

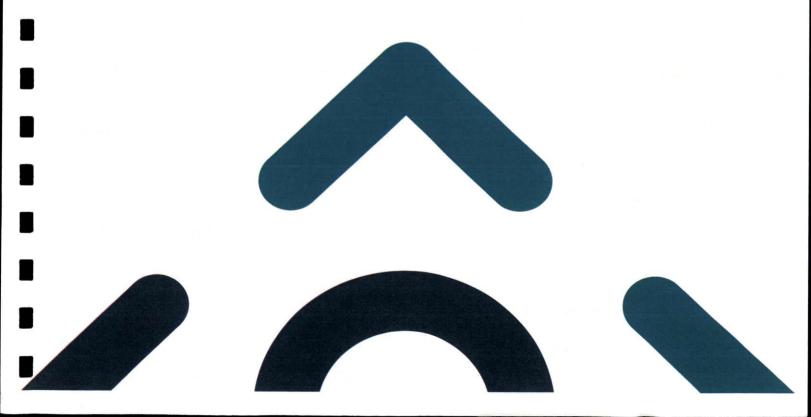
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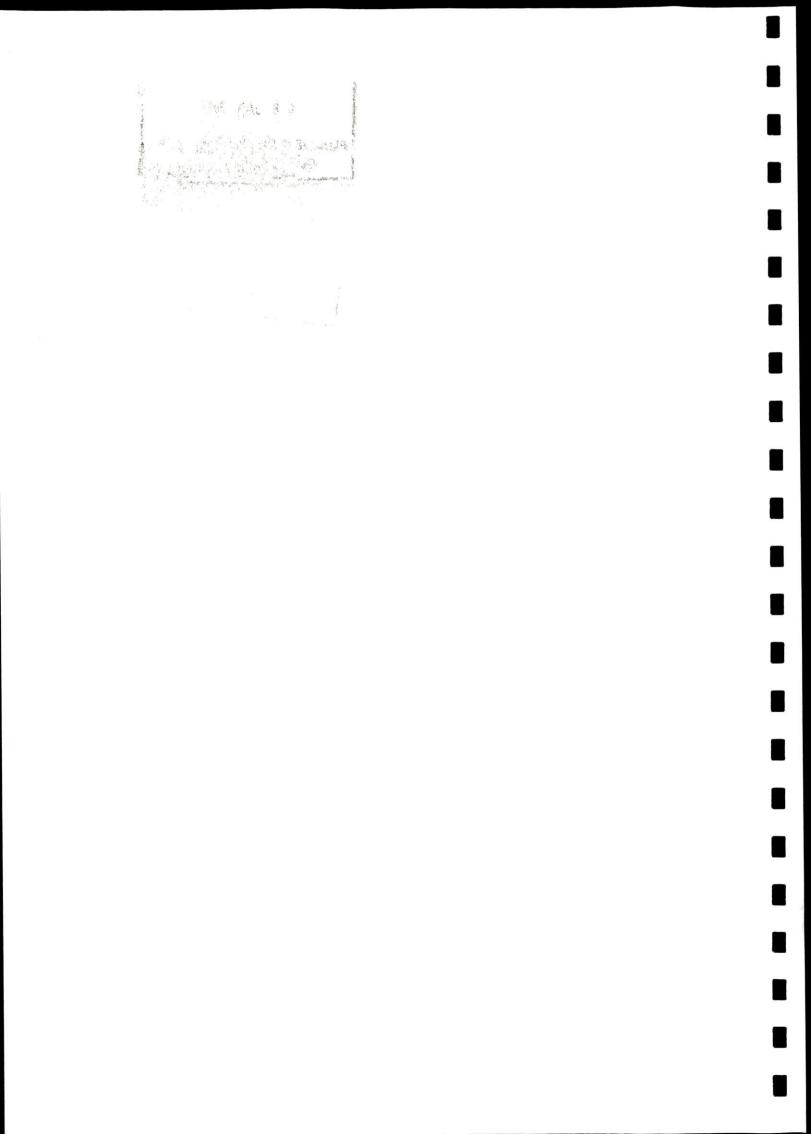
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Planning & Development Section
Galway Council

Bird Survey Report

Proposed Derryclare Wild Western Peatlands Project Response to Further Information Request







DOCUMENT DETAILS



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Information Request

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INTRODUCTION

1.1 Background

MKO was commissioned to undertake breeding bird surveys in response to the Request for Further Information (RFI) on the proposed Derryclare Wild Western Peatlands Project received from Galway County Council (Planning Ref. 23/60) on the 19th of April 2023. The proposed project will involve the felling of approximately 343ha of conifer plantation within 20 harvest blocks, habitat restoration and enhancement, upgrading of existing roads and construction of new temporary access roads, temporary water crossings, resurfacing of an existing carpark and fencing in Derryclare Nature Reserve, Co. Galway.

Point 2 Item a of the RFI stated in relation to birds:

Full Bird Survey Report, focusing on breeding bird or winter /wetland bird surveys paying particular attention to Merlin, Golden Plover, Common Gull and Cormorant. (Merlin identified as breeding on island on Lough Inagh) Bird Surveys guidance should be followed – Institute of Ecology and Environmental Management Guidance Document states; "It is however, an underlying presumption of these guidelines that bird surveys (breeding/non breeding) should always be scoped in unless robust justification can be provided as to why they are not required. This presumption is due to the wide range of habitats that may be of value to bird species, seasonal variations in habitat use and/or value, the mobility of bird species and the potential sensitivity of bird species to a range of impacts that may result from development projects." Appropriate seasonal bird surveying shall be carried out and submitted".

Merlin, golden plover, common gull and cormorant are special conservation interests of the Connemara Bog Complex Special Protection Area (SPA) designated under designated under the EU Birds (2009/147/EC) and Habitats (92/43/EEC) Directives Natura 2000 network, which is approximately 2.2km from the proposed development site at the nearest point. A nationally important breeding population of cormorant has been recorded within the SPA at Lough Scannive (approximately 12km from the proposed development site) and up to 15 pairs of merlin, 27 pairs of golden plover and 45 pairs of common gull have been recorded throughout the SPA. Bird surveys were conducted during breeding season 2023 to determine whether breeding merlin, golden plover, common gull or cormorant were dependent on the proposed development site or adjacent Lough Inagh and north Derryclare Lough for breeding. Appropriate survey methodologies (following Gilbert *et al.* [1998] and Hardey *et al.* [2013]) were employed for individual species.

Site Description

The proposed development site is located within Coillte lands in west County Galway, approximately 13km southeast of Letterfrack (IG: L 83927 50924) and is adjacent to Lough Inagh and Derryclare Lough. The site is accessed via a forestry road turning west off the R344. The proposed development footprint within the Environmental Impact Assessment Report (EIAR) study area is dominated by conifer plantation (Fossitt habitat code WD4), low-lying blanket bog (PB3) and recently felled woodland (WS5), with smaller sections of wet heath (HH3), exposed siliceous rock (ER1), other artificial lakes and ponds (FL8), non-calcareous spring (FP2) and eroding upland river (FW1).





