Achill Sound to Bunacurry Greenway, Achill Island

Screening Report for Appropriate Assessment

Doherty Environmental Consultants Ltd

May 2020

Screening Report for Appropriate Assessment

Document Stage	Document Version	Prepared by
Final	1	Pat Doherty MSc, MCIEEM

This report has been prepared by Doherty Environmental Consultants Ltd. with all reasonable skill, care and diligence. Information report herein is based on the interpretation of data collected and has been accepted in good faith as being accurate and valid.

This report is prepared for Mayo County Council and we accept no responsibility to third parties to whom this report, or any part thereof, is made known. Any such party relies on the report at their own risk.

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1.0 INTRODUCTION

Doherty Environmental Consultants (DEC) Ltd. have been commissioned by Mayo County Council to undertake a Screening Report for Appropriate Assessment for the proposed Achill Sound to Bunacurry Greenway project (see Figure 1.1 for location, Figure 1.2 for aerial view of the proposed greenway and Appendix 2 Project Scheme Design Drawings).

This Screening Report for Appropriate Assessment forms Stage 1 of the Habitats Directive Assessment process and is being undertaken in order to comply with the requirements of the Habitats Directive Article 6(3). The function of this Screening Report is to determine if it can or cannot be excluded, on the basis of objective information, that the project, individually or in combination with other plans or projects, will have a significant effect on a European Site. This Screening Report has been prepared to provide information to Mayo County Council to assist them in their determination as to whether a Stage 2 Appropriate Assessment is required for the project.

1.1 LEGISLATIVE CONTEXT

This Screening Report for Appropriate Assessment is being prepared in order to enable the competent authority to comply with Article 6(3) of Council Directive 92/43/EEC (The Habitats Directive). It is prepared to assess whether or not the project alone or in combination with other plans and projects is likely to have a significant effect on any European Site in view of best scientific knowledge and in view of the conservation objectives of the European Sites and specifically on the habitats and species for which the sites have been designated.

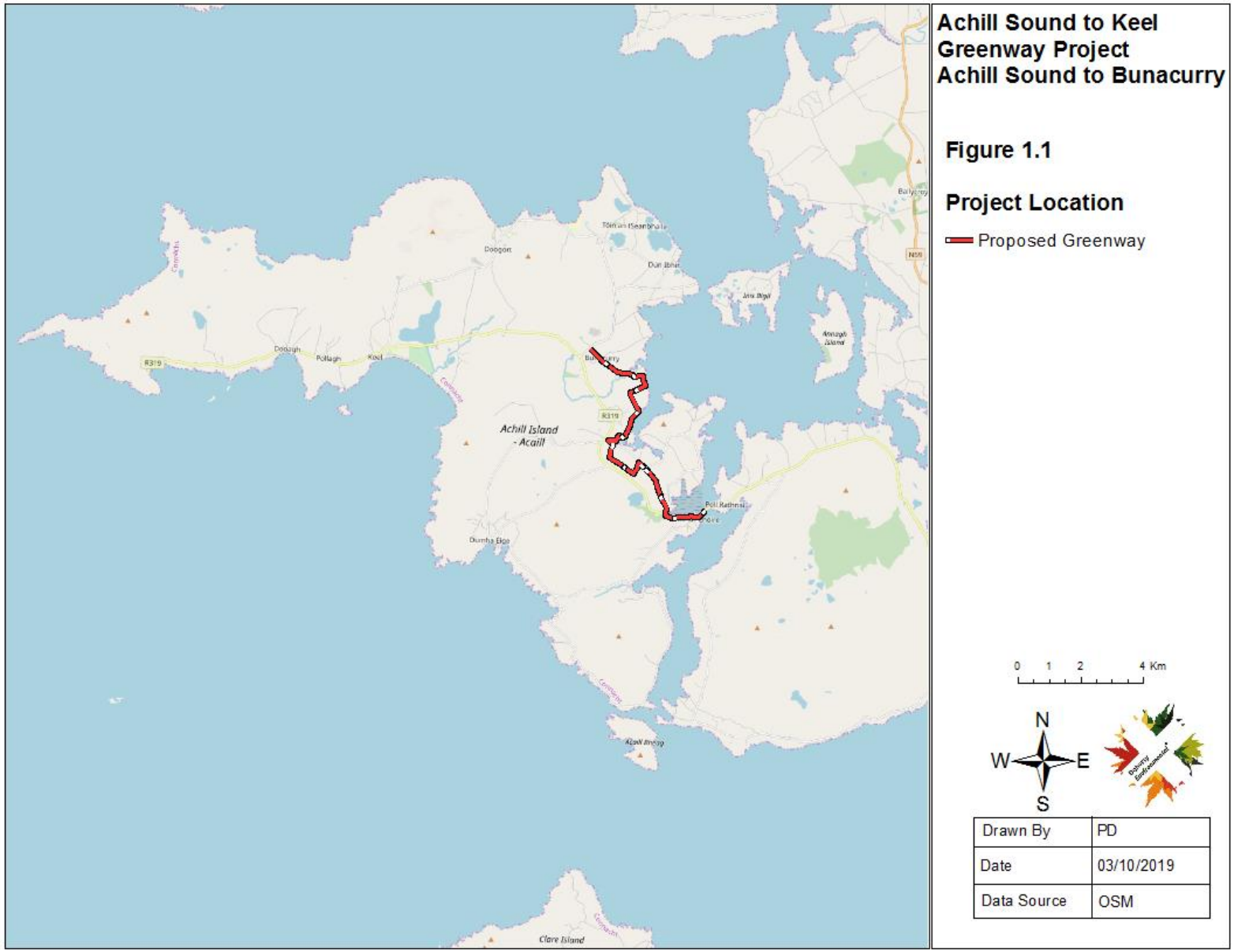
1.1.1 Requirement for an Assessment under Article 6 of the Habitats Directive

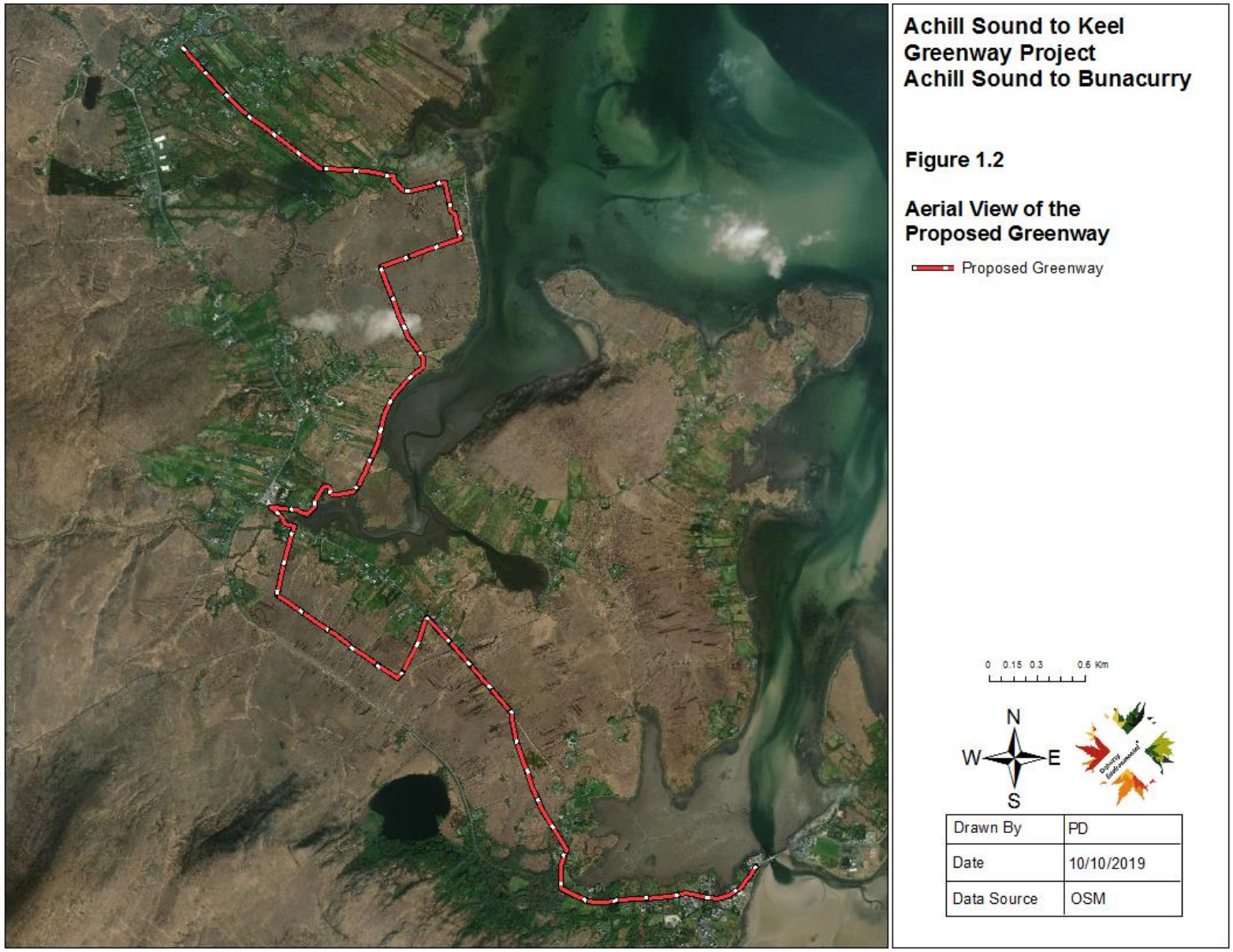
According to Regulation 42(1) of the European Communities (Birds and Natural Habitats) Regulations 2011 – 2015, the competent authority has a duty to:

- Determine whether the proposed Project is directly connected to or necessary for the management of one of more European Sites; and, if not,

- Determine if the Project, either individually or in combination with other plans or projects, would be likely to have a significant effect on the Eurpoean Site(s) in view of best scientific knowledge and the Conservation Objectives of the site(s).

This Report contains a Screening for Appropriate Assessment and is intended to assess and address all issues regarding the construction and operation of the Project and to inform and allow the competent authority to comply with the Habitats Directive. Article 6(3) of the Habitats Directive defines the requirements for assessment of projects and plans for which likely significant effects on European Sites may arise. The European Communities (Birds and Natural Habitats) Regulations, 2011 – 2015 (the Habitats Regulations) transpose into Irish law Directive 2009/147/EC (the Birds Directive) and Council Directive 92/43/EEC (the Habitats Directive) lists habitats and species that are of international importance for conservation and require protection. The Habitats legislation requires competent authorities, to carry out a Screening for Appropriate Assessment of plans and projects that, alone or in combination with other plans or projects, would be likely to have significant effects on European Sites in view of best scientific knowledge and the Site's conservation objectives. This requirement is transposed into Irish Law by Part 5 of the Habitats Regulations and Part XAB of the Planning and Development Act, 2000 (as amended).


Achill Sound to Keel
Greenway Project
Achill Sound to Bunacurry
Figure 1.1
Project Location
Proposed Greenway
Achill Island
- Acaill
Clare Island
0 1 2 4 Km
N
W
E
S
Drawn By PD
Date 03/10/2019
Data Source OSM


Achill Sound to Keel
Greenway Project
Achill Sound to Bunacurry
Figure 1.2
Aerial View of the
Proposed Greenway
Proposed Greenway
0 0.15 0.3 0.6 Km
N
W
E
S
Drawn By PD
Date 10/10/2019
Data Source OSM

1.2 STAGE 1 SCREENING METHOD

This Screening Report has been prepared in order to comply with the legislative requirements outlined in Section 1.1 above and aims to establish whether or not the proposed greenway between Achill Sound and Bunacurry, alone or in combination with other plans or projects, would be likely to have significant effects on European Sites in view of best scientific knowledge and the Site's conservation objectives. In this context "likely" refers to the presence of doubt with regard to the absence of significant effects (ECJ case C-127/02) and "significant" means not trivial or inconsequential but an effect that has the potential to undermine the European Site's conservation objectives (English Nature, 1999; ECJ case C-127/02). In other words any effect that compromises the conservation objectives of a European Site and interferes with achieving the conservation objectives for the site would constitute a significant effect.

