7.4. Population and Human Health

- 7.4.1. The proposed development site, including the mainland and Dursey Island, is located in a sparsely populated rural area. In 2016 the Electoral Division (ED) of Kilnamanagh had a population of 342 persons (174 males and 168 females). Of these, four persons lived on Dursey Island at that time. It is stated that this has since dropped to two permanent inhabitants currently living on the island, down from 20 in 1991. Population of the island is stated to increase during the summer months, when visitors take up seasonal residence. The Pobal HP Deprivation Index Score for the study area is 'marginally below average', meaning the area is somewhat disadvantaged in terms of economic development.

- 7.4.2. It is submitted in the EIAR that by improving ease of access to the island, the proposed development could support a level of repopulation of the island. This may well be so, however there are many other factors at play whereby population of small islands has vastly decreased over the years. For the remaining two inhabitants and others who own land on the island and have moved from the island, farming is the main economic activity. The nature of this farming predominately comprises low intensity activities, mainly sheep grazing and to a lesser extent dry stock.
- 7.4.3. In relation to Human Health, in the 2016 census, the majority of inhabitants in Kilnamanagh reported that their health was 'very good' or 'good', 57% and 29.5%, respectively. Approximately 10.5% considered their general health to be 'fair'. Two individuals characterised their general health as 'bad'. Just one individual reported being in 'very bad' general health. A further eight persons did not answer this question. Of the 342 inhabitants in the ED, a total of 46 persons were reported to have a disability at the time of the 2016 census.
- 7.4.4. It is stated that three employees would continue to work as cableway operators and between three and five additional employees would staff the visitor centre, gift shop and café. I would submit that in the first instance, the new infrastructure would not lead to any immediate change in the resident population as new job opportunities would be likely to be taken up by people who live locally.
- 7.4.5. With an improved transport service connecting the island with the mainland, this would support the existing inhabitants of the islands, though no notable increase in population as a direct result of the cableway project would likely arise. The new infrastructure, including the new cable car, would however improve the safety and comfort for users including the inhabitants and those who farm lands on Dursey Island as well as visitors to the island.
- 7.4.6. The new cable car infrastructure would comprise a larger dual cable car / cableway with a faster overall journey time and a much increased capacity to transport tourists to the island. With the development in place, the visiting population would be enabled to grow considerably and the visitor numbers are set out in Table 1 above.
- 7.4.7. I am satisfied that the cable car development would not give rise to any significant changes to long term health. Other factors which could impact on human health include noise, air quality, water and soils during the construction phase. These are

dealt with under their respective headings below, but insofar as they would interact with human health, it can be concluded that with appropriate site management and adoption of mitigation measures, as proposed, and noting the short-term and transient nature of the construction works, no adverse impacts on human health would conceivably arise because of these environmental impacts.

- 7.4.8. In terms of mitigation, it is proposed to carry out the most disruptive elements of the work during the off-season period and a Construction and Environmental Management Plan (CEMP) and Construction Traffic Management Plan (CTMP), both which would be required to be prepared by the appointed contractor, would be implemented.
- 7.4.9. In relation to population and human health, no mitigation is proposed for the operation stage. I note that the development would result in moderate to significant positive benefits in terms of journey amenity and improved access between Dursey Island and the mainland for the resident, farming and tourist population.
- 7.4.10. However, as visitor numbers increase to the levels set out, there is potential for human activity to indirectly interact negatively with the environment, including in particular, the sensitive ecological environment that prevails. I have dealt with this predominately under the heading of Biodiversity below and also in the Appropriate Assessment section (Section 8).

Concluding Comments – Population and Human Health

- 7.4.11. No change to the resident population is anticipated as a result of the development, however, visiting population would be enabled to considerably increase and the development has potential to bring positive impacts on the local and regional economy in terms of increased tourism. There is a real risk however, that over time, the increase in visitor numbers enabled by the increase in visitor capacity of the cable car infrastructure would result in the diminishment of the uniqueness of the highly sensitive environment. Experiencing the Beara Peninsula and Dursey Island would continue to be enjoyable, though the experience may become less unique and more ordinary as the number of visitors grow. The increase in visitor has also the potential to negatively impact on other elements of the environment, matters which are addressed under the respective headings below.

7.5. Biodiversity

Introduction

- 7.5.1. Chapter 7 of the EIAR sets out an examination of Biodiversity. The zone of influence identified is presented in Plate 7.1 of Chapter 7 and it includes the proposed development area, the R572 approach road west of Bealbarnish Gap and all of the proposed works (passing bays and visibility splays) along it. It also includes established roads and walking routes on Dursey Island and those on Garinish Head and Crow Head on the mainland, together with routes linking these and a 500 m buffer around all of the above. This zone of influence was also adopted as the study area by the applicant for the purpose of their assessment.

Recreational Walkways/Trails

- 7.5.2. Dursey Island and the Beara Peninsula are popular destinations for recreational walkers. On Dursey Island there is an unsurfaced road running from east to west for c.5km part and the route continues beyond the road end along undefined informal pathways. There are also a number of informal paths on private lands. Dursey Island Loop and the longer distance Beara Way are two overlapping walks which run through the island. At Garinish Head on the mainland, east of the cable car site, the Garinish Loop walk is well defined and it is stated that the trail attracts a considerable numbers of visitors. At Crow Head, also on the mainland further south, the walkway is less well defined and this walk is stated to attract very few visitors. The Beara-Breifne Way long distance trail starts on the east of Dursey island and continues to County Leitrim, tracing the steps of the historic march of O'Sullivan-Beara.

Consultation

- 7.5.3. During the applicant's consultations, the responses received which relate to biodiversity are set out in Table 7.1 of Chapter 7 of the EIAR and I have reviewed these. In addition to those set out in the table, the applicant's consultants state that they consulted with an ornithologist (Mr. Mike Trewby), stated to be a national expert on the red-billed chough (*Pyrrhocorax pyrrhocorax*) (May 2019), hereinafter 'Chough'. It is stated that the expert advised that in order to conserve the resident chough population, a numerical carrying capacity should be established for Dursey Island based on findings of a study by Keribiou *et al.* (2009) and in order to facilitate

future monitoring of the chough population, productivity/breeding success of the population should be measured. Consultations were also held between the applicant's consultants and the National Parks and Wildlife Service (NPWS) (May 2019). It is stated that the NPWS set out specific requirements for survey data which included (i) location of nest sites, (ii) key areas of habitat and (iii) flush distances, with three to four surveys per week required during May and June 2019. NPWS also required data on movement of visitors on the island, particularly identifying the proportion of visitors that divert onto the western end of the island and those who stay on established trails.

Designated Sites

- 7.5.4. The site of the existing and proposed cable car is particularly sensitive in terms of biodiversity given that it is within the Beara Peninsula SPA (Site Code 004155) and is adjacent to the Kenmare River SAC (Site Code 002158). The SPA area covers a significant extent of Dursey Island incorporating the sea cliffs and terrestrial habitats.
- 7.5.5. The SCIs of the Beara Peninsula SPA are Chough and Northern Fulmar (*Fulmarus glacialis*), hereinafter 'Fulmar'. Of the QIs of the Kenmare River SAC site, seven were found within or in the vicinity of the zone of influence with potential including: Large shallow inlets and bays [1160], Reefs [1170], Submerged or partially submerged sea caves [8330], Vegetated sea cliffs of the Atlantic and Baltic coasts [1230], Otter (*Lutra lutra*) [1355], European dry heaths [4030] and Common harbour seal (*Phoca vitulina*) [1365].
- 7.5.6. Dursey Island is also designated as a pNHA (Site Code 000086), due to its important breeding populations of fulmar and chough. The area to the north of the existing cable car station on the mainland lies within Garinish Point pNHA (Site Code 004986). It comprises mainly heath and grassland and is used by the chough species for feeding. Firkeel Gap pNHA is traversed by the R572 approach road. The main feature of interest of this pNHA is the Flora (Protection) Order (2015) species, Betony (*Betonica officinalis*).

Terrestrial Habitats

- 7.5.7. Habitat surveys are stated to have been carried out by the applicant's EIA consultants during September 2018 and May 2019 and the general character of the habitats in the study area are described. Dry-humid acid grassland (GS1) and dry

siliceous heath (HH1) or a combination of both are stated to be the dominant habitat types in the study area, on both the island and mainland. On Dursey Island, farming is concentrated on the more sheltered south-eastern part of the island and in this area, vegetation is heavily grazed and sward heights are particularly short. The less accessible, more north-western areas and hills are dominated by open heathlands. The coastline in the vicinity of the site comprises low cliffs. The habitat at this location is stated to conform to exposed rocky shores (LR1).

- 7.5.8. The heathland within the study area on both the mainland and island is stated to conform in places to the description of European dry heath [4030], a Qualifying Interest (QI) of the adjoining Kenmare River SAC. This SAC comprises an area of the Atlantic ocean along the coastline and also includes Crow head on the mainland. It is stated that dry siliceous heath and dry-humid acid grassland are foraging habitats for Chough bird species, a Special Conservation Interest (SCI) of the Beara Peninsula SPA, while rocky sea cliffs are roosting/nesting habitat for same.

Bird Species

- 7.5.9. Surveys of Chough species were undertaken between March and July 2019. The largest flock recorded during the surveys comprised 32 individuals consisting of adults and juveniles which were observed on the western end of Dursey Island in July. This number is greater than the 20 birds observed by Berrow et al. (1993) in 1992 and less than the 46 birds observed by Gray et al. (2003) in 2002/03. Six confirmed breeding pairs and their respective nest sites were identified during the applicant's surveys in 2019. This number is lower than those recorded during previous chough surveys, including ten potential breeding pairs in both 1992 (Berrow et al., 1993) and 2002/03 (Gray et al., 2003). At the time of writing the EIAR, post breeding surveys had commenced in August 2019 and were due to continue to November 2019.
- 7.5.10. In relation to Fulmar, it is stated that 487 individuals were observed during a previous survey carried out on Dursey Island in 2016 and 12 individuals were observed on Crow Head. No evidence of breeding Peregrine Falcons (*Falco peregrinus*), listed on Annex I to the Birds Directive are stated to have been found during the surveys. However, it is stated that there is likely to be at least one such individual foraging in the vicinity.

7.5.11. Table 7.18 of the EIAR presents a list of 22 avian species observed breeding in the study area during bird surveys and Table 7.19 presents a list of 11 bird species considered to possibly breed in the zone of influence.

Flora and Fauna

7.5.12. Table 7.12 lists the rare and protected species of flora and fauna within and up to 5km offshore of the Zone of Influence of the development based on previous research. The species referenced above in the context of designated sites have been excluded.

Invasive Alien Species (IAS)

7.5.13. A total of five Invasive Alien Plant Species (IAPS) were identified in the study area, all of which are included in the Third Schedule of the European Communities (Birds and Natural Habitats) Regulations 2011. Subsequent field surveys identified a further occurrence of Japanese knotweed (*Fallopia japonica*) in a private garden on Dursey Island.

7.6. Key Ecological Receptors and pre-mitigation impacts

7.6.1. Key Ecological Receptors (KERs) drawn from desk study and field-based surveys and potential impacts of the proposed development were identified by the applicant. These are summarised in Table 2 directly below, which also includes a list of potential impacts in the absence of mitigation and the level of significance envisaged.

Table 2 – Key Ecological Receptors and their potential pre-mitigation impacts.

KERs in the zone of influence	Pre-Mitigation Impacts identified in the EIAR	Significance (Unmitigated)
Bats - Soprano pipistrelle (<i>Pipistrellus pygmaeus</i>) and common pipistrelle (<i>Pipistrellus pipistrellus</i>)	destruction of roosts and direct mortality of roosting bats during demolition of structures detrimental effects associated with lighting during operation	Moderate negative
Red-billed cough (<i>Pyrhocorax pyrrhocorax</i>) – which is a qualifying interest of the Beara Peninsula SPA.	disturbance due to human activity (and dogs) during operation destruction of foraging habitat due to visitor footfall. Three known nest sites at the western end of Dursey Island are potentially vulnerable to human disturbance.	Significant negative
European herring gull (<i>Larus argentatus</i>)	leftover food waste left by visitors during operation could lead to growth in population and indirectly impact on increased predation of other seabird species.	Slight negative
Great black-backed gull (<i>Larus marinus</i>)	leftover food waste left by visitors during operation could lead to growth in population and indirectly impact on increased predation of other seabird species.	Slight negative
Ground-nesting Passerines	potential disturbance of species due to humans during operation potential disturbance or destruction of nests due to visitors during operation	Moderate negative
Other Raptors	negative effects on prey species potentially leading to reduction in availability of food during operation	Slight Negative
Common snipe (<i>Gallinago gallinago</i>)	potential disturbance of species due to humans during operation potential disturbance or destruction of nests due to visitors during operation	Slight Negative

<p>Eurasian oystercatcher (<i>Haematopus ostralegus</i>)</p>	<p>potential disturbance of species due to humans during operation potential disturbance or destruction of nests due to visitors during operation</p>	<p>Slight Negative</p>
<p>Betony (<i>Betonica officinalis</i>) (was stated to have been found on the mainland side of the site but none was found on Dursey island)</p>	<p>potential destruction of plants due to construction works potential destruction of plants due to visitor footfall during operation</p>	<p>Moderate Negative</p>
<p>Invasive alien species (IAS)/ Invasive Alien Plant Species (IAPS)</p>	<p>potential introduction and/or dispersal of Invasive Alien Plant Species (IAPS) during construction potential introduction and/or dispersal of IAPS due to visitor traffic during operation</p>	<p>Significant Negative</p>
<p>Large shallow inlets and bays This habitat is a QI of the Kenmare River SAC.</p>	<p>potential loss of ecological integrity due to run-off of pollutants during construction works potential loss of ecological integrity due to run-off of improperly treated/untreated wastewater during operation potentially altered community structures due to introduction/dispersal of marine IAS during construction and/or operation</p>	<p>Moderate Negative</p>
<p>Reefs This habitat is a QI of the Kenmare River SAC.</p>	<p>potential loss of ecological integrity due to run-off of pollutants during construction works potential loss of ecological integrity due to run-off of improperly treated/untreated wastewater during operation potentially altered community structures due to introduction/dispersal of marine IAS during construction and/or operation</p>	<p>Moderate Negative</p>

<p>Vegetated sea cliffs of the Atlantic and Baltic coasts.</p> <p>This habitat is a QI of the Kenmare River SAC.</p> <p>Rocky sea cliffs also provide roosting/nesting habitats for the Chough, a QI of the Beara Peninsula SPA.</p>	<p>potentially altered plant community structure and erosion regime due to the introduction/dispersal of terrestrial IAPS during construction and/or operation</p> <p>unmanaged increased visitor footfall in the vicinity of cliffs could also give rise to de-vegetation and soil erosion. However, much of the area of this habitat is inaccessible to visitors.</p>	<p>Moderate Negative</p>
<p>European dry heaths</p> <p>This habitat is a QI of the Kenmare River SAC and are foraging habitats for Chough, a QI of the Beara Peninsula SPA.</p>	<p>potentially altered plant community structure and erosion regime due to introduction/dispersal of terrestrial IAPS during construction and/or operation.</p> <p>unmanaged increased visitor footfall in the vicinity of cliffs could also give rise to de-vegetation and soil erosion.</p>	<p>Moderate Negative</p>

7.6.2. Other general impacts are also set out. These have been identified as including habitat loss on the mainland (0.8 ha), comprising the area required to accommodate the development footprint, and disturbance from noise and vibration during construction. It is stated that disturbance to fauna might occur during operation as a result of the presence of humans due to reduced time spent foraging and experiencing elevated levels of stress, which could threaten the viability of the population in question. Disturbance by walking of dogs is also identified as an impact. Direct mortality as a result of collision risk has also been identified as a potential impact. Loss of biodiversity has been identified as leading to negative impacts on nature-based recreation, impacting negatively on human health. Impacts on the receiving water environment have also been referenced and I have dealt with this later under the heading of Water.