METHODS

Breeding Bird Surveys 2.1

Breeding bird surveys were conducted in the proposed development site and adjacent Lough Inagh and Derryclare Lough between May and July 2023. Four species specific surveys were conducted for breeding merlin, breeding cormorant, breeding common gull, and breeding golden plover. During surveys, all incidental observations of other birds of conservation concern (i.e., species listed on Annex I of the EU Birds Directive, species listed on the Red List of Birds of Conservation Concern in Ireland (Gilbert et al., 2021) and raptor species were recorded.

Breeding Merlin Survey 2.1.1

A breeding merlin survey was conducted following Hardey et al. (2013). The aim of the survey was to identify occupied territories and monitor their breeding success near or within the proposed development site. Breeding merlin watches of 3 hours were conducted during daylight at four breeding raptor watch locations, supplemented by searches for indicators of merlin such as plucking posts and pellets. Any merlin observed were recorded and mapped and breeding status was assigned following British Trust of Ornithology breeding status codes. Surveyors did not attempt to approach suspected nest sites to avoid disturbance.

Each breeding raptor watch location was surveyed three times during the core breeding season period between May and July. The purpose of early visits (early May to early June) is to establish active nest locations and late visits (July to early August) is to check for fledglings, following guidance provided by Hardey et al. (2013). Survey effort is presented in Table 1, including full details of dates, times and weather conditions. Figure 1 shows the breeding raptor watch locations.

Breeding Cormorant Survey 2.1.2

A breeding cormorant survey was conducted following Gilbert et al. (1998). The aim of the survey was to identify active cormorant colonies at Lough Inagh and north Derryclare Lough. Transects were walked along the shores of these lakes during daylight. Given the small area of the lakes (~700m at the widest point), it was possible to survey for suitable nest trees along the water's edge and islets from two transect routes. Any cormorant observed were recorded and mapped and breeding status was assigned following British Trust of Ornithology breeding status codes.

Each transect was surveyed on one occasion during July, when young birds are expected to be fledgling and most detectable. Survey effort is presented in Table 1, including full details of dates, times and weather conditions. Figure 2 shows the transect locations

Breeding Common Gull Survey 2.1.3

0 8 JAN 2024 A breeding common gull survey was conducted following Gilbert et al. (1998). The aim of the survey was to identify active common gull colonies at Lough Inagh and parts. Dogs. were walked along the shores of these lakes during daylight, concurrently with the breeding cormorant survey. Given the small area of the lakes (~700m at the widest point), it was possible to survey for ground nesting colonies along the water's edge and islets from the same two transect routes as the breeding cormorant surveys. Any common gull observed were recorded and mapped and breeding status was assigned following British Trust of Ornithology breeding status codes.

Each transect was surveyed on one occasion during July, when young birds are expected to be fledgling. Survey effort is presented in Table 1, including full details of dates, times and weather conditions. Figure 3 shows the transect locations.



2.1.4 **Breeding Golden Plover Survey**

A breeding golden plover survey was conducted based on Brown and Shepherd (1993) methodology, as outlined by Gilbert *et al.* (1998). The aim of the survey was to locate golden plover nests in bog and heath habitat within and near the proposed development site. As this habitat was located in discrete pockets throughout the site, each pocket (analogous to a 500 X 500m quadrat in Brown and Shepherd [1993] methodology) was surveyed individually by a surveyor walking transects no greater than ~100m apart during daylight for 20-25mins, where access allowed. The surveyor paused at regular intervals to listen for calls. Any golden plover observed were recorded and mapped and breeding status was assigned following British Trust of Ornithology breeding status codes.

Each transect was surveyed on three occasions during the core breeding season period between May and July. Survey effort is presented in Table 1, including full details of dates, times and weather conditions. Figure 4 shows the transect locations.

2.2 Statement of Authority

This report has been prepared by Susan Doyle (PhD), Senior Ornithologist, and Katie Grice (BSc), Graduate Ornithologist, and reviewed by Patrick Manley (BSc), Senior Ornithologist, all of MKO. All are suitably qualified ornithologists and competent experts for the purposes of the preparation of this report. Field survey methodology was also designed by Susan Doyle. Field surveys were undertaken by Susan Doyle, Louis de Vries (MSc) and Marcus Hogan (BSc). These surveyors are suitably qualified competent experts in field ornithology.

2.3 Limitations

A suite of breeding bird surveys were undertaken at the proposed development site between May and July 2023, using methodology following the appropriate guidelines. As the RFI was received in April, surveys did not begin until May, and did not include the first month of the core breeding season (April). However, due to the breeding ecology and phenology of the target species, no significant limitations resulted from surveys beginning in May. The proposed development site is located in an upland area where some terrain is hazardous due to forestry works and slope, which limited some transect route coverage, particularly on the western side of the lakes. However, due to the small area that could not be directly accessed by transect routes, and the visibility over these areas from nearby transects, no significant limitations resulted from not accessing these areas. The survey duration and scope are considered entirely satisfactory and no significant limitations in the survey have been identified.

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Table 1 Survey effort

Date	Survey	Location	Duration (h)	Weather Conditions	Comments	Surve	yor
29/05/2023	Breeding Merlin and Golden Plover Survey	BR4	3:00 starting at 08:30	Visibility: good; Wind speed and direction: light breeze SE; Cloud cover and height: 0-33% >500m; Rain: none; Frost: none; Snow: none	e; Frost: none; Snow: none		
29/05/2023	Breeding Merlin and Golden Plover Survey	BR2	3:00 starting at 11:50	Visibility: good; Wind speed and direction: light breeze SE; Cloud cover and height: 0-33% >500m; Rain: none; Frost: none; Snow: none		LDV	
30/05/2023	Breeding Merlin and Golden Plover Survey	BR3	3:00 starting at 06:30	Visibility: good; Wind speed and direction: gentle breeze SE; Cloud cover and height: 0-33% >500m; Rain: none; Frost: none; Snow: none	no clouds	LDV	
30/05/2023	Breeding Merlin and Golden Plover Survey	BR1	3:00 starting at 10:00	Visibility: good; Wind speed and direction: light air SE; Cloud cover and height: 0-33% >500m; Rain: none; Frost: none; Snow: none	no clouds	LDV	
07/07/2023	Breeding Merlin and Golden Plover Survey	BR4	3:00 starting at 11:00	Visibility: good; Wind speed and direction: strong breeze SSW; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		MH	
07/07/2023	Breeding Merlin and Golden Plover Survey	BR3	3:00 starting at 14:30	Visibility: moderate; Wind speed and direction: strong breeze SSW; Cloud cover and height: 66-100% 150-500m; Rain: drizzle; Frost: none; Snow: none		MH	780000
18/07/2023	Breeding Merlin and Golden Plover Survey	BR2	3:00 starting at 10:15	Visibility: good; Wind speed and direction: light breeze NNE; Cloud cover and height: 33-66% 150-500m; Rain: none; Frost: none; Snow: none		MH	
18/07/2023	Breeding Merlin and Golden Plover Survey	BR1	3:00 starting at 13:30	Visibility: good; Wind speed and direction: moderate breeze NW; Cloud cover and height: 33-66% 150-500m; Rain: none; Frost: none; Snow: none			6
19/07/2023	Breeding Merlin and Golden Plover Survey	BR4	3:00 starting at 10:15	Visibility: good; Wind speed and direction: moderate breeze NW; Cloud cover and height: 33-66% 150-500m; Rain: none; Frost: none; Snow: none		MH	inty
19/07/2023	Breeding Merlin and Golden Plover Survey	BR3	3:00 starting at 13:30	Visibility: good; Wind speed and direction: moderate breeze NW; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		МН	Consider
19/07/2023	Breeding Cormorant and Common Gull Survey	T1	2:00 starting at 13:30	Visibility: good; Wind speed and direction: moderate breeze NW; Cloud cover and height: 0-33% <150m; Rain: none; Frost: none; Snow: none	two fishing boats on the lake	SD	-
19/07/2023	Breeding Cormorant and Common Gull Survey	T2	2:00 starting at 15:30	Visibility: good; Wind speed and direction: fresh breeze NW; Cloud cover and height: 0-33% <150m; Rain: none; Frost: none; Snow: none		SD	
20/07/2023	Breeding Merlin and Golden Plover Survey	BR2	3:00 starting at 10:00	Visibility: moderate; Wind speed and direction: moderate breeze NW; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		MH	