The nature of the likely interactions between the project and the conservation objectives of European Sites will depend upon the sensitivity of these sites and their reasons for designation to potential impacts arising from the project; the current conservation status of the features for which European Sites have been designated; and any likely changes to key environmental indicators (e.g. habitat structure; vegetation community) that underpin the conservation status of European Sites, in combination with other plans and projects.

This Screening Report for Appropriate Assessment has been undertaken with reference to respective National and European guidance documents: Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities (DEHLG 2010) and *Assessment of Plans and Projects Significantly Affecting Natura 2000 sites – Methodological Guidance of the Provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC* and recent European and National case law. The following guidance documents were also of relevance during the preparation of this Screening Report:

- A guide for competent authorities. Environment and Heritage Service, Sept 2002. Appropriate Assessment of Plans and Projects in Ireland – Guidance for Planning Authorities (2010). DEHLG.

- Assessment of Plans and Projects Significantly Affecting Natura 2000 Sites – Methodological Guidance of the Provisions of Article 6(3) and (4) of the Habitats Directive 92/42/EEC. European Commission (2001).

- Managing Natura 2000 Sites – The provisions of Article 6 of the Habitats Directive 92/43/EEC. European commission (2018).

The EC (2001) guidelines outline the stages involved in undertaking a Screening Report for Appropriate Assessment for projects. The methodology adopted during the preparation of this Screening Report is informed by these guidelines and was undertaken in the following stages:

1. Describe the project and determine whether it is necessary for the conservation management of European Sites;
2. Identify European Sites that could be influenced by the project;
3. Where European Sites are identified as occurring within the zone of influence of the project identify potential effects arising from the project and screen the potential for such effects to negatively affect European Sites identified under Point 2 above; and
4. Identify other plans or projects that, in combination with the project, have the potential to affect European Sites.

2.0 PROJECT DESCRIPTION

2.1 OVERVIEW OF THE PROJECT

The project comprises the provision of a new greenway to a length of 10.6km between the townland of Achill Sound and Bunacurry.

The proposed greenway will include the following features:

- Approximately 10.6km of shared walking and cycling greenway between the townland of Achill Sound and Bunacurry.
- Path widths will vary from 2.6m to 4m in width. Widths will be dictated by existing on site features.
- The provision of a suitable surface i.e. Clause 803 Quarry Dust or Asphalt Tarmac or raised boardwalk depending on local conditions for pedestrian and cyclists use.

- Provision of access controls such as pedestrian and cycle friendly gates along the route.
- The provision of a temporary construction compound to be situated in an existing council depot yard at Achill Sound.
- The provision of a trail-head, car parking, plaza and promenade at Achill Sound.
- The demolition of an existing unoccupied dwelling at Achill Sound for public realm enhancement.
- Traffic calming.
- The provision of a trail-head, car parking, promenade at Achill Sound.
- All associated ancillary works and integrated landscape plans for the reinstatement of any temporary construction footprint.

2.1.1 General Methodology

Surface Type

A tailored surface finish shall be employed to ensure a durable and fit for purpose trail in accordance with National Trails Office Guidance. This surface will provide accessibility and a robust surface that will be able to withstand footfall and cycling traffic. The proposed surface type to be used on the proposed greenway will be an unbound surface of compacted quarry stone and dust.

2.1.2 Trail Surface Construction Materials

Materials for construction of the trail will be imported but not stockpiled on site. The materials to be employed shall principally consist of:

- Geotextile ground reinforcing cloth
- Granular sub-base material (NRA clause 804)
- 6mm crushed limestone dust; and
- Topsoil / grass seed

2.1.3 Construction Methodology

The first item of works to be completed on the ground prior to the commencement of the construction works will be the setting out of the construction footprint along the proposed greenway. The construction footprint will be limited to the width of the proposed greenway. Once marked out on the ground the construction corridor temporary fencing will be installed. Once fencing is in place all construction plant, machinery and personnel will be restricted from encroaching into areas beyond the temporary construction fenceline.

Construction materials will be transported from stockpiled areas at the construction compounds along the proposed greenway route in 6-ton dumper trucks for construction of the trail. In areas of peatland, where blanket bog habitats dominate the land cover only tracked plant with low ground-bearing pressure will be used. A total of 2 no. dumper trucks and 2 no. tracked, low ground-bearing pressure vehicles will be required throughout the duration of the construction phase.

2.1.4 Construction Methodology For Surface Types

The proposed greenway will utilise three surface types, referred to hereafter as type A, B and C surfaces. Type A surface will consist of existing public road and path surfaces; Type B surface will consist of compact stone and dust/tarmacadam surface; and Type C surface will consist of a boardwalk surface.

Existing public roads and surfaced paths comprise approximately 7.1km of the 10.6km of the proposed greenway. These sections of the proposed route that utilise the existing public road surfaces and surfaced paths will involve very minor works in the form of signage and road markings. There will be no requirement for wholesale changes in the surfaces of these sections of the proposed greenway. Where necessary upgrades will be made to surfaces where repairs and maintenance is required.

A description of the quarry dust/tarmacadam surface and the boardwalk surfaces are provided below.

Figure 2.2: Proposed Compacted Stone and Dust

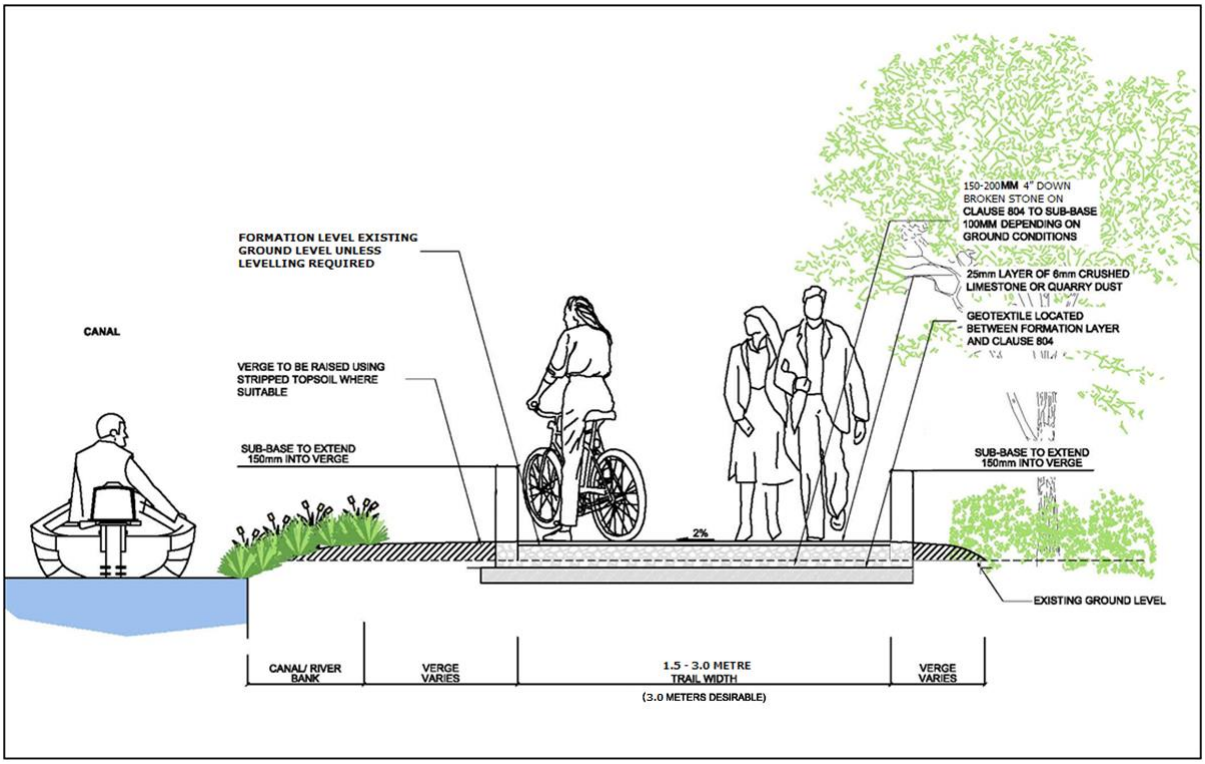


Table 2.1 Type B Compacted Stone and Dust

Compacted Stone and Dust	
LOCATIONS	MATERIAL SPECIFICATION
Saula West – Ch. 3,350 to Ch. 4,640 over defunct bog road. Cashel South Ch. 5,620 to 5,850 over existing track, through scrub and dense bracken Cashel South Ch. 5,850 to 5,950 over improved/wet grassland.	Geotextile Polybrane 240 Membrane or alternative equivalent product grade Sub -Base layer 4" Down Broken Stone, then Granular sub-base, in accordance with Clause 804 of TII Specification. Surface layer 0/6mm crushed limestone or quarry dust

Cashel South Ch. 6,230 to Ch. 6,700 over grassland. Cashel South Ch. 6,780 to Ch. 6,840 over grassland. Cashel South Ch. 6,910 to Ch. 7,030 over grassland. Bunacurry/Cashel South Ch. 8,205 to Ch. 8,245 over grassland. Bunacurry/Cashel South Ch. 8,430 to Ch. 8,505 over existing bog access road.	

CONSTRUCTION SEQUENCE (Refer Figure 2.2 above)

(a) Formation Tray Excavation where unavoidable (Desirable Width of 4m. (b) Overlay to Width of 2.6m) (C) 1.4m of verge comprised of 0.7m either side of finished overlay to be managed for landscaping with the establishment of species-rich grassland and heath habitat as appropriate.

Grade out irregularities to form 2.6m wide formation tray (width of formation tray to be approximately 300mm wider than the path width) to maximum depth of 100mm below ground level. (Actual depth will depend on depth of sub-base being used, which will depend on ground conditions. Where possible new construction will overlay existing). Formation tray should be rectangular in section with vertical sides and level base.

Any Stripped vegetation and excavated topsoil to be stacked neatly either side of formation tray to be used for reinstatement of path shoulders.

There would be no excavation requirements in regard to the overlay of the existing surface other than to address isolated issues with soft spots.

Geotextile Installation

Lay and secure geotextile sheet in formation tray or on top of the existing ground. Overlap joining sheets by 1.0m.

If required in soft ground - Lay and secure geogrid on top of geotextile sheet. Overlap joining sheets by 1.0m.

Sub-Base Layer

Using either a drag box or suitable excavator lay the required depth of 4" down Broken Stone upon the geotextile sheet to falls and levels, to form 1:50 (2%) camber or 1:40 (2.5%) cross-fall in maximum layer depths of 150mm – 200mm. Then 100mm Clause 804 granular sub-base. Depths of Sub-base will depend on existing ground conditions

Compact sub-base layer using a pedestrian roller taking care not to apply undue pressures to the canal bank until satisfactory compaction is achieved.

Once sub-base layer is compacted, check levels of the surface at regular intervals along the compacted sub-base layer for consistent even surface regularity. Any part of the sub-base layer deviating from the required level must be raked off or topped up with additional Clause 804 granular sub-base and re-compacted to the correct levels.

Surface Layer

Using either a drag box or suitable excavator lay 25mm depth of 6mm limestone dust to falls and levels, to form 2.5m to 3.5m wide path surface with 1:50 (2%) camber or 1:40 (2.5%) crossfall along the centre line of compacted sub-base layer.

Compact surface layer using a roller until satisfactory compaction is achieved.

Once rolling is finished, check levels of the surface at regular intervals along the compacted surface layer for consistent even surface regularity. Any part of the surface layer deviating from the required level must be raked off or topped up with additional 6mm limestone dust and re- compacted to the correct levels.