7.7. Proposed Mitigation

7.7.1. Proposed mitigation measures have been set out and include the following:

- Applicants have established a monthly numerical carrying capacity of 12,835 visitors which would be enforced for Dursey Island based on a previous study carried out on a Ouessant island in France. Dogs would no longer be allowed onto Dursey island.
- Control of visitor numbers by using a web based ticketing system to restrict visitors to the planned numbers permitted. (I also note that in consideration of traffic, under separate heading, electronic signage at specific points along the route would alert intending visitors of times when the car park is full, in order to alert visitors and deter them from making or completing the journey to the cable car site).
- Control of visitor behaviour by formalising three established looped walking trails on Dursey Island and on Garinish Head and Crow Head on the mainland by placing marker posts with directional arrows along the routes so as to minimise the risk of visitors walking into open habitat and prevent disturbance of chough and other ground-nesting birds.
- Control of visitor behaviour by erection of 'minimum impact behaviour' (MIB) signage at key sensitive locations along trails and providing an education campaign to inform visitors of the sensitive ecological environment.
- Mitigation by design including carrying out the most noise emitting elements in winter, lighting plan to minimise impacts on biodiversity, design of drainage and wastewater to meet appropriate standards.
- Prepare and implement an IAS/IAPS management plan and ensure landscaping uses native species and IAS/IAPS-free soil and implementation of best practice biosecurity protocols.
- Bat boxes are proposed to be erected and bat-friendly lighting would be used.
- Providing waste bins on the island and mainland to prevent accumulation of food litter to minimise the attraction of an increased number of gulls.

7.7.2. The overarching mitigation measure during the construction phase would be the requirement for the preparation and adherence to both a CEMP and an environmental operating plan (EOP) by the appointed contractor. Any specimens of betony encountered would be translocated under NPWS licence.

7.8. Residual Impacts

7.8.1. Residual impacts on key ecological receptors have been set out in Table 7.9 of Chapter 7 of the EIAR, wherein it is submitted that in most instances that an imperceptible or no negative effect would result post adoption of mitigation. A slight positive effect has been identified on bats. An imperceptible or slight negative effect has been identified as a result of IAS/IAPS, however, noting the robust mitigation including biosecurity protocols proposed, I would conclude that the residual impact in respect of IAS/IAPS would be no greater than imperceptible.

7.9. Monitoring

7.9.1. Monitoring of visitor numbers by counting and carrying out annual visitor surveys is proposed. The conservation status of the Dursey Island chough population during the breeding season would be monitored as would the conservation status of the habitats on Dursey and the information gathered from monitoring would be fed into Fáilte Ireland's Environmental surveying and monitoring programme.

7.10. Assessment of Applicants Proposed Mitigation Measures (Operation Phase)

Direct Impacts

7.10.1. I am satisfied that the mitigation proposed would be effective in respect of addressing direct impacts which have potential to arise, largely during construction of the **physical infrastructure**, including the cable car and associated structures and buildings.

Indirect Impacts

7.10.2. I am not satisfied that the mitigation measures proposed would be effective in respect of indirect impacts during the operation phase. Over time the cable car has grown as a visitor attraction and with the new higher capacity cable car in place, this would generate a renewed interest in its popularity particularly as it is one of the signature Discovery Points on the Wild Atlantic Way tourism route. It is worth recalling that the new cable car facility would have the physical capacity to carry

between 3,400 and 6,600 per day. It is the applicants intention to limit the visitors to both the mainland and island. A total of 100,000 visitors would be permitted to the cable car site on the mainland, of which 80,000 visitors would be permitted to make the journey to Dursey Island. A total of 12,835 visitors would be allowed onto the island in any one month. These intended visitor numbers represent an almost quadrupling of the current annual numbers (20,424) and the monthly permitted figure is significantly more than the current 4,950 visitors to the island in the peak months of July and August. My concerns centre around the impacts which would arise on the sensitive biodiversity environment during the operation phase, as a result of increased visitor footfall, particularly on Dursey Island but also, to a lesser degree on the sensitive areas on the mainland, including Garinish Point and Crow Head. It is of relevance to note that no cap is proposed for the monthly visitor number (within the annual cap of 100,000) who would visit the mainland only.

7.10.3. Concerns have also been raised by observers relating to the impacts likely to arise with the new development in place because of increased number of visitors inadvertently trampling on ecologically-sensitive habitats and causing disturbance to breeding Chough species and also affecting their foraging habitat. The applicant's main mitigation measure in this regard is the proposal to adopt their calculated numerical visitor carrying capacity for Dursey Island with regard to Chough foraging habitat, together with control and educating visitors in relation to the sensitive environment. I have set out my assessment of the applicants rationale and methodology for arriving at the numerical carrying capacity directly below.

Assigned Numerical Visitor Carrying Capacity

7.10.4. In deciding on the visitor numerical carrying capacity for Dursey Island, the applicant draws on a scientific study of the effects of tourism on the chough population, carried out by Keribiou *et al.*, 2009 in Ouessant, a small island of 1,541 ha in area, located 20 km west off the western coast of Brittany in France and which hosts Chough species. I have read the research paper entitled 'Tourism in protected areas can threaten wild populations: from individual response to population viability of the chough *Pyrrhocorax*' (Keribiou *et al.*, 2009) as included in the 'Journal of Applied Ecology 2009,46, 657–665'. It is worthwhile setting out a summary of the research carried out together with its findings. The scientific paper is attached as Appendix 7.3 to the Biodiversity Chapter in the EIAR and from an online search, I

have been able to obtain a copy of the appendices related to this paper from the scientific journal. The appendices are also highly relevant. I have placed a copy of the paper and its accompanying appendices on file for completeness and for ease of reference by the Board.

- 7.10.5. Similarly to Dursey, tourism has grown considerably on Ouessant with 150,000 annual visitors last reported (2005) and there was no sign of any levelling off at that time. The high season of tourists occurs on the French island in July and August, also similarly to the peak visitor time for Dursey island.
- 7.10.6. The study followed the population monitoring and modelling of impact of tourism on individual response and population viability of the chough on Ouessant over an eight-year period between the longer period of 1993 and 2005. The breeding population was reported as having been fairly stable in the last 50 years (10 to 13 pairs), but a strong decrease in the number of non-breeders was observed, from about 55 individuals in the 1970s to 15 in 2009.
- 7.10.7. The study by Keribiou *et al.*, examined **feeding habitat choice** by examining the **spatial distribution of the choughs** in relation to **feeding habitat availability**. It was noted in the study that choughs fed almost exclusively on very short swards of grass which are found primarily on the coastline on the French island. For the purpose of the study, the coastline, where all choughs and most tourists were stated to have been observed, was selected as the study area. The area was divided into an index of 123 squares, each measuring 250m x 250m. During the lengthy study period, the impact of tourism on foraging was studied by examining the annual variation in foraging time, assessing the correlation between the number of choughs and the number of visitors and quantifying the spatio-temporal decrease in the availability of feeding habitat when visitors were present.
- 7.10.8. Results revealed that the **flush distance** (distance at which a foraging bird would fly off if disturbed) significantly increased in the presence of dependent juveniles in the flock. It was found that flush distance was not affected by visitor number, type of disturbance or flock size.
- 7.10.9. In winter, the **spatial distribution** of chough flocks was found to positively correlate with the amount of feeding habitat throughout the day, whereas in summer this correlation was found in early morning or late afternoon only. This negative impact of

the number of visitors on foraging behaviour was found to be due to a reduction in the area of available feeding habitat.

- 7.10.10. By combining the average flush distance and spatial distribution of paths on the coastline, it was estimated that the presence of visitors on Ouessant island resulted in a severe decrease in the area available for foraging in respect of choughs and a reduction in the time available for foraging. In this regard, it was found that 97% of the habitat was potentially affected by human disturbance. This translated into reduced summer juvenile survival and reduced population viability. The excess juvenile mortality was considered to most likely be as a result of severe undernourishment, due to the reduction in feeding time budget. The results of the study found that the chough population in Ouessant was threatened by tourism to the point where the short-term viability of the chough species was noted to be endangered.
- 7.10.11. Of the overall study area, it was found that while 62 ha of suitable feeding habitat was available when visitor numbers were low, 26 ha, comprising short grassland, were used by the choughs. In contrast, during peak visitor hours in summer days, the total area available was found to reduce to 4-8 ha, all of which was used by choughs. Based on an analysis of all of the information gathered during the study, it was concluded that the number of tourists should not exceed 16,500 in peak season in August.
- 7.10.12. In the case of Dursey Island, the applicant notes the primary difference between both islands, with Ouessant being more developed comprising a population of 900 persons and served by an airport and having more extensive pathways and cliff walking. It is worth recapping at this point that the study area used in Ouessant was along the cliff coastline where foraging of choughs was stated to occur, away from the built-up areas. The study area included pathways along the coastline.
- 7.10.13. Noting the established carrying capacity of visitors for this French island, as set out above (16,500), the applicant considered that the carrying capacity for Dursey could be calculated by correlating available foraging areas which they deem to be a key variable on both islands. To that end, they state that the available foraging area for Ouessant is 7.6875km² (768.75 ha). Having reviewed the scientific paper, this area does not represent the available foraging area as stated by the applicant but instead

represents the gross area enclosed by the 123 index squares which formed the study area, i.e. 123 squares each of 250m x 250m, a total of 768.75 ha. It is then stated by the applicant, that the whole of Dursey island, a gross area 5.98km² (598ha) is suitable for foraging at one time or another. By comparing the study area of Ouessant with the stated gross foraging area available on Dursey Island (at one time or another), the applicants calculated that Dursey Island could accommodate 12,835 visitors per month. In this regard, I refer the Board to Tables 7.26 and 7.27 within Chapter 7 (Biodiversity) of the EIAR for the details used by the applicant in its mathematical calculation.

- 7.10.14. The calculated numerical visitor carrying capacity arrived at for Dursey cannot be relied on for a number of reasons. In the first instance, the stated foraging area used in the applicant's calculation in respect of Ouessant, 7.6875km² (768.75 ha), represents the entire/gross study area of the island, including the coastal location where foraging and visitors were observed on that island. It is important to note at this point that the scientific study in Ouessant did not arrive at its monthly numerical visitor carrying capacity based on this figure (the entire study area) in any case. Of greater relevance to note is that the feeding area within the study area in Ouessant was found to be considerably less at 62 ha, of which 26 ha was used on average by choughs and during peak visitor times this was reduced to 4.8 ha.
- 7.10.15. In contrast, it was stated by the applicant that all of Dursey is available for foraging at one time of the year or another. In this regard, I conclude that the two variables used by the applicant are not comparable, i.e. the study area within which foraging and visitors were observed on Ouessant and the entire area of Dursey Island, where foraging is stated to be available at one time or another.
- 7.10.16. It would also appear on further reading of the EIAR and NIS that not all of Dursey Island provides a suitable habitat for foraging, for example, it is stated in Chapter 7 of the EIAR that the enclosed fields are likely to provide suitable habitat during the winter period. It is also stated that from late June to early July, choughs were increasingly observed gathering in flocks to forage at the western end of Dursey Island. The EIAR sets out that Choughs in Ireland are known to forage principally on grazed grassland with short sward heights, earthen banks, coastal machair and maritime turf, and to a lesser degree, also on heathland, dunes, cliffs, improved grassland and tidewrack. In Table 3.2 of the submitted NIS, it is stated that Choughs

forage mainly within 300m of the cliff tops used for breeding. Therefore the figure used as the available foraging area in the applicant's calculation, which is stated to be the entire of Dursey Island, would appear to be overestimated.

- 7.10.17. The study at Ouessant considered many factors around the net available feeding area at different times, and the impact of tourists on the feeding pattern across summer, winter and various times of the days within summer and winter seasons. The foraging area for Dursey was arrived at without considering such factors, in particular it did not distinguish available foraging area in summer when visitors are at peak and winter when visitor numbers are low. The western end of the island is clearly the stronghold area for foraging and is the most vulnerable between June and August, inclusive, during which time it would be exposed to the greatest numbers of visitors.
- 7.10.18. Different flush distances are also used, with a flush distance of 30m used for Dursey, based on observed flush distances of between 10m (minimum) and 150m (maximum), in comparison to 147m+/- 23m (flocks with juveniles) and 75m+/-9m (flocks without juveniles) used in the study of chough in Ouessant. The applicants state that the smaller flush distance observed on Dursey may be due to the Choughs there being more habituated to people (visitors) than those on Ouessant. This assertion is put forward without scientific evidence and is contrary to the findings in the aforementioned Ouessant study, where it was found that the flush distance was not affected by visitor number, type of disturbance or flock size. An underestimated flush zone which cannot be ruled out in this case, would have implications for the available foraging area on Dursey island.
- 7.10.19. It was found by Keribiou *et al.* that by combining the average flush distance and spatial distribution of paths on the coastline in Ouessant, 97% of the foraging habitat within the study area along the coastline was found to be potentially affected by human disturbance. On Dursey Island, it was stated by the applicant that only 22% (30m flushing distance + 20m as a precautionary buffer) was affected by human disturbance. In any case, this affected area on Dursey was not taken into account in estimating the visitor carrying capacity, where instead gross areas only were used.
- 7.10.20. Having regard to all of the above and noting the limited data available on the impacts of tourists on the chough population on Dursey, in contrast to the detailed data

available for Ouessant, it is not possible to rely on the numerical visitor carrying capacity arrived at for Dursey Island. Therefore, I cannot agree that this mitigation measure (adopting the numerical carrying capacity calculated by the applicant for Dursey Island) would be effective in terms of addressing indirect impacts on the Chough bird species or its feeding habitat during the operation phase of the development.

Control of Visitor Numbers

7.10.21. It is stated in Chapter 7 (Biodiversity) that a web-based ticketing system would be employed to control visitor numbers making the journey to the island. It is likely that a proportion of the 100,000 visitors arriving at the mainland would explore walking along Garinish Head and Crow Head, and these sensitive areas on the mainland might also experience impacts.

7.10.22. I note that currently visitors could arrive at the cable car site and purchase their tickets for the journey to Dursey and it is also stated in Chapter 5 (Traffic and Transport) of the EIAR that Variable Message Signs (VMS) would be erected at four locations as far east as Glengarriff, to advise intending visitors in advance that the car park is closed. It is not clear therefore whether or not the current practice of allowing visitors to arrive without a ticket (and purchase one on arrival) would continue and this in turn leaves unresolved concerns around how visitors who wish to access Dursey Island and the sensitive areas on the mainland would be controlled. However, I acknowledge that the maximum visitor numbers committed to would be a requirement of the overall operation of development if the development is approved and the visitor numbers committed to could be further strengthened by attaching an appropriately worded condition to an approval, should the Board be minded to approve the development.

Control of Visitor Behaviour

7.10.23. The main activity on the island heretofore is that of small scale non-intensive farming, mainly sheep grazing and a level of tourism outlined. A survey of existing visitors on Dursey Island was carried out by the applicants in preparing the EIAR and NIS. The findings revealed that currently visitors readily wander off-track, exploring the very nature that is the attractiveness of the island. A total of 68% of the 537 respondents stated that they left established paths at some point while on the island.

Of these, 26% reported walking to the extreme western end of the island of which 42% stated that they left the path at that point. I remain unconvinced that this would be prevented, notwithstanding the proposal for formalisation of trails and walkways with trail markers and use of signage and educational tools. Its open nature would make it easy and inviting for visitors to explore off-trail onto open habitats. The Beara Way walking route, a 200 km looped route from the mainland to and through the island continues to the western end of the island, bringing visitors through this sensitive ecological environment. While the western end containing the chough 'hotspot', would not be included in the new formalised walking route as set out in this EIAR, it remains on many published tourist maps and information, e.g. Beara Way: Map 7 – Foher to Dursey Island on irishtrails.ie information website, and would therefore be vulnerable to the significant visitor numbers envisaged.

- 7.10.24. I do not consider that the potential ecological impacts identified in my assessment above would be adequately prevented by the measures to control visitor behaviour and in this regard, there is potential for significant adverse impacts to remain post mitigation. This is particularly so as the visitor management plan envisaged in **West Cork Municipal District Local Area Plan (2017)** for Dursey Island is as yet not in place. This requirement is elaborated under the heading of 'Planning Assessment' later in this assessment.