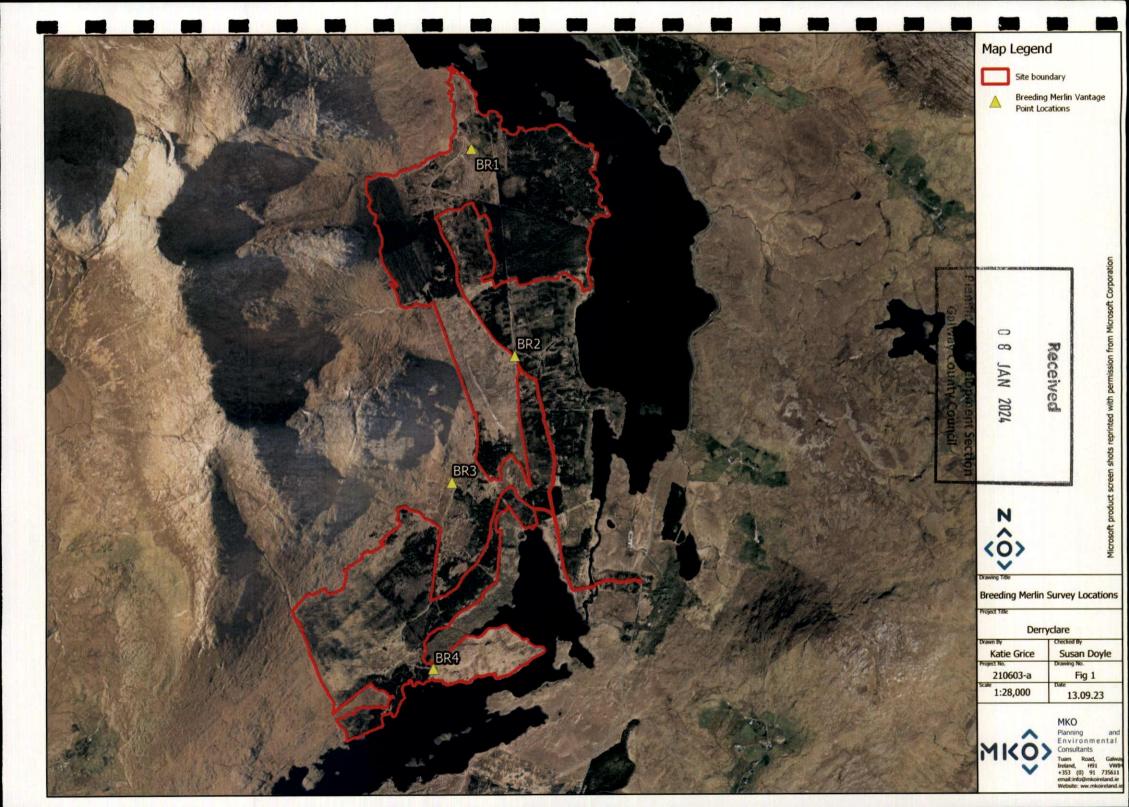
Date	Survey	Location	Duration (h)	Weather Conditions	Comments	Surveyor
20/07/2023	Breeding Merlin and Golden Plover Survey	BR1	3:00 starting at 13:15	Visibility: good; Wind speed and direction: fresh breeze NW; Cloud cover and height: 33-66% 150-500m; Rain: drizzle; Frost: none; Snow: none		МН

