

Ecological Impact Assessment

Proposed Carpark and
Mass Rock Trail Upgrades
at Mullaghgarve, Co.
Leitrim





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1. INTRODUCTION

1.1 Background

MKO has been commissioned to conduct an Ecological Impact Assessment (EcIA) for Leitrim County Council of a proposed carpark and upgrades to the existing Mass Rock Trail at Mullaghgarve, Co. Leitrim. (Grid ref: H 03270 14655).

The EcIA includes an accurate description of all aspects of the proposed works during construction, operation and decommissioning (where relevant). It then provides a comprehensive description of the baseline ecological environment, which is based on an appropriate level of survey work that was carried out in accordance with the most appropriate guidelines and methodologies. The EcIA then completes a thorough assessment of the impacts of the proposed development on biodiversity. Where likely ecologically significant effects are identified, measures are prescribed to avoid or minimise or compensate for such effects.

1.2 Statement of Authority

A baseline ecological survey was undertaken on the 24th of May 2022 by Cillian Burke (BSc.) and Rachel Walsh (BSc., QCIEEM) of MKO. This report has been prepared by Cillian Burke (BSc.). This report has been reviewed by Rachel Walsh (BSc., QCIEEM) who has 2 years' experience in ecological assessment.

1.3 Relevant Guidance

In addition, the guidelines listed below were consulted in the preparation of this document to provide the scope, structure and content of the assessment:

- Guidelines for Ecological Impact Assessment in the UK and Ireland. Terrestrial, Freshwater, Coastal and Marine (CIEEM, 2018) (amended 2021).
- Draft Revised guidelines on the information to be contained in Environmental Impact Statements (EPA, 2017).
- Environmental Impact Assessment of National Road Schemes –A Practical Guide (NRA, 2009).
- Guidelines for assessment of Ecological Impacts of National Road Schemes, (NRA, 2009).
- Environmental Assessment and Construction Guidelines (NRA, 2006).

2. DESCRIPTION OF PROPOSED WORKS

2.1 Site Location

The site of the proposed development is located along the Mullaghgarve Mass Rock Walk, near Sliabh an Iarainn, Co. Leitrim (Grid ref: H 03270 14655). It is approx. 7km east of Drumshanbo town. The proposed trail is partly located within the Cuilcagh-Anierin Uplands SAC while the proposed carpark footprint is located outside of the SAC boundary within agricultural fields.

The site location is shown in Figure 2-1.

2.2 Proposed Works

The proposed development comprises an upgrade to the existing Mass Rock Trail, and the construction of a carpark at Aghacashel (grid ref: H 03270 14655) of approx. 0.04ha in area.

The proposed car park will consist of 13 no. spaces and will be surrounded with stock-proof fencing. The carpark area will be surfaced with Terram, 5F2 capping, Clause 804 and Stone Mastic Asphalt (SMA) finish.

The Mass Rock Trail is an existing trail with begins north of the proposed carpark (grid ref: H 03229 14714) and proceeds northward along an existing hardcore surface for 975m. The trail then turns westward over the mountain for approximately 520m until it reaches Mass Rock.

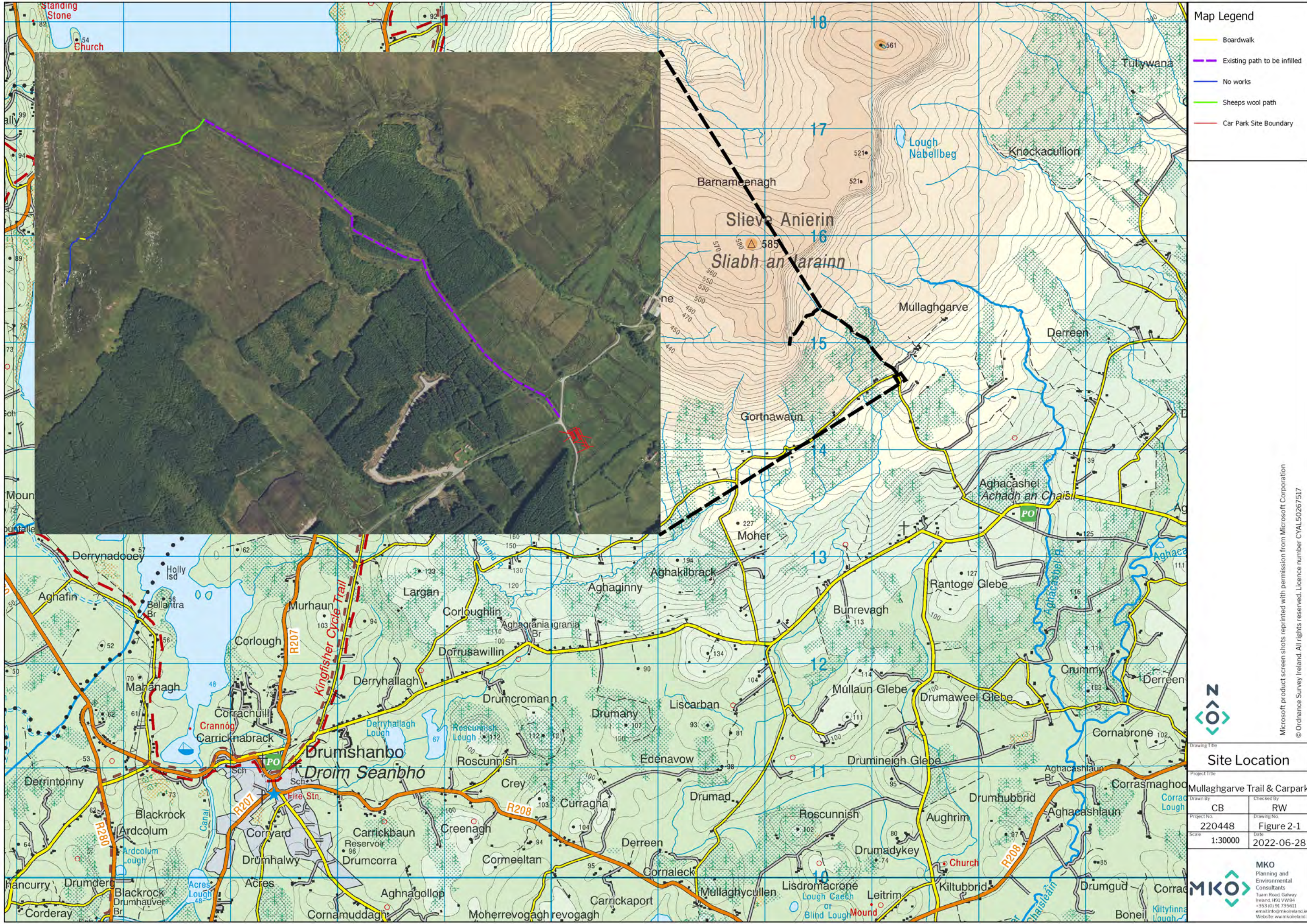
It is proposed to clean off the first section of the trail by removing overgrowth and laying Clause 804 stone onto the existing hardcore surface. Four no. field gates are proposed along this section.

As the trail turns westwards, it is proposed to lay 150m of sheep's wool pathway along the existing trail route. This will involve an excavation of approx. 2ft deep x 3ft wide. Approx. 300 to 500mm of sheep's wool will be laid followed by 50mm of drainage stone and approx. 150mm of CL804 stone. This will be carried out manually. A seasonally dry channel traverses this section of trail. It is proposed to create a bridge structure over this channel consisting of wooden planks so that the seasonal flow remains unimpeded.

For the majority of the remainder of the existing trail, no works are proposed. Towards the end of the trail a boardwalk, measuring 20m long, is proposed. This will be a pre-constructed structure and will be transported to the proposed location manually.

The proposed trail works, and location of the carpark are shown in Figure 2-2.

A detailed layout of the proposed carpark is shown in Figure 2-3.