Restriction on dog access to Dursey Island

- 7.10.25. I note the proposal to prohibit the bringing and walking of dogs (except assistant dogs and dogs belonging to the island residents) onto the island, which would likely reduce negative impacts on the sensitive biodiversity environment from dogs.

NPWS Submission to the Board

- 7.10.26. The NPWS do not object to the proposal on biodiversity grounds but state that additional precautionary mitigation would be required to protect a Chough species nest in a derelict building on the island. In response to this submission, the applicant states their willingness to engage with the landowner. This matter remains open and unresolved at this point.

Concluding Comment - Biodiversity

7.10.27. I am satisfied that direct impacts on the biodiversity environment from the construction and operation as a result of the physical infrastructure would be appropriately mitigated and any residual impacts would be acceptable. However, I am not satisfied that, arising from the much increased cable-car capacity and the corresponding increased visitor numbers which would be permitted to visit Dursey Island and would likely explore the sensitive areas of the mainland (Garinish Head and Crow Head), has been adequately assessed from a scientific perspective. Equally, I am not satisfied that the formalised trails and visitor management mitigation measures would be sufficiently effective, particularly given the significant increase in visitor numbers which would be enabled by the development, and in the absence of a visitor management plan for Dursey Island in particular. The measures proposed are unlikely to successfully mitigate the arising indirect impacts on biodiversity.

7.11. Land, Soils and Geology

- 7.11.1. Chapter 8 examines the land, soils and geological environment. The Geological Survey of Ireland (GSI) 1:100,000 mapping of bedrock geology indicates that both the mainland and the majority of Dursey Island is underlain by the Cahahone Mountain Formation, consisting of purple and green sandstones and siltstones. Site investigation revealed that overburden comprised thin peaty topsoil and gravelly/cobbly colluvium overlying shallow bedrock. Laboratory testing found no evidence of ground contamination present amongst the inert soils encountered.
- 7.11.2. The GSI Bedrock Geology map shows a geological fault running in a northwest-southeast direction and passing in the immediate vicinity of the proposed locations on both the mainland and Dursey Island.
- 7.11.3. There are no Geological Heritage features, quarries or commercial mineral deposits within the boundaries of the site which would be impacted by the proposed development. The national Landslide Susceptibility Map indicated the area falling within the moderately low to moderately high landslide susceptibility area. I would agree as submitted that because the ground cover is rock outcrop and the slope angle is mild, the area is not one which would enable the detachment and sliding of

rock. No historical landslides are stated to have been recorded within or close to the site.

7.11.4. The construction phase of the development is stated to require the excavation of approximately 6,500 cubic metres of overburden and bedrock. It is stated in the non-technical summary of the EIAR (Volume 1) that rock removal would likely employ a rock ripping technique rather than blasting. It is also set out that rock would be used as backfill to the proposed retaining walls. The position of the retaining walls are shown on Figure 11.22 (Landscape Masterplan) of Volume 3 of the EIAR. It is also stated that there is no fill required to be imported onto the site. Stripped topsoil would be temporarily stored and reused throughout the development area. A geotextile screen and boom with oil barrier would be used during construction to prevent the runoff of silt, oil or other deposits generated by construction activities.

7.11.5. While not stated in Chapter 8 of the EIAR, I note the mitigation measure set out elsewhere in the EIAR, including that a CEMP would be prepared by the appointed contractor for the proposed development. In this regard, I also note the contents of the Outline CEMP set out in Appendix 4.1b of the submitted EIAR.

7.11.6. There are stated to be no predicted impacts on land and soils during the operation phase. I have some concerns with this conclusion reached. During the operational stage, the numbers of visitors to Dursey Island would significantly increase, enabled by the higher capacity dual cable car with a faster overall journey time. The numbers of walkers using routes such as the Crow Head Loop, Garinish Loop and Beara Way are also likely to increase. The indirect impacts on land and soils from inadvertent trampling pressure and rates of erosion have not been considered. When vegetation cover is reduced, soil can become impacted through soil compaction and erosion, negatively affecting future vegetation growth and triggering a feedback loop. Soil compaction can reduce infiltration and cause an increase in run-off and overland waterflow leading to erosion of the top layer of soil. Dursey Island is a unique island environment, and because of its extreme sensitive conditions, trampling impacts on land and soil could be amplified. The thin peaty topsoils encountered in some areas of the island would be particularly vulnerable to such indirect impacts, as off-route walking cannot be ruled out.

7.11.7. I note that there are no excessive steep slopes along the main walking road and trail running through the island, which reduces my concerns on impacts caused by erosion.

Concluding Comments - Land and Soil

7.11.8. Overall, with the adoption of the mitigation measures outlined, it can be reasonably concluded that no significant adverse direct impacts would arise on the land, underlying soils or geology as a result of the construction or operation phase of the physical infrastructure development on the mainland and island site. However, I am not satisfied that the operational phase of the development would not result in indirect impacts on land and soils from human activity and these indirect impacts on land and soils have not been considered in the EIAR respect of land and soil.

7.12. Water

Hydrogeology

- 7.12.1. The hydrogeological and hydrological aspects of the environment are described in Chapter 9 of the EIAR. The site of the cable car on the mainland is located within the Beara Sneem Groundwater Body and Dursey Island is located in the Beara Sneem Islands Groundwater Body.
- 7.12.2. The bedrock aquifer underlying the site (mainland and island) is classified as a Poor Aquifer (PI) – Bedrock, which is generally poorly productive except for local zones. Groundwater vulnerability description for the site (mainland and island) indicates that groundwater is 'X-Rock at or near Surface or Karst'. As the site is underlain by a poor aquifer and is located in an area of extreme vulnerability area, the area is within a Resource Protection Zone - PI/E as characterised by the Environmental Protection Area (EPA). The groundwater protection response for an on-site treatment system on the site is therefore R2¹ – 'Acceptable subject to normal good practice.'
- 7.12.3. Under the requirements of the Water Framework Directive 2000/60/EC (WFD), the Beara Sneem and Beara Sneem islands Groundwater Bodies are classified as having an overall 'Good' status for water quality and are 'not at risk', according to the latest information available on the EPA portal.

- 7.12.4. The area of the Atlantic Ocean within Kenmare River SAC forms part of the South Western Atlantic Seaboard Coastal Waterbody. It is categorised as 'not at risk' by the EPA.
- 7.12.5. There is an existing groundwater supply via a borehole located on the mainland close to the cable car site and potable water on the island is available from an existing spring. Monitoring of the groundwater well on the mainland is undertaken by Cork County Council, taking into account pH, Electrical Conductivity, Coliforms and E.Coli parameters. The results of the monitoring in 2018 revealed good quality groundwater with respect to the parameters analysed. The results are presented in Table 9.2 of Chapter 9 (Hydrogeology) of the EIAR. Results from further sampling of the mainland well and two additional trial wells which were drilled during site investigation are set out in Table 9.3. The results revealed clean unpolluted groundwater with low levels of ammonia, nitrate, phosphorous and bacteriological parameters recorded.
- 7.12.6. There are no other public groundwater supplies or group water schemes recorded on the GSI database in the vicinity of the site. A new groundwater supply borehole is proposed for the mainland development.
- 7.12.7. Groundwater flow on the mainland is towards the sea and island in a south-westerly direction, following the drop in topography. The underlying rock is stated to have very limited porosity and groundwater flow would occur through fractures, fissures and joints within the bedrock. Water was encountered at depths of between 3.4m and 9m below ground level at the location where the wells were drilled, with moderate water yields which is evidence of non-homogenous distribution of fracturing within the rock. A falling head infiltration test was carried out at a borehole (RC01) on the mainland which revealed a bedrock permeability (k) of 3.93×10^{-3} m/s suggesting a moderate to high bedrock permeability.
- 7.12.8. I note that no contaminated soil was encountered at the locations of the site investigations. However, it is stated that there is potential for localised ground contamination during the construction phase, and as such its excavation would result in a permanent positive impact following its removal. Any excavated contaminated material stored on-site, while awaiting removal for disposal, would present a risk due

to contaminated surface runoff, leading to a moderate to significant impact on the hydrogeological environment.

- 7.12.9. It is also stated that there is a risk of contamination of soils and the aquifer from construction material leading to a slight temporary impact. The majority of the areas where materials would be excavated, would be covered in hardstanding surface, which would reduce the potential for contaminants to enter the underlying aquifer from the surface. Overall, the potential impact can be rated as slight temporary.
- 7.12.10. During the operational phase, run-off from hardstanding areas around the visitor centre and car park and other impermeable surfaces, including from the building roofs, would be managed. Run-off from permeable parking bays would percolate through porous media and subsequently be collected via a subsurface collector drain. This drain would firstly pass through a petrol interceptor before clean water is discharged to the adjacent Ballaghboy stream. Noting the measures proposed, the potential for contaminated run-off can be rated as imperceptible.

Wastewater Treatment

- 7.12.11. Domestic wastewater generated from the proposed development at the mainland would pass through a proprietary wastewater treatment plant, after which it would be pumped to a sand filter and then discharge through the sand filter to ground. It is submitted that the replacement of the existing treatment system, with the new system would result in a permanent positive impact as the current system, a septic tank, provides primary treatment of effluent only. However, I note that the proposed development would generate a greater quantity of effluent because of the visitor centre and the 84 seater café proposed, together with the increased visitor numbers that would be enabled because of the increased capacity of the new cable car infrastructure. Accordingly it is necessary to consider the additional effluent hydraulic and organic loading, the level of treatment proposed and to assess any consequent environmental impacts on the hydrogeological environment in particular.
- 7.12.12. Based on percolation testing carried out on the mainland, a 'T' value of 43.33 min/25mm and a 'P' value of 12.38 min/25mm were obtained. It is stated by the applicant that the water table was encountered at 1.0m below ground level at the location of the percolation test holes. Table 9.6 of Chapter 9 (Hydrogeology) of the EIAR sets out the estimated hydraulic and organic loading at the development site

for both the mainland and the island. The loadings are based on the peak number of visitors and the estimated use of the toilet facilities, drawing on the EPA's 'Wastewater Treatment Manual – Treatment Systems for Small Communities, Business, Leisure Centres and Hotels'.

- 7.12.13. On the mainland site, it is proposed to install a Denitrifying Wastewater Treatment Plant incorporating anaerobic and biozone treatment with phosphate and alkalinity dosing systems. This would provide primary and secondary treatment of the effluent generated. Treated effluent would then be pumped to a proposed sand polishing filter on the northern portion of the site over a plan area of 14.5m x 14.5m (212 sq.m), constructed at a depth 300mm below the existing ground level and would comprise 900mm of graded sand. The sand filter design is based on guidance set out in the Code of Practice: Wastewater Treatment Systems for Single Houses (2009) and subsequent clarifications issued by the EPA. The treated effluent at the base of the polishing filter would be discharged to a 300mm deep gravel distribution layer. The underlying soil beneath the gravel distribution layer is stated to have a suitable permeability to receive the treated effluent and it is proposed to distribute this treated effluent over an area of 440sq.m. Based on the EPA Clarification on the Code issued in 2012, a minimum depth of 300mm is required between the point of infiltration and the bedrock/water table and while it is not stated that this would be provided, it is inferred, in that, it is stated that a minimum of 1.2m of unsaturated suitable subsoil would be available beneath the base of the gravel distribution area. It is also stated that design details including plans and cross-sections have been provided by 'Wastewater Solutions' and were reviewed by the applicant as part of their assessment. These design details did not form part of the application documentation received by the Board.
- 7.12.14. On the island site, volumes of effluent generated and hence hydraulic and organic loading would be considerably less as the main facilities including the visitor centre and café are proposed for the mainland site and only toilet facilities are proposed on the island. No percolation testing was carried out on the island site, as it is stated that there is a lack of subsoil at this location and it is stated that the proposed sand polishing filter would be raised and bunded above ground. A similar but scaled-down version of the proprietary effluent treatment system proposed for the mainland and as detailed above is proposed for the island. The treated effluent would also pass

through a raised sand filter with a plan area of 8m x 8m (64sq.m) providing tertiary treatment. The treated effluent at the base of the sand filter would be discharged to a 300mm deep gravel distribution layer, located directly beneath the sand polishing filter and would thereafter drain by gravity to the underlying weathered bedrock/water table.

- 7.12.15. It would appear that the requirement for 300mm to be maintained between the point of infiltration to ground (beneath the base of the distribution area) and the bedrock/water table, i.e. suitable sub-soil beneath the gravel distribution layer, cannot be achieved on the island site, because of the lack of sub-soil. This lack of sub-soil is referenced in the EIAR and set out above and I also note that the lack of subsoil on the island site is evident from a review the applicant's geotechnical investigation report attached to Chapter 8 (Land and Soils). The applicant's reference to 1.2m of unsaturated subsoil beneath the base of the gravel distribution area on the island site is therefore not accurate, as the breakdown provided for this figure includes the depth of the sand filter (900mm) on the gravel distribution layer (300mm) and does not include subsoil envisaged in the EPA Code of Practice including the clarification document issued in 2012. The proposal therefore does not meet the guidance set out in this regard.
- 7.12.16. A groundwater risk assessment was carried out which identified the potential risk of the proposed discharge on relevant receptors. It identified the source (discharge of treated effluent), pathway (underlying subsoil beneath the sand polishing filter) and receptor (Atlantic ocean/Kenmare River SAC and the bedrock aquifer beneath the site). A conceptual site model is presented in the applicant's assessment (Plate 9.2) in Chapter 9.
- 7.12.17. In order to determine the impacts of the proposed discharges on the mainland and island sites, an assimilative capacity calculation was carried out. The normal background concentrations found in the groundwater were compared to the levels arising taking discharge concentrations from the treatment systems on both the mainland and island sites into account. The calculations revealed that the resulting concentration in groundwater beneath the sand distribution filter on each site would be below the required limits for drinking water quality. In addition, further dilution would occur as the contaminates travel through the groundwater, prior to reaching any identified potential receptors.

- 7.12.18. As set out above, the groundwater responses matrix for on-site Wastewater Systems for Single Houses indicates a Response of R2¹ (underlying Bedrock Aquifer) for the site indicating that it is suitable for discharge to ground.
- 7.12.19. In relation to the proposed groundwater water supply, the minimum separation distance of 60m between the polishing filter (source) and the water supply well (receptor) on the mainland would be met as the sand polishing filter would be located 200m from the proposed groundwater supply borehole location. I am satisfied that the well would not be impacted on from the wastewater treatment system.
- 7.12.20. Overall, the applicant's assessment concluded that there would be a neutral risk scenario in that the proposed discharge would be located a sufficient distance from identified receptors and sufficient dilution would be available to attenuate potential contaminants. It is stated that given the small increases in concentration of relevant parameters in groundwater immediately downstream of the sand polishing filters on both the mainland and island sites, this aspect of the development has been assessed as a slight permanent impact.
- 7.12.21. I have some concerns regarding the limited details of the design and layout of the effluent system and the sand polishing areas that have been provided. There are no dimensioned or scaled drawings presented and neither are there any longitudinal or cross sections provided for the mainland or island site. I also note that the sand filter on the mainland is represented as a rectangular shape on Fig. 10.1 (Mainland Drainage Plan) in Volume 2 of the EIAR. This drawing is not to scale or dimensioned but it would appear when comparing it to other scaled drawings on file, that the sand polishing filter area indicated on the figure is significantly less than the 212 sq.m size proposed.
- 7.12.22. In the absence of detailed cross-sections and longitudinal sections, it remains unclear how the substantially large sand filter proposed on the mainland side in particular would be constructed within the sloped topography. It is open to the Board to request such details from the applicant to address the information gap highlighted, however, the absent details are not critical to the assessment.
- 7.12.23. On balance, noting the high quality of treatment proposed including primary, secondary and tertiary treatment and having regard to the information on file and to the guidance provided in the EPAs codes of practice and the result of the risk

assessment carried out, the effluent generated can be safely disposed of without unacceptable risk to the underlying aquifer or the Atlantic Ocean (Kenmare River SAC). It is relevant to also note that a Groundwater Discharge Licence under the Local Government (Water Pollution) Acts 1977 & 1990 would be required before the discharge is commenced and conditions attached to the licence would be required to be met.