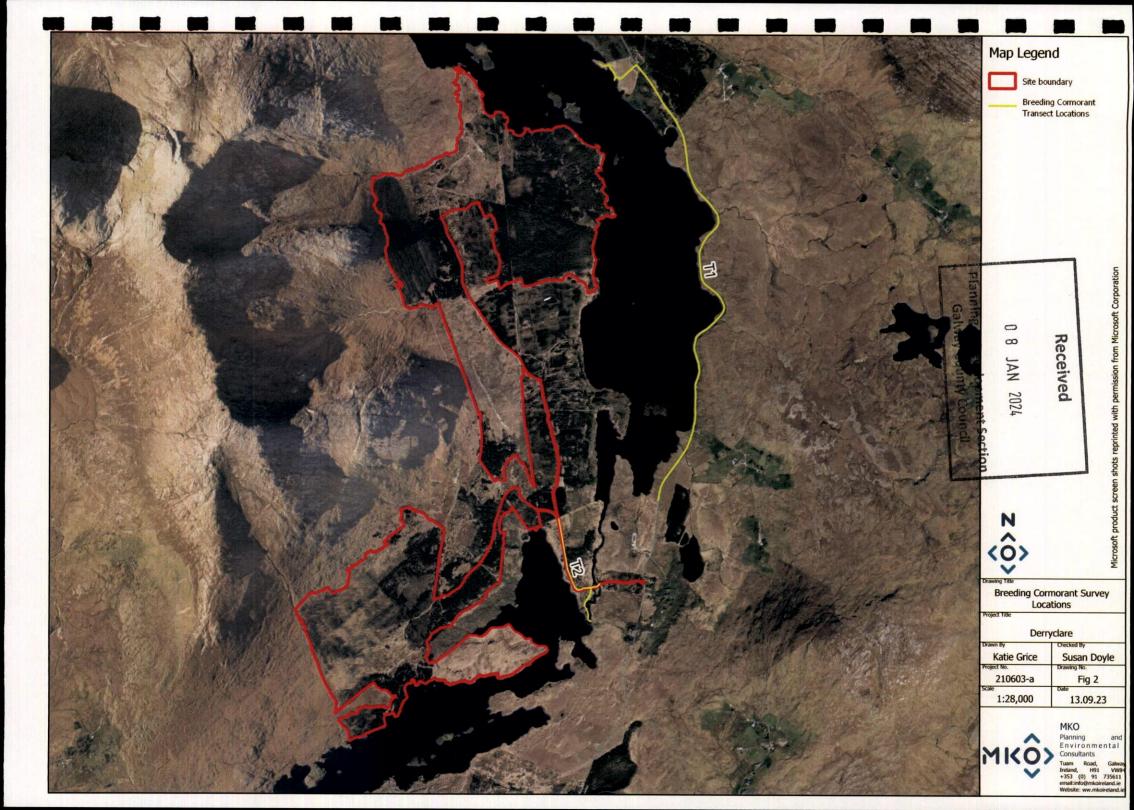
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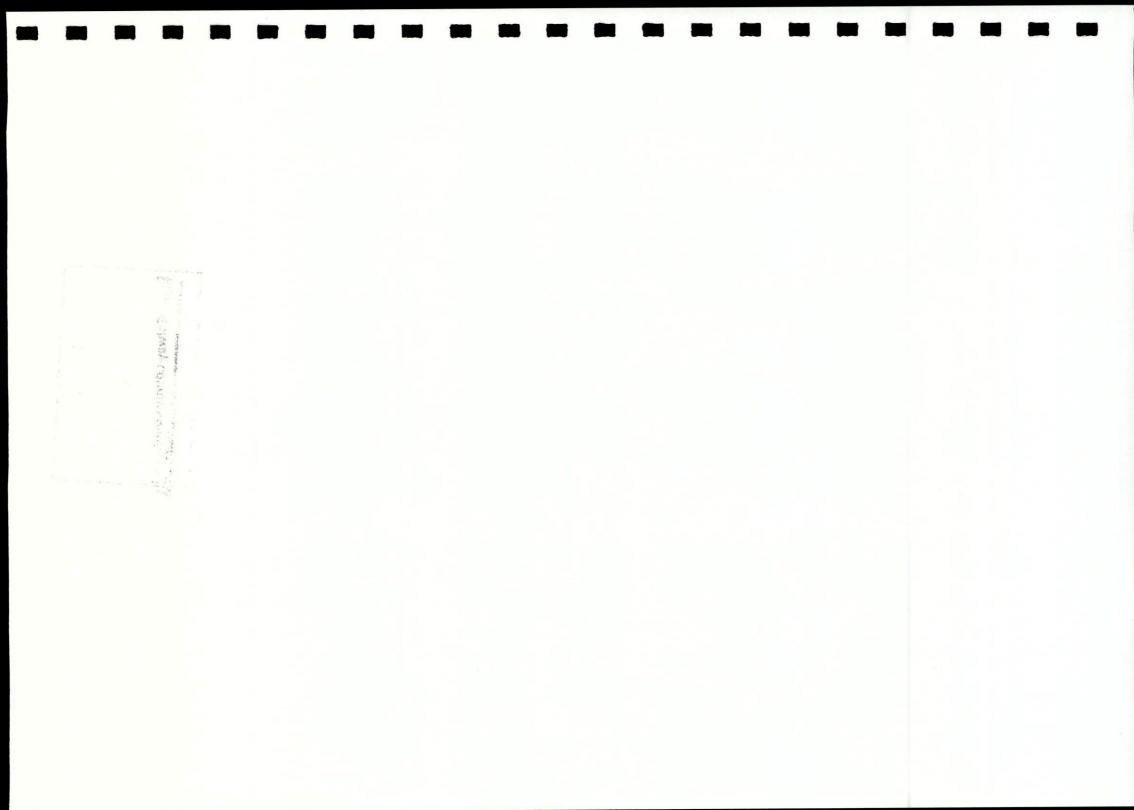
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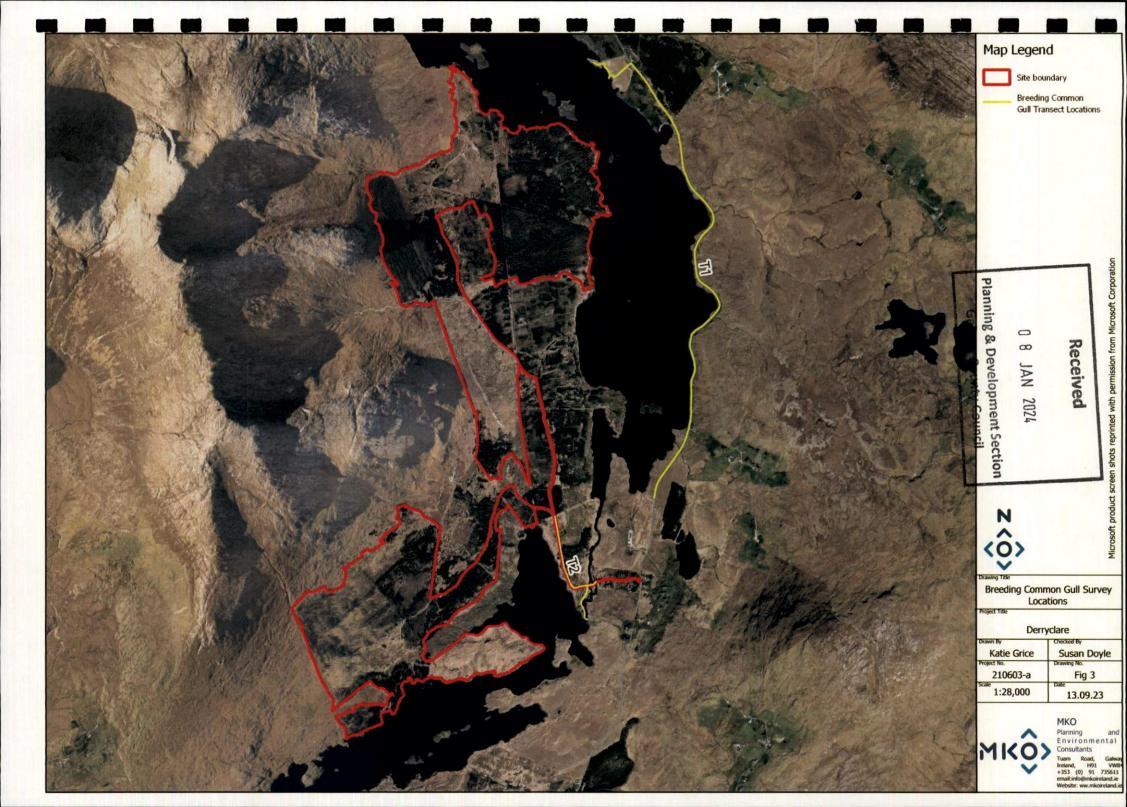
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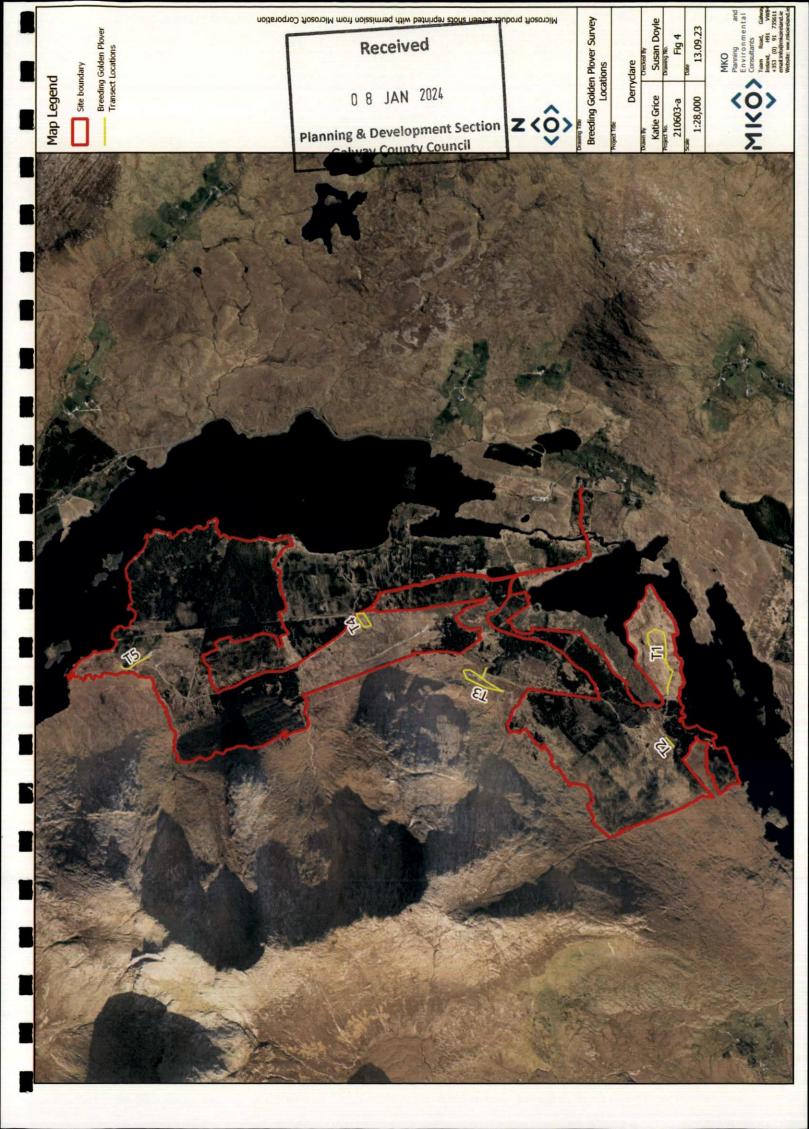