Map Legend

- Boardwalk
- Existing path to be infilled
- No works
- Sheeps wool path
- Car Park Site Boundary

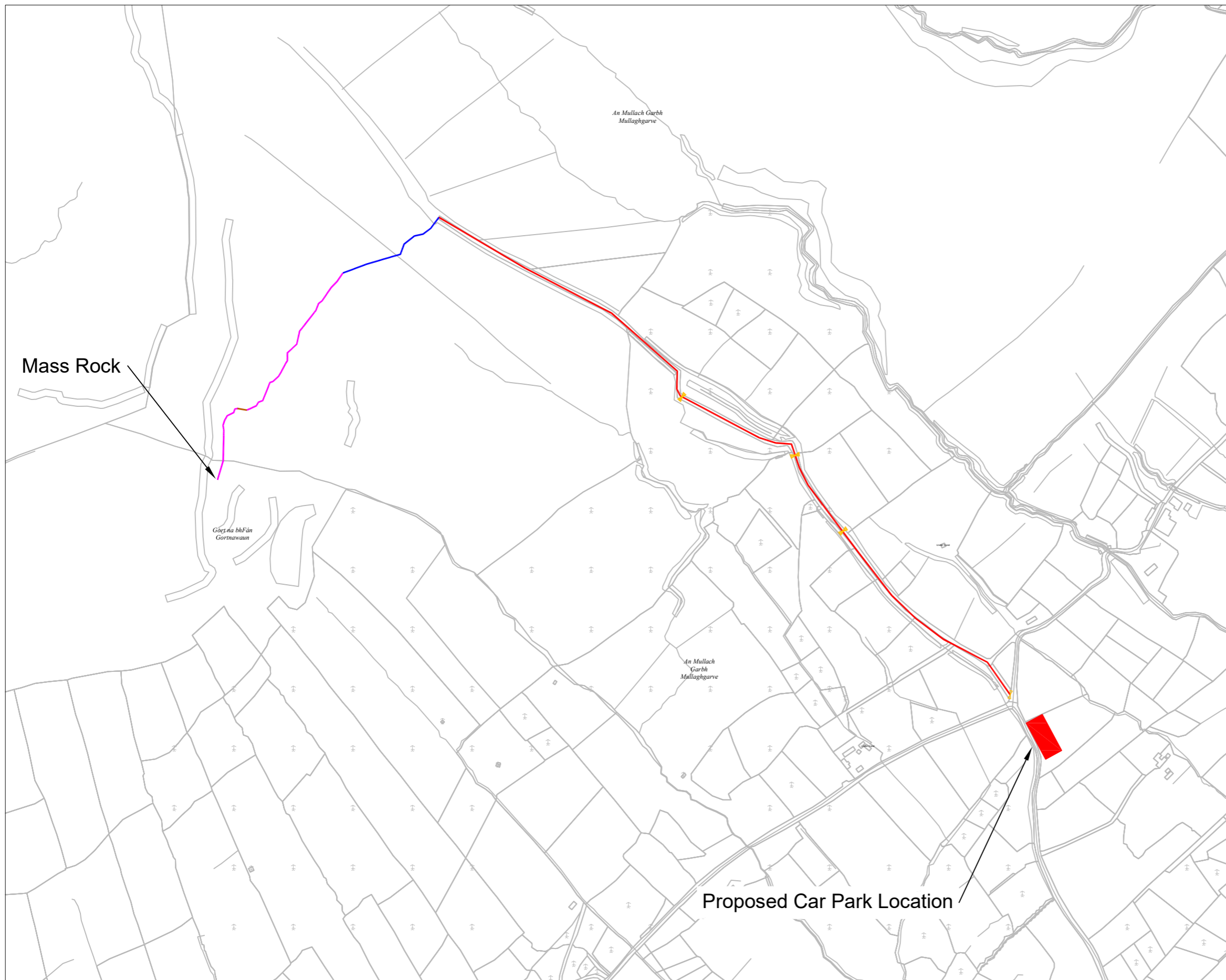


Site Location

Project Title	
Mullaghgarve Trail & Carpark	
Drawn By	Checked By
CB	RW
Project No.	Drawing No.
220448	Figure 2-1
Scale	Date
1:30000	2022-06-28






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Legend:

Trail to extend from proposed car park adjacent to local public road to the mass rock site. Trail length is 1455m and proposed works to trail as follows:

-  Existing access road to be cleaned off & 150mm CL804 stone material to be laid on existing hardcore surface. Side drains along path to be reopened. 975m
-  Existing mountain bog. Proposed sheep's wool pathway to be installed. 150m
-  No works to take place on this section. 310m
-  Timber boardwalk. 20m
-  Proposed 10ft field gate with kissing gates adjacent.

Mass Rock

Proposed Car Park Location



Leitrim County Council

Director of Services
Mr. Joseph Gilhooly
Áras an Chontae
Carrick-on-Shannon
Co. Leitrim
Tel: 071 9620005

REV:	DATE:	AMENDMENT:

<i>Project</i> Mullaghgarve Mass Rock Walking Trail				
<i>Component</i> Map			<i>Title</i> Overview of Scheme	
<i>Scales</i> 1:5000@A3	<i>Date</i> 13/04/2022	<i>O.S. Sheet Ref.:</i> 1471	<i>Drawing No.:</i> ACP-003	<i>Revision:</i> 0
<i>Design</i> RF	<i>Drawn</i> RF	<i>Checked</i> PMS		



Pedestrian Access To Car Park

Existing Hedgerow To Be Maintained

19m

44m

Stockproof Fencing

Carpark Entrance & Exit

Area for future development



Leitrim County Council
 Director of Services
 Mr. Joseph Gilhooly
 Áras an Chontae
 Carrick-on-Shannon
 Co. Leitrim
 Tel: 071 9620005

REV:	DATE:	AMENDMENT:
0	28/04/21	Original Design

Project				
Aughacashel Mass Rock Carpark				
Component	Title			
Layout	Proposed Carpark			
Scales	Date	O.S. Sheet Ref.:	Drawing No.:	Revision:
1:500@A3	01/09/2021	1471	ACP-001	0
Design	Drawn	Checked		
RF	RF	PMS		

3. METHODOLOGY

The following sections describe the methodologies followed to establish the baseline ecological condition of the proposed development site and surrounding area. Assessing the impacts of any project and associated activities requires an understanding of the ecological baseline conditions prior to and at the time of the project proceeding. Ecological Baseline conditions are those existing in the absence of proposed activities (CIEEM, 2018).

3.1 Desk Study

A desk study was undertaken to inform this ecological impact assessment. This study includes a thorough review of available information that is relevant to the ecology of the site of the proposed development. This information provides valuable existing data and also helps in the assessing the requirement for additional ecological surveys.

The following list describes the sources of data consulted:

- Review of online web-mappers: National Parks and Wildlife Service (NPWS), Environmental Protection Agency (EPA)
- Review of the publicly available National Biodiversity Data Centre web-mapper.

3.2 Field Surveys

3.2.1 Multi-disciplinary ecological walkover surveys

Assessing the impacts of any project and associated activities requires an understanding of the ecological baseline conditions prior to and at the time of the project proceeding. Ecological Baseline conditions are those existing in the absence of proposed activities (CIEEM, 2018).

Multi-disciplinary ecological walkover surveys were undertaken in accordance with NRA Guidelines on Ecological Surveying Techniques for Protected Flora and Fauna on National Road Schemes (NRA, 2009). This survey provided baseline data on the ecology of the study area and assessed whether further, more detailed habitat or species-specific ecological surveys were required. The multi-disciplinary ecological walkover survey comprehensively covered the entire study area.

The survey design and methodologies will be derived from the following best practice guidance documents:

- TII 'Guidelines for the Assessment of Ecological Impacts of National Road Schemes'.
- Department of Environment, Heritage & Local Government 'Appropriate Assessment of Plans and Projects in Ireland'.
- TII 'Guidelines for the Treatment of Bats during the Construction of National Road Schemes'.
- TII 'Guidelines for the Treatment of Otters prior to the construction of National Road Schemes'.
- TII 'Guidelines for the Treatment of Badgers prior to the construction of National Road Schemes'.
- TII 'Best Practice Guidelines for the Conservation of Bats in the Planning of National Road Schemes'.
- TII 'Environmental Impact Assessment of National Road Schemes – A Practical Guide'.
- TII 'Guidance for the Protection and Preservation of Trees, Hedgerows and Scrub prior to during and post construction of National Road Schemes'.
- NRA guidance document - Guidelines on management of noxious weeds and non-native invasive plant species on national roads. National Roads Authority (NRA, 2010).

The survey was devised to detect the potential presence of protected species with an emphasis on rare and protected flora, terrestrial mammals, birds and potential habitat features that may potentially support protected species such as reptiles, amphibians, invertebrates and aquatic species. Where encountered, features of key ecological interest were recorded using a handheld GPS (Global Positioning Satellite) device and written notes will be logged using standard recording sheets. A photographic record of geo-referenced images will be taken from the site of all features of interest and as examples of each habitat type, any areas of particular ecological sensitivity and evidence of mammal, bat or bird activity and any examples of other taxa, where possible.

Habitats were classified in accordance with the national habitat classification system used in Ireland - A Guide to Habitats in Ireland (Fossitt (2000)).

The survey had regard to the potential presence of problematic invasive alien species with an emphasis on those species listed on the ‘Third Schedule’ of Regulations 49 & 50 of the Birds and Natural Habitats Regulations 2011.

A full and comprehensive survey, commensurate with the nature and scale of the works, was achieved.