Landscaping

Using available topsoil and turfs from excavations (and only if necessary, imported topsoil). Landscaped verges and edges should be finished level with path surface and taper down and away from the path surface to allow surface water to run off onto adjacent verges. Landscaping of the verges to be treated with the application of a species-rich grassland and/or heath species mix. All species to be planted as part of the landscaping will be of local and native provenance and will be typical of species-rich grassland/heath habitat occurring in the wider area.

Table 2.2: Type C Raised Boardwalk

Raised Boardwalk	
LOCATIONS:	MATERIAL SPECIFICATION
Saula West Ch. 4640 – Ch. 5060 Cashel South Ch. 5,950 to Ch. 6,230 Cashel South Ch. 6,700 to Ch. 6,780 Cashel South Ch. 6,840 to Ch. 6,910 Cashel/Bunacurry Ch. 8,180 to 8,210 Cashel/Bunacurry Ch. 8,240 to 8,440	Components for boardwalk: Main Beams 150mm x 50mm x 3m length Handrail uprights 100mm x 100mm x 1.5m (centres every1.5m) Handrails 100mm x 50mm x 6m Cross heads 100mm x 50mm x boardwalk width Deck boards 200mm x 50mm x boardwalk width Piles 100mm x 100mm x 1.5m (length depends on ground conditions
Construction Sequence The walkway will be built in a modular way starting from the roadway and working along the proposed route. The construction will be undertaken in sections, with support post installation being undertaken first followed by the installation of the walkway frame and finally walkway surface. This will allow the boardwalk to be constructed and used as access for the construction of the boardwalk. Any surface treatments of the boardwalk frame and posts will be undertaken offsite prior to installation. The plant to be used during the construction phase will include a mini-digger of low ground bearing pressure. The use of this plant will be restricted to a 5 metre working corridor along the boardwalk route. The mini-digger will be used for the installation of posts only and will be permitted to track around the working corridor under the footprint of the boardwalk on only one occasion. The use of the mini-digger	

will be restricted to periods of dry weather conditions. Works to be undertaken within peatland habitat will be done by hand as much as possible.

Construction works will include support post installation and the assembly of the frames and bolting on of the walkway boards.

Only machinery that can be transported along the boardwalk (e.g. power barrow, muck truck, generator and power tools) will be permitted. This machinery will only be permitted to be used on the boardwalk.

Round posts of 4 inches in diameter will be used to secure the boardwalk. Wherever possible posts will be laid approximately every 1.8m on each side of the walkway. This will be constrained by the presence of bog hollows along the boardwalk route, as no posts will be placed in such hollows. Nevertheless, it is estimated that, as the walkway is approximately 450 metres in length, approximately 500 posts will be required. Each post will be approximately 100mm x 100mm in width. As such the overall physical footprint of the boardwalk within blanket bog habitat will amount to $5m^2$. All posts will be driven in situ using a mini digger of low ground bearing pressure.

The depths of posts will depend on the ground conditions but they will extend below the base of the blanket bog and will be a minimum of 1.2 metres. Probing during vegetation sampling noted that the majority of the blanket bog underlying the footprint of the boardwalk is in excess of 2m in depth.

The posts will be made of wood or potentially steel although wood is more likely. The boardwalk frame and boards will be plastic but will have a wood finish.

The boardwalk will be raised to a minimum height of 300mm above the blanket bog surface. The boardwalk has been designed to sit above the blanket bog so that surface water runoff and drainage are not impeded and to allow the penetration of light under the boardwalk and facilitate vegetation growth underneath and around it.

Construction works will be supervised by a suitably qualified environmental engineer or ecologist.

The construction staff will be restricted to a small team of 4 people.

3.0 OVERVIEW OF THE PROPOSED GREENWAY ROUTE

The majority of the proposed greenway will be restricted to existing public roads, surfaced paths and old bog roads. Approximately 7.1km of the route runs over existing public road while approximately 1.3km runs over defunct bog roads. Together these sections account for approximately 80% of the length of the proposed greenway. The remaining 20% (approximately 2.2km) is located over greenfield land in the form of grassland and peatland habitats.

The habitats occurring along and adjacent to the proposed greenway route are briefly described below according to chainages along the proposed route. Figure 3.1 provides an overview of the land cover occurring along each of the sections of the proposed greenway as described below, while Figure 3.2 to 3.7 provide higher resolution aerials showing land cover and chainages along the proposed greenway.

Ch 0 to approximate Ch. 3,100 This section of the greenway route is existing and already in place. From Ch. 0 on the Achill Sound side of the causeway bridge until Ch. 1,350 at the junction with the Shore Road, the greenway will be situated along the existing R319 regional road. At Ch. 1,350 it turns north on to the existing Shore Road and follows this public road until Ch. 1,600 where it turns northwest and follows an existing section of tarmacadam greenway. This existing stretch of greenway continues in a northwesterly direction until approximately Ch. 3,350 in the townland of Saula West. The dominated habitat occurring within the footprint of the proposed greenway from Ch. 0 to Ch. 3,350 is existing artificial surfaces (BL3) in the form of impermeable road surfaces and paths.

Ch. 3,100 to approximately Ch. 3,350: Artificial surface (BL3) in the form of an existing paved public road occurs along this section of the proposed route. The proposed greenway will be accommodated along the existing verge of the road. The verge consists of grassy verge (GS2) habitat.

Ch. 3,350 to approximately Ch. 3,800: Artificial surface (BL3) in the form of an existing bog road, which is underlain by road fill and hardcore material occurs along this section. The bog road is in a state of disrepair in areas and has become colonized by heathland species such as *Calluna vulgaris, Molinia caerulea* and *Schoenus nigrans*. Dense stands of *Rhododendron*

ponitcum occur along this section closer to Ch. 3,350. *Gunnera tinctoria* was also noted along this section of the proposed greenway.

Ch 3,800 to approximately Ch. 4,650: This section of the route follows along a turbary track that overlays deep peat. The original habitat under the footprint of this track and in the surrounding area was lowland blanket bog (PB3). The habitats along this section of the route varies between an existing grassy tracked surface, best described as grassy verge (GS2), cutover/eroding blanket bog (PB4/5) and rank *Juncus effusus* dominated wet grassland (GS4). The blanket bog habitat occurring either side of the proposed greenway route along this section is representative of cutover blanket bog (PB4).

Ch 4,650 to approximately Ch 4,710: This short section of the proposed greenway represents the end of a largely southeast to northwest orientated section of the proposed route that follows an existing turbary track. The existing turbary track terminates at approximately Ch. 4,650. The next 60m of the track to approximately Ch. 4,710 overly an area of regenerating blanket bog. This area has been cutover in the past (PB4) but is now supporting a typical suite of blanket bog species that are indicative of active blanket bog conditions. As such it is more representative of lowland blanket bog (PB3).

Ch. 4,710 to approximately Ch. 5,160: This south to north orientated section of the proposed greenway route first follows a bank that runs through regenerating blanket bog. Moving north the underlying peat thins out and the habitat becomes more representative of wet heath (HH3) with exposed siliceous rock. Towards the end of this section the route merges with an existing paved public road (BL3).

Ch. 5,160 to approximately Ch. 5,630: This section of the route follows an existing public road in a westerly direction over the lower Owenbegacashel River bridge. The estuary of the river is located to the north and east of the public road. The route then turns east, following an existing public road until its terminus at a pier adjacent to the coast.

Ch. 5,630 to approximately Ch. 6,050: The proposed greenway route runs adjacent to the coastline in a north and east direction. It first passes through an area of scrub habitat (WS2) before running along a number of small unimproved agricultural fields that are now representative of improved/wet grassland (GA1/GS4) habitat.

Ch. 6,020 to approximately Ch. 6,200: This south to north orientated section of the proposed greenway runs along the edge an area of lowland blanket bog/degraded blanket bog (PB3/PB4_5) and Molinia-dominated wet heath (HH3) mosaic and improved grassland (GA2). The grassland field dominates the cover to the east while the peatland habitat mosaic of blanket bog and wet heath dominates the cover to the west. Sections of this bog have been drained in the past.

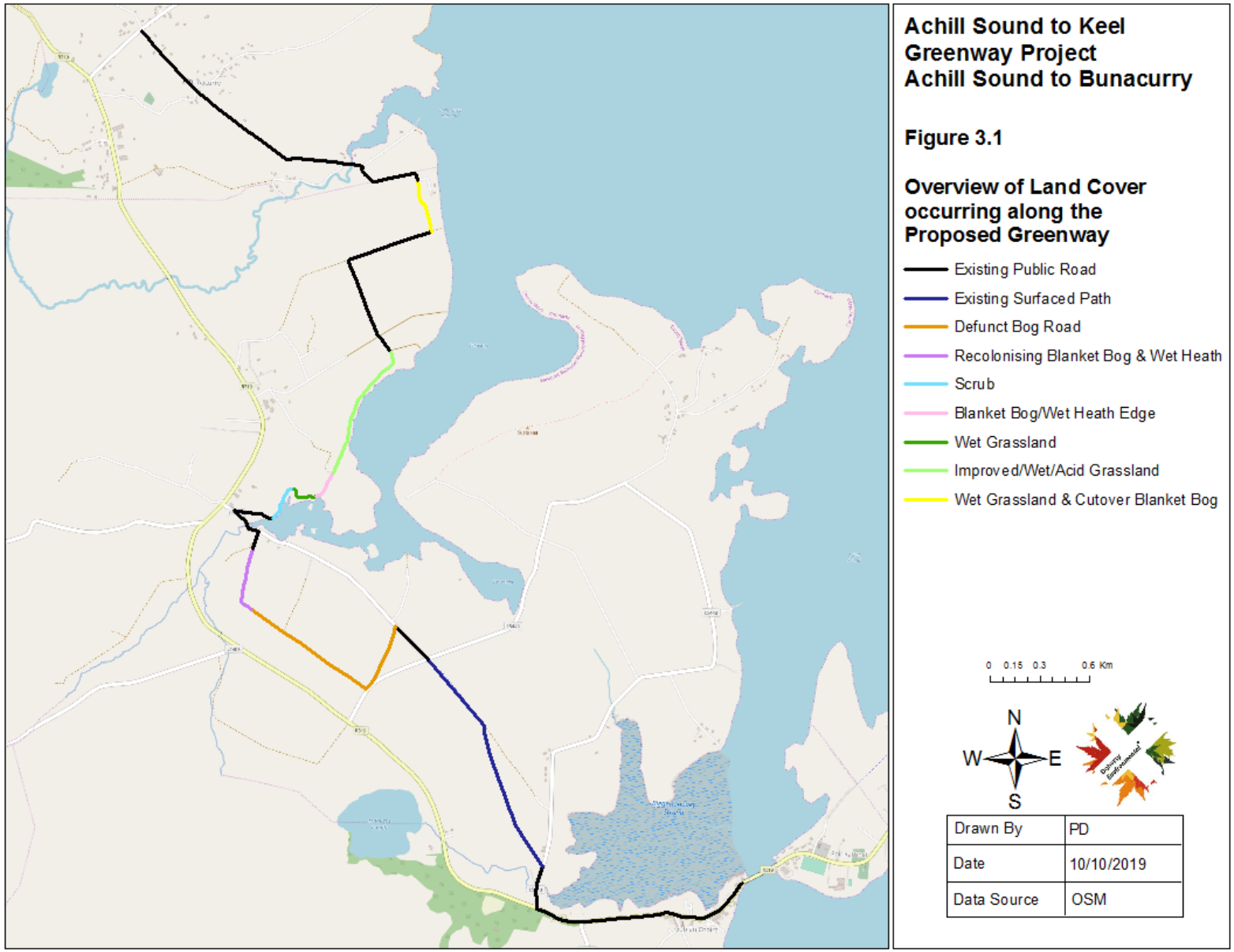
Ch. 6,200 to approximately Ch. 7,060: This section of the proposed greenway runs over a series of fields that have been reclaimed from original lowland blanket bog. The fields are in a varying states of management with some reverting to blanket bog conditions, others being representative of wet grassland (GS4) and others representative of acidic grassland (GS3) and Molinia dominated wet heath (HH3).