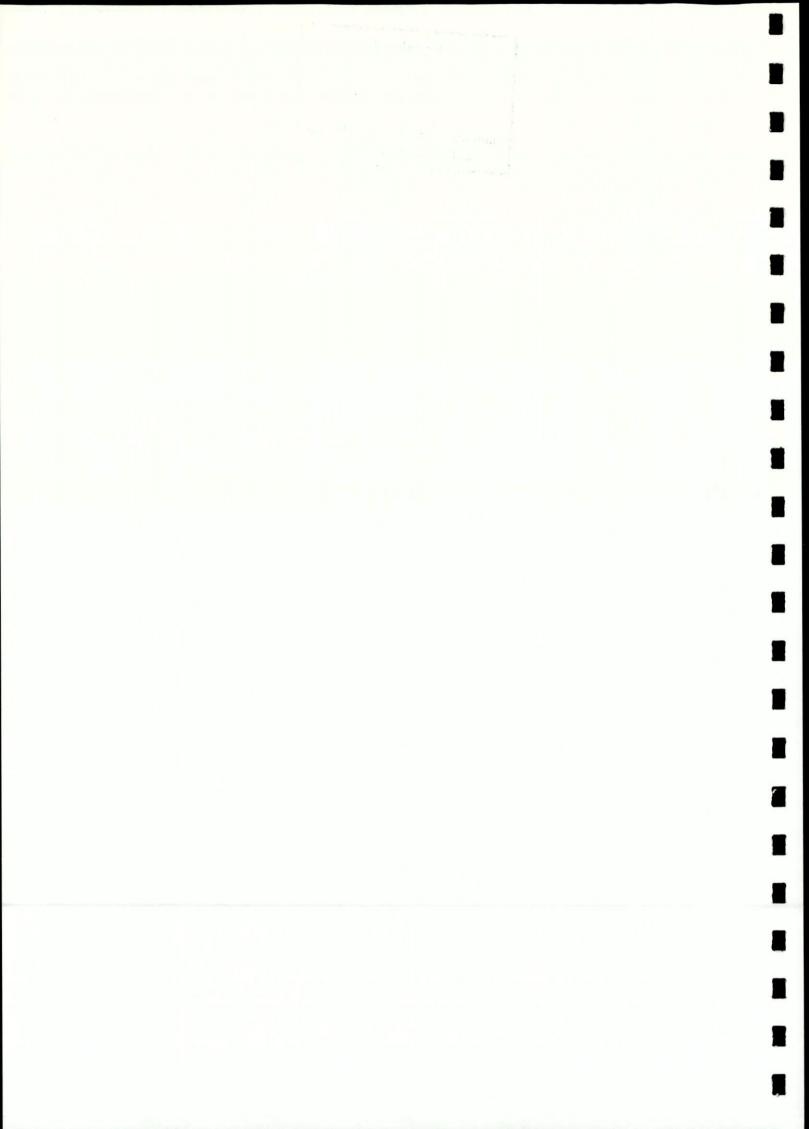






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RESULTS

3.1 Breeding Bird Surveys

The results of field surveys are presented under individuals survey types below. Survey data is presented in Table 2 to Table 5. Survey maps are presented in Figure 5 to Figure 14.

3.1.1 Breeding Merlin Survey

A total of three observations of merlin were recorded during breeding merlin surveys (Table 2, Figure 5). Both male and female merlin were seen in suitable nesting habitat. Two observations were of merlin flying to a wooded islet in north Derryclare Lough in May (L 83105 48792), approximately 350m from the development site boundary. This islet contained suitable nesting trees and, given the repeated visits of merlin to this island, is a likely nest site. The final observation was of a female carrying prey in July, which suggests hatched chicks in this area.