3.2.2 Determining Importance of Ecological Receptors

The importance of the ecological features identified within the study area was determined with reference to a defined geographical context. This was undertaken following a methodology that is set out in Chapter 3 of the ‘Guidelines for Assessment of Ecological Impacts of National Roads Schemes’ (NRA, 2009). These guidelines set out the context for the determination of value on a geographic basis with a hierarchy assigned in relation to the importance of any particular receptor. The guidelines provide a basis for determination of whether any particular receptor is of importance on the following scales:

- > International
- > National
- > County
- > Local Importance (Higher Value)
- > Local Importance (Lower Value)

The Guidelines clearly set out the criteria by which each geographic level of importance can be assigned. Locally Important (lower value) receptors contain habitats and species that are widespread and of low ecological significance and of any importance only in the local area. Internationally Important sites are either designated for conservation as part of the Natura 2000 Network (SAC or SPA) or provide the best examples of habitats or internationally important populations of protected flora and fauna. Specific criteria for assigning each of the other levels of importance are set out in the guidelines and have been followed in this assessment. Where appropriate, the geographic frame of reference set out above was adapted to suit local circumstances. In addition, and where appropriate, the conservation status of habitats and species is considered when determining the significance of ecological receptors.

3.2.3 Characterisation of Impacts and Effects

The ecological effects of any identified impacts are characterised as per the CIEEM ‘Guidelines for Ecological Impact Assessment in the UK and Ireland (2018)’. The headings under which the impacts are characterised follow those listed in the guidance document and are applied where relevant. A summary of the impact characteristics considered in the assessment is provided below:

- **Positive or Negative.** Assessment of whether the proposed development result in a positive or negative effect on the ecological receptor.
- **Extent.** Description of the spatial area over which the effect has the potential to occur.

- **Magnitude** to size, amount, intensity and volume. It should be quantified if possible and expressed in absolute or relative terms e.g. the amount of habitat lost, percentage change to habitat area, percentage decline in a species population.
- **Duration** is defined in relation to ecological characteristics (such as the lifecycle of a species) as well as human timeframes. For example, five years, which might seem short-term in the human context or that of other long-lived species, would span at least five generations of some invertebrate species.
- **Frequency and Timing.** This relates to the number of times that an impact occurs and its frequency. A small-scale impact can have a significant effect if it is repeated on numerous occasions over a long period.
- **Reversibility.** This is a consideration of whether an effect is reversible within a ‘reasonable’ timescale. What is considered to be a reasonable timescale can vary between receptors and is justified where appropriate in the impact assessment section of this report.

3.2.4 Determining the Significance of Effects

The ecological significance of the effects of the proposed development are determined following the precautionary principle and in accordance with the methodology set out in Section 5 of CIEEM (2018).

For the purpose of EcIA, ‘significant effect’ is an effect that either supports or undermines biodiversity conservation objectives for ‘important ecological features’ or for biodiversity in general. Conservation objectives may be specific (e.g. for a designated site) or broad (e.g. national/local nature conservation policy) or more wide-ranging (enhancement of biodiversity). Effects can be considered significant at a wide range of scales from international to local (CIEEM, 2018).

When determining significance, consideration is given to whether:

- Any processes or key characteristics of key ecological receptors will be removed or changed
- There will be an effect on the nature, extent, structure and function of important ecological features
- There is an effect on the average population size and viability of ecologically important species.
- There is an effect on the conservation status of important ecological habitats and species.

The EPA draft guidelines on information to be included in Environmental Impact Statements (EPA, 2017) and the *Guidelines for assessment of Ecological Impacts of National Road Schemes*, (NRA, 2009) were also considered when determining significance and the assessment is in accordance with those guidelines.

The terminology used in the determination of significance follows the suggested language set out in the Draft EPA Guidelines (2017) as shown in Table 3.1 below.

Table 3-1 Criteria for determining significance of effect, based on (EPA, 2017) guidelines.

Effect Magnitude	Definition
No change	No discernible change in the ecology of the affected feature.
Imperceptible effect	An effect capable of measurement but without noticeable consequences.
Not Significant	An effect which causes noticeable changes in the character of the environment but without significant consequences.
Slight effect	An effect which causes noticeable changes in the character of the environment without affecting its sensitivities.

Effect Magnitude	Definition
Moderate effect	An effect that alters the character of the environment that is consistent with existing and emerging trends.
Significant effect	An effect which, by its character, its magnitude, duration or intensity alters a sensitive aspect of the environment.
Very Significant	An effect which, by its character, magnitude, duration or intensity significantly alters most of a sensitive aspect of the environment.
Profound effect	An effect which obliterates sensitive characteristics.

As per TII (NRA, 2009) and CIEEM (2019) best practice guidelines the following key elements should also be examined when determining the significance of effects:

1. The likely effects on 'integrity' should be used as a measure to determine whether an impact on a site is likely to be significant (NRA, 2009)
2. A 'significant effect' is an effect that either supports or undermines biodiversity conservation objectives (CIEEM, 2019)

Integrity

In the context of EcIA, 'integrity' refers to the coherence of the ecological structure and function, across the entirety of a site, that enables it to sustain all of the ecological resources for which it has been valued. Impacts resulting in adverse changes to the nature, extent, structure and function of component habitats and effects on the average population size and viability of component species, would affect the integrity of a site, if it changes the condition of the ecosystem to unfavourable.

Conservation status

An impact on the conservation status of a habitat or species is considered to be significant if it will result in a change in conservation status. According to CIEEM (2019) guidelines the definition for conservation status in relation to habitats and species are as follows:

- Habitats – conservation status is determined by the sum of the influences acting on the habitat that may affect its extent, structure and functions as well as its distribution and its typical species within a given geographical area
- Species – conservation status is determined by the sum of influences acting on the species concerned that may affect its abundance and distribution within a given geographical area.

As defined in the EU Habitats Directive 92/43/EEC, the conservation of a habitat is favourable when:

- Its natural range, and areas it covers within that range, are stable or increasing
- The specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future
- The conservation status of its typical species is favourable.

The conservation of a species is favourable when:

- Population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats
- The natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future

- There is and will probably continue to be, a sufficiently large habitat to maintain its population on a long-term basis.

According to the NRA/CIEEM methodology, if it is determined that the integrity and/or conservation status of an ecological feature will be impacted on, then the level of significance of that impact is related to the geographical scale at which the impact will occur (i.e., local, county, national, international).

4. DESK STUDY

4.1 Designated Sites

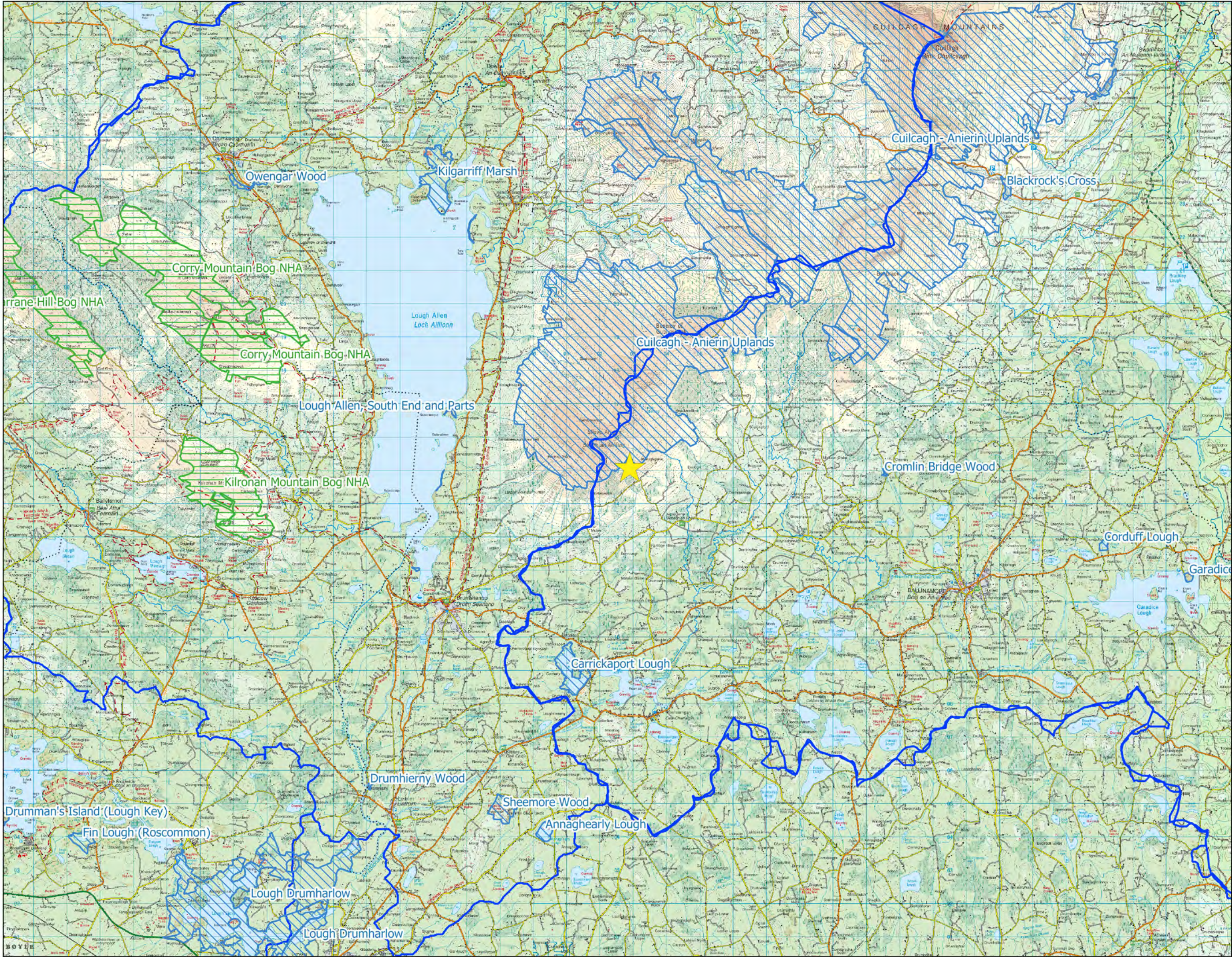
The potential for the proposed development to impact on sites that are designated for nature conservation was considered in this Ecological Impact Assessment.