- 7.12.24. Accordingly, the issue of the treatment of effluent should not form a reason for refusal of the approval sought.

Other Hydrogeological Impacts

- 7.12.25. Other identified hydrogeological impacts include impacts to groundwater from surface water drainage, contaminated soil and aquifer recharge. These have all been rated as imperceptible in terms of significance which I agree with and is acceptable. Surface water from the impermeable areas would be treated via SuDS limiting the infiltration to groundwater.

Mitigation

- 7.12.26. During construction, the overarching mitigation measure is the requirement for the appointed contractor to prepare and adhere to a project specific EOP for the construction phase. While not referenced specifically in Chapter 9, the development of and adherence to a CEMP would also be a strict requirement. An Outline CEMP and Outline EOP have both been submitted and are contained in Appendix 4.1 of the EIA.
- 7.12.27. During the operation phase, conditions of the Groundwater Discharge Licence (once granted) for the disposal of effluent would be a requirement and it is stated that a maintenance agreement would be put in place for the on-site wastewater treatment system. All other potential impacts have been identified as slight in the operational phase and as such no long-term mitigation measures are proposed. Post mitigation, I would agree that residual impacts on the hydrogeological environment would be imperceptible.

Hydrology

- 7.12.28. The hydrological environment and impacts from the proposed development are examined in Chapter 10 (Hydrology) of the EIA. The proposed development site on

the mainland is within the 'Fanahy_SC_010' WFD sub-catchment, which is within the 'Dunmanus-Bantry-Kenmare' WFD catchment. Surface water flows over existing hardstand areas discharging to ground or continuing to discharge to the sea. A stream, the Ballaghboy 21, runs south of the cable car site on the mainland from east to west and it discharges to the sea. This watercourse is part of the 'Ballydonegan_010' waterbody under the WFD. It has not been assigned a status yet under the WFD and is categorised as 'Not at Risk' from a quality perspective. There are a number of smaller local watercourses on Dursey Island which discharge direct to the sea. The Atlantic Sea adjacent to the proposed development site has an EPA coastal water quality status of 'unpolluted' from 2010-2012 which is the most recent record.

- 7.12.29. No area of the works has been identified as being at risk of flooding. There are no bathing waters located in proximity to the proposed development site.
- 7.12.30. During construction, activities within and alongside surface waters could cause a deterioration of water quality, primarily from suspended solids, concrete grout or hydrocarbons entering the watercourse channels and could physically alter the watercourse bed, bank and coastal morphology. I would agree with the impact rating as 'moderate to significant'.
- 7.12.31. During operation, the risk to surface and groundwater from pollution or hydrocarbons would be negligible. There would invariably be an increase in the run-off rate of surface water from impermeable surfaces and if unmitigated these would be rated as moderate to significant in magnitude due to the highly-sensitive environment.
- 7.12.32. It is stated that the construction would be undertaken following best practice which I am satisfied would be sufficient to control construction impacts on the receiving water environment. Specific control measures in relation to the use of concrete would also be employed.
- 7.12.33. During operation, impacts on surface water would be mitigated against by measures set out including employment of SuDS, which would mitigate any potential impacts with regard to changes in runoff rates.
- 7.12.34. I am satisfied that with the adoption of best practice and other mitigation outlines, the residual impacts would reduce to no greater than imperceptible.

Concluding Comments – Hydrogeology and Hydrology

7.12.35. It can be reasonably concluded that provided the prescribed mitigation measures are implemented, the significance of all residual impacts with respect to hydrogeological and hydrological environment would be imperceptible.

7.13. Air Quality and Climate

- 7.13.1. Air quality and climate are examined in Chapter 13. An assessment of the likely impacts was carried out on the basis of compliance with the Air Quality Standards Regulations 2011 which are the regulations which set out limit values for NO₂, PM₁₀, PM_{2.5}, Benzene and CO. These standards are set out in Table 13.1 of Chapter 13 of the EIAR.
- 7.13.2. The greatest potential for impact on air quality would arise from dust dispersion and deposition during the construction phase which would also depend on local meteorological factors including rainfall, wind speed and wind direction. -There are currently no statutory guidelines regarding the maximum dust deposition levels that may be generated during the construction phase of a development in Ireland. Instead, the German air pollution control regulation entitled 'Technical Instructions on Air Quality Control (*Technische Anleitung zur Reinhaltung der Luft*)', referred to as the **TA Luft** for dust deposition is frequently used. It sets a maximum allowable level for dust deposition of 350 mg/(m²*day) averaged over a one year period at any receptors outside the site boundary is frequently used. The Institute of Air Quality Management in the UK guidelines (2014) (IAQM) methodology was applied to the construction phase of the development in order to predict the likely magnitude of the dust impacts in the absence of mitigation measures.
- 7.13.3. In relation to dust impacts arising during construction, it is noted that while construction dust tends to be deposited within 200m of a construction site, the majority of the deposition occurs within the first 50m. It is stated that there are ten sensitive receptors (properties) within 50m of the proposed works which includes works on the approach road, R572 regional road, leading to the cable car site. The impact of construction of the proposed development is likely to be short-term and imperceptible with respect to human health.

- 7.13.4. As the construction activity would occur directly adjacent to or in close proximity to the Garinish Point pNHA, Beara Peninsula SPA, Kenmare River SAC and Durseley Island pNHA, impacts from dust could arise on these ecologically-sensitive sites.
- 7.13.5. While there is potential for emission of greenhouse gases, including CO₂ and N₂O, due to the nature and the short-term period for the construction phase, impacts on climate during the construction phase would be imperceptible.
- 7.13.6. For the operational phase, the air quality assessment was carried out following procedures described in publications by the EPA (2015, 2017) and using the methodology outlined in the guidance documents published by the UK DEFRA (2018; 2016). The key pollutants reviewed in the assessment are NO₂, PM₁₀, PM_{2.5}, Benzene and CO, with particular focus on NO₂ and PM₁₀.
- 7.13.7. It is submitted that as the development would not cause daily flow changes by 1,000 annual average daily traffic (AADT) or more, or that HGV flow change would not be greater than 200 vehicles per day, drawing on TII guidance, a quantitative assessment of the impact of traffic emissions on ambient air quality and climate is not necessary.
- 7.13.8. The impact of NO and NO₂ emissions resulting from the traffic along the R572 associated with the proposed development at the Beara Peninsula SPA, Garinish Point pNHA and Kenmare River SAC were assessed. The impact of the proposed development in terms nitrogen oxides (NO and NO₂) impacts on sensitive ecosystems is rated in the applicant's assessment as long-term, neutral and imperceptible.
- 7.13.9. A range of dust minimisation measures, all of a standard nature, are proposed. The preparation and implementation of a dust management plan during the demolition and construction phase is the key mitigation measure proposed. I am satisfied that with the adoption of the mitigation outlined, impacts on air quality and climate including from dust would be controlled during construction.
- 7.13.10. No specific mitigation measures are stated to be required during the operational phase in relation to air quality and climate. I have some concerns regarding the emissions from the additional car-based traffic in the long term and I have dealt with this under the heading of Traffic and Transport in which I have noted that the

significant increase in car-based traffic would be contrary to national policy on climate change.

Concluding Comments – Air Quality and Climate

7.13.11. I am satisfied that provided the prescribed mitigation measures are implemented, the significance of all residual impacts with respect to air quality and climate would be neutral and imperceptible in the short term. However, in the long term, the consequent increase in car-based traffic would be contrary to national and local policy in seeking to reduce Ireland's greenhouse gas emissions from the transport sector and in addressing the impact of climate change.

7.14. Noise and Vibration

7.14.1. Noise and vibration are examined in Chapter 12 of the EIAR in which impacts on sensitive receptors (properties) have been set out. Separately, impacts on ecological receptors as a result of noise or vibration has been considered under the heading of Biodiversity above.

7.14.2. A baseline environmental noise survey was conducted at three locations in the vicinity of the proposed development in order to quantify the existing noise environment at the nearest noise sensitive locations that might be affected by the proposed development. Baseline noise levels at all locations are those from the sea and wind and the sound of birds calling.

7.14.3. Due to the nature of construction activities, particularly movement of soil and rock, there is potential for the generation of elevated noise levels over the short term. The applicant's noise assessment has found that by reference to BS 5228-1:2009+A1:2014 Code of Practice for Noise and Vibration Control on Construction and Open Sites – Part 1 Noise, during construction, the daytime noise limit of 65dB LAeq is not likely to be exceeded at locations beyond 50m. Exceedances are expected at residential properties located within 50m from the road improvement works along the R572. However these exceedances would occur over short-term periods and would be transient as the work progresses.

7.14.4. Potential for vibration at neighbouring sensitive locations during construction has also been identified but would not give rise to structural or cosmetic damage to existing dwellings.

- 7.14.5. Rock-breaking/rock ripping would occur away from sensitive receptors (residential properties) and would be localised around where the existing cable car and car park currently exists on the mainland. I am satisfied that, with adoption of best practice any noise and vibration impacts would be short-term and not significant.
- 7.14.6. The primary sources of operational noise that would be associated with the development is identified as the mechanical plant servicing at the visitor centre. Best practice noise control measures would be adopted, including selection of low noise equipment, maintenance of equipment and limiting hours of work to normal working times. It is stated that the appointed contractor would be required to engage a site environmental manager (SEM) who would be responsible for matters relating to noise and vibration during construction. The previously referenced EOP and CEMP would also be adhered to.
- 7.14.7. During operation, the proposed visitor centre would be located greater than 200m from the nearest sensitive receptor and the plant would be required to be controlled such that noise emissions would not exceed 85dB at 1m, in accordance with BS4142: 2014 'Methods for Rating and Assessing Industrial and Commercial Sound'. Increase in noise due to increased traffic flow is predicted to have a negligible impact. No significant vibration emissions are expected from the operation of the proposed development.

Concluding Comments – Noise and Vibration

- 7.14.8. Subject to implementation of mitigation measures outlined, noise would be reduced and I conclude that residual impacts would be no greater than slight in terms of significance. During the operation phase, noise would have a neutral, imperceptible, long-term impact. I am satisfied that no significant impacts during the construction or operation would arise from vibration.

7.15. Material Assets

- 7.15.1. Chapter 16 of the EIAR examines the impact of the development on material assets including agricultural property (land) and non-agricultural assets.

Agricultural Land

- 7.15.2. The study area includes agricultural lands in Ballynacallagh Townland on Dursey Island for the proposed cable car site. The agricultural landcover comprises mainly

improved grassland on the mainland and upland grazing on the island. Impacts on agricultural properties have been identified as comprising landtake, land severance, impact on farm buildings/facilities and other impacts such as on services and land drainage.

- 7.15.3. Landtake associated with the approach road (R572) comprises permanent landtake from farm holdings for completion of the aforementioned roadworks. Permanent landtake would be across 16 farm holdings, comprising 2.11 hectares in area (including 0.75 hectares of roadbed). Temporary landtake would also occur across agricultural lands and the public road. In relation to severance, there would be an impact on existing field access to lands on some farm holdings, but no permanent severance would be caused by the road improvement works. I concur with the rating of all of these impacts, set out in Table 16.6 of Chapter 16, as being imperceptible and slight in terms of significance.
- 7.15.4. The proposed development would impact on existing farm buildings on two established farms. On one farm there would be an impact on a number of traditional drystone buildings. On another farm there would be an impact on a stonewall structure in poor condition. These impacts have also been rated as slight.
- 7.15.5. Some minor disturbance may result on land drainage and services (water, power and utilities) during the construction, though these would be imperceptible and short term in duration.
- 7.15.6. Increasing the number of visitors on Dursey Island has the potential to affect agricultural land on the island. It is put forward that the formalisation of trails would discourage walkers from wandering off established paths onto farmland and that no negative effect would arise on agriculture or agricultural lands. I have concerns that this measure, while likely to reduce impacts, may not be sufficiently effective as experience has shown that walkers divert and explore off the established trails onto the open land. However, in this regard, my concerns largely relate to impact on biodiversity and on land and soils on open areas, rather than on private agricultural holdings and I have dealt with this matter in some detail under the headings of Biodiversity and Land and Soils above.
- 7.15.7. Mitigation measures are set out in Table 16.7 of Chapter 16 and include standard measures including replacement of boundaries with stockproof fencing and replacing

field access gates on affected lands. The appointed contractor would be required to inform Dursey Island farmers during such periods of interruption to the existing cableway service and in these instances Cork County Council would provide alternative access to Dursey for farmers with livestock on the island.

- 7.15.8. Residual impacts would be slight for the majority of affected farms (81%) and imperceptible for the remainder.

Non-Agricultural material assets

- 7.15.9. A new groundwater supply borehole is proposed for the mainland site, replacing a current well on site. It would be used to provide a new potable water supply. Water for Dursey island is currently supplied via an existing spring. No new supply is proposed on the cable car site on the island, instead water would be brought to the site if required. Rainwater and greywater would be used in non-potable applications.
- 7.15.10. A new wastewater treatment plant is proposed on both the mainland and the island site. The existing wastewater treatment on the mainland site would be decommissioned. There are currently no wastewater treatment or welfare facilities on the island site. I have considered the impacts of the proposed wastewater treatment plants under the heading of Hydrogeology above.
- 7.15.11. It is submitted that there is a phone service in the study area but that the area is without a broadband service. It is proposed to introduce broadband by running a fibre optic cable along the R572 for a length of 4.3km and it would utilise existing telephone poles. A new/upgraded electricity supply would be provided on the site.
- 7.15.12. The cable car would continue to operate during construction, however some temporary interruptions to its service are envisaged. During operation, I would agree as submitted that the proposed development would give rise to positive impacts on the community by providing a safer cable car service for its users. I have dealt with its justification and scale under the planning assessment in Section 9 below.
- 7.15.13. In relation to impacts that might arise on non-agricultural material assets, largely from disruption of services during construction, these would be repaired / replaced without unreasonable delay.

7.15.14. No residual impacts are predicted on the non-agricultural material assets and I would suggest that some residual impacts would be positive as a result of improved utilities and services.

Concluding Comments – Material Assets

7.15.15. It can reasonably be concluded that provided the prescribed mitigation measures set out are implemented, the proposed development would not give rise to any significant adverse impacts on agricultural or non-agricultural material assets.

7.16. Traffic and Transport

7.16.1. Chapter 5 of the EIAR sets out an examination of the traffic and transport impacts of the proposed development. It was based on a site visit, traffic and parking surveys as well as drawing on guidance from TII publications² and the current Cork County Development Plan.

7.16.2. The section of the R572 which leads to the site from the R575 at the Bealbarnish Gap, a designated scenic route (S118), is a narrow road with restricted forward visibility and has a poor alignment with tight bends and for the most part it is without any verge. It measures c.8km in length and provides access to c.130 private properties. The majority of the road is too narrow to facilitate passing traffic with existing local passing places used for such occurrences. While the speed limit of the road is set at 80kph, the average speed attainable is stated to be 40kph.

7.16.3. While I note that traffic surveys were carried out during May and June Bank Holiday weekends in 2019, which would have represented a busy weekend for visitors, a more representative picture would likely have been obtained if surveys were carried out during the peak holiday season in July and/or August particularly during the August Bank Holiday weekend. Traffic surveys carried out during that period would better inform how the road network, particularly the 8km stretch of road leading to the site, currently functions as a baseline during the busiest holiday period and how it would function with the new development in place.

7.16.4. The surveys carried out on the May and June bank holiday weekends revealed that there were 434 two-way vehicle movements per day, a total of 868 one-way

² Transport Infrastructure Ireland Traffic and Transport Assessment Guidelines, PE-PDV-02045, (May 2014) and TII Publication, DN-GEO-03031 Rural Road Link Design.

journeys. It is stated that 68 two-way vehicles (136 total movements) occurred during peak time of the day, found to be between 12:00 and 13:00 hours. At this point, I would note that there is clearly already a considerable traffic load on the deficient narrow road leading to the site and even in the current situation traffic movements would likely be greater in the peak holiday season (July and August). It is stated that with the new development in place, approximately 500 vehicles would arrive during the peak season with a consequential increase in traffic of 16% per day. I consider that this predicted increase in traffic movements to be an underestimation when the current numbers and future permitted visitor numbers are taken into account. I have set out details of visitor numbers in **Table 1** under section 7.3 (Assessment of Environmental Effects) in my report above and I expand as relevant to the consideration of traffic below.