Ch. 7,060 to approximately Ch. 8,200: This section of the proposed greenway uses an existing public road that is representative of a bog road. The road is surfaced throughout and is representative of artificial surfaces (BL3).

Ch. 8,200 to approximately Ch. 8,530: This section of the proposed greenway runs along the boundary of previously improved agricultural fields that are now representative of wet grassland (GS4) and cutover blanket bog (PB4) located to the west.

Ch. 8,530 to approximately to Ch. 10,600 Bunacurry: This final section of the proposed greenway uses existing minor public road surfaces (BL3).

The proposed greenway will not require the provision of any new watercourse crossings. All watercourses to be crossed by the proposed greenway route are already crossed by existing sections of public road. Figure 3.1 shows the watercourses crossed by the existing public road sections of the proposed greenway.


Achill Sound to Keel Greenway Project
Achill Sound to Bunacurry
Figure 3.1
Overview of Land Cover occurring along the Proposed Greenway
Existing Public Road
Existing Surfaced Path
Defunct Bog Road
Recolonising Blanket Bog & Wet Heath
Scrub
Blanket Bog/Wet Heath Edge
Wet Grassland
Improved/Wet/Acid Grassland
Wet Grassland & Cutover Blanket Bog
0 0.15 0.3 0.6 Km
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Drawn By PD
Date 10/10/2019
Data Source OSM