Natural Heritage Areas (NHAs) are designated under the Wildlife (Amendment) Act 2000 and their management and protection is provided for by this legislation and planning policy. The potential for effects on these designated sites is fully considered in this EcIA.

Proposed Natural Heritage Areas (pNHAs) were designated on a non-statutory basis in 1995 but have not since been statutorily proposed or designated. However, the potential for effects on these designated sites is fully considered in this EcIA.

The following methodology was used to establish which nationally designated sites have the potential to be impacted by the proposed development:

- Initially the most up to date GIS spatial datasets for all nationally designated sites and water catchments were downloaded from the NPWS website (www.npws.ie) and the EPA website (www.epa.ie) on the 11/05/2022. The datasets were utilized to identify Designated Sites which could feasibly be affected by the proposed development.
- All Nationally Designated Sites that could potentially be affected were identified using a source-pathway - receptor model. To provide context for the assessment, Nationally Designated Sites within a distance of 15km surrounding the development site are shown on Figure 4-1. Sites that were further away from the proposed development were also considered and no complete source-pathway-receptor chain for significant effect was identified for any Nationally Designated Site that was further than 15km from the site.
- A map of all the Nationally Designated Sites around the Development Site is provided in Figure 4-1.
- Catchment mapping was used to establish or discount potential hydrological connectivity between the site of the proposed development and any Nationally Designated Sites. The hydrological catchments are also shown in Figure 4-1.
- Table 4-1 provides details of all relevant Nationally Designated Sites as identified in the preceding steps and assesses which, if any, are within the likely Zone of Impact.
- The site synopses for these sites, as per the NPWS website (www.npws.ie), were consulted and reviewed at the time of preparing this report.



Map Legend

- Site Location
- NHA
- pNHA
- WFD Hydrological Catchment Areas



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Nationally Designated Sites	
Project Title	
Mullaghgarve Trail & Carpark	
Drawn By	Checked By
CB	RW
Project No.	Drawing No.
220448	Figure 4-1
Scale	Date
1:100000	2022-05-23
MKO Planning and Environmental Consultants <small>Team Road, Galway Ireland H91 V9B4 +353 (0) 91 735611 email: info@mkofireland.ie Website: www.mkofireland.ie</small>	

Table 4-1 Identification of Nationally Designated Sites within 15km.

Designated Sites and distance from proposed works	Likely Zone of Impact Determination
Natural Heritage Areas (NHA)	
Corry Mountain Bog NHA [002321] Distance: 10.4km	There is no potential for direct effects as the development site is located outside of the NHA.
Kilronan Mountain Bog NHA [000617] Distance: 10.8km	There is no hydrological connectivity between the development site and the NHA. Furthermore, due to the terrestrial nature of the habitat for which the NHA is designated and the intervening distance between the NHA and the development site, there is no source-pathway-receptor chain for indirect effects.
Proposed Natural Heritage Areas (pNHAs)	
Cuilcagh - Anierin Uplands [000584] Distance: The Mass Rock Trail is located within the pNHA. The proposed carpark is located 420m south of the pNHA.	A section of the Mass Rock Trail is within this pNHA. The works are small scale, restricted to existing, degraded tracks and will be carried out manually. There is no potential for significant impact to Annex I habitats within the pNHA. The proposed carpark is located 420m south of the pNHA and is downgradient of the pNHA. Therefore, there is no potential for significant impact to aquatic Qualifying Interests.
Lough Allen, South End and Parts [000427] Distance: 5.4km	There is no potential for direct effects as the development site is located outside of the pNHA. This pNHA is located within a separate hydrological catchment to the development site, therefore, the potential for indirect effects can be ruled out.
Carrickaport Lough [001920] Distance: 5.5km	There is no potential for direct effects as the development site is located outside of the pNHA This pNHA is located within a separate ground waterbody and there is no surface water connection to to the development site, therefore, the potential for indirect effects can be ruled out via surface or groundwater pathways.
Cromlin Bridge Wood [001409] Distance: 7.5km	There is no potential for direct effects as the development site is located outside of the pNHA. There is no downstream connectivity from the development site to the pNHA, therefore, there is no potential for significant effect.

<p>Kilgarriff Marsh [000426] Distance: 9.4km</p>	<p>There is no potential for direct effects as the development site is located outside of the pNHA.</p> <p>This pNHA is located within a separate hydrological catchment and ground waterbody, there is no surface water connection to the development site, therefore, the potential for indirect effects can be ruled out via surface or groundwater pathways.</p>
<p>Sheemore Wood [001421] Distance: 10.5km</p>	<p>There is no potential for direct effects as the development site is located outside of the pNHA.</p> <p>This pNHA is located within a separate hydrological catchment and groundwater body, therefore, there is no potential for indirect effects.</p>
<p>Annaghealy Lough [001402] Distance: 10.8km</p>	
<p>Drumhierny Wood [001412] Distance: 12.2km</p>	
<p>Blackrock's Cross [000976] Distance: 13.8km</p>	<p>There is no potential for direct effects as the development site is located outside of the pNHA.</p> <p>The pNHA is located upgradient of the development site and due to the small-scale nature of the works and intervening distance, there is no potential for indirect effects.</p>
<p>Lough Drumharlow [001643] Distance: 13.8km</p>	<p>There is no potential for direct effects as the development site is located outside of the pNHA.</p> <p>This pNHA is located within a separate hydrological catchment and groundwater body, therefore, there is no potential for indirect effects.</p>
<p>Owengar Wood [001419] Distance: 13.8km</p>	
<p>Corduff Lough [001407] Distance: 14.2km</p>	<p>There is no potential for direct effects as the development site is located outside of the pNHA.</p> <p>Due to the small-scale nature of the works and intervening distance, there is no potential for indirect effects.</p>

4.2

Biodiversity Ireland Database

The National Biodiversity Data centre database was accessed on the 11th of May 2022 to search for previous records of protected flora and fauna and invasive species. Table 4-2 lists the protected faunal species recorded within the 2km square H01 which pertains to the current study area. High impact invasive species listed on the Third Schedule of S.I. No. 477/2011 - European Communities (Birds and Natural Habitats) Regulations 2011 recorded in 2km square H01 are listed in Table 4-3.