- 7.16.5. The existing single cable car facility with capacity for six persons would be replaced with a dual cable car facility with each cable car having capacity for 15 persons. As is evident from the aforementioned Table 1 above, the proposed cable car facility would have the capacity to carry considerably more visitors. It is stated that the proposed cable car facility could transport between 3,400 and 6,600 persons per day, though visitor numbers would be capped as outlined earlier in my assessment and as elaborated below in respect of traffic considerations.
- 7.16.6. Visitor numbers would be permitted to increase to a stated maximum of 100,000 per annum onto the cable car site on the mainland and a maximum of 80,000 visitors would be permitted to make the journey to the island in any one year. Visitor numbers in the two-month peak period, July and August, currently total just under 10,000. With the new cable car in place, this would be permitted to increase to 25,600 visitors (across the two month peak holiday season) making the journey to the island. There are no stated proposals for capping monthly visitors to the mainland site and visitor centre (and not necessarily travel to the island) within the overall annual cap of 100,000. It is not clear how many additional visitors would likely visit the mainland only during this peak period of July and August. The visitor number is likely to be well above the 25,600 visitors who would specifically make the journey across to the island, given the difference between the annual figures outlined where 25% additional tourists would be allowed to visit the mainland (100,000) when compared those who would make the journey to the island (80,000).

- 7.16.7. I cannot agree with the applicant's conclusion that with the development in place, it would lead to a 16% traffic increase. I believe the increase would be much greater given the significant increase in visitor numbers which the new cable car would enable. There is no existing or proposed dedicated bus service, nor is there any evidence that the road network could support such a bus or coach service and while some visitors might cycle or walk to the site, given its remote location, the majority of visitors would clearly arrive by car.
- 7.16.8. The R572 leading to the mainland side requires significant modification in the form of ten passing bays, one visibility splay and other more minor road improvements to address poor forward visibility. These works are proposed to be carried out over a three month period during the off-season. Access would be maintained to all properties along the R572 during the construction phase. I do not accept that the improvement works proposed would be sufficient to provide for orderly and safe movement of cars during the peak holiday season, as visitor numbers greatly increase. The additional volume of traffic has the potential to overwhelm the narrow road and lead to intermittent traffic congestion and generate a traffic hazard and significant inconvenience for residents and others. The very fact that there are ten additional passing bays proposed over 8km would in itself indicate that the road network is not sufficient to accommodate the increased traffic movement.
- 7.16.9. The car park at the existing cable car site accommodates approximately 70 vehicles. It is stated that it is often oversubscribed during the peak tourist season. I also note that it is stated in Chapter 2 (Alternatives) that the car park would increase to 100-180 spaces and that on the busiest in-season days there would likely be a shortfall of between 170 and 230 spaces. It suggests the need for an overflow car park in the vicinity of the development or a satellite car park with a shuttle bus service, however, this option was not progressed in the assessment of alternatives. It was stated that due to site constraints and landscape, it is not desirable or cost-effective to have a car park of scale exceeding 180 spaces. The design now before the Board includes a car park containing **100 car parking spaces** including eight accessible spaces.
- 7.16.10. It is stated that car parking available at Lehanmore and at Garinish would be located where up to 60 additional cars could **potentially** be accommodated. While precise locations or breakdown of parking available are not set out, I note that there is parking available at Lehanmore community centre located c.4km east of the cable

car site and at the light keepers cottage property in Gairinish, approximately 500m east of the cable car site on the mainland. Details of how the car spaces would be shared with the existing uses at the locations referred to have not been outlined and as there is no shuttle bus or similar arrangement proposed, it is unlikely that the majority of tourists who arrive by car would be inclined to park away from the cable car site itself in what appears to be an informal arrangement.

7.16.11. Variable Message Signs (VMS) are proposed at four locations namely: 1. R572 Bealbarnish Gap, 2. the R572 / R571 Junction at Castletownbere-Bearhaven, 3. the R575 / R571 Junction at Eyeries Cross and 4. the N71 / R572 Junction at Glengarriff. It is stated that signs would alert intending visitors at times when the car park is at capacity with the hope that visitors would change their plans and not continue the journey to the cable car site. I have questioned the need for the VMS at the N71/R572 which is located in Glengarriff, approximately 55km from the Dursey Island cable car and state that it would not support the VMS at this location as it would cause inappropriate distraction and confusion on road users given its location so far removed from the cable car. While acknowledging the measure of VMS for advanced warning and communication with intended visitors, its success very much depends on visitors 'obeying' the message and would unlikely deter all visitors from completing the journey that they have started, adding to the congestion on the narrow road leading to the site and furthering my concerns regarding traffic impacts and car parking. This would be particularly so as it is stated elsewhere in the EIAR (Chapter 7– Biodiversity) that web-based ticketing system would be used to control visitor numbers to the capacity outlined, therefore, some visitors would likely continue their journey to make use of their previously purchased ticket, notwithstanding any message that the car park is full.

7.16.12. While provisions for cyclists or pedestrians using the road have not been specifically provided, I note that this is not unique in the rural context and would normally be acceptable. However, in the context of the significant increase in visitor numbers and corresponding significant increase in car based traffic, which are likely to arise, vulnerable road users would not be adequately protected. Increased vehicular traffic would invariably lead to confusion along the road with opposing traffic having to give way, U-turns and reversing of vehicles occurring closer to the site, all of which would lead to a traffic hazard along the narrow access road leading to the site. This would

also lead to negative impacts on the amenity of residents who live along the road. The proposal for 30 additional car spaces to serve the development where the numbers of visitors could potentially triple over the peak tourist season would not address the shortfall of up to 230 car parking spaces also referenced by the applicant and this matter of insufficient car parking remains unresolved.

- 7.16.13. The consequent increase in car-based traffic and associated car parking would also be contrary to national and local policy in seeking to reduce Ireland's greenhouse gas emissions from the transport sector and delivering sustainable tourism. The development would attract day visitors which is not the desirable model for sustainable tourism or for mitigating the impact of climate change. A parking space for one bus is provided on site. As there is no dedicated bus service to the cable car site, it is evident that car-based travel would continue to be the main mode of transport given the remote location of the site and the narrow road leading to the site.
- 7.16.14. In relation to construction traffic, I am satisfied that this could be managed through the implementation of a construction traffic management plan and engagement with the community/local residents and given the short-time and nature of the construction phase, this would follow good practice.

Concluding Comments - Traffic

- 7.16.15. It is considered that notwithstanding mitigation including road improvements, largely in the form of providing passing bays, the road network serving the visitor centre would experience a substantial increase in traffic volumes with potential to overwhelm the restricted road leading to the site during peak season. The proposal for 30 additional car parking spaces would not be sufficient for the significant increase in visitor numbers which the new cable car would enable. The development would also encourage unsustainable car based day visits and would be contrary to national and local policy in seeking to reduce Ireland's greenhouse gas emissions from the transport sector. For the reasons outlined and in consideration of traffic and car parking, the development should not be approved.

7.17. Cultural Heritage

Archaeology

- 7.17.1. Chapter 14 of the EIAR provides an examination of archaeological and cultural heritage. There are no known **archaeological sites** or **recorded monuments** located within the footprint of the proposed development, on the island or the mainland sites. There are stated to be 19 such sites located within 500m of the proposed development area and 250m of the R572. In developing the passing bays and localised road improvements along the route of the R572, there is some potential for the proposed development to have an impact on previously unknown archaeological sites. It is proposed that excavation works would be monitored by a qualified archaeologist and that any encountered archaeological features and/or deposits would be preserved.
- 7.17.2. There are three **cultural heritage assets** located within the proposed development area, including in the first instance the Dursey Island cable car and associated infrastructure (ref: CH 1). It is proposed to retain the mainland-side pylon and hauling machinery and remove all other structural elements. A full written and photographic record of this existing cultural heritage asset would be made prior to removal. It would be hugely important to retain the existing cable car, a simple wooden structure, as a heritage asset, rather than preserving it only through photographic record. Should the Board be minded to grant permission, a condition should attach requiring the cable car to be preserved at a location on the site.
- 7.17.3. Two vernacular structures shown on the 1926 ordnance survey Ireland (OSI) map (ref: CH 37 and CH 38), including an unroofed walled remains of a structure (probably once a house) and a roofed stonewall structure in poor condition (probably formerly used as an agricultural shed), are located within the footprint of the proposed passing bays along the R572. The widening of the roadway would require the demolition of both which would result in a direct significant adverse effect on these two structures. In order to mitigate this impact, a full photographic record of these structures would be made in advance of their removal. Excavation works associated with the construction of the passing bays are proposed to be monitored by a fully qualified archaeologist.

7.17.4. There are a number of cultural heritage features on Dursey Island, including the Signal Tower, an ecclesiastical site and associated graveyard and many vernacular buildings, mainly domestic dwellings. The Beara-Breifne Way, Ireland's longest hiking trail, starts from Dursey Island on the east and it travels past the cable car station on the mainland side to connect to Garinish Point. This trail continues to trace the footsteps of O'Sullivan-Beare which occurred during his historic march to Leitrim.

Architectural

7.17.5. There are no buildings of significance in the immediate vicinity of the site of the proposed development and neither are there records of such on the historical OSI maps. On the mainland, the closest structure is the slipway located approximately 90m to the south-east. On the island, the nearest structure is a small building associated with the island-side slipway, located approximately 160m away from the proposed development. The proposed development would not give rise to any significant adverse effects on buildings/structures of architectural heritage significance.

7.17.6. In consideration of the archaeological impacts, a photographic record of the existing cable car and its ancillary facilities would be made prior to its removal and this record and other drawings and photographs and historical records would be displayed in the proposed visitor centre. As set out above, the cable car is worthy of retention as a heritage feature, rather than preserving it solely through photographic record.

7.17.7. As also stated above, under the heading of archaeology, two vernacular structures are required to be demolished in order to facilitate the construction of the easternmost passing bay on the R572. These buildings are not of significant architectural heritage importance and are classified as 'record only' under the terminology used in the National Inventory of Architectural Heritage. As also outlined above, their record would be provided through photography which is acceptable.

Concluding Comments – Cultural Heritage

7.17.8. Overall, I am satisfied that the proposed development would not have any unacceptable significant impacts on Cultural Heritage including Archaeology and Architectural Heritage subject to the mitigation proposed to address the loss of the existing Dursey Island Cable car and most of its infrastructure (CH 1) and the loss of two vernacular structures (CH37 and CH38) in ruinous/poor condition as outlined

above. As stated above, this would include preservation of the existing cable car wooden structure and placing it as a feature either in the visitor centre or externally on site.

7.18. Landscape and Visual Amenity

- 7.18.1. Chapter 11 of the EIAR examines the landscape and visual effects. The study area chosen relates to the main cable car development on the mainland and the island, and includes the road improvement works. The development site is located in an area which is part of a landscape character type (LCT) 4, 'Rugged Ridge Peninsulas' which is recognised in policy as being of very high value with very high sensitivity, and of national landscape importance. Within this LCT, there are several distinctive landscape character areas (LCAs) including Dursey Island. High or very high landscapes are defined in guidance set out by the Guidelines on Landscape and Visual Assessment Landscape Institute (GLVIA) 2013 in which it is set out that the principal management objective for the area is 'the protection of the existing character from change'.
- 7.18.2. The main approach route along the R572 to the site and on which the road improvement works are proposed, is a designated scenic route (S118 – Castletownbere via Cahermore to Carinish Point).
- 7.18.3. Dursey Sound is a narrow channel between the island and the mainland, and this seascape is also an important part of the character of the area. Views from Dursey Island across Dursey Sound are similarly scenic. The site and surrounding landscape, including Dursey Island in particular, has a strong sense of wilderness, naturalness and remote character.
- 7.18.4. Chapter 13 'Green Infrastructure and Environment' of the Cork County Development Plan 2015-2021 contains relevant policies and objectives pertaining to the protection of the visual and scenic amenities of the natural environment, requiring that new development meet standards of siting and design. Objective GI 6-2 of the plan requires the management of development to have regard to the value of the landscape, its character, distinctiveness and sensitivity, as recognised in the Cork County Draft Landscape Strategy and requires higher standard of development in areas designated as 'high value' landscapes.

Predicted Landscape Effects

7.18.5. It is submitted that the construction impacts would be short term, slight to moderate adverse. During operation, the introduction of the built elements into a scenic landscape of high sensitivity would have the potential to reduce the sense of naturalness and remoteness with a resultant slight to moderate adverse effect on the landscape character of the study area at a local level.

Predicted Visual Effects

7.18.6. Ten photomontage locations were presented representing five views from the mainland and five from the island. These are represented on Figure 11.1 of the EIAR. On the mainland, the more elevated views, include Viewpoint 3 (view from R572 at Ballaghboy) and Viewpoint 5 (view from ridge and Beara-Breifne Way to north of mainland site at Ballaghboy) are those where the visual effects are most pronounced. The significance of the effect at Viewpoint 3 is considered to be 'Slight to Moderate', while the quality of the effect is considered 'Neutral to Adverse'. The significance of the visual effect from Viewpoint 5 is considered 'Moderate to Significant', while the quality of the effect is considered to be both beneficial in terms of the removal of the existing buildings and adverse in terms of the new buildings and car park. The development on the island side is confined to a small localised area represented by viewpoints 6 to 10. During the construction phase, I would agree, as submitted, that visual effects are likely to be short term and no greater than slight adverse.

Mitigation

7.18.7. Measures which form part of the design and those which would reduce adverse effects are set out. These measures would include minimising cut and fill and to work with the landscape form and topography. The proposed visitor centre would be of a contemporary design, very different to the vernacular architecture of the local area. However, it is modest in terms of height and scale and would blend into the landscape successfully. Natural materials are proposed on the building façades. The landscape strategy for the mainland side is to adopt a simple approach with native planting and natural stone paving and exposed aggregate as surface treatment. Screen walls would be finished in stone cut effect to reflect the dry-stone walls in the local area. Parking spaces would be finished with a reinforced grass system. At the area where the cable car platform, building and hard surface area are

proposed to be removed, the natural regeneration of the ground would be facilitated. I am satisfied that the landscape proposals are acceptable. Visual effects would be relatively localised. The development would arguably afford a formalised and managed appreciation of the landscape which would generate a positive effect.

Concluding Comments – Landscape and Visual

7.18.8. Overall, while there would be a change to the landscape as a result of the development, on balance, the impacts on the landscape and visual environment would be neutral and acceptable.

7.19. Interactions and Cumulative Impacts

7.19.1. Chapter 17 of the EIAR addresses the main interactions between different aspects of the environment that may have been affected as a result of the proposed development. The likely significant interactions arising from the proposed development are outlined in Table 17.1 (Matrix of Key Interrelationships). Having reviewed this matrix, while an extensive number of interactions are included, there are some omissions. Noting the increased capacity of the proposed new dual-car cable car and the corresponding increase in visitors to Dursey Island which would likely arise, the visiting population has potential to interact with biodiversity in particular and also with land and soils. The visiting population has also potential to interact with hydrogeology noting the increase in effluent which would be generated and the on-site effluent treatment systems proposed. To a lesser extent, there is potential for the visiting population to interact with cultural heritage including archaeology and architectural heritage and with material assets. Impacts on hydrology arising from an increase in impermeable area have potential to interact on the underlying hydrogeology.

7.19.2. It is submitted that with the adoption of mitigation measures proposed, no residual significant impacts would arise as a result of interactions. While I agree with this conclusion reached by the applicant in relation to the physical infrastructure and buildings proposed, I do not share this conclusion regarding interactions between the (increased) visiting population and biodiversity, land and soils, transport and climate during the operation phase, in which I have assessed that the indirect impacts with respect to these interactions cannot be satisfactorily mitigated.