Table 2 Merlin records

Ref.	BR	Date	Time	Species	Number	Number Habitat and activity Breeding status		Surveyor
ML001	BR4	29/05/2023	08:57	Merlin	1	lakes and ponds and semi-natural woodland, travelling	suitable nesting habitat; possible breeder	LDV
ML002	BR4	29/05/2023	10:19	Merlin	1	lakes and ponds and semi-natural woodland, travelling, male	suitable nesting habitat; possible breeder	LDV
ML003	BR1	18/07/2023	16:19	Merlin	1	conifer plantation and bogs, carrying prey, adult female seen carrying prey into conifer plantation	adult carrying food/faecal sac; confirmed breeding	МН

3.1.2 **Breeding Cormorant Survey**

A total of one observation of cormorant was recorded during breeding cormorant surveys (Table 3, Figure 6). A lone bird seen perched on rocks off an islet in Lough Inagh. There was no indication of breeding in this area.

Table 3 Cormorant records

Ref.	BR	Date	Time	Species	Number	Breeding status	Surveyor
CA001	T1	19/07/2023	14:18	Cormorant	1	summering; non-breeding	SD





3.1.3 Breeding Common Gull Survey

A total of three observations of common gull were recorded during breeding common gull surveys (Table 4, Figure 7). Three lone individuals were seen flying overhead or on the water's edge of Lough Inagh and Derryclare Lough. There was no indication of breeding in this area.

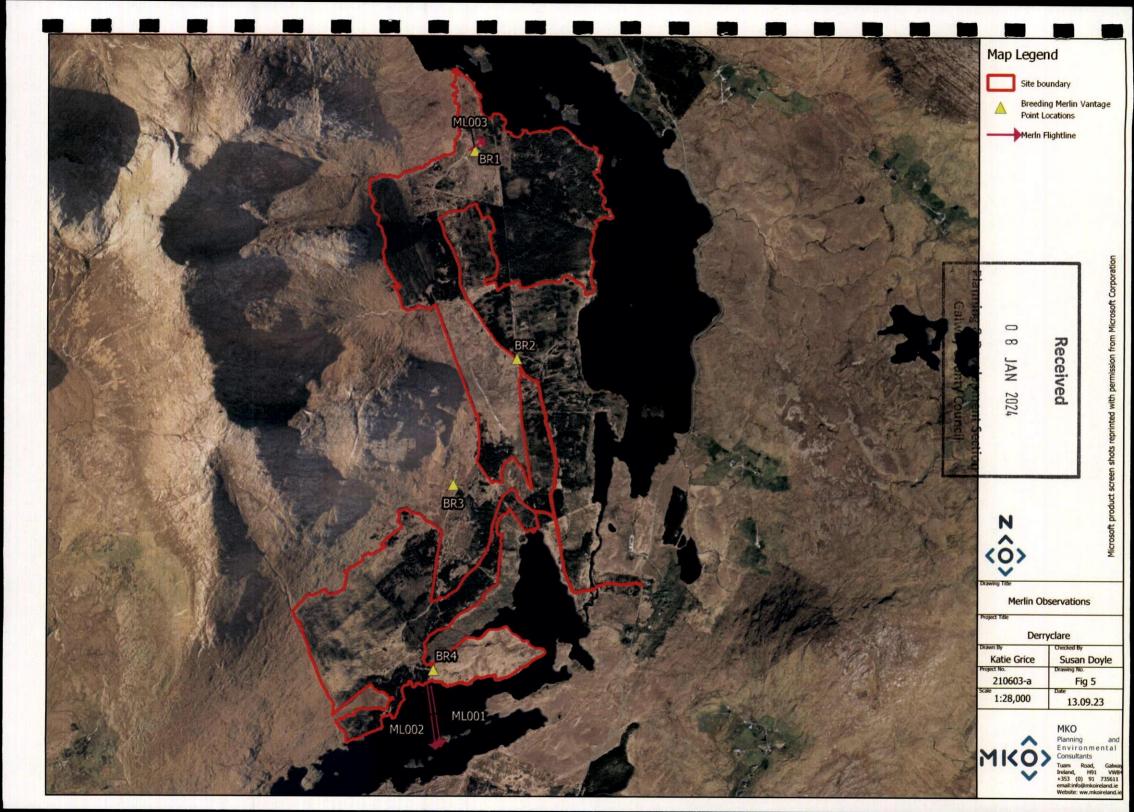
Table 4 Common gull records

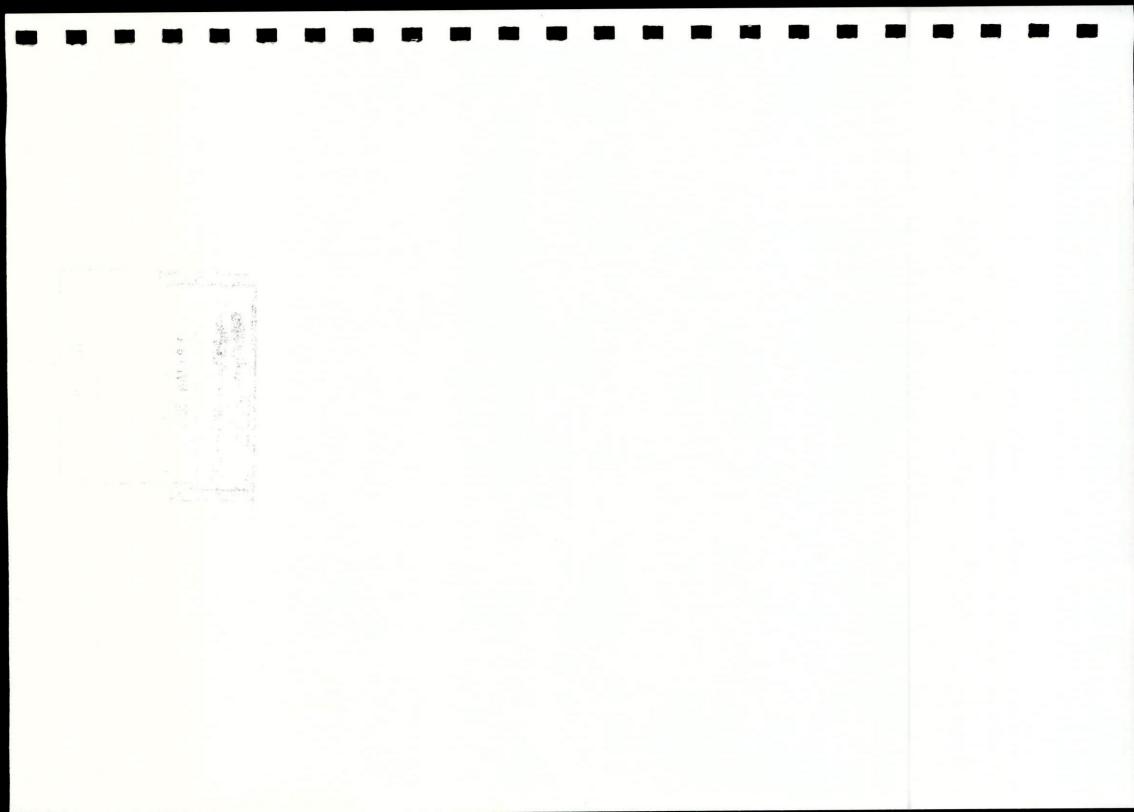
Ref.	BR	Date	Time	Species	Number	Breeding status	Surveyor	
CM001	T1	19/07/2023	15:16	Common Gull	1	summering; non-breeding	SD	
CM002	T1	19/07/2023	15:25	Common Gull	1	summering; non-breeding	SD	
CM003	T2	19/07/2023	15:45	Common Gull	1	summering; non-breeding	SD	