Table 4-2 NBDC records for protected faunal records within 10km square H01

Common Name	Scientific Name	Status
Mammals		
Eurasian Otter	<i>Lutra lutra</i>	Annex II, IV; WA
Eurasian Badger	<i>Meles meles</i>	WA
Eurasian Red Squirrel	<i>Sciurus vulgaris</i>	WA
Irish Hare	<i>Lepus timidus subsp. hibernicus</i>	Annex V; WA
West European Hedgehog	<i>Erinaceus europaeus</i>	WA
Pine Marten	<i>Martes martes</i>	Annex V; WA
Birds		
Eurasian Curlew	<i>Numenius arquata</i>	Red list
Peregrine Falcon	<i>Falco peregrinus</i>	Annex I
Meadow Pipit	<i>Anthus pratensis</i>	Red list
Corn Crane	<i>Crex crex</i>	Annex I; Red list
Kestrel	<i>Falco tinnunculus</i>	Red list
Snipe	<i>Gallinago gallinago</i>	Red list
Swift	<i>Apus apus</i>	Red list
Eurasian Woodcock	<i>Scolopax rusticola</i>	Red list
Grey Partridge	<i>Perdix perdix</i>	Red list
Grey Wagtail	<i>Motacilla cinerea</i>	Red list
Red Grouse	<i>Lagopus lagopus</i>	Red list
Redwing	<i>Turdus iliacus</i>	Red list
Ring Ouzel	<i>Turdus torquatus</i>	Red list

Common Name	Scientific Name	Status
Whinchat	<i>Saxicola rubetra</i>)	Red list
Yellowhammer	<i>Emberiza citrinella</i>	Red list
Barn Swallow	<i>Hirundo rustica</i>	Amber list
Sandpiper	<i>Actitis hypoleucos</i>	Amber list
Black-headed Gull	<i>Larus ridibundus</i>	Amber list
Starling	<i>Sturnus vulgaris</i>	Amber list
Coot	<i>Fulica atra</i>	Amber list
Linnet	<i>Carduelis cannabina</i>	Amber list
Eurasian Teal	<i>Anas crecca</i>	Amber list
Goldcrest	<i>Regulus regulus</i>	Amber list
Cormorant	<i>Phalacrocorax carbo</i>	Amber list
Great Crested Grebe	<i>Podiceps cristatus</i>	Amber list
Hen Harrier	<i>Circus cyaneus</i>	Amber list
House Martin	<i>Delichon urbicum</i>	Amber list
House Sparrow	<i>Passer domesticus</i>	Amber list
Lesser Black-backed Gull	<i>Larus fuscus</i>	Amber list
Merlin	<i>Falco columbarius</i>	Amber list
Mute Swan	<i>Cygnus olor</i>	Amber list
Northern Wheatear	<i>Oenanthe oenanthe</i>	Amber list
Sand Martin	<i>Riparia riparia</i>	Amber list
Spotted Flycatcher	<i>Musciapa striata</i>	Amber list
Skylark	<i>Alauda arvensis</i>	Amber list
Tufted Duck	<i>Aythya fuligula</i>)	Amber list
Whooper Swan	<i>Cygnus cygnus</i>	Amber list
Willow Warbler	<i>Phylloscopus trochilus</i>	Amber list
Amphibians		

Common Name	Scientific Name	Status
Common Frog	<i>Rana temporaria</i>	Annex V; WA

Annex II, Annex IV, Annex V – Of EU Habitats Directive, Annex I – Of EU Birds Directive, WA – Irish Wildlife Acts (1976-2021), BoCCI RL – Birds of Conservation Concern Ireland Red List

Table 4-3 Invasive species recorded in 10km square H01

Common Name	Scientific Name
Canada Goose	<i>Branta canadensis</i>
Giant Hogweed	<i>Heracleum mantegazzianum</i>
Himalayan Knotweed	<i>Persicaria wallichii</i>
Indian Balsam	<i>Impatiens glandulifera</i>
Japanese Knotweed	<i>Fallopia japonica</i>
Nuttall's Waterweed	<i>Elodea nuttallii</i>
Salmonberry	<i>Rubus spectabilis</i>
Eastern Grey Squirrel	<i>Sciurus carolinensis</i>

4.3 EPA Water Quality

The EPA Envision map viewer was consulted on the 11th of May 2022 regarding the water quality status of watercourses surrounding the proposed development. The Biotic Index of Water Quality (BIWQ) was developed in Ireland by the Environmental Protection Agency (EPA). Q-values are assigned using a combination of habitat characteristics and structure of the macro-invertebrate community within the waterbody. Individual macro-invertebrate families are classified according to their sensitivity to organic pollution and the Q-value is assessed based primarily on their relative abundance within a sample.

The proposed development site is located within the Erne Catchment, Hydrometric Area 36 and within Yellow [Ballinamore]_SC_010 sub-catchment and the Annadale Stream_010 sub-basin.

The Annadale Stream (IE_NW_36A050500) is not within the SAC at the location of the development site. The river flows from the SAC located 709m upstream.

The river waterbody Water Framework Directive (WFD) status 2013-2018 for the Annadale Stream was 'Good' and river waterbodies risk was 'not at risk'.

The development site is located within the Anierin-Cuilcagh East (IEGNI_NW_G_035) groundwater catchment. The ground waterbody WFD status 2013-2018 for this area was 'Good' and the ground waterbodies risk was deemed 'not at risk' The GSI vulnerability is at 'extreme' vulnerability.

5. FIELD STUDY

5.1 Baseline Habitats

Assessing the impacts of any project and associated activities requires an understanding of the ecological baseline conditions prior to and at the time of the project proceeding. Ecological baseline conditions are those existing in the absence of proposed activities (CIEEM 2018). Multidisciplinary ecological walkover surveys were conducted on the 24th of May 2022 in line with NRA (2009) guidelines (Ecological Surveying Techniques for Protected Flora and Fauna during the Planning of National Road Schemes) by Cillian Burke (BSc.) and Rachel Walsh (BSc, QCIEEM.).

Habitats were identified in accordance with the Heritage Council's 'Guide to Habitats in Ireland' (Fossitt, 2000). Plant nomenclature for vascular plants follows 'New Flora of the British Isles' (Stace, 2010), while mosses and liverworts nomenclature follow 'Mosses and Liverworts of Britain and Ireland - a field guide' (British Bryological Society, 2010).

The proposed trail begins along an existing hardcore track for 975m. This is categorised as spoil and bare ground (**ED2**) with recolonising species of improved agricultural grassland (**GA1**) (Plate 5-1), with species including sweet vernal grass (*Anthoxanthum odoratum*), daisy (*Bellis perennis*), white clover (*Trifolium repens*), germander speedwell (*Veronica chamaedrys*), silverweed (*Potentilla anserina*), horsetail (*Equisetum spp.*) and creeping thistle (*Cirsium arvense*). Soft rush (*Juncus effusus*) delineates both sides of the track. Plots of conifer plantation (**WD4**) are present alongside the track. Two streams, categorised as eroding/upland rivers (**FW1**) (Plate 5-2), are located along both sides of this section of track. Both rivers are heavily vegetated and shaded along much of the stretch and dominated by soft rush (*Juncus effusus*). The streams flow in a south-easterly direction and are approximately 30cm wide with a rocky substrate. The stream which flows along the western side of the track is culverted as the track turns westwards over this stream.

The existing Mass Rock Trail, as it crosses westwards over Sliabh an Iarainn, traverses an area mapped under Article 17 habitat mapping (NPWS 2019) as a mosaic of Dry Heath, Active Blanket Bog, Siliceous Scree, and Siliceous Rocky Slopes (Figure 5-1).

The proposed 150m sheep's wool path crosses westwards over the mountain and is located on an existing trodden path across mosaic peatland habitat dominated by dry siliceous heath (**HH1**). The existing trodden path is degraded with bare, exposed and recolonising soils and is categorised as spoil and bare ground/recolonising bare ground (**ED2/ED3**) (Plate 5-3). Adjacent dry heath habitat is dominated by ling heather (*Calluna vulgaris*) and bilberry (*Vaccinium myrtillus*). The trail crosses a seasonally dry channel (Plate 5-4) which was damp with no flow at the time of survey.

The remainder of the trail, for which predominantly no works are proposed, except for a 20m length of board walk, continues along an existing degraded track (Plate 5-4). The trail then ends at Mass Rock, an elevated area on the mountain which consists of Dry siliceous heath (**HH1**) and exposed siliceous rock (**ER1**) (Plate 5-6). The dry heath habitat is dominated by ling heather (*Calluna vulgaris*) and bilberry (*Vaccinium myrtillus*), with occasional tormentil (*Potentilla erecta*), sweet vernal grass (*Anthoxanthum odoratum*), deergrass (*Trichophorum caespitosum*) and occasional soft rush (*Juncus effusus*). Bryophyte species present include Common Tamarisk-moss (*Thuidium tamariscinum*), Common haircap moss (*Polytrichum commune*) and *Sphagnum capillifolium*. Heath bedstraw (*Galium*

saxatile), common sorrel (*Rumex acetosa*), wood sorrel (*Oxalis acetosella*) and lesser stitchwort (*Stellaria graminea*) are less frequent but also present.

The proposed carpark, located approx. 40m south of the beginning of the trail, is categorised as wet grassland (**GS4**) (Plate 5-7) Scattered hawthorn trees (*Crataegus monogyna*) are present along the western boundary with a drainage ditch (**FW4**). The drainage ditch is heavily vegetated and was damp with no flowing water at the time of survey. The grassland is dominated by sweet vernal grass (*Anthoxanthum odoratum*), meadow grass (*Poa sp.*), red fescue (*Festuca rubra*), soft rush (*Juncus effusus*) and white clover (*Trifolium repens*). Also present are sedge species (*Carex sp.*), marsh thistle (*Cirsium palustre*), *Rhytidadelphus squarrosus* and occasional cuckoo flower (*Cardamine pratensis*).