7.19.3. **Cumulative impacts** are also addressed in Chapter 17 of the EIAR. Based on the information provided, including existing and permitted or proposed development within a 15km radius, as well as the applicable local development plans, notwithstanding my conclusions reached on impacts arising from the development alone, it can be concluded that beyond the individual impacts identified, there is no potential for additional cumulative impacts arising from the development when taken in combination with any other known plans or projects. Concerns are raised in submissions that the EIAR did not consider cumulative impacts of the current proposal in combination with the wider development of the Wild Atlantic Way. This is a reasonable point, however, the Wild Atlantic Way is a strategic tourism initiative (rather than a specific project), based largely along an existing coastal route, primarily along the western seaboard. I am not aware of any specific project along the Wild Atlantic Way which has come before the planning authority or the Board for assessment such as would warrant consideration of cumulative impacts with the current proposal. I also note that any future projects, including future tourism projects proposals along the Wild Atlantic Way tourism route would be required to be separately assessed through the planning process and where relevant would require assessment for significant environmental effects on the environment through EIA.

Concluding Comments – Cumulative Impacts and Interactions

7.19.4. In light of the assessment above it can be concluded that there is no potential for additional cumulative impacts arising from the development when taken in combination with any other known plans or projects. It can also be concluded that no significant effects are likely to arise from interactions between any of the various environmental factors in terms of the physical infrastructure proposed. However, noting the increase in visitor footfall expected as a result of the operation phase of the development, indirect impacts with respect to certain interactions outlined have not been considered and these cannot be satisfactorily mitigated based on the information presented within the EIAR or the wider file.

7.20. Vulnerability to risks of major accidents and/or disasters

7.20.1. With regard to the effects of the project on the environment arising from its vulnerability to risks of major accidents and/or disasters, this matter is addressed in Chapter 17 of the EIAR. A qualitative evaluation of potential for such major

accidents/or disasters was presented. It is concluded that the project is not of a nature that would result in it generating a risk of major accidents and/or natural disasters. There are no 'Seveso' sites (as defined in the Chemicals Act (Control of Major Accident Hazards Involving Dangerous Substances) Regulations 2015 in close proximity to the development site.

7.20.2. The maintenance of the proposed cableway would be in line with the 2016 report for the existing cableway 'Safety Requirements for Dursey Island Cable Car pre-commissioning Inspection, maintenance, operational inspection and checks'. The operation would be governed by separate health and safety legislation.

Concluding Comments – Vulnerability to risks of major accidents and/or disasters

7.20.3. Having regard to the nature and scale of the proposed development and to the nature of the receiving environment, I am satisfied that the risk of a major accident or natural disaster have both been adequately considered and given the nature of the development, the low probability of such an occurrence and the mitigation measures proposed, it is not likely that significant effects on the environment would arise as a result of risks of major accidents and/or natural disasters.

Reasoned Conclusion

7.20.4. It is considered that subject to the implementation of the mitigation measures referred to above, as detailed throughout the chapters of the EIAR, including Chapter 18 (Mitigation Measures), which accompanied the application, the effects on the environment of the proposed development, by itself and in combination with other development in the vicinity, would be acceptable in respect of the delivery of the physical infrastructure and any associated direct impacts.

7.20.5. However, due to the scale and increased capacity of the new cable car and the proposal to permit a significant increase in visitor numbers to the mainland site and to Dursey Island, the development has potential to lead to unacceptable indirect impacts on the sensitive biodiversity environment in particular and also on land and soils during the operational phase of the development. This is particularly so in the absence of a visitor management plan being in place for Dursey Island. The numerical visitor carrying capacity put forward for Dursey Island has not been adequately scientifically assessed and accordingly cannot be accepted as an effective mitigation measure in this regard.

7.20.6. In addition, impacts on the environment as a result of significant increase in **car-based transport** and a corresponding increase in greenhouse gas emissions would also be unacceptable. Alternatives including a cable car with a smaller capacity such as would serve the island community and a level of sustainable tourism with a corresponding more sustainable level of car-based traffic movements and reduced car parking requirement were not adequately considered. Interactions between all environment factors, particularly the visiting population and Biodiversity, Land and Soils and Traffic were not adequately explored.

7.20.7. Overall, I cannot be fully satisfied that the proposed development would not have any unacceptable indirect effects on the environment.

8.0 **Appropriate Assessment**

8.1.1. This section of my assessment considers the implications of the proposed development on relevant European sites in view of their conservation objectives. The existing environment is described in Section two and a description of the proposed development is provided in Section three of this report.

8.2. **Stage one – Screening for Appropriate Assessment**

8.2.1. The NIS states that the Appropriate Assessment (AA) Screening Report prepared for Cork County Council, concluded in view of best scientific knowledge and the Conservation Objectives of the sites concerned, that, in the absence of appropriate mitigation, the proposed development was likely to have a significant effect on two European sites, namely the Beara Peninsula SPA (Site Code: 004155) and the Kenmare River SAC (Site Code: 002158). The Screening report is not on the Board's file as it is submitted that Cork County Council were the competent authority for the screening stage (Stage 1) of the Appropriate Assessment process and that, in their role as competent authority, Cork County Council determined that Appropriate Assessment was required in order to assess the implications of the proposed development for those two sites, having regard to the sites' conservation objectives.

8.2.2. In accordance with Section 177AE of the Planning and Development Act, 2000, as amended, and following the determination by Cork County Council that Appropriate Assessment was required in respect of the proposed development, the role of competent authority and responsibility for undertaking the Appropriate Assessment

was assumed by An Bord Pleanála and Cork County Council submitted a Natura Impact Statement (NIS) in respect of the proposed development.

8.2.3. Based on my examination of the applicant's NIS and supporting information, the NPWS website, aerial and satellite imagery, the scale of the proposed development and likely effects, hydrological connection and functional relationship between the proposed works and the European sites and their conservation objectives, and having regard to information gathered during my site visits, I can conclude that the that Beara Peninsula SPA (Site Code: 004155) and the Kenmare River SAC (Site Code: 002158) are the only European Sites that could be affected by the proposed development and are subject to Appropriate Assessment.

8.2.4. The next nearest European sites are The Bull and The Cow Rocks SPA (Site Code 004066) located 7.7km to the west, Deenish and Scarriff Islands SPA (Site Code 004175), 13.8km to the north and Iveragh Peninsula SPA (Site Code 004154) to the north. There is no meaningful ecological connection between these three sites and the application site and therefore these European sites can be screened out for likely significant effects with confidence.

8.3. Stage two - Appropriate Assessment

8.3.1. I am satisfied that the information submitted in the NIS is sufficient to allow the Board to carry out Appropriate Assessment of all aspects of the proposed development and to enable the Board to reach complete precise and definitive findings as to the implications for European Sites. The sites brought forward to stage two assessment are the Beara Peninsula SPA and the Kenmare River SAC and are considered below.

Beara Peninsula SPA (Site Code: 004155)

8.3.2. The Beara Peninsula SPA is a coastal site with special conservation interests (SCIs) for an internationally important breeding population of Red-billed Chough (*Pyrrhocorax pyrrhocorax*), listed on Annex I of the Birds Directive and a nationally important population of Northern Fulmar (*Fulmarus glacialis*).

8.3.3. A total of 32 Chough (individuals) were recorded by the applicant during bird surveys carried out over one season on Dursey in 2019 (March-July). I note that this figure does not include Chough that are present on Dursey in winter months and that

survey was ongoing when the planning application was submitted. Historical records for Dursey Island reveal that 20 birds were observed in 1992 and 46 were observed in 2002/2003. Hence, as put forward, the population of individuals is less than found in 2002/2003 and greater than the 1992 population in respect of individual chough species. In their response to submissions document, the applicant draws on information received from an ornithologist (Mr. Derek Scott), who is stated to have carried out surveys on the island from 1978 to 2019 (excluding 1980-1985 when no surveys were carried out). The data is presented in Appendix B of the applicant's response to submissions document and it shows a fluctuating pattern. It is also stated by the applicant that the data before 2000 is less reliable than post 2000 since the surveys were more casual and less extensive in the period prior to 2000.

- 8.3.4. As set out in the NIS, in terms of population trends, six confirmed breeding pairs (of which five were confirmed on Dursey Island) and their respective nest sites were identified during the applicant's surveys in 2019. This number is lower than the numbers recorded during previous chough surveys in 1992 and 2002/2003 (ten potential breeding pairs).
- 8.3.5. **Northern Fulmar** is known to occur within the likely zone of impact of the proposed development. It is stated that 487 individual fulmars were observed during a previous survey carried out on Dursey Island in 2016 and 12 individuals were observed on Crow Head. In a separate previous survey of Dursey Sound in 2018, seven individuals were recorded. During surveys carried out by the applicant, fulmars were observed nesting on steep and isolated cliffs to the north, west and southern sides of Dursey Island. Due to the isolated locations of their nests and their confinement to foraging at sea, this species is not considered vulnerable to disturbance.
- 8.3.6. **Site-specific conservation objectives** have not been set by the NPWS for the Beara Peninsula SPA. The approach stated to have been taken by the applicant is that specific conservation objectives set for another similar site were used in its place and it is stated that this approach has been suggested by the NPWS. In relation to the Chough, the site specific conservation objective 'maintain the favourable conservation condition of Chough' from the Castlemaine Harbour SPA (NPWS, 2011a) (Site Code: 004029) Co. Kerry and the Trawbreaga Bay SPA (NPWS, 2014) (Site Code: 004034) in Co. Donegal is referred to by the applicant but without any reference to it's application to the Beara Peninsula SPA. No further detail was

provided in the NIS related to these aforementioned site-specific conservation objectives or their attributes or targets which should be used in the analysis of any adverse effects. In relation to the Fulmar, the site specific conservation objective 'maintain the favourable conservation condition of Fulmar from the Saltee Islands SPA' (NPWS, 2011b) (Site Code: 004002) in Co. Wexford is stated to be used, however no detail is provided on these and any related attributes or targets that should apply has not been set out in the NIS.

- 8.3.7. For the Boards information, I include a table below (Table 3) setting out the conservation objectives and a summary of the attributes and targets that apply to the three aforementioned sites selected by the applicant.

DECISION QUASHED

Table 3: Conservation Objectives for sites referenced to have been used by the applicant.

Conservation Objectives for Trawbreaga Bay SPA [004034] Co. Donegal: Maintain the favourable conservation condition of Red-billed Chough		
Attribute	Measure	Target
Population trend	Percentage change	Long term population trend is stable or increasing
Distribution	Range, timing and intensity of use of areas	No significant decrease in the range, timing and intensity of use of areas by chough, other than that occurring from natural patterns of variation
Conservation Objectives for Castlemaine Harbour SPA [004029] Co. Kerry: Maintain the favourable conservation condition of Red-billed Chough		
Attribute	Measure	Target
Population	Numbers	Long term population trend is stable or increasing
Distribution	Range	No significant decrease in the range of areas used
Conservation Objective for Saltee Islands SPA [004002] co. Wexford: Maintain the favourable conservation condition of Fulmar		
Attribute	Measure	Target
Breeding population abundance: apparently occupied sites	Number	No significant decline
Productivity rate	Mean number	No significant decline
Distribution: breeding colonies	Number, location, area	No significant decline
Prey biomass available	Kilogrammes	No significant decline
Barriers to connectivity	Number. Location, shape, area	No significant decline
Disturbance at the breeding site	Level of impact	No significant decline
Disturbance at the marine areas immediately adjacent to the colony	Level of impact	No significant decline

8.3.68. In relation to the Chough species, the targets and objectives for the two European sites, Castlemaine Harbour SPA (NPWS, 2011a) and the Trawbreaga Bay SPA (NPWS, 2014) chosen by the applicant are focused on the importance of the sites as foraging resources and communal roost sites and not on breeding pairs.

8.3.69. In addition to these sites put forward by the applicant as comparable sites, I also note the **general conservation objective** which applies to the Beara Peninsula SPA: 'To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA'.

Kenmare River SAC (Site Code: 002158)

8.3.70. The **Kenmare River SAC** is a long, narrow bay facing southwest. It contains three marine habitats listed on Annex I to the Habitats Directive, namely reefs, large shallow bay and marine caves. There is also a very high number of marine species present. Its qualifying interests (QIs) are as follows:

- [1014] Marsh Snail *Vertigo angustior*
- [1160] Large shallow inlets and bays
- [1170] Reefs
- [1220] Perennial vegetation of stony banks
- [1230] Vegetated sea cliffs of the Atlantic and Baltic coasts
- [1303] Lesser Horseshoe Bat *Rhinolophus hipposideros*
- [1330] Atlantic salt meadows (*Glauco-Puccinellietalia maritima*)
- [1355] Otter *Lutra*
- [1365] Harbour seal *Phoca vitulina*
- [1410] Mediterranean salt meadows (*Juncetalia maritimi*)
- [2120] Shifting dunes along the shoreline with *Ammophila arenaria* (white dunes)
- [2130] Fixed coastal dunes with herbaceous vegetation (grey dunes)
- [4030] European dry heaths
- [5130] *Juniperus communis* formations on heaths or calcareous grasslands
- [6130] Calaminarian grasslands of the *Violetalia calaminariae*
- [8330] Submerged or partially submerged sea caves

8.3.71. The **Site-specific conservation objective** set for this European site is 'To maintain or restore the favourable condition of each of the QIs, as defined by a list of attributes and targets'. I would agree that it has been established that the proposed development has the potential to adversely affect the following QIs having regard to their applicable conservation objectives:

- [1160] Large shallow inlets and bays
- [1170] Reefs

- [1230] Vegetated sea cliffs of the Atlantic and Baltic coasts
- [4030] European dry heaths

8.3.72. I am satisfied that as submitted, other QIs in the Kenmare River SAC do not have potential for adverse effects on the achievement of the conservation objective for the site. Reasons include that the QIs are not located within or adjacent to the likely zone of impact and because of the absence of pathways.

8.4. Assessment of Adverse Effects – Beara Peninsula

8.4.1. The existing and proposed cable car site is located within the Beara Peninsula SPA, as is much of Dursey Island and a number of walking trails on the mainland.

8.4.2. In relation to the **Northern Fulmar** SCI, this bird species is not considered to be vulnerable to loss or disturbance to breeding sites or foraging habitats by virtue of the isolated locations of their nests on cliff faces and their confinement to foraging at sea. It is submitted that fulmars did not appear perturbed by the presence of observers during the breeding bird surveys and therefore adverse effects as a result of increased visitor numbers can be ruled out and overall it can be concluded that there would be no adverse effect on this SCI.

8.4.3. In relation to the **red-billed Chough**, the adverse effects in relation to the following impacts are considered below.

Habitat loss and disturbance from Physical Development

8.4.4. It is stated that only a small area of foraging habitat would be lost (0.8 ha) at the footprint of the physical development. This area is remote from the chough 'hotspot', area at the western end of Dursey Island which is stated to contain three of the five nests identified on the island. It is also submitted that the proposed development would not result in habitat fragmentation. I am satisfied that no adverse effects resulting from direct impacts in the form of habitat loss or fragmentation would arise as a result of the delivery of the physical infrastructure and buildings proposed.

Disturbance from Noise and/or Vibration

8.4.5. I would agree as submitted that the generation of noise or/and vibration associated with the construction of the proposed development would not result in adverse effects on choughs, particularly as the most disruptive elements would be carried out outside of the breeding season, when bird populations tend to be less susceptible to

disturbance. I have dealt with the issue of human disturbance under separate heading below.

Direct Mortality and Traffic

- 8.4.6. Collision risk would be minimal, having regard to the characteristics of the choughs and the overall project design and would not provide for adverse effects on choughs. Neither would the likely increase in traffic as a result of the proposed development adversely affect chough.