1850
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Achill Sound to Keel Greenway Project
Achill Sound to Bunacurry
Figure 3.2
Land Cover
Ch. 0 - 1,850
Existing Public Road
Existing Surfaced Path
Defunct Bog Road
Recolonising Blanket Bog & Wet Heath
Scrub
Blanket Bog/Wet Heath Edge
Wet Grassland
Improved/Wet/Acid Grassland
Wet Grassland & Cutover Blanket Bog
0 0.05 0.1 0.2 Km
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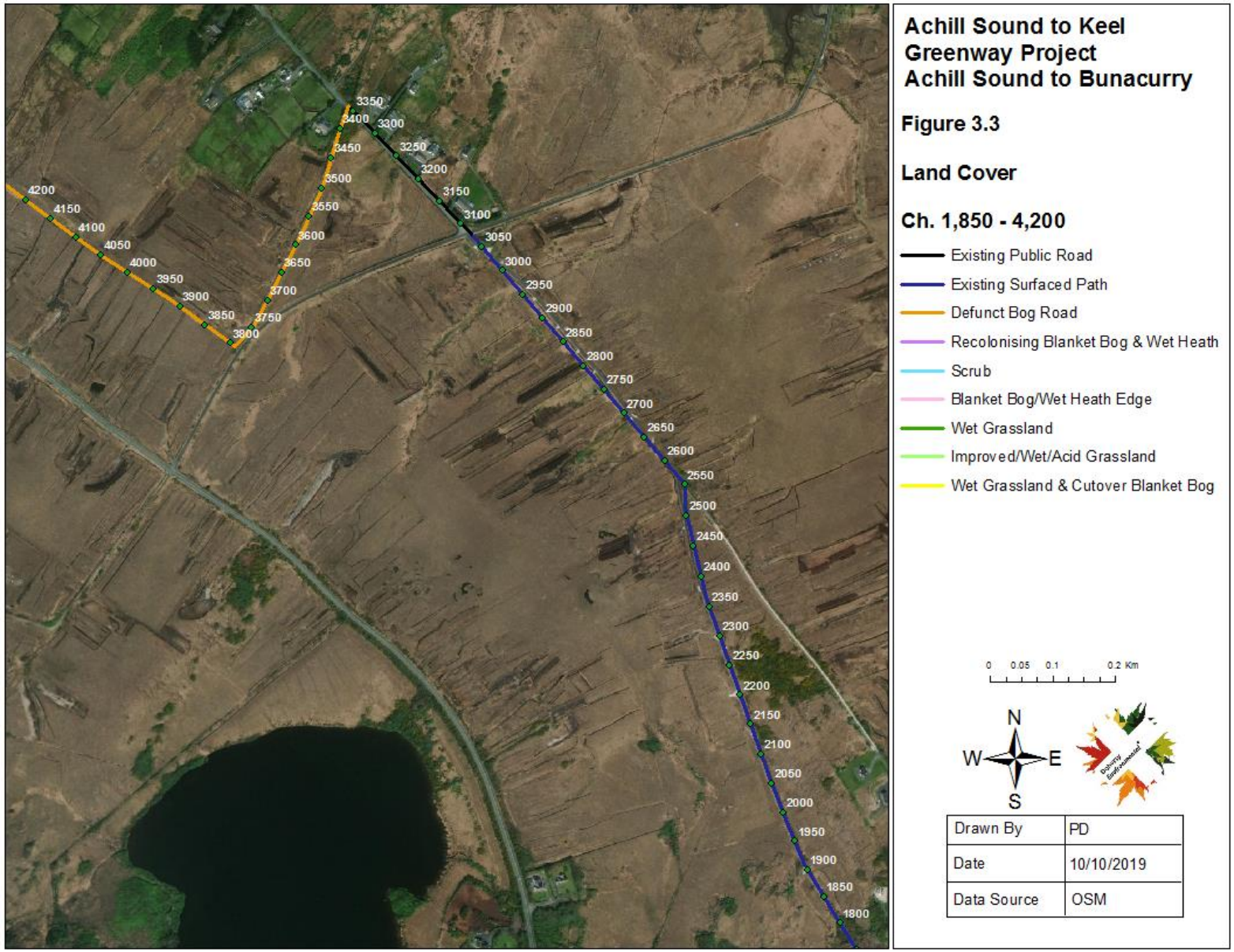
Achill Sound to Keel
Greenway Project
Achill Sound to Bunacurry
Figure 3.3
Land Cover
Ch. 1,850 - 4,200
Existing Public Road
Existing Surfaced Path
Defunct Bog Road
Recolonising Blanket Bog & Wet Heath
Scrub
Blanket Bog/Wet Heath Edge
Wet Grassland
Improved/Wet/Acid Grassland
Wet Grassland & Cutover Blanket Bog
0 0.05 0.1 0.2 Km
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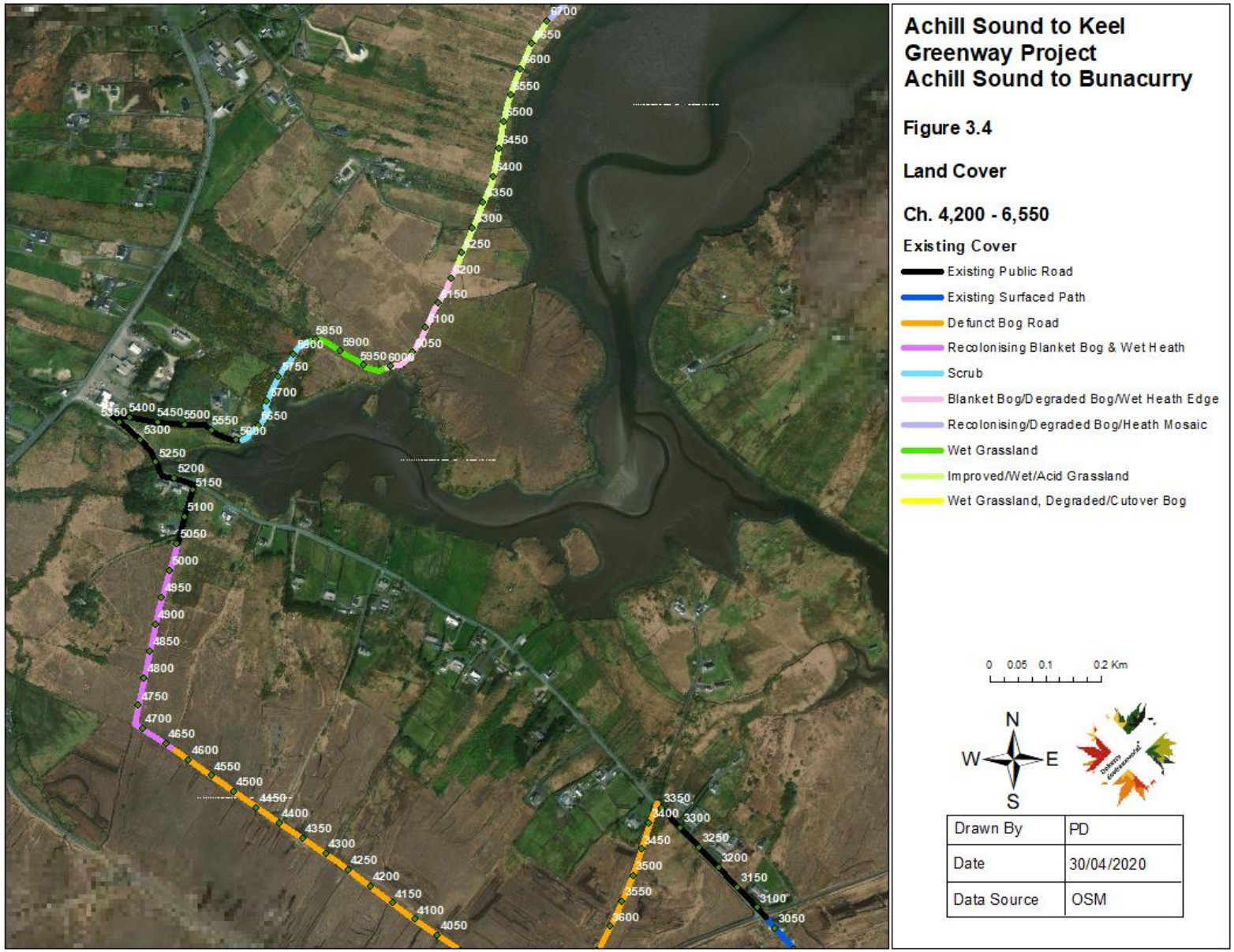
Achill Sound to Keel
Greenway Project
Achill Sound to Bunacurry
Figure 3.4
Land Cover
Ch. 4,200 - 6,550
Existing Cover
Existing Public Road
Existing Surfaced Path
Defunct Bog Road
Recolonising Blanket Bog & Wet Heath
Scrub
Blanket Bog/Degraded Bog/Wet Heath Edge
Recolonising/Degraded Bog/Heath Mosaic
Wet Grassland
Improved/Wet/Acid Grassland
Wet Grassland, Degraded/Cutover Bog
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Date 30/04/2020
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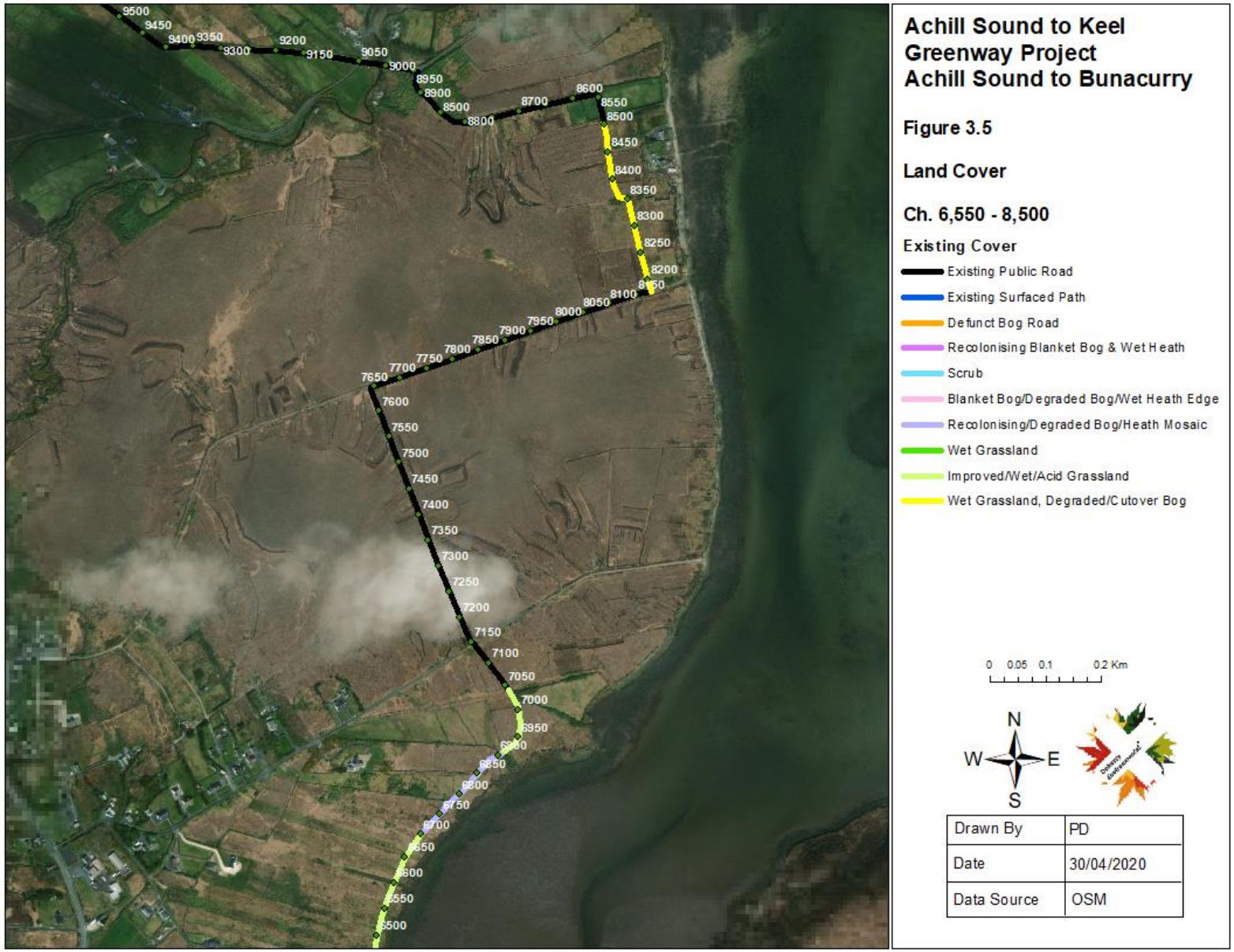
Achill Sound to Keel
Greenway Project
Achill Sound to Bunacurry
Figure 3.5
Land Cover
Ch. 6,550 - 8,500
Existing Cover
Existing Public Road
Existing Surfaced Path
Defunct Bog Road
Recolonising Blanket Bog & Wet Heath
Scrub
Blanket Bog/Degraded Bog/Wet Heath Edge
Recolonising/Degraded Bog/Heath Mosaic
Wet Grassland
Improved/Wet/Acid Grassland
Wet Grassland, Degraded/Cutover Bog
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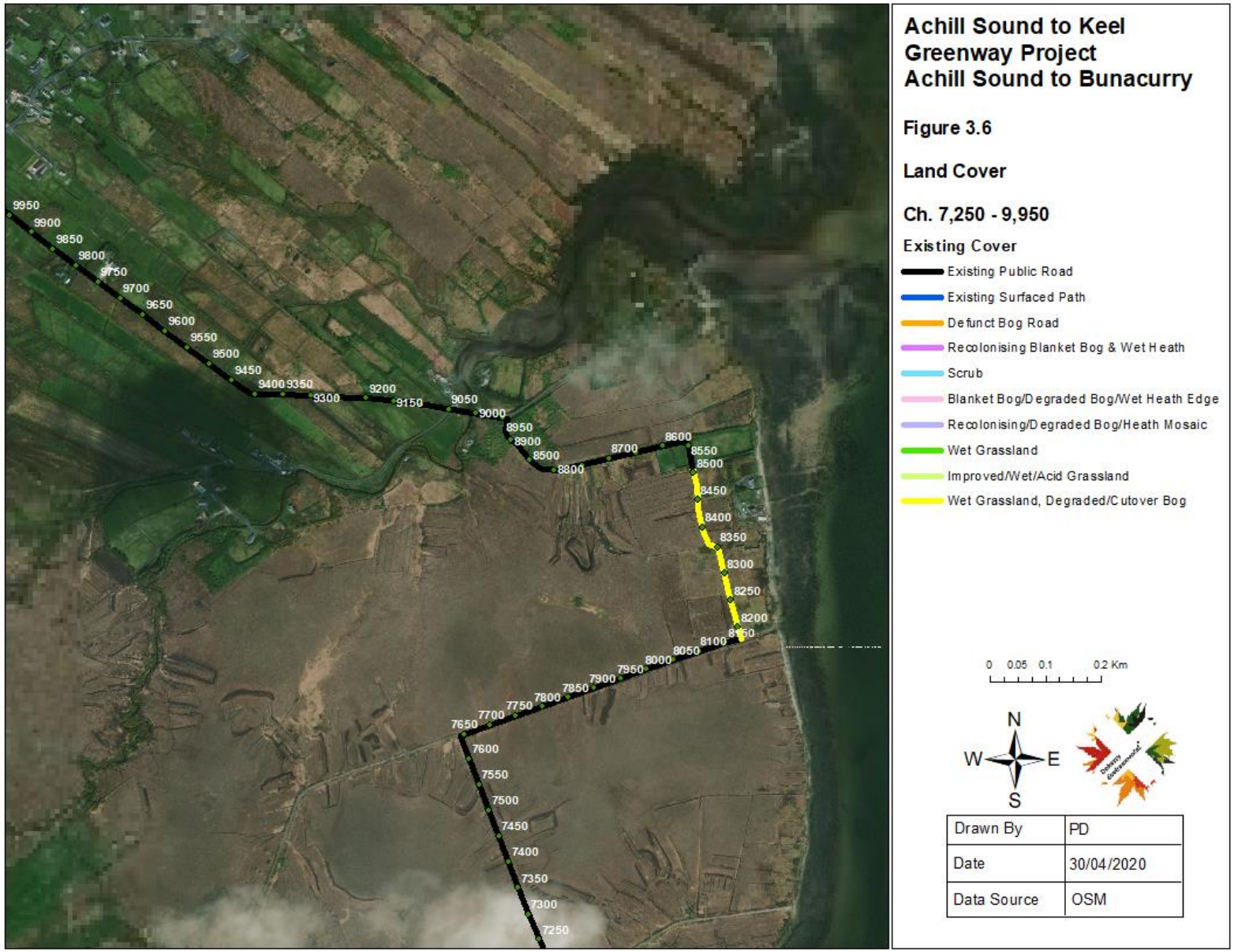
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9000
8950
8900
8800
8700
8600
8550
8500
8450
8400
8350
8300
8250
8200
8150
8100
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8000
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7700
7650
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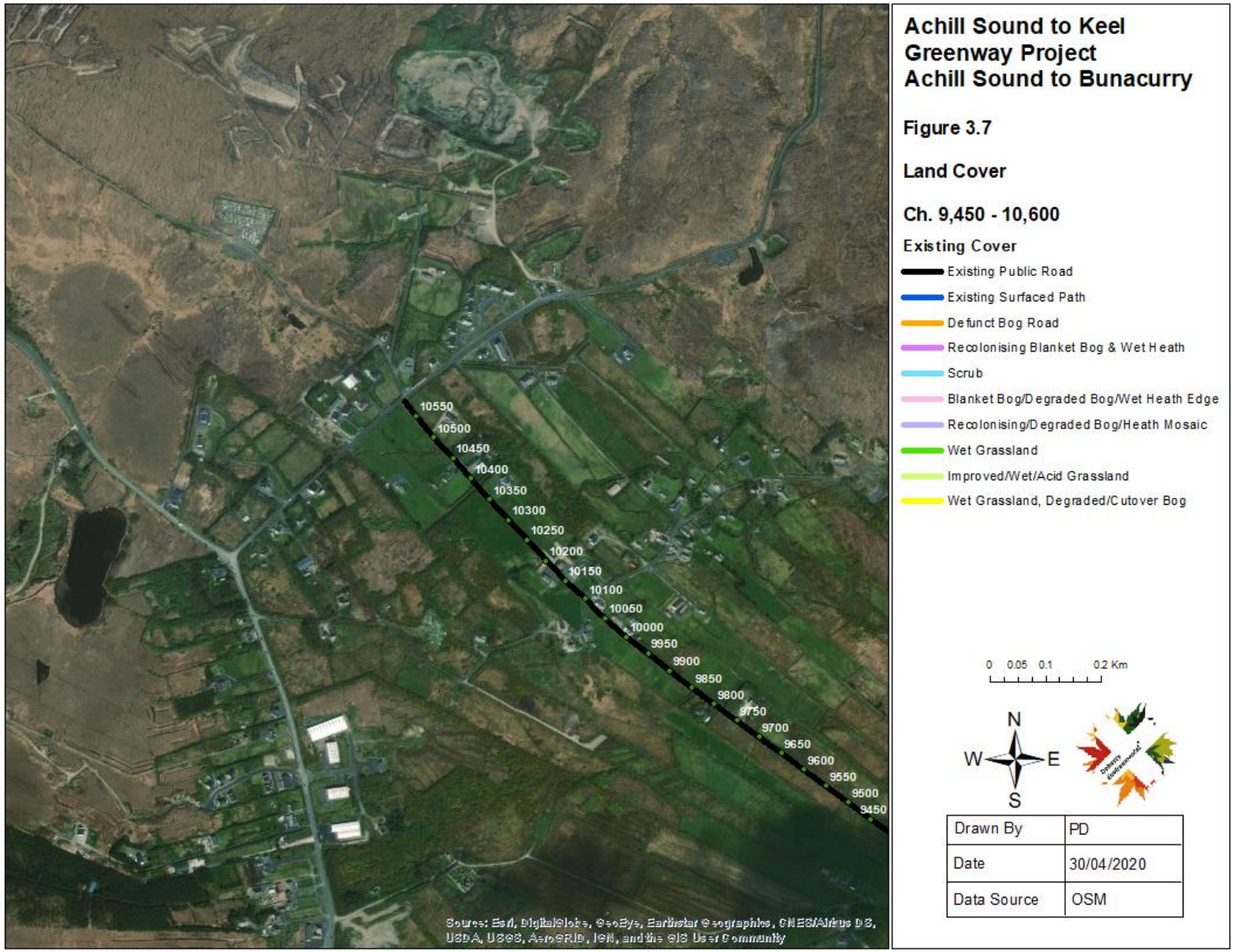
7550
7500
7450
7400
7350
7300
7250
Achill Sound to Keel
Greenway Project
Achill Sound to Bunacurry
Figure 3.6
Land Cover
Ch. 7,250 - 9,950
Existing Cover
Existing Public Road
Existing Surfaced Path
Defunct Bog Road
Recolonising Blanket Bog & Wet Heath
Scrub
Blanket Bog/Degraded Bog/Wet Heath Edge
Recolonising/Degraded Bog/Heath Mosaic
Wet Grassland
Improved/Wet/Acid Grassland
Wet Grassland, Degraded/Cutover Bog
0 0.05 0.1 0.2 Km
N
W
E
S
Drawn By PD
Date 30/04/2020
Data Source OSM


10550
10500
10450
10400
10350
10300
10250
10200
10150
10100
10050
10000
9950
9900
9850
9800
9750
9700
9650
9600
9550
9500
9450
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community
Achill Sound to Keel Greenway Project
Achill Sound to Bunacurry
Figure 3.7
Land Cover
Ch. 9,450 - 10,600
Existing Cover
Existing Public Road
Existing Surfaced Path
Defunct Bog Road
Recolonising Blanket Bog & Wet Heath
Scrub
Blanket Bog/Degraded Bog/Wet Heath Edge
Recolonising/Degraded Bog/Heath Mosaic
Wet Grassland
Improved/Wet/Acid Grassland
Wet Grassland, Degraded/Cutover Bog
0 0.05 0.1 0.2 Km
N
W
E
S
Drawn By PD
Date 30/04/2020
Data Source OSM

4.0 IS THE PROJECT NECESSARY FOR THE CONSERVATION MANAGEMENT OF EUROPEAN SITES

The project has been described in Section 2 of the Screening Report and it is clear from the description provided that the project is not directly connected with or necessary for the future conservation management of any European Sites.

5.0 EUROPEAN SITES WITHIN THE ZONE OF INFLUENCE OF THE PROJECT

5.1 LIST OF EUROPEAN SITES

Current guidance recommends that all European Sites occurring within 15km of project sites should be identified at the outset of a screening exercise. A total of 18 European Sites have been identified in the surrounding 15km area. Table 5.1 lists these European Sites and the spatial relationship between each of these sites and the study area is shown on Figure 5.1 and Figure 5.2. Appendix 1 lists the qualifying features of interest/special conservation interest for each of these European Sites.

In addition to the European Sites occurring within a 15km area of the project site the DEHLG 2010 guidelines on Appropriate Assessment of Plans and Projects in Ireland also advise that where the potential exists for a hydrological pathway to occur between the project site and European Sites beyond the 15km distance, then these sites should also be included as part of the Screening. No other European Sites are connected to the project site via hydrological pathways or any other pathways and as such only those sites located within a 15km distance of the project site are included in this Screening for Appropriate Assessment.

5.2 IDENTIFICATION OF EUROPEAN SITES IN THE PROJECT ZONE OF INFLUENCE

The project site is not located within a European Sites, does not adjoin the boundary of any European Sites and is not located within the immediate vicinity of any European Sites. The occurrence of the 18 European Sites within the zone of influence of the project is dependent on the presence of a potential impact pathway, that connects the project site to these European Sites.

A source-pathway-receptor model has been used to establish which, in any, of these 18 European Sites could occur within the zone of influence of the project. Under such a model the project, as described in Section 2 above, represents the source.

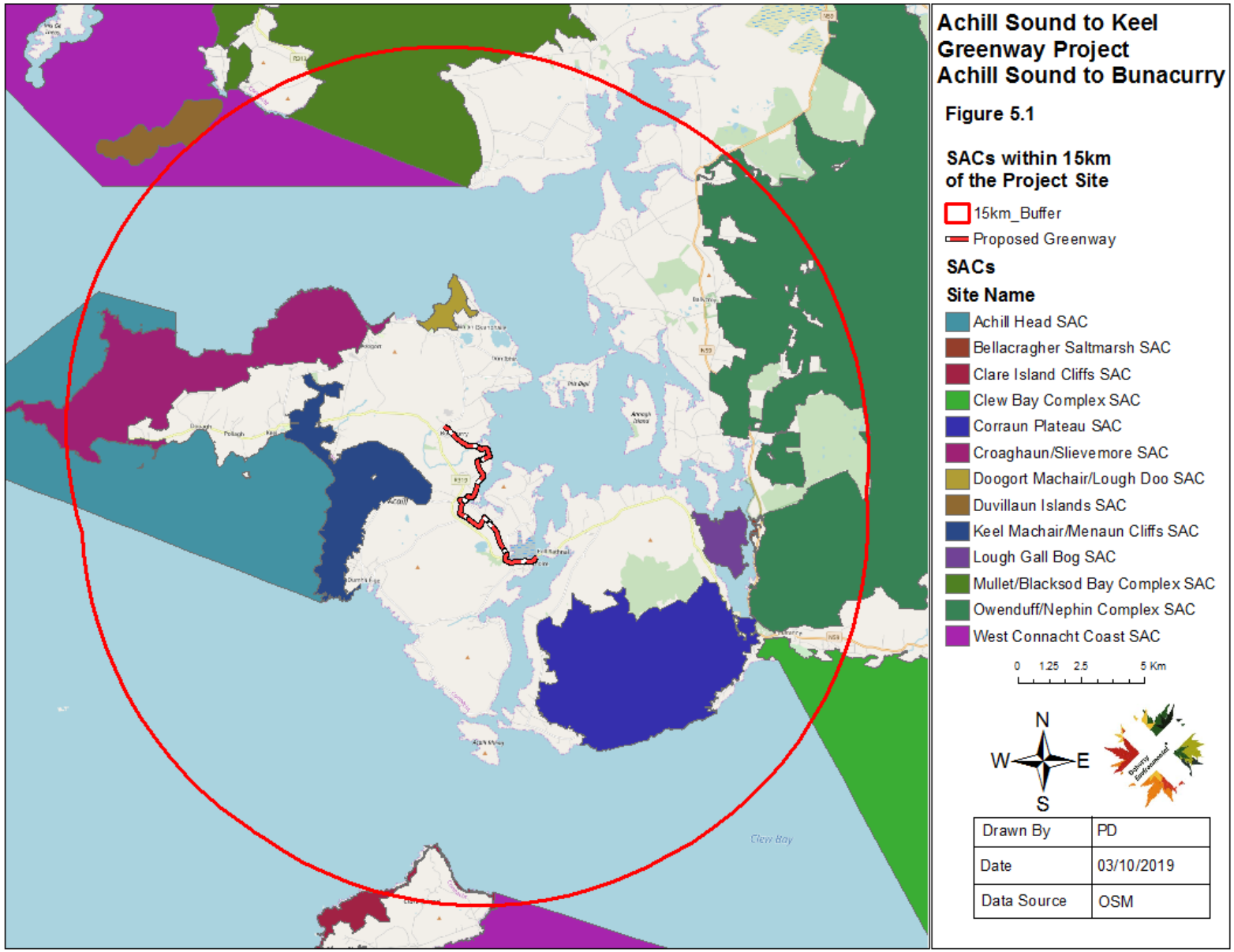
Potential impact pathways are restricted to hydrological pathways and the potential for the project to interact with mobile qualifying species of European Sites within the 15km surrounding area. Given the distance between the project site and the nearest of these European Sites, which is the Keel Machair/Menaun Cliffs SAC located approximately 1.1km to the west, other impact pathways such as noise, air, lighting and human disturbance will not have the potential to influence the qualifying features of interest and the conservation objectives of these European Sites.

The receptors represent European Sites and their associated qualifying features of interest.

European Sites and their associated qualifying features are likely to occur in the zone of influence of the project only where hydrological pathways establish a link between the project site and European Sites or where the project site is likely to play an important role in supporting populations of mobile species that are listed as special conservation interests/qualifying species for surrounding European Sites.

Table 5.1 provides a determination as to whether each of these four European Site occur within the zone of influence of the project. This determination has been undertaken in line with the following questions:

- Is there a hydrological pathway linking the Project site to European Sites and does this pathway have the potential to function as an impact pathway?
- Are Annex I qualifying habitats of these European Sites at risk of experiencing impacts as a result of the project?
- Does the project site have the potential to interact with or support Annex II qualifying species/special conservation interest bird species of these European Sites?


Achill Sound to Keel
Greenway Project
Achill Sound to Bunacurry
Figure 5.1
SACs within 15km
of the Project Site
15km_Buffer
Proposed Greenway
SACs
Site Name
Achill Head SAC
Bellacragher Saltmarsh SAC
Clare Island Cliffs SAC
Clew Bay Complex SAC
Corraun Plateau SAC
Croaghaun/Slievemore SAC
Doogort Machair/Lough Doo SAC
Duvillaun Islands SAC
Keel Machair/Menaun Cliffs SAC
Lough Gall Bog SAC
Mullet/Blacksod Bay Complex SAC
Owenduff/Nephin Complex SAC
West Connacht Coast SAC
0 1.25 2.5 5 Km
N
W
E
S
Drawn By PD
Date 03/10/2019
Data Source OSM

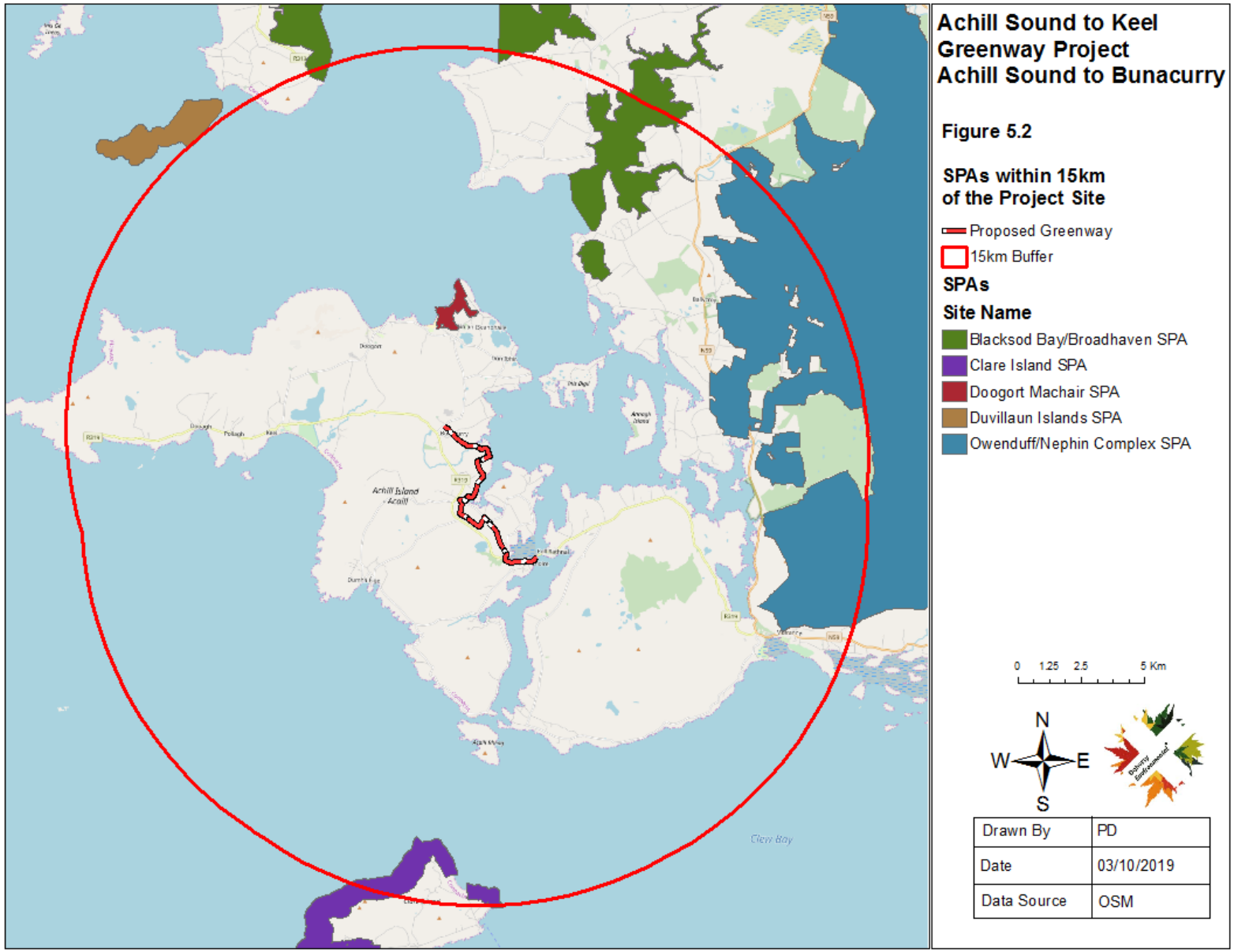

Achill Sound to Keel
Greenway Project
Achill Sound to Bunacurry
Figure 5.2
SPAs within 15km
of the Project Site
Proposed Greenway
15km Buffer
SPAs
Site Name
Blacksod Bay/Broadhaven SPA
Clare Island SPA
Doogort Machair SPA
Duvillaun Islands SPA
Owenduff/Nephin Complex SPA
0 1.25 2.5 5 Km
N
W
E
S
Drawn By PD
Date 03/10/2019
Data Source OSM

Table 5.1: Identification of European Sites within the Zone of Influence of the Project

European Sites	Site Code	Distance (Km) from Project Site	Is there a Hydrological Pathway and does it have the potential to function as an Impact Pathway?	Does the Project have the potential to interact with Annex I Habitats?	Does the Project have the potential to interact with Mobile Species?	Do European Sites occur within the Projects Zone of Influence?
Achill Head SAC	2268	8.2	No. This SAC is located in a separate surface water catchment to the project site.	No. There are no pathways that could link the project site to the qualifying habitats of this SAC.	No. No Annex II species are listed as qualifying features of interest for this SAC.	No.
Bellacragher Saltmarsh SAC	2005	13.6	No. This SAC is located in a separate surface water catchment to the project site.	No. There are no pathways that could link the project site to the qualifying habitats of this SAC.	No. No Annex II species are listed as qualifying features of interest for this SAC.	No.
Clare Island Cliffs SAC	2243	12.5	No. This SAC is located in a separate surface water catchment to the project site.	No. There are no pathways that could link the project site to the qualifying habitats of this SAC.	No. No Annex II species are listed as qualifying features of interest for this SAC.	No.
Clew Bay Complex SAC	1482	12	No. This SAC is located in a separate surface water catchment to the project site.	No. There are no pathways that could link the project site to the qualifying habitats of this SAC.	No. This SAC is designated for its role in supporting Geyers	No.

European Sites	**Site Code**	**Distance (Km) from Project Site**	**Is there a Hydrological Pathway and does it have the potential to function as an Impact Pathway?**	**Does the Project have the potential to interact with Annex I Habitats?**	**Does the Project have the potential to interact with Mobile Species?**	**Do European Sites occur within the Projects Zone of Influence?**
					Whorl Snail, otters and harbour seals. There will be no potential for the project to interact with any of the populations of these species supported by this SAC given the remote distance that separate the project site and this SAC and the location of the project within terrestrial habitats that are buffered from the coast.	
Corraun Plateau SAC	485	4.5	No. This SAC is located in a separate surface water catchment to the project site.	No. There are no pathways that could link the project site to the qualifying habitats of this SAC.	No. No Annex II species are listed as qualifying features of interest for this SAC.	No.

European Sites	**Site Code**	**Distance (Km) from Project Site**	**Is there a Hydrological Pathway and does it have the potential to function as an Impact Pathway?**	**Does the Project have the potential to interact with Annex I Habitats?**	**Does the Project have the potential to interact with Mobile Species?**	**Do European Sites occur within the Projects Zone of Influence?**
Croaghaun/ Slievemore SAC	1955	4.5	No. This SAC is located in a separate surface water catchment to the project site.	No. There are no pathways that could link the project site to the qualifying habitats of this SAC.	No. No Annex II species are listed as qualifying features of interest for this SAC.	No.
Doogort Machair/Lo-ugh Doo SAC	1497	4	No. This SAC is located in a separate surface water catchment to the project site.	No. There are no pathways that could link the project site to the qualifying habitats of this SAC.	No. The sedentary liverwort *Petalophyllum ralfsii* is the only Annex II species that is listed as qualifying features of interest for this SAC. The habitats of this SAC that support this species are located at a remote distance from the project site and there will be no potential for the project to interact with the habitats that support this species.	No.

European Sites	**Site Code**	**Distance (Km) from Project Site**	**Is there a Hydrological Pathway and does it have the potential to function as an Impact Pathway?**	**Does the Project have the potential to interact with Annex I Habitats?**	**Does the Project have the potential to interact with Mobile Species?**	**Do European Sites occur within the Projects Zone of Influence?**
Duvillaun Islands SAC	495	14.9	No. This SAC is located in a separate surface water catchment to the project site.	No. No Annex I qualifying habitats are listed as qualifying features of interest of this SAC.	No. This SAC is designated for its role in protecting a population of grey seals. The habitats for grey seal protected within this SAC are located at a remote distance from the project site. The footprint of the project site is restricted in its entirety to the terrestrial environment and will not represent a risk to the quality of marine waters in the wider vicinity of the project site. As such there will be no potential for the project to influence the habitats, within or without, the boundary of this SAC, that grey seals rely upon.	No.

European Sites	**Site Code**	**Distance (Km) from Project Site**	**Is there a Hydrological Pathway and does it have the potential to function as an Impact Pathway?**	**Does the Project have the potential to interact with Annex I Habitats?**	**Does the Project have the potential to interact with Mobile Species?**	**Do European Sites occur within the Projects Zone of Influence?**
Keel Machair/ Menaun Cliffs SAC	1513	1.1	No. This SAC is located in a separate surface water catchment to the project site.	No. There are no pathways that could link the project site to the qualifying habitats of this SAC.	No. The sedentary liverwort *Petalophyllum ralfsii* is the only Annex II species that is listed as qualifying features of interest for this SAC. The habitats of this SAC that support this species are located at a remote distance from the project site and there will be no potential for the project to interact with the habitats that support this species.	No.
Lough Gall Bog SAC	522	8	No. This SAC is located in a separate surface water catchment to the project site.	No. There are no pathways that could link the project site to the qualifying habitats of this SAC.	No. No Annex II species are listed as qualifying features of interest for this SAC.	No.

European Sites	**Site Code**	**Distance (Km) from Project Site**	**Is there a Hydrological Pathway and does it have the potential to function as an Impact Pathway?**	**Does the Project have the potential to interact with Annex I Habitats?**	**Does the Project have the potential to interact with Mobile Species?**	**Do European Sites occur within the Projects Zone of Influence?**
Mullet/Blacksod Bay Complex SAC	470	9.5	No. This SAC is located in a separate surface water catchment to the project site.	No. There are no pathways that could link the project site to the qualifying habitats of this SAC.	No. This SAC is designated for its role in supporting *Petalophyllum ralfsii* and otters. There will be no potential for the project to interact with any of the populations of these species supported by this SAC given the remote distance that separate the project site and this SAC and the location of the project within terrestrial habitats that are buffered from the coast.	No.
Owenduff/ Nephin Complex SAC	534	10.5	No. This SAC is located in a separate surface water catchment to the project site.	No. There are no pathways that could link the project site to the qualifying habitats of this SAC.	No. This SAC is designated for its role in supporting the herb marsh saxifrage, the moss	No.

European Sites	Site Code	Distance (Km) from Project Site	Is there a Hydrological Pathway and does it have the potential to function as an Impact Pathway?	Does the Project have the potential to interact with Annex I Habitats?	Does the Project have the potential to interact with Mobile Species?	Do European Sites occur within the Projects Zone of Influence?
					Hamatocaulis vernicosus and otters. There will be no potential for the project to interact with any of the populations of these species supported by this SAC given the remote distance that separate the project site and this SAC and the location of the project within terrestrial habitats that are buffered from the coast. In addition there will be no interactions with watercourses that could support individual otters outside this SAC.	

European Sites	**Site Code**	**Distance (Km) from Project Site**	**Is there a Hydrological Pathway and does it have the potential to function as an Impact Pathway?**	**Does the Project have the potential to interact with Annex I Habitats?**	**Does the Project have the potential to interact with Mobile Species?**	**Do European Sites occur within the Projects Zone of Influence?**
West Connacht Coast SAC	2998	9.8	No. This is a marine SAC located at a remote distance from the project site.	No. No Annex I qualifying habitats are listed as qualifying features of interest of this SAC.	No. This SAC is designated for its role in protecting a population of bottle-nosed dolphin. The habitats for bottle-nosed dolphin protected within this SAC are located at a remote distance from the project site. The footprint of the project site is restricted in its entirety to the terrestrial environment and will not represent a risk to the quality of marine waters in the wider vicinity of the project site. As such there will be no potential for the project to influence the habitats, within or without, the boundary of this SAC, that bottle-nosed dolphin rely upon.	No.

European Sites	**Site Code**	**Distance (Km) from Project Site**	**Is there a Hydrological Pathway and does it have the potential to function as an Impact Pathway?**	**Does the Project have the potential to interact with Annex I Habitats?**	**Does the Project have the potential to interact with Mobile Species?**	**Do European Sites occur within the Projects Zone of Influence?**
Blacksod Bay/Broadhaven SPA	4037	9.5	No. This SAC is located in a separate surface water catchment to the project site.	No. There are no pathways that could link the project site to the habitats within this SPA upon which special conservation interest bird species rely.	This SPA is designated for its role in supporting a range of overwintering and breeding bird species. This SPA is located at a remote distance from the project site the provision of the greenway will not have the potential to undermine the habitats within this SPA upon which these species rely. In addition these species are not known to rely on habitats occurring within the vicinity of the project site and as such there will be no potential for the project to interact with the special conservation interest bird species populations of this SPA.	No.

European Sites	**Site Code**	**Distance (Km) from Project Site**	**Is there a Hydrological Pathway and does it have the potential to function as an Impact Pathway?**	**Does the Project have the potential to interact with Annex I Habitats?**	**Does the Project have the potential to interact with Mobile Species?**	**Do European Sites occur within the Projects Zone of Influence?**
Clare Island SPA	4136	12.5	No. This SPA is located in a separate surface water catchment to the project site.	No. There are no pathways that could link the project site to the habitats within this SPA upon which special conservation interest bird species rely.	No. This SPA is designated for its role in supporting breeding colonies of cliff nesting sea birds and choughs. The SPA is located at a remote distance from the project site and there are no links between the project site and the habitats upon which these bird species rely.	No.
Doogort Machair SPA	4235	4	No. This SPA is located in a separate surface water catchment to the project site.	No. There are no pathways that could link the project site to the habitats within this SPA upon which special conservation interest bird species rely.	No. This SPA is designated for its role in supporting a breeding population of Dunlin. The habitat upon which this breeding population is located at a remote distance from the project site and there will be no potential for the project to interact with the habitats upon which this species relies. In turn	No.

European Sites	**Site Code**	**Distance (Km) from Project Site**	**Is there a Hydrological Pathway and does it have the potential to function as an Impact Pathway?**	**Does the Project have the potential to interact with Annex I Habitats?**	**Does the Project have the potential to interact with Mobile Species?**	**Do European Sites occur within the Projects Zone of Influence?**
					there will be no potential for the project to interact with the breeding population of Dunlin of this SPA.	
Duvillaun Islands SPA	4111	14.9	No. This SPA is located in a separate surface water catchment to the project site.	No. There are no pathways that could link the project site to the habitats within this SPA upon which special conservation interest bird species rely.	No. This SPA is designated for its role in supporting a wintering population of barnacle goose and breeding populations of storm petrel and fulmar. The project site is located at a remote distance from the habitats upon which these species rely and there will be no potential for the project to interact with these habitats. In turn there will be no potential for the project site to interact	No.

European Sites	**Site Code**	**Distance (Km) from Project Site**	**Is there a Hydrological Pathway and does it have the potential to function as an Impact Pathway?**	**Does the Project have the potential to interact with Annex I Habitats?**	**Does the Project have the potential to interact with Mobile Species?**	**Do European Sites occur within the Projects Zone of Influence?**
					with these bird species of the SPA.	
Owenduff/ Nephin Complex SPA	4098	10.8	No. This SPA is located in a separate surface water catchment to the project site.	No. There are no pathways that could link the project site to the habitats within this SPA upon which special conservation interest bird species rely.	No. This SPA is designated for its role in supporting a resident population of Merlin and a breeding population of Golden Plover. The habitats upon which these species rely within the SPA are located at a remote distance from the project site and there will be no potential for the project to interact with these habitats. Merlin are likely to roam outside the SPA during foraging bouts but the provision of the proposed greenway will not have the potential to result in any perceptible interactions	No.

European Sites	**Site Code**	**Distance (Km) from Project Site**	**Is there a Hydrological Pathway and does it have the potential to function as an Impact Pathway?**	**Does the Project have the potential to interact with Annex I Habitats?**	**Does the Project have the potential to interact with Mobile Species?**	**Do European Sites occur within the Projects Zone of Influence?**
					with the foraging habitat of Merlins.	

Table 5.1 above examines the relationship between the project site and the 18 European Sites occurring within the wider 15km area surrounding the project site. As noted within this table none of these European Sites occur in close proximity to the project site and there are no functional impact pathways linking the project site to these European Sites. As such these European Sites do not occur within the zone of influence of the project.