There were no Annex I habitats within the footprint of the proposed carpark.

No Invasive Alien Species (IAS) listed under the Third Schedule of the European Communities Regulations 2011 (S.I. 477 of 2015) were found within the study areas.

A habitat map depicting Article 17 mapped area (NPWS 2019) is shown in Figure 5-1.

A habitat map of the proposed carpark footprint is shown in Figure 5-2.






Map Legend

Article 17 Habitats
(NPWS 2019)

-  Mosaic of:
 - Dry Heath
 - Siliceous Scree
 - Siliceous Rocky Slopes
 - Active Blanket Bog

Mass Rock Trail

-  Proposed Boardwalk (20m)
-  Existing Harcore Path to be Cleaned and Infilled (975m)
-  No Works Proposed
-  Proposed Sheep's Wool Path (150m)

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Drawing Title
Annex I Habitats & Mass Rock Trail

Project Title
Mullaghgarve Mass Rock Trail & Carpark

Drawn By	Checked By
RW	RW

Project No.	Drawing No.
220448	Figure 5-1

Scale	Date
1:2800	2022-06-28

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Map Legend

- Site Boundary
- ▨ Wet grassland (GS4)
- Drainage Ditches (FW4)
- Hawthorn trees



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Drawing Title
Habitat Map for Proposed Carpark

Project Title
Mullaghgarve Mass Rock Trail & Carpark

Drawn By CB	Checked By RW
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Project No. 220448	Drawing No. Figure 5-2
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Scale 1:350	Date 2022-06-29
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Plate 5-1 Existing walking track (ED2/ED3) with improved agricultural grassland species, and adjacent conifer plantation (WD4).



Plate 5-2 Heavily vegetated eroding/upland river (FW1) running along the existing track.



Plate 5-3 Proposed footprint for sheep's wool track over existing degraded bare soil (ED2).



Plate 5-4 Seasonally dry channel which traverses southwards along the proposed sheep's wool track.



Plate 5-5 The existing trodden track, continuing through adjacent dry heath (HH1).

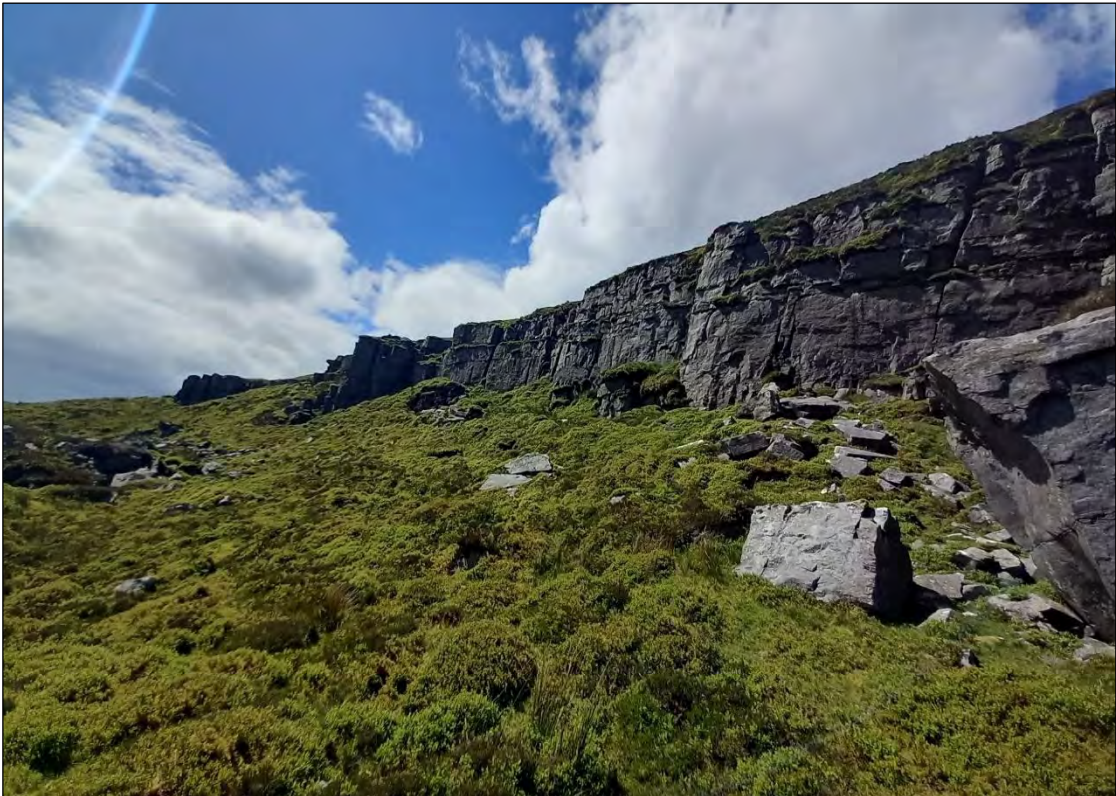


Plate 5-6 Mass Rock, at the end of the trail, with Siliceous Dry Heath (HH1) and Exposed Siliceous Rock (ER1).



Plate 5-7 Wet grassland (GS4) within the proposed footprint of the carpark, with scattered hawthorn trees present along the western boundary visible in the background.

5.1.1 Significance of Habitats

Ecological evaluation follows a methodology that is set out in Chapter 3 of the 'Guidelines for Assessment of Ecological Impacts of National Roads Schemes' (NRA, 2009). The habitats within and adjacent to the development site were evaluated in accordance with the criteria developed by the NRA (2009b), which classifies sites in terms of their ecological importance, *i.e.* 'international importance', 'national importance', 'county importance', 'local importance (higher value)' or 'local importance (lower value)'.

Habitats within the development site such as dry siliceous heath (**HH1**), exposed siliceous rock (**ER1**) and are located within the Cuilcagh-Anierin SAC and correspond to Annex I habitats listed on the EU Habitats Directive and are of International Importance.

The 975m of existing track itself is categorised as spoil and bare ground/recolonising bare ground (ED2/ED3) with recolonising agricultural grassland specie and is classed as having Local Importance (lower value).

The eroding/upland rivers (**FW1**) either side of the existing track are of Local Importance (higher value) as they provide wider landscape connectivity.

The wet grassland (**GS4**) is of local importance (lower value) as it is a small area of local importance for wildlife but is common and widespread in the wider area.

The drainage ditch (**FW4**) and scattered hawthorn trees are of Local Importance (higher value) because of their potential to provide wider landscape connectivity.

5.2 Fauna

5.2.1 Birds

Meadow pipits (*Anthus pratensis*) were identified within the Cuilcagh-Anierin SAC near the end of the track where no works are proposed.

5.2.2 Otter

There are heavily vegetated streams and a drainage ditch within/adjacent to the proposed development. However, no signs of otter, such as couches, holts, spraints, prints or feeding remains were observed during the walkover survey.

5.2.3 Badger

No evidence of badger activity was recorded during the survey and no breeding or resting sites occur along the proposed footprint.

5.2.4 Bats

During the walkover survey, the development site was visually assessed for potential use as bat roosting habitat using a protocol set out in BCT *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (3rd edn.) (Collins, 2016). Table 4.1 of the 2016 BCT Guidelines identifies a grading protocol

for assessing structures, trees and commuting/foraging habitat for bats. The protocol is divided into four Suitability Categories: *High, Moderate, Low and Negligible*.

No suitable features for roosting bats were found during the walkover survey, and the footprint area is assessed as having *Negligible* suitability for roosting bats.

The Mass Rock Trail traverses open mountain habitat. There are limited linear features and these open areas are assessed as having *Negligible* suitability for foraging or commuting bats.

The edges of adjacent conifer woodland and gappy areas of hedgerow or treeline in the area and along the first 975m of the trail are assessed as having *Low to Moderate* suitability for foraging and commuting, however, there will be no loss of linear features as a result of the development. The carpark footprint is assessed as having *Low* suitability for foraging and commuting due to the presence of isolated hawthorn trees along the western boundary.

5.2.5 **Significance of Fauna**

Otter which potentially forage within the rivers along the track are of Local Importance (higher value).

Any potential bat populations in the vicinity of the development site would be of Local Importance (higher value).

Bird species observed during the walkover survey are of populations of local importance (higher value).

5.3 **Invasive Species**

No invasive species listed on the third schedule of the EC (Birds and Natural Habitats) Regulations 2011 S.I. 477/2011 were recorded during the site visit.

6. IMPACT ASSESSMENT

6.1 Do Nothing Impact

If the proposed development were not to go ahead, the existing Mass Rock Trail would continue under its current usage as a recreational walking trail. The proposed carpark footprint would likely continue to be managed under its current agricultural regime.