Human Disturbance

- 8.4.7. The greatest adverse effects requiring consideration are those arising from indirect impacts caused by the increased visitor footfall during the operation stage of the development, primarily on Dursey Island, but also to Garinish Head and Crow Head on the mainland. The increased visitor footfall occurs on Dursey Island during July and August, at a time when choughs are breeding, nesting and fledging.
- 8.4.8. Keribiou *et al.*, 2009 found that human disturbance constitutes a significant threat to the short-term viability of chough populations on Ouessant island in France. I have set out a summary of the findings of this study under the heading of Biodiversity in the EIA section of my overall report above. Human disturbance has also been identified as a potential threat to the choughs of Dursey Island (CAAS, 2018b): 'The potential risks to local bird population of current levels of visitors using the site are mainly centred on the risk of increased disturbance to Choughs which use the maritime grasslands along the peninsula to feed'.
- 8.4.9. The main effects on the chough species identified by the applicant, are those which would arise from visitor disturbance to **breeding/nests, foraging habitats** and disturbance to the species from **visitor presence** within the Chough 'flush distance' causing them to fly away.
- 8.4.10. Implications of these potential effects on the conservation objectives referenced in the NIS are not made explicit. The integrity test must show that the development would not affect the long-term population trend and that there would be no significant decrease in the range, timing and use of areas by Chough in order for adverse effects to be ruled out.

- 8.4.11. In relation to **breeding/nests**, the applicant has identified six nests in the study area, including one on the mainland and five on the island. Three of the nests are present on the western side of the island, the chough 'hotspot'.
- 8.4.12. This number is lower than the numbers recorded during previous chough surveys in 1992 and 2002/2003 (ten potential breeding pairs). The NIS does not expand upon this recorded decrease in breeding pairs on the island. I note that the target for population trend from the conservation objectives require that the long-term population trend is stable or increasing. Based on the information provided in the NIS, it is unclear what changes have occurred on the wider Beara Peninsula SPA and hence it is unclear if the long-term population of the Chough species on the SPA is stable or increasing.
- 8.4.13. A 10-year Chough monitoring programme as proposed in the NIS would provide valuable insight into the Dursey population, however there is no reference to contingency measures proposed should a decrease in Chough population be recorded.
- 8.4.14. While not objecting to the development, the NPWS state that additional precautionary mitigation would be required to protect a nest for the Chough bird species in a derelict building on the Island. In response to this submission, the applicant states their willingness to engage with the landowner. This matter remains open and unresolved and the absence of significant effects on breeding sites/nests cannot be ruled out.
- 8.4.15. In the Biodiversity section of the EIAR, the applicant has stated that c.1.33 sq. km of potential chough **foraging habitat** on Dursey, i.e. 22% of total available area (stated to be the entire island area), could be subject to human disturbance by visitors at peak visitor times. The figure has been arrived at based on the length and width of walking trails and the width includes an average **flush distance** of 50m, which includes an observed average flush distance of 30m and a precautionary buffer of 20m.
- 8.4.16. I note that the entire island area was put forward as comprising a suitable foraging area for Chough and was used in the applicants calculation of a numerical visitor carrying capacity for Dursey Island based on the Chough species. I have dealt with this under the heading of Assessment of Applicants Proposed Mitigation Measures

(Operation Phase) in Section 7 (Biodiversity) of the EIA section above, where I have concluded that the numerical visitor capacity arrived at is without adequate scientific evidence. I am not convinced that the entire island area, excluding the walking trails and a 50m width to account for flush disturbance, would be available for foraging for Chough for many reasons, which I have also outlined in Section 7 (Biodiversity) of the EIA section above.

- 8.4.17. While acknowledging that the mitigation measures proposed, comprising formalisation of trails supported by education campaigns and signage, would reduce visitor impacts on the Chough species, noting the open nature of the western end of the island in particular, and that the Beara Way walking trail continues to the western end of the island, it cannot be certain that all or almost all of the visitors would stay on the proposed formalised trails and turn back before reaching the western end which is extremely sensitive. I note the proposal to prohibit dogs (except assistance dogs and dogs belonging to the island residents) onto the island, which I also acknowledge would reduce negative effects on foraging chough.
- 8.4.18. Overall, there is insufficient scientific information on how the Chough species and its foraging habitats would be impacted by the significant increase in visitor footfall and visitor disturbance arising out of the significant increased visitor capacity proposed. There is insufficient information to rule out a significant decrease in range, timing and intensity of use of areas by chough on Dursey Island and by extension on the Beara Peninsula SPA. Therefore, it cannot be concluded that no reasonable scientific doubt remains as to the absence of adverse effects on the conservation objectives and thereby the overall integrity of the Beara Peninsula SPA.

8.5. Assessment of Adverse Effects - Kenmare River SAC

- 8.5.1. In the absence of mitigation, it is submitted that the proposed development has potential to result in adverse effects on the integrity of the Kenmare River SAC, in view of its Conservation Objective for 'Large shallow inlets and bays' and 'reefs'. These effects would arise from adverse impacts on water quality in the ocean at Dursey Sound, which have the potential to occur during both the construction and operation of the proposed development. It is also stated that the use of a barge during the construction stage poses the risk that invasive alien species may be introduced to the marine environment in the vicinity of the proposed development

leading to adverse effects on the marine communities present within the likely zone of impact.

- 8.5.2. In the absence of mitigation, it is also submitted that the proposed development has potential for adverse effects on the integrity of the Kenmare River SAC, in view of its Conservation Objective for '**Vegetated sea cliffs of the Atlantic and Baltic coasts**'. Direct effects are limited to those arising from the introduction or spread of invasive alien plant species. Adverse effects are also stated as having potential to arise from increases in the number of people using the existing walking trails in close proximity to vegetated sea cliffs on Crow Head, Dursey Island and Garinish Head during its operation resulting in indirect impacts on the vegetation structure and composition by increasing trampling pressure and rates of erosion in the immediate vicinity of the trails. This is stated to be particularly the case along the north-western and south-western extremities of Crow Head, within the SAC and in places along Garinish Head, where though lying outside of the SAC, existing walking trails are within 50 m of the cliffs (and SAC). Owing to the informality of some of the trails, walkers could stray onto the cliffs inadvertently causing a degradation of the structure and composition of the cliff vegetation in these areas.
- 8.5.3. In the absence of mitigation, I would agree as submitted that the proposed development could result in adverse effects on the integrity of the Kenmare River SAC, in view of its Conservation Objective for '**European dry heaths**'. Direct effects are limited to those arising from the introduction or spread of invasive alien plant species. Indirect effects on the physical structure, vegetation structure and vegetation composition of the habitats concerned could arise from increases in the number of people using the existing walking trails which traverse areas of dry heath on Crow Head, which is within the SAC (and other areas, Dursey Island and Garinish Head, though it must be noted that these areas lie outside the Kenmare River SAC) leading to faster erosion and habitat loss and fragmentation.
- 8.5.4. In relation to direct effects to terrestrial habitats, mitigation put forward would include the preparation and implementation of an IAS/IAPS Management Plan for the construction phase. In respect of indirect effects, mitigation measures outlined above in respect of the Beara Peninsula SPA aimed at managing visitor numbers and behaviour are stated to also be more than adequate to prevent adverse effects on

Annex I habitats 'Vegetated sea cliffs of the Atlantic and Baltic coasts' and 'European dry heaths' in the Kenmare River SAC.

8.5.5. I am satisfied that with the proper implementation of the mitigation measures set out in the NIS, the development would not adversely affect the integrity of the Kenmare River SAC in view of its conservation objectives for Annex I Marine Habitats (Large shallow inlets, bays and reefs). I am also satisfied that mitigation measures would satisfactorily address the effects as a result of **direct impacts** on Annex I Terrestrial Habitats (Vegetated sea cliffs of the Atlantic and Baltic coasts and European dry heaths) arising from the construction of the physical works.

8.5.6. However, I am not satisfied that the mitigation measures proposed which are also those proposed in respect of the Beara Peninsula SPA, including establishing an acceptable visitor capacity and management and education of visitors, would adequately mitigate adverse effects arising out of **indirect impacts** on the aforementioned terrestrial habitats. I have outlined the reasons why this is so both above under the heading of 'Assessment of Adverse Effects – Beara Peninsula' and in the EIA section of this report, largely under the heading of Biodiversity.

8.5.7. In overall conclusion, it cannot be ascertained that no reasonable scientific doubt remains as to the absence of adverse impacts on the integrity of the Kenmare River SAC in respect of the Annex I terrestrial habitats comprising Vegetated sea cliffs of the Atlantic and Baltic coasts and European dry heaths.

8.6. In-combination effects

8.6.1. Table 6.1 of the NIS provides an assessment of potential adverse effects arising from the proposed development in combination with plans and/or projects. Due cognisance was had to the An Bord Pleanála website, Cork County Council Planning Department and The Department of Housing, Planning and Local Government's EIA Portal in this regard. Notwithstanding my conclusions outlined above in relation to the implications of the project alone on the Beara Peninsula SPA and Kenmare River SAC, the proposed development does not have the potential to act in combination with other plans or projects to generate any further potential adverse effects. Any other future (and currently unknown) tourism projects including those along the Wild Atlantic Way tourism route would be assessed for appropriate assessment as they

arise. I am therefore satisfied that no additional cumulative / in-combination effects are likely to arise.

8.7. Monitoring

8.7.1. It is proposed to monitor the conservation status of the chough population on Dursey Island on an annual basis (during the breeding season) for a period of ten years. It is also proposed to monitor the conservation status of habitats. Monitoring of surface water and groundwater is also proposed to be undertaken. The monitoring outcomes would allow an assessment of the efficacy of mitigation measures proposed and where any shortcomings are discovered, the applicant proposes to develop and implement additional control measures, however, such contingency measures are not elaborated in the NIS. Notwithstanding the monitoring proposed, including monitoring of visitor numbers, this would not overcome the concerns of remaining adverse effects on the conservation objectives of the two European sites, as through my assessment set out above, such adverse effects have not been ruled out post mitigation.

8.8. Appropriate Assessment (Stage 2) Conclusion

8.8.1. An Appropriate Assessment of the implications of the proposed development on the qualifying features of the Beara Peninsula SPA (Site code 004155) and the Kenmare River SAC (Site Code 002158) in light of their conservation objectives has been undertaken. The assessment examined all aspects of the project that could affect the conservation objectives of the sites and focused particularly on the projected significant increase in visitor numbers to Dursey Island and walking trails on the Beara Peninsula as detailed in the Natura Impact Statement. All mitigation measures proposed have been taken into account.

8.8.2. On the basis of the information provided with the application, including the Natura Impact Statement, I am not satisfied beyond reasonable scientific doubt, that adverse effects on the integrity of the Beara Peninsula SPA or the Kenmare River SAC can be excluded.

This conclusion is based on:

- Reasonable doubt as to the scientific soundness of the calculation of the numerical visitor carrying capacity of Dursey Island in relation to disturbance

of Red-billed Chough, an Annex I bird species and special conservation interest for the Beara Peninsula SPA

- Uncertainty as to the effectiveness of mitigation measures to rule out a significant decrease in range, timing and intensity of use of areas of Chough on Dursey Island and by extension, the Beara Peninsula SPA
- Uncertainty as to the effectiveness of mitigation measures to rule out adverse effects on the Annex I terrestrial habitats comprising Vegetated sea cliffs of the Atlantic and Baltic coasts and European dry heaths having regard to the conservation objectives of the Kenmare River SAC.

8.8.3. Therefore, it cannot be ascertained that the proposed development would not adversely affect the integrity of the Beara Peninsula SPA or Kenmare River SAC because the effects are uncertain and the Board is therefore precluded from approving the development.

9.0 Planning Assessment

9.1. Introduction

9.1.1. The issues that are particularly relevant to the planning assessment and which are considered in this section of the assessment include the following:

- Justification / Project Need
- Sustainability and Visitor Capacity
- Policy
- Other (procedural)

9.2. Justification / Project Need

9.2.1. The original cable car on site was constructed in 1969, where its intended purpose was to transport island residents, farmers and livestock between the mainland and Dursey Island. As stated above, the cable car structure was replaced in part/upgraded in 1981 and again in 2004 and the cableway supporting pylons were replaced with two new galvanised steel structures in 1977.

- 9.2.2. As the population on the island significantly reduced over the years, currently the cable car is mainly used by tourists who wish to visit and experience the unique island. The area in which the cableway is located has become very popular for tourism and is one of fifteen 'Signature Discovery Points' located along the Wild Atlantic Way tourism route. The cable car provides a novel journey experience to Dursey Island, and the island's natural environment and unspoilt landscape form the basis of its attraction as a tourist destination. The area also features a number of popular walking trails, including the long distance trail the east of Dursey Island to Leitrim (the Beara-Breifne Way) and the Beara Way, a 206-kilometre long circular trail around the Beara Peninsula and extending to the western end of Dursey Island, as well as shorter walks/trails including Garinish Loop on Garinish Point and a walking trail on Crow Head, both on the mainland and Dursey Island Loop on Dursey Island.
- 9.2.3. The site and existing cableway are situated on Cork County Council lands and the service is and would continue to be operated by the Council. It is submitted by that the overriding objective of the proposed development is to create a coherent, distinct, environmentally-sensitive and considered tourism destination at the existing location of the Dursey Island Cable Car.
- 9.2.4. The proposed development would run two cable cars with an overall faster journey and it would facilitate a greater number of visitors to the site and onwards to Dursey Island. It is stated that it would result in greater revenue being generated by the attraction and that indirect economic benefits would likely result for businesses in the Beara, west Cork and Kerry regions and other attractions on the Wild Atlantic Way tourist route.
- 9.2.5. In terms of safety, it is submitted that the existing cableway infrastructure is non-compliant with safety standards and while currently safe to use, it would need to be replaced in the short to medium term in order to maintain safe and convenient access to the island for all users.
- 9.2.6. The current and proposed visitor numbers are set out in **Table 1** in Section 7.3 (Assessment of Environment Effects) above. In the peak season (July and August), the existing cableway is stated to carry approximately 4,650 persons per month to and from Dursey Island. It is submitted that queuing for two hours and upwards is a

regular occurrence both on the mainland and island. By improving access to and from the island, it is submitted that the proposal has potential to prevent depopulation of Dursey Island, create new opportunities for local businesses through enhanced tourism, which in turn would have potential to improve the viability of life on the island, including farming activities. It is of relevance to note that there is no regular ferry service between the island and the mainland. The practice of moving livestock ceased in 2012 and since then, Cork County Council provide ferries to move cattle between the island and mainland approximately four to five times per year.

9.2.7. It is clearly evident that the current cableway infrastructure is deficient in terms of safety in the first instance and is also sub-optimal for access for visitors and residents as outlined above. The new cableway and associated infrastructure would address the deficiency. It would provide a modern service for the remaining two inhabitants of the island and an enhanced experience for tourists. While the replacement of the existing cable car is justified, it is necessary to consider the scale of the proposed development and to assess whether or not the development as a whole is sustainable including whether or not it would contribute to the development of sustainable tourism, given the larger capacity cable car facility that is proposed and the significant increase in the number of tourists it would facilitate by comparison to current visitor numbers. I deal with this matter directly below under the heading of 'Sustainability and Scale'.

9.3. Sustainability and Scale

9.3.1. A number of observers raise concerns about the scale of the development, stating the large increase in capacity of the proposed cable car and the resultant significant increase in visitor numbers would be excessive in terms of generating unsustainable car-based tourism and would have potential to harm Dursey Island's ecologically-sensitive environment and landscape.

9.3.2. The proposal, in addition to providing access to the remaining two permanent island inhabitants, is also for a significant tourist development. It would provide a dual-cable car facility where currently there is one and it would provide for a capacity for 100,000 visitors annually to the cable car site, with visitor numbers accessing Dursey Island capped at 80,000 per year. A monthly upper limit of 12,835 visitors allowed

onto the island is also set out. These figures represent an almost quadrupling of the current annual numbers (20,424) and the monthly permitted figure is significantly more than the current 4,950 visitors to the island in the peak months of July and August. With the numbers and visitor caps proposed, it remains unclear why a dual cable car facility with the physical capacity to carry between 3,400 and 6,600 per day, multiples greater than required to meet the proposed increased capacity outlined above, is required.