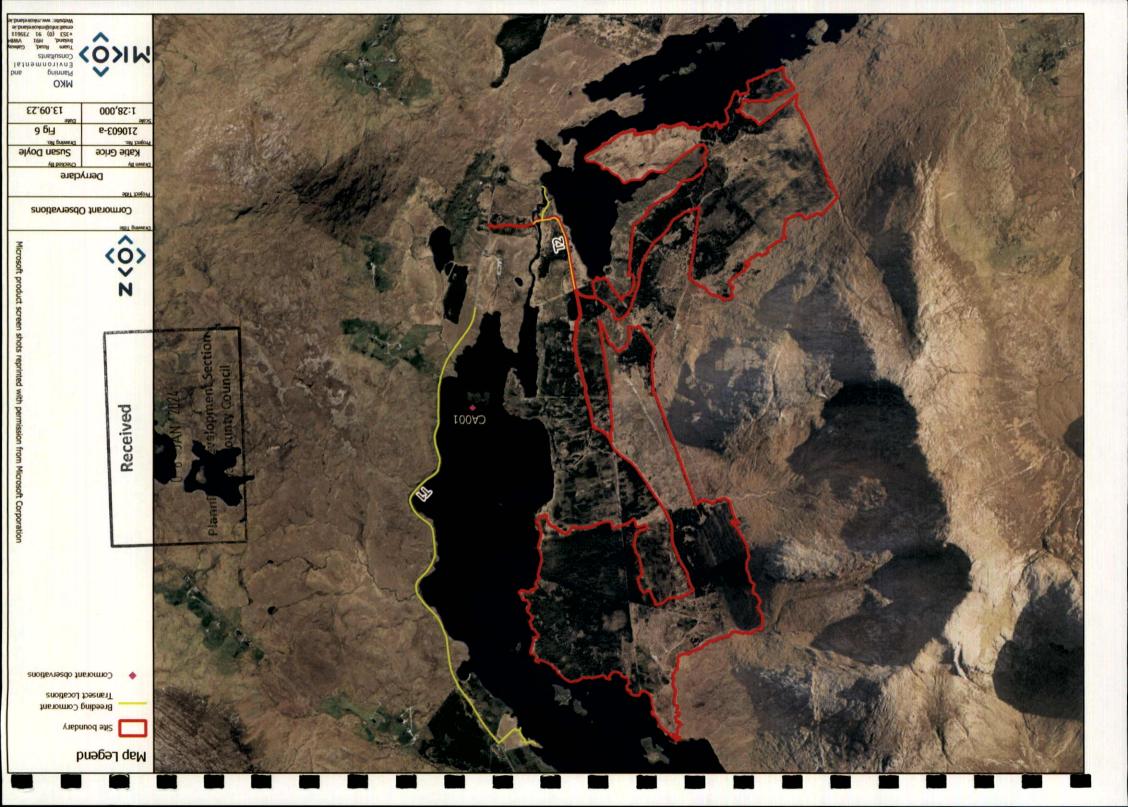
3.1.4 Breeding Golden Plover Survey

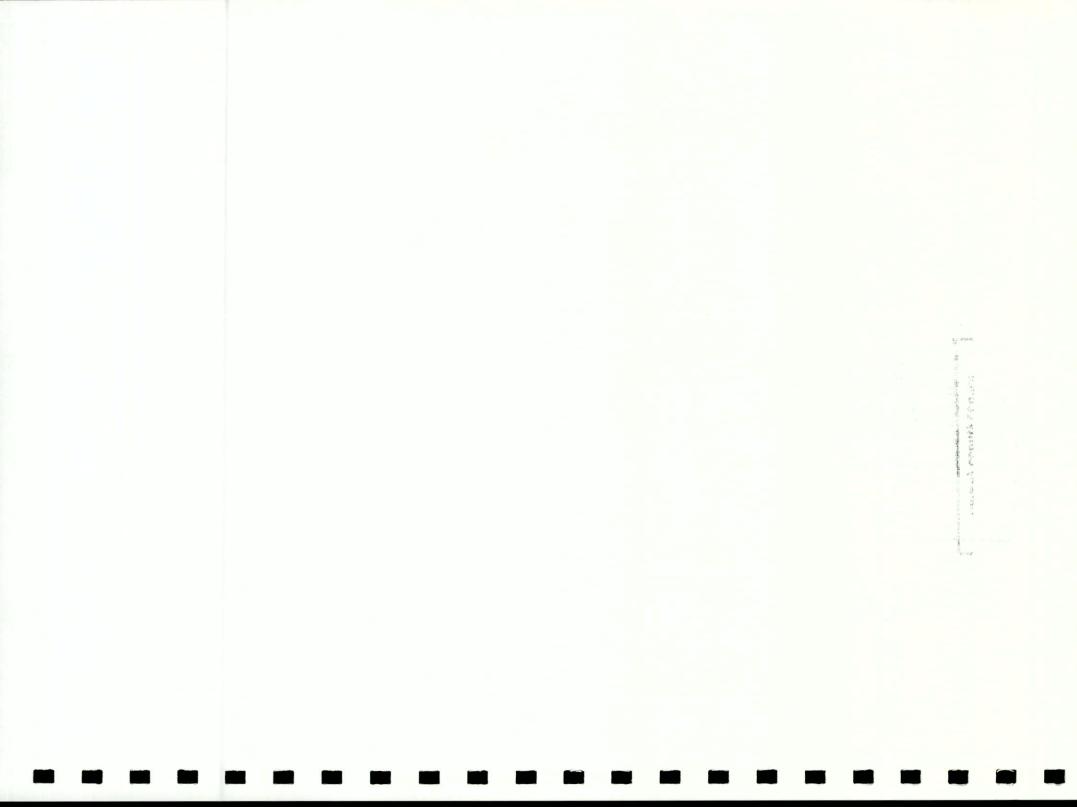
No golden plover were recorded during breeding golden plover surveys. There was no indication of breeding in the area.

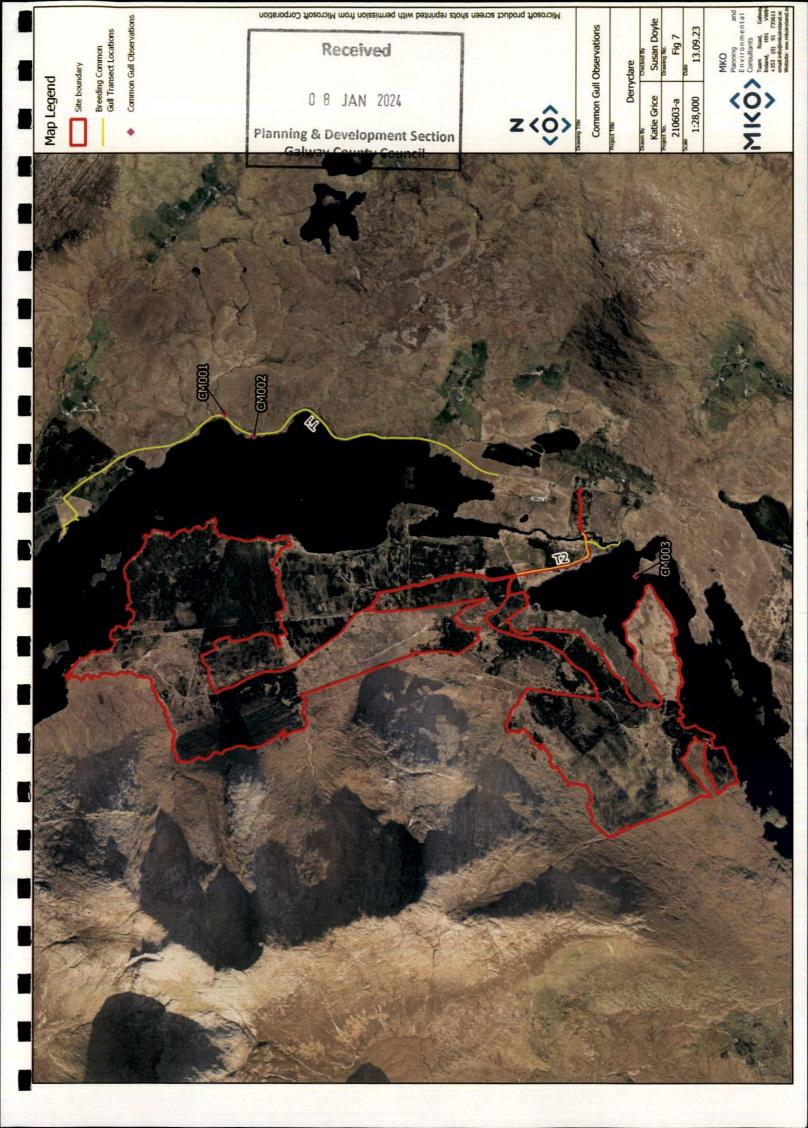


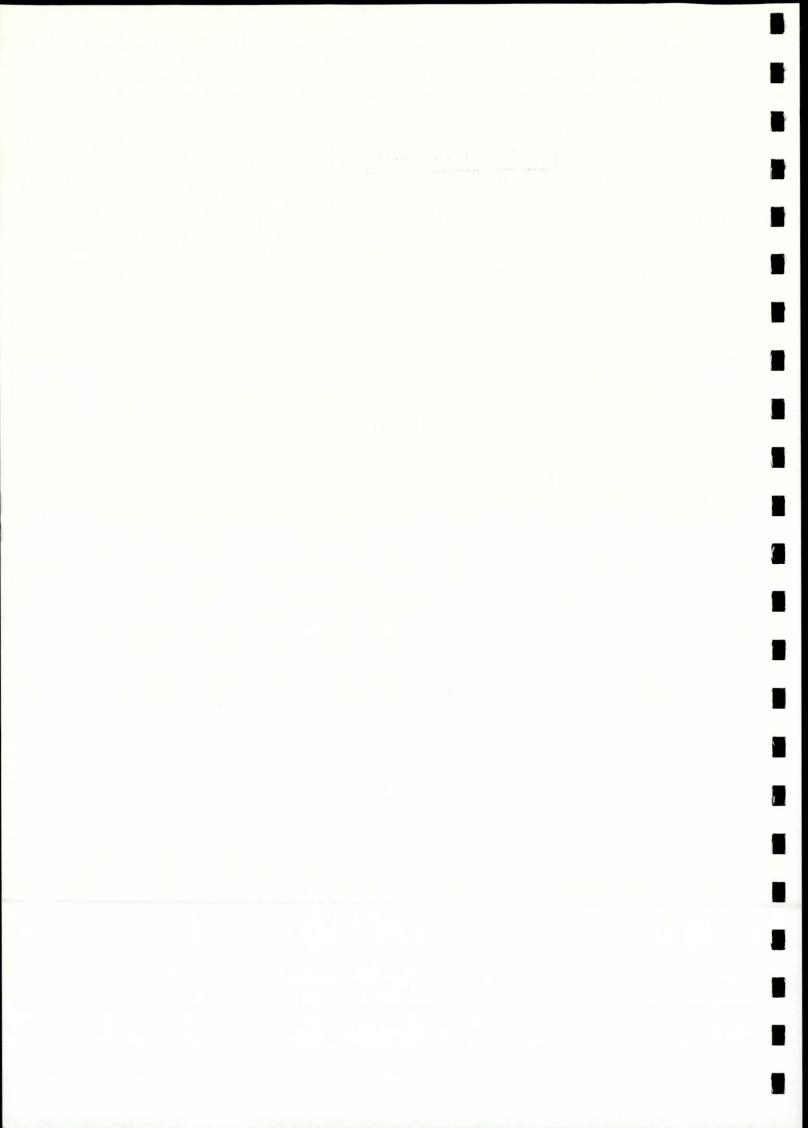














3.2 Incidental records

There were incidental records of seven species during surveys, including additional records of cormorant and common gull (Table 5). These records comprised:

- Herring gull: There were two observations of herring gull seen travelling through the site in May (Figure 8).
- Feral goose: A flock of 13 feral goose were seen travelling over Derryclare Lough in May (Figure 9).
- Cormorant: There were two observations of cormorant travelling over Derryclare Lough in May (Figure 10).
- Meadow pipit: There were 20 observations of meadow pipit during surveys (Figure 11). Birds were seen perched, travelling and foraging throughout the site, including in suitable nesting habitat, suggesting possible breeding in the area.
- **Common gull**: There was one observation of common gull seen travelling over Derryclare Lough in July (Figure 12).
- Swift: A single swift was seen flying over conifer plantation in July (Figure 13).
- Kestrel: A kestrel was seen perched in the conifer plantation in July (Figure 14). Although the bird was in suitable nesting habitat, there was no further evidence of breeding in this area during surveys.

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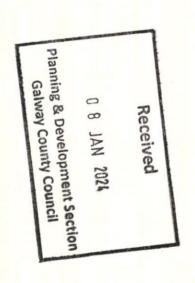