6.2 Impacts to Habitats

6.2.1 Habitat Loss

6.2.1.1 Construction phase

As described in Section 2.2, the majority of the proposed trail (975m) is located over an existing hardcore track colonised by agricultural plant species, which will be lightly excavated back to stone and back-filled with 100-150mm of Clause 804 stone. This element of work is not significant in the context of habitat loss.

For the majority of the remainder of the Mass Rock Trail, no works are proposed. The proposed 150m of sheep's wool trail, and 20m boardwalk, traverse westwards through Annex I Dry Siliceous Heath habitat and exposed siliceous rock. However, as described in Section 2.2, these proposed areas are located along existing trodden tracks of bare/degraded peat. The sheep's wool trail will require manual digging approx. 3ft wide and 2ft in depth of the existing trodden track. The installation of the sheep's wool track will be carried out manually and no machinery will access adjacent Annex I areas. The excavated materials from the manual digging will be left both sides of the track to serve as edging for the path. The proposed 20m of boardwalk will similarly be installed manually by transporting a pre-constructed section of boardwalk to the site. No excavations will be required for the boardwalk. Therefore, there will be no loss of Annex I habitat as a result of the proposed works.

The loss of approx. 0.04ha of wet grassland for the proposed carpark footprint is not considered significant in the context of habitat loss. This is a small-scale area, and the habitat is common and widespread in the wider area. The carpark will consist of 6F2 capping stone, Clause 804 and a possible SMA finish. The total footprint area is 0.04ha which is deemed as a small-scale development and the remaining area will be set aside for possible future development. Scattered trees within the footprint will be retained to ensure wider landscape connectivity and the drainage ditch will be piped in advance of surfacing works.

Mitigation

No mitigation is required.

Residual effects

No significant effects via habitat loss are predicted.

6.2.1.2 **Operational phase**

The Mass Rock Trail is an existing trail used by hillwalkers recreationally. The trail will continue to be used as normal during operation of the development. There will be no additional habitat loss as a result of operation of the development.

Mitigation

No mitigation is required.

Residual effects

No significant effects via habitat loss during operation are predicted.

6.3 **Impacts to Fauna.**

6.3.1 **Loss of Faunal Habitat**

6.3.1.1 **Construction phase**

The existing surface of the 975m of trail is not of ecological significance and does not support any faunal habitat. The proposed development will result in the loss of approx. 0.04ha of wet grassland habitat and a small section of vegetated drainage ditch. These habitats are common and widespread in the area and the loss of same is not considered significant in the context of faunal habitat.

The proposed sheep's wool trail and board walk are located along existing trodden/bare soil paths, the loss of which is not considered significant in the context of faunal habitat.

There will be no loss of linear features which could be used by fauna for commuting or foraging. The existing hawthorn trees within the footprint of the proposed carpark will be retained.

The works will only occur during daylight hours and no artificial lighting will be used.

Mitigation

No mitigation is required.

Residual effects

No significant effects via faunal habitat loss are predicted.

6.3.1.2 **Operational phase**

There is no additional faunal habitat loss anticipated during operation of the development. No external lighting is proposed for the trail or carpark during the operational phase of the development. Therefore, no impacts on faunal habitat are expected.

Mitigation

No mitigation is required.

Residual effects

No significant effects are predicted.

6.3.2 **Disturbance & Displacement of Fauna**

6.3.2.1 **Construction phase**

The potential for disturbance to fauna during construction of the development was considered.

There was no evidence of protected mammals such as badger or otter observed within the development areas during ecological surveys. The works will be carried out during normal daylight hours, and no artificial lighting to facilitate construction works will be necessary. The works will be small-scale in nature and duration, with the sheep's wool trail and boardwalk elements of the project carried out manually. In addition, there will be no requirement for removal of trees or hedgerow. Therefore, there is no potential for significant effects to fauna via disturbance or displacement as a result of the development.

Mitigation Measures

No mitigation is required.

Residual impacts

No residual impacts on fauna via disturbance or displacement are anticipated at any scale.

6.3.2.2 Operational phase

No additional disturbance effects to fauna are anticipated during operation of the development.

The Mass Rock Trail is an existing trail which is used by recreational hillwalkers. The proposed development is small-scale, and the proposed upgrade works to the trail and small carpark will not significantly increase human activity in the area.

The development areas were assessed as having *Negligible* suitability for roosting bats and *Low to Moderate* suitability for foraging and commuting. No removal of linear features or external lighting is proposed as part of the development.

Therefore, no significant impacts via disturbance of fauna is predicted as a result of the development.

Mitigation Measures

No mitigation is required.

Residual impacts

No residual impacts via disturbance of fauna during operation of the development are anticipated at any scale.

6.4 Impacts to Water Quality

6.4.1 Construction phase impacts to water quality

There will be no impacts on water quality as a result of construction of the carpark. A layer of Terram will be installed and the drainage ditch will be piped before surfacing begins. The drainage ditch is separated from the adjacent mapped streams by the existing road.

The proposed sheep's wool trail and board walk will be constructed manually and are small-scale in size. There will be no impacts on water quality as a result of construction of these elements.

A seasonally dry channel (Plate 5-4) is present along the proposed sheep's wool trail. This will not be blocked but will be accommodated by providing a bridge-like structure over this section, through use of a timber bridge which will connect to both sides of the sheep's wool/stone elements of the path.

Two streams are present adjacent to the first 975m section of trail to be upgraded. The following measures will be in place to prevent sedimentation of the streams as a result of upgrade works along the track.

Mitigation

- Stockpiling of excavated material will not occur adjacent to the watercourses. Any excavated material will be moved to the proposed carpark area and subsequently removed when work on the carpark commence.
- Works will be postponed if heavy rain is forecast.
- Back-filling material will be placed along the track carefully and will be levelled to ensure that no material enters the stream.

Residual effects

Once the above measures are implemented, no significant effects on water quality are predicted.

6.4.2 Operational phase impacts to water quality

There is no potential for significant effects on water quality as a result of the development during the operational phase. Minor excavations will be required for the trail and carpark and will not have any impacts on the water table. The nature of the sheep's wool trail and boardwalk will allow for the flow of water to continue uninterrupted within the peatland habitats.

A seasonally dry channel is present along the proposed sheep's wool trail. This will not be blocked but will be accommodated by providing a bridge-like structure over this section, through use of a timber bridge which will connect to both sides of the sheep's wool/stone elements of the path. The proposed stone and wooden bridge will not negatively impact water quality during operation as no waste material will be produced, and it will permit the seasonal stream to freely flow.

Mitigation Measures

No mitigation is required.

Residual impacts

No residual impacts via deterioration of water quality during operation of the development are anticipated at any scale.

6.5 Biosecurity measures

No Third Schedule invasive species were recorded during the walkover survey. However, the following best practice measures will be in place to prevent their introduction:

- Good construction site hygiene will be employed to prevent the introduction and spread of problematic invasive alien plant species (e.g. Rhododendron, Japanese Knotweed, Giant Rhubarb etc.) by thoroughly washing vehicles prior to entering the site.
- Materials used on site will be confirmed to be from a clean source that is free of invasive species.

6.6 Impacts on Nationally Designated Sites

The Mass Rock Trail is partly located within Cuilcagh-Anierin Uplands pNHA while the proposed carpark is located 420m to the south of the pNHA. This Site has been assessed as per its European Site designation. As summarised by Table 4.1, there is no potential for loss of QI habitats as a result of the proposal. In addition, there is no potential for significant effects on water quality or on aquatic QIs. No direct or indirect impacts to any other Nationally Designated Sites were detected.

6.7 Impacts on European Designated Sites

The potential for significant effect on Cuilcagh-Anierin Uplands SAC and Boleybrack Mountains SAC was considered in the accompanying AASR. The AASR concludes as follows:

It is concluded beyond reasonable scientific doubt, in view of best scientific knowledge, on the basis of objective information and in light of the conservation objectives of the relevant European sites, that the works, individually or in combination with other plans and projects, will not have a significant effect on any European Site.

6.7.1 Likely Cumulative Impact of the Proposed Development in Combination with other Plans and Projects

A search and review in relation to plans and projects that may have the potential to result in cumulative and/or in-combination impacts on biodiversity was conducted. This included a review of online Planning Registers and served to identify past and future plans and projects, their activities and their predicted environmental effects.

6.7.2 Other Plans and Projects

The online planning system for Leitrim County Council was consulted on the 12/05/2022 in relation to the site of the proposed development. One project was identified in the last 5 years in close proximity to the site location. These include:

- Permission for 2 no. forest bell mouth entrances onto a public road including all other associated site works (PI Ref 18204)

6.7.3 Plans

The following plans been reviewed and taken into consideration as part of this assessment:

- Leitrim County Development Plan 2015-2021
- Draft Leitrim County Development Plan 2023-2029
- National Biodiversity Action Plan 2017-2021

The review focused on policies and objectives that relate to European sites and biodiversity. None of the objectives reviewed had the potential to result in cumulative adverse effects on any European Site or biodiversity.