- 9.3.3. This monthly visitor cap put forward by the applicant was established based on the interpretation of a scientific study carried out on Ouessant island, France by Keribiou *et al.*, 2009. I have considered this study and the applicant's methodology used to calculate the numerical visitor carrying capacity for Dursey Island in some detail in the EIA section of this report, largely under the heading of Biodiversity. I have concluded that the assigned carrying capacity based on the foraging areas for Chough species has not been adequately assessed from a scientific perspective. In considering the matter of Appropriate Assessment, I have concluded that it cannot be ascertained that the proposed development would not adversely affect the integrity of the Beara Peninsula SPA or Kenmare River SAC because the effects are uncertain. The proposal therefore cannot be considered as a sustainable development given that significant effects on the environment with respect to **Biodiversity** and that significant effects on protected **European sites** cannot be ruled out.
- 9.3.4. Under the heading of EIA, I have also recommended a refusal of approval based on concerns around the unmanaged inadvertent trampling across lands and the impacts the increased visitor numbers could have on **Land and Soil**.
- 9.3.5. The scale of the development, by virtue of the numbers of visitors it would enable to journey to the island and others which it would attract to the mainland, has potential to overwhelm the restricted road network and cause undesirable **traffic** congestion. It is clearly evident that the **car park** proposed with a total of 100 spaces would not provide sufficient capacity for the increased visitor numbers. The development would also encourage car based day visits which in itself is contrary to national and local policy in seeking to reduce Ireland's greenhouse gas emissions from the transport sector. For the reasons outlined in relation to transport and related climate impacts, the development cannot be considered sustainable.

9.3.6. There is no doubt but the cable car is hugely important to the island and to a sustainable level of tourism. However, having regard to the considerations above and noting that it's replacement with a modern larger capacity dual car structure which would enable a significant increase in visitors to experience Dursey Island, I can only conclude that the development as proposed is excessive in scale and would not constitute sustainable tourism. Overall, it would in my view risk the loss of the unique natural environment, which is the attraction of the island itself. Accordingly, based on considerations of sustainability and scale, the development should not be approved.

9.4. Policy

9.4.1. National and regional policy supports the growth of sustainable tourism, while recognising the need to protecting the environment. Local policy considerations, as relevant, are set out below.

9.4.2. As set out in the **Cork County Development Plan 2014/2020**, Dursey Island cable car is listed as a key tourist attraction of national importance and generates significant visitor numbers. The island and the development site on the mainland are within a high value landscape and a landscape character type described in the plan as 'Rugged Ridge Peninsula'. The site and most of the island are within a proposed Natural Heritage Area (pNHA) and a designated SPA for birds (Beara Peninsula SPA). The island is surrounded by Kenmare River SAC and access to the cable car is along a designated scenic route (S118) from Castletownbere via Cahermore to Garnish Point. Section 8.2 (Protection of Tourist Assets) lists Dursey Island cable car as one of the key tourist attractions of national importance. Objective TO 9-1-'Tourist Facilities' requires tourism related developments outside settlements to be appropriate in scale and to have regard to the pertaining environmental conditions and sensitivities, scenic amenity and the availability of services. Objective RCI 10-3 – 'Development Proposals on the Islands', is also relevant, seeking sustainable development proposals that are compatible with environmental and landscape sensitivities, as well as nature conservation designations pertaining to the islands and contribute to the long term economic and social development of the islands. Section 5.3.12 supports the promotion of Dursey as a walking destination and states that it is part of the 'Beara Way' walking route. Section 8.9.1 sets out that the development of infrastructure is fundamental to the effective delivery of a sustainable tourism product

in Cork. Section 8.9.2 sets out that the Council seeks to promote the development of tourism in a manner that is compatible with the conservation and enhancement of the environment.

- 9.4.3. When assessing the proposal against the policies and objectives of the County development plan, the recurring theme centres around supporting tourism development proposals that are sustainable and the need to protect the highly sensitive environment is set out.
- 9.4.4. Section 5.3.15 of the **West Cork Municipal District Local Area Plan (2017) (WCMD LAP)** sets out that Dursey Island has a particularly unique landscape and cultural quality, which differs from the experience on some of the other West Cork islands, and requires that sensitivity must be exercised in the consideration of appropriate and sustainable forms of development and that a balance must be sought between recognising the needs of occupants and visitors alike, whilst respecting the character and sense of place of the island. Section 5.3.16 of the plan sets out that that it would be appropriate to maximise the island's tourism potential, as a means of attracting residents, visitors and activity on the island, and also states that in developing tourism opportunities, visitor numbers should not be excessive and should not take from the sense of remoteness that is the attraction of the island itself. The need for a visitor management plan to be developed in order to control numbers accessing Dursey Island to an acceptable level given the sensitivity of the island is set out in the plan. No such visitor plan has been submitted with or referenced in the application documentation, except referring to the intention of preparing one. Reliance is instead placed on the assigned numerical carrying capacity, which as I have outlined under the heading of Biodiversity in Section 7 above, is not based on sound scientific evidence.
- 9.4.5. Objective GDO-02 of the WCMD LAP seeks to conserve the landscape and cultural quality of Dursey while recognising the needs of its occupants and improving service provision to the island. Objective GDO-03 supports the development of sustainable tourism capitalising on upgrading the cable car including walked loops, in a manner that is compatible with the conservation designations on and around the island.
- 9.4.6. Central to the above policies and objectives is the recognition of the unique natural and sensitive environment of Dursey Island. The island is extremely pristine and

unspoilt and would be highly vulnerable to impacts from the development proposed, not by the physical development itself, but by the impacts arising from the increased visitor footfall catered for. As set out earlier in this report, the new cableway would run two higher capacity cable cars, where currently there is one small traditional cable car structure, and would allow for a faster overall journey. It would greatly enable an increase the visitor numbers travelling to the island resulting in increased potential for ecological impacts arising from visitor footfall across the sensitive and natural environment.

9.4.7. Under objective GDO-05 of the WCMD LAP, it is stated that the plan would protect the favourable conservation status of European sites (Beara Peninsula SPA and Kenmare River SAC) and that development proposals should not be located within the SPA. It sets out that development on the island would only be permitted where it is shown that it is compatible with the requirements of the Habitats Directive and the protection of these European designated sites. I have addressed this in some detail in Section 8 above, under the heading of Appropriate Assessment of this report in which I have concluded that significant effects cannot be ruled out for both the Beara Peninsula SPA and Kenmare River SAC.

9.4.8. The **West Cork Islands Integrated Development Strategy (2010)** notes the importance of the Dursey Island cable car and states that its tourist potential should be maximised. It also states that it is important in developing opportunities in tourism to ensure that visitor numbers to the island are not excessive and do not take from the sense of remoteness that is an attraction to the island itself. The need for a visitor management plan to be developed in order to control numbers accessing Dursey Island is again set out.

9.4.9. The **Cork Tourism Strategy 2016: Growing Tourism in Cork – A Collective Strategy** centres around a vision to grow sustainable tourism responsibly. It sets out four goals around increasing visitor numbers and the duration of stay, increasing revenue value, increasing visitor traffic and encouraging repeat visits. Section 4.3 encourages adding value to signature tourist experiences by leveraging Ireland's Ancient East and the Wild Atlantic Way.

9.4.10. While the need to upgrade the existing cable car is justified as concluded above, the overall scale of the proposed development and the increased capacity such as would

lead to a significant increase in visitors to the unspoilt remote area would be contrary to planning and related policy outlined above, which collectively support the delivery of responsible and sustainable tourism. The requirement for the preparation of a visitor management plan for Dursey Island has not been fulfilled and the assigned numerical visitor carrying capacity on this unique and highly ecological sensitive island, a significant portion of which is within an SPA, and all which is surrounded by an SAC has not been established from a scientific perspective. Based on policy considerations, the proposed development as currently proposed should therefore not be approved.

9.5. Other – General / Procedural

9.5.1. It is stated that some developments and refinements of the current design may occur during the detailed design stage and that any such iterations of the development, if approved, would not include any significant adverse impacts on the environment not addressed within this EIAR. In this regard, I note that the proposal now before the Board is that which is set out on the public notices and described in the drawings and documentation submitted with the application, including the EIAR and the NIS and it is that documentation which I have considered in my assessment. If the proposed development is ultimately approved by the Board and should the Local Authority seek to materially change or amend the proposal further post any such approval, this rests as a matter for the Local Authority in due course, including seeking any such necessary approvals.

9.6. Overall Conclusion on proper planning and sustainable development

9.6.1. It is considered that the principle of the proposed development to replace the existing cable car serving Dursey Island and the mainland, and the provision of a visitor centre and café is acceptable and would facilitate a safer and improved journey experience for inhabitants of the island, those who are engaged in farming activities on the island, those who have established links with the island and for a sustainable number of tourists. However, the scale of the development is excessive, and as proposed, it would enable a significant increase in visitor numbers, risking unsustainable impacts to the highly sensitive ecological environment. The development would not be compatible with the environmental sensitivities and nature conservation designations of the area, particularly of Dursey Island.

9.6.2. The development would lie contrary to planning policy which supports responsible sustainable tourism development and the conservation of an enhancement of the environment. Policy in relation to Dursey Island requires that visitor numbers are not excessive and that a visitor plan should be developed to control numbers to an acceptable level. No such visitor plan is in place and it is considered that the numbers which would be enabled by the proposed development as set out, would be excessive.

9.6.3. The development would also give rise to unsustainable transportation movements along a substandard road, R572 regional road, a scenic route, which would require several physical interventions. It is clearly evident that the car-parking proposed is insufficient for the visitor numbers provided for. The consequent increase in car-based traffic would also lie contrary to national policy in seeking to reduce Ireland's greenhouse gas emissions from the transport sector and contribute to adaption to climate change.

9.6.4. Overall, the development is not justified in planning terms would result in a form of unsustainable tourism that is not appropriate to the unique circumstances of Dursey island. The proposed development would, therefore, be contrary to the proper planning and sustainable development of the area.

10.0 Recommendation

On the basis of the above assessment, I recommend that the Board **REFUSE TO APPROVE** the proposed development in accordance with the following Draft Order.

DRAFT ORDER

Decision

Refuse to Approve the above proposed development based on the reasons and considerations set out below.

Reasons and Considerations

In coming to its decision, the Board had particular regard to:

- (a) the relevant provisions of the Planning and Development Act 2000, as amended and the Planning and Development Regulations 2001-2020;

- (b) the relevant provisions of EU Directive 2014/52/EU, amending Directive 2011/92/EU (EIA Directive);
- (c) the relevant provisions of Directive 92/43/EEC (Habitats Directive) and Directive 79/409/EEC as amended by 2009/147/EC (Birds Directives), Wildlife Acts 1976, as amended and the European Communities (Birds and Natural Habitats) Regulations 2011, as amended;
- (d) national and regional and local policies of relevance;
- (e) the nature, extent and scale of the proposed works as set out in the application for approval;
- (f) the information submitted including the Approval Drawings, Environmental Impact Assessment Report, Natura Impact Statement and associated documentation, and the range of mitigation measures set out;
- (g) the likely effects and consequences for the environment and the proper planning and sustainable development of the area in which it is proposed to carry out the proposed development and the likely significant effects of the proposed development on European Sites;
- (h) the submissions received from the local authority, prescribed bodies and observers in the course of the application, and
- (i) the report and recommendation of the inspector.

Appropriate Assessment

Appropriate Assessment - Stage 1 (Screening)

The Board agreed with and adopted the screening assessment carried out and conclusions reached in the Inspector's report that Beara Peninsula Special Protection Area (Site Code 004155) and Kenmare River Special Area of Conservation (Site Code: 002158) are the only European Sites in respect of which the proposed development has the potential to have a significant effect.

Appropriate Assessment - Stage 2

The Board also adopted the report of the Inspector and agreed with her conclusions in relation to the Stage 2 Appropriate Assessment. The Board is not satisfied beyond reasonable scientific doubt, that arising from significant increase in visitor numbers to

the cable car visitor attraction and surrounding area, including Dursey Island in particular, during its operation phase, the proposed development individually or in combination with other plans or projects would not indirectly adversely affect the integrity of the Beara Peninsula SPA in respect of the breeding population of Chough (*Pyrrhocorax pyrrhocorax*) and its feeding habitats or Kenmare River SAC in respect of Annex I Terrestrial Habitats (Vegetated sea cliffs of the Atlantic and Baltic coasts and European dry heaths) having regard to the sites conservation objectives.

It is considered that the Board cannot ascertain that the proposed development would not adversely affect the integrity of the Beara Peninsula SPA or Kenmare River SAC because the effects are uncertain and the Board is therefore precluded from approving the development.

Environmental Impact Assessment

The Board completed an Environmental Impact Assessment of the proposed development, taking into account:

- the nature, scale, location, and extent of the proposed development;
- the Environmental Impact Assessment Report and associated documentation submitted with the application;
- the submissions from the applicant, prescribed bodies and third-party observers in the course of the application;
- the Inspector's report.

The Board considered that the Environmental Impact Assessment Report, supported by the documentation submitted by the Local Authority, provided information that is reasonable and sufficient to allow the Board to carry out an Environmental Impact Assessment and to reach a reasoned conclusion on the significant effects of the proposed development on the environment, taking into account current knowledge and methods of assessment. The Board was satisfied that the information and data available was up to date at the time of taking the decision.

The Board was also satisfied the Inspector's report sets out how these various environmental issues were addressed in the examination and recommendation and are incorporated into the Board's decision.

Reasoned Conclusion

- 10.1.1. The Board agreed with the inspectors conclusions that subject to the implementation of the mitigation measures referred to above, as detailed throughout the chapters of the EIAR, including Chapter 18 (Mitigation Measures), which accompanied the application, the effects on the environment of the proposed development, by itself and in combination with other development in the vicinity, would be acceptable in respect of the delivery of the physical infrastructure and any associated direct impacts.
- 10.1.2. However, the Board also agreed with the inspector, that due to the scale and increased capacity of the new cable car and the proposal to permit a significant increase in visitor numbers to the mainland site and to Dursey Island, the development has potential to lead to unacceptable indirect impacts on the sensitive **biodiversity** environment in particular and also on **land and soils** during the operational phase of the development. This is particularly so in the absence of a visitor management plan being in place for Dursey Island. The numerical visitor carrying capacity put forward for Dursey Island has not been adequately scientifically assessed and accordingly cannot be accepted as an effective mitigation measure in this regard.
- 10.1.3. In addition, impacts on the environment as a result of significant increase in **car-based transport** and a corresponding increase in greenhouse gas emissions would also be unacceptable. Alternatives including a cable car with a smaller capacity such as would serve the island community and a level of sustainable tourism with a corresponding more sustainable level of car-based traffic movements and reduced car parking requirement were not adequately considered. Interactions between all environment factors, particularly the visiting population and Biodiversity, Land and Soils and Traffic were not adequately explored.
- 10.1.4. Overall, the Board cannot be fully satisfied that the proposed development would not have any unacceptable indirect effects on the environment.

10.2. Proper Planning and Sustainable Development

- 10.2.1. It is considered that the principle of the proposed development to replace the existing cable car serving Dursey Island and the mainland, and the provision of a visitor centre and café is acceptable and would facilitate a safer and improved journey

experience for inhabitants of the island, those who are engaged in farming activities on the island, those who have established links with the island and for a sustainable number of tourists. However, the scale of the development is excessive, and as proposed, it would enable a significant increase in visitor numbers, risking unsustainable impacts to the highly sensitive ecological environment. The development would not be compatible with the environmental sensitivities and nature conservation designations of the area, particularly of Dursey Island.

10.2.2. The development would lie contrary to planning policy which supports responsible sustainable tourism development and the conservation of an enhancement of the environment. Policy in relation to Dursey Island requires that visitor numbers are not excessive and that a visitor plan should be developed to control numbers to an acceptable level. No such visitor plan is in place and it is considered that the numbers which would be enabled by the proposed development as set out, would be excessive.

10.2.3. The development would also give rise to unsustainable transportation movements along a substandard road, R572 regional road, a scenic route, which would require several physical interventions. It is clearly evident that the car-parking proposed is insufficient for the visitor numbers provided for. The consequent increase in car-based traffic would also lie contrary to national policy in seeking to reduce Ireland's greenhouse gas emissions from the transport sector and contribute to adaption to climate change.

10.2.4. Overall, the development is not justified in planning terms would result in a form of unsustainable tourism that is not appropriate to the unique circumstances of Dursey island. The proposed development would, therefore, be contrary to the proper planning and sustainable development of the area.

Patricia Calleary.

Patricia Calleary
Senior Planning Inspector

28th April 2020.