The absence of any potential impact pathways will eliminate the potential for this project to result in likely significant effects to European Sites. A Screening Matrix, in line with European Commission (2001) guidelines is provided below in Table 5.2.

Table 5.2: Screening Matrix for Project

Screening Criteria	Evaluation
Brief description of the project or plan	The project and associated activities are described in Section 3 above.
Brief description of the European Sites	The European Sites occurring in the wider surrounding area are identified and briefly described in Section 5 above. Appendix 1 lists all qualifying features of interest of each of these European Sites.
Describe the individual elements of the project (either alone or in combination with other plans or projects) likely to give rise to impacts on the European Sites.	No elements of the project are likely to give rise to impacts to European Sites. All European Sites are located at remote distance from the project site. There are no potential impact pathways connecting the project site to these European Sites and their qualifying habitats or the habitats within these designated conservation areas upon which qualifying species rely. The project site does not provide habitat upon which qualifying species of the surrounding SACs and SPAs rely and there will be no potential for the project to result in any perceptible interactions with these species.
Describe any likely direct, indirect or secondary impacts of the project (either alone or in	The project is representative of small to medium scale greenway project. Much of the proposed project will utilise existing public road surfaces,

Screening Criteria	**Evaluation**
combination with other plans or projects) on the European Sites site by virtue of: • size and scale; • land-take; • distance from the Natura 2000 site or key features of the site; • resource requirements (water abstraction etc.); • emissions (disposal to land, water or air); • excavation requirements; • transportation requirements; • duration of construction, operation, decommissioning, etc.;	surfaced paths and defunct bog roads (i.e. approximately 8.4km of the route or approximately 80%). There will be no land take from European Sites. Greenfield land-take that makes up the remaing circa 20% of the route is predominantly restricted to areas that have been and are still subject to ongoing human activities in the form of agriculture and turbary. The nearest European Sites to the project site is located over 1.1km to the west. The project will not require any resources from European Sites. Minor excavations will be required for the provision of the greenway surface along greenfield sections of the trail. Transportation requirements will be minimal and will be associated with the small construction crew during the construction of the greenway route. It is estimated that the construction phase will last for 15 months. The proposed greenway has been designed for a life span of 50 years.
Describe any likely changes to the site arising as a result of: • reduction of habitat area: • disturbance to key species; • habitat or species fragmentation; • reduction in species density; • changes in key indicators of conservation value • (water quality etc.); • climate change.	The project will not: have the potential to result in a reduction in habitat area of any qualifying habitats or habitats upon which qualifying species of surrounding SACs and SPAs rely; there are no impact pathways linking the project site to the SACs and SPAs in the wider area surrounding the project site and there will be no potential for the project to disturb qualifying species of these European Sites. The project site does not support any habitats upon which qualifying species of surrounding European Sites rely and the project is not likely to result in

Screening Criteria	**Evaluation**
	significant disturbance effects to these species beyond the boundary of their SACs and SPAs.
Describe the potential for the project alone or in combination with other plans or projects to result in likely significant effects to European Sites.	Mayo County Council online planning portal was searched for recently approved (2015 and later) planning applications in the vicinity of the project site. Four project were identified and are examined for their potential to combine with the proposed project to result in cumulative negative impacts to European Sites. Planning Ref 17308: Relates to the retention of an existing first floor accommodation and retention of alterations to an existing dwelling at Bunacurry. This project is located adjacent to a section of the proposed greenway that will utilise the existing public road. Minimal works in the form of road markings and signage where necessary will be required for the proposed greenway along this section. No works associated with either project will have the potential alone or in combination with each other to result in cumulative impacts to European Sites. Planning Ref: 17706: Relates to the construction of a dwelling house in the townland of Cashel and the retention of an existing access road to the site. This project site is located to west of the proposed greenway and is buffered from the greenway by approximately 400m. Both sites are located at remote distance from any European Sites. There are no pathways connecting both sites to European Sites and as such there will be no potential for the proposed greenway to combine with this project to result in cumulative impacts to European Sites.

Screening Criteria	**Evaluation**
	Planning Ref 15707: Relates to the construction of a dwelling house in the townland of Cashel. This project site is located adjacent to the proposed greenway. Both sites are located at remote distance from any European Sites. There are no pathways connecting both sites to European Sites and as such there will be no potential for the proposed greenway to combine with this project to result in cumulative impacts to European Sites.
Describe any likely impacts on the European Sites site as a whole in terms of: interference with the key relationships that define the structure of the site; interference with key relationships that define the function of the site	For reasons set out above the project will not have the potential to interfere with key relationships that define the structure and function of European Sites.
Provide indicators of significance as a result of the identification of effects set out above in terms of: • loss; • fragmentation; • disruption; • disturbance; • change to key elements of the site (e.g. water quality etc.).	For reasons set out above the project will not have the potential to result in such effects to European Sites.
Describe from the above those elements of the project or plan, or combination of elements, where the above impacts are likely to be significant or where the scale or magnitude of impacts is not known.	The project will not have the potential to result in likely significant effects to European Sites.

6.0 SCREENING CONCLUSION

During the Screening of the proposed project which involves the provision of greenway from the townland of Achill Sound to Bunacurry on Achill Island it was found that 18 European Sites occur within a 15km radius of the project site. The nearest European Site, the Keel Machair/Menaun Cliffs, to the project site is located approximately 1.1km to the west. All other European Sites in the wider surrounding are located at remoter distance from the project site. No potential impact pathways were identified linking the project site to these European Sites. As such each of these European Sites were adjudged to be located outside the zone of influence of the project. A review of all other projects in the vicinity of the project site was completed as part of the Screening. A total of three projects were identified, each of which are minor in scale and are also located at remote distances from European Sites with no potential impact pathways connecting them to such sites in the wider surrounding area. Given the remote location of the project site and these other projects from European Sites and the absence of any potential impact pathways linking them to European Sites there will be no potential for the project to combine with these other projects to result in likely significant effects to European Sites.

In light of the findings of this report it is the considered view of the authors of this Screening Report for Appropriate Assessment that it can be concluded by the Mayo County Council that the project is not likely, alone or in-combination with other plans or projects, to have a significant effect on any European Sites in view of their Conservation Objectives and on the basis of best scientific evidence and there is no reasonable scientific doubt as to that conclusion.

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APPENDIX 1: QUALIFYING FEATURES OF INTEREST OF EUROPEAN SITES OCCURRING WITHIN THE WIDER SURROUNDING AREA

A total of 18 European Sites were identified as occurring within a 15km radius of the project site. Table A1.1 below lists the qualifying features of interest of each of these European Sites.

Table A1.1: Qualifying Features of Interest for European Sites occurring within 15km of the Project

European Sites	Qualifying Features Of Interest
Achill Head SAC	Mudflats and sandflats not covered by seawater at low tide [1140]
	Large shallow inlets and bays [1160]
	Reefs [1170]
Bellacragher Saltmarsh SAC	Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330]
	Mediterranean salt meadows (Juncetalia maritimi) [1410]
Clare Island Cliffs SAC	Vegetated sea cliffs of the Atlantic and Baltic coasts [1230]
	Calcareous rocky slopes with chasmophytic vegetation [8210]
	Siliceous rocky slopes with chasmophytic vegetation [8220]
Clew Bay Complex SAC	Mudflats and sandflats not covered by seawater at low tide [1140]
	Coastal lagoons [1150]
	Large shallow inlets and bays [1160]
	Annual vegetation of drift lines [1210]
	Perennial vegetation of stony banks [1220]
	Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330]
	Embryonic shifting dunes [2110]
	Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2120]
	Machairs (* in Ireland) [21A0]
	Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0]
	Vertigo geyeri (Geyer's Whorl Snail) [1013]
	Lutra lutra (Otter) [1355]
	Phoca vitulina (Harbour Seal) [1365]
Corraun Plateau SAC	Northern Atlantic wet heaths with Erica tetralix [4010]
	European dry heaths [4030]
	Alpine and Boreal heaths [4060]
	Juniperus communis formations on heaths or calcareous grasslands [5130]
	Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani) [8110]
	Siliceous rocky slopes with chasmophytic vegetation [8220]
Croaghaun/ Slievemore SAC	Northern Atlantic wet heaths with Erica tetralix [4010]
	European dry heaths [4030]
	Alpine and Boreal heaths [4060]
	Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani) [8110]
	Siliceous rocky slopes with chasmophytic vegetation [8220]

Doogort Machair/Lough Doo SAC	Machairs (* in Ireland) [21A0]
	Petalophyllum ralfsii (Petalwort) [1395]
Duvillaun Islands SAC	Halichoerus grypus (Grey Seal) [1364]
Keel Machair/ Menaun Cliffs SAC	Perennial vegetation of stony banks [1220]
	Machairs (* in Ireland) [21A0]
	Alpine and Boreal heaths [4060]
	Petalophyllum ralfsii (Petalwort) [1395]
Lough Gall Bog SAC	Blanket bogs (* if active bog) [7130]
	Depressions on peat substrates of the Rhynchosporion [7150]
Mullet/Blacksod Bay Complex SAC	Mudflats and sandflats not covered by seawater at low tide [1140]
	Large shallow inlets and bays [1160]
	Reefs [1170]
	Salicornia and other annuals colonising mud and sand [1310]
	Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2120]
	Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130]
	Atlantic decalcified fixed dunes (Calluno-Ulicetea) [2150]
	Machairs (* in Ireland) [21A0]
	Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation [3150]
	Alkaline fens [7230]
	Lutra lutra (Otter) [1355]
	Petalophyllum ralfsii (Petalwort) [1395]
Owenduff/ Nephin Complex SAC	Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) [3110]
	Natural dystrophic lakes and ponds [3160]
	Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260]
	Northern Atlantic wet heaths with Erica tetralix [4010]
	Alpine and Boreal heaths [4060]
	Juniperus communis formations on heaths or calcareous grasslands [5130]
	Blanket bogs (* if active bog) [7130]
	Transition mires and quaking bogs [7140]
	Salmo salar (Salmon) [1106]
	Lutra lutra (Otter) [1355]
	Drepanocladus vernicosus (Slender Green Feather-moss) [1393]
	Saxifraga hirculus (Marsh Saxifrage) [1528]
West Connacht Coast SAC	Tursiops truncatus (Common Bottlenose Dolphin) [1349]
Blacksod Bay/Broadhaven SPA	Great Northern Diver (Gavia immer) [A003]
	Light-bellied Brent Goose (Branta bernicla hrota) [A046]
	Common Scoter (Melanitta nigra) [A065]
	Red-breasted Merganser (Mergus serrator) [A069]
	Ringed Plover (Charadrius hiaticula) [A137]
	Sanderling (Calidris alba) [A144]
	Dunlin (Calidris alpina) [A149]
	Bar-tailed Godwit (Limosa lapponica) [A157]
	Curlew (Numenius arquata) [A160]

	Sandwich Tern (Sterna sandvicensis) [A191]
	Dunlin (Calidris alpina schinzii) [A466]
	Wetland and Waterbirds [A999]
Clare Island SPA	Fulmar (Fulmarus glacialis) [A009]
	Shag (Phalacrocorax aristotelis) [A018]
	Common Gull (Larus canus) [A182]
	Kittiwake (Rissa tridactyla) [A188]
	Guillemot (Uria aalge) [A199]
	Razorbill (Alca torda) [A200]
	Chough (Pyrrhocorax pyrrhocorax) [A346]
Doogort Machair SPA	Dunlin (Calidris alpina schinzii) [A466]
Doogort Machair SPA	Dunlin (Calidris alpina schinzii) [A466]
Duvillaun Islands SPA	Fulmar (Fulmarus glacialis) [A009]
	Storm Petrel (Hydrobates pelagicus) [A014]
	Barnacle Goose (Branta leucopsis) [A045]
Owenduff/ Nephin Complex SPA	Merlin (Falco columbarius) [A098]
	Golden Plover (Pluvialis apricaria) [A140]

APPENDIX 2: SCHEME DRAWINGS