Plans	Key Policies and Objectives directly related to European Sites and Biodiversity in the Zone of Influence	Assessment of Potential Impact on European Sites
<p>Leitrim County Development Plan 2015-2021</p>	<p><u>SAC/SPA</u></p> <p><u>Policy 76</u></p> <p>It is the policy of the Council to protect and conserve Special Areas of Conservation and Special Protection Areas including ‘Candidate’ and ‘Proposed’ areas.</p> <p><u>Policy 77</u></p> <p>It is the Policy of the Council to ensure that all Plans and Projects that have the potential to negatively impact on the integrity of the Natura 2000 network, will be subject to a Habitats Directive Assessment (HDA), in accordance with Article 6 of the Habitats Directive and in accordance with best practice and guidance</p> <p><u>Policy 78</u></p> <p>No projects or programme giving rise to significant adverse; direct, indirect, secondary or cumulative impacts upon the integrity of any Natura 2000 sites, having regard to their qualifying interests and conservation objectives, arising from their size, scale, area or land take, shall be permitted on the basis of this Plan (either alone or in combination with other plans or projects)</p> <p><u>Objective 62</u></p> <p>It is an objective of the Council to protect those sites identified as Special Areas of Conservation as well as any other sites that may be so identified during the lifetime of this plan.</p> <ul style="list-style-type: none"> > 000623 Benbulbin, Gleniff and Glenade Complex > 000625 Bunduff Lough and Machair/Trawalua/Mullaghmore > 001919 Glenade Lough > 001403 Aroo Mountain > 000428 Lough Melvin > 001976 Lough Gill 	<p>The Development plan was comprehensively reviewed, with particular reference to Policies and Objectives that relate to the biodiversity, protected species and designated sites.</p> <p>The proposed development has been designed in order to avoid peatland habitats, by upgrading the Mass Rock Trail along existing, degraded tracks. The upgrades in the vicinity of these habitats will be carried out manually and there will be minimal disturbance of adjacent habitats.</p> <p>There will be no loss of trees or hedgerows as a result of the development.</p> <p>No potential for negative cumulative impacts when considered in conjunction with the current proposal were identified.</p>

Plans	Key Policies and Objectives directly related to European Sites and Biodiversity in the Zone of Influence	Assessment of Potential Impact on European Sites
	<ul style="list-style-type: none"> ➤ 000584 Cuilcagh-Anierin Uplands ➤ 002032 Boleybrack Mountain <p><u>Objective 65</u></p> <p>It is an objective of the Council to protect the following proposed Special Protection Areas and all others as they become proposed and designated during the lifetime of this plan.</p> <ul style="list-style-type: none"> ➤ 004187 Sligo/Leitrim Uplands <p><u>Peatlands</u></p> <p><u>Objective 74</u></p> <p>It is an objective of the Council to conserve peatlands and protect peatland landscapes within the County.</p> <p><u>Objective 75</u></p> <p>It is an objective of the Council to seek hydrological reports for significant developments within and close to peatlands, in order to assess potential impacts on the integrity of the peatland ecosystems.</p> <p><u>Trees, woodlands & Hedgerows</u></p> <p><u>Policy 83</u></p> <p>It is the Council’s policy to ensure the preservation of sound deciduous trees, woodlands and native hedgerows, without excessively inhibiting development.</p> <p><u>NHA/pNHA</u></p> <p><u>Policy 79</u></p> <p>It is the policy of the Council to protect NHA sites. The Council acknowledges that not all sites of ecological importance have been identified and will protect any such site of significance, proposed as an NHA.</p> <p><u>Objective 66</u></p>	

Plans	Key Policies and Objectives directly related to European Sites and Biodiversity in the Zone of Influence	Assessment of Potential Impact on European Sites
	<p>It is an objective of the Council to protect all Natural Heritage Areas and those proposed for designation either before or during the lifetime of this plan so as to recognise that the process of designation of such sites is ongoing, with new sites being added and boundaries of existing sites being adjusted, as better information becomes available.</p> <p><u>Objective 67</u> It is an objective of the Council to protect the following proposed Natural Heritage Areas and all others as they become proposed during the lifetime of this plan.</p>	
<p>Draft Leitrim County Development Plan 2023-2029</p>	<p>Policies</p> <p>NH POL 1 To protect and conserve Special Areas of Conservation and Special Protection Areas.</p> <p>NH POL 2 To implement Article 6(3) and where necessary Article 6(4) of the Habitats Directive, to ensure that Appropriate Assessment is carried out in relation to works, plans and projects with the potential to impact European sites (SACs and SPAs), whether directly or indirectly or in combination with any other plan(s) or project(s). All assessments must be in compliance with the European Communities (Birds and Natural Habitats) Regulations 2011, as amended, and the Planning and Development Act 2000 (as amended) as relevant.</p> <p>NH POL 4 To consult with relevant prescribed bodies, such as the National Parks and Wildlife Service (DoHLGH), and take account of any licensing requirements when undertaking, approving and authorising development which is likely to affect plant, animal or bird species or habitats protected by law.</p> <p>NH POL 5 To ensure that development does not have a significant adverse impact on plant, animal or bird species or habitats protected by law, subject to satisfactory mitigation measures.</p> <p>Objectives</p> <p>NH OBJ 1 To ensure that no project or programme giving rise to significant adverse, direct, indirect, secondary or cumulative impacts on the integrity of any Natura 2000 site(s), having regard to their qualifying interests and conservation objectives, arising from their size, scale, area or land take, proximity, resource requirements, emissions (disposal to land, water or air), transportation requirements, duration of construction, operation, decommissioning or from any other effects shall be permitted on the basis of this Plan (either alone or in combination with other plans or projects) 30.</p>	<p>Within the AA Screening Report that accompanies this application, it was found that there is no potential for significant effect to Cuilcagh-Anierin Uplands SAC or any other European Site as a result of the development.</p> <p>There will be no negative impacts on birds, bats or any other fauna as a result of the development. There will be no significant impacts on peatland habitats as a result of upgrades to the Mass Rock Trail or the proposed carpark.</p> <p>No potential for negative cumulative impacts when considered in conjunction with the current proposal were identified.</p>

Plans	Key Policies and Objectives directly related to European Sites and Biodiversity in the Zone of Influence	Assessment of Potential Impact on European Sites
	<p>NH OBJ 2 To protect and conserve those sites designated as Special Areas of Conservation (SACs) during the lifetime of this Draft Plan. The list of current SACs is contained in Table 11.1 of this Chapter.</p> <p>NH OBJ 3 To protect and conserve those sites designated as Special Protection Areas during the lifetime of this Draft Plan. There is current one SPA in Co. Leitrim which is contained in Table 11.2 of this Chapter.</p> <p>NH OBJ 5 To protect the character, appearance and quality of the habitats and semi-natural features in Co. Leitrim such as woodlands, hedgerows, peatlands, wetlands and artificial waterways of historic or ecological importance.</p> <p>NH OBJ 6 To promote, in partnership with the relevant agencies, the development and implementation of codes of best practice through initiatives such as the Local Floral Pride initiatives, Community Environmental Action and the Green Schools projects.</p>	
<p>National Biodiversity Action Plan 2017-2021</p>	<p><u>Objective 4: Conserve and restore biodiversity and ecosystem services in the wider countryside</u></p> <p>Target 4.2 - Principal pollutant pressures on terrestrial and freshwater biodiversity substantially reduced by 2020.</p> <p><u>Objective 6: Expand and improve management of protected areas and species</u></p> <p>Target 6.2 - Sufficiency, coherence, connectivity, and resilience of the protected areas network substantially enhanced by 2020.</p>	<p>The proposed development will not have significant effects on Cuilcagh-Anierin SAC or Nationally designated sites due to the small-scale nature of the works.</p> <p>No significant effects have been identified as a result of the proposed development.</p>

6.7.4 **Conclusion of Cumulative Assessment**

The review of plans and projects that is described above did not reveal any additional potential pathways for effect on European Sites or biodiversity that may have arisen as a result of those plans or projects.

No pathway or mechanism for the development works to result in any significant effect on any European Site, was identified when considered on its own during the assessment process and therefore, there is no potential for it to contribute to any such effects when considered in-combination with any other development.

7. **CONCLUSION**

Following consideration of the residual effects (post incorporation of best practice measures) it is noted that the proposed development will not result in any significant effects on the biodiversity, flora and fauna of the existing environment.

Provided that the proposed development is constructed in accordance with the best practice that is described within this report, significant effects on biodiversity are not anticipated at any geographical scale.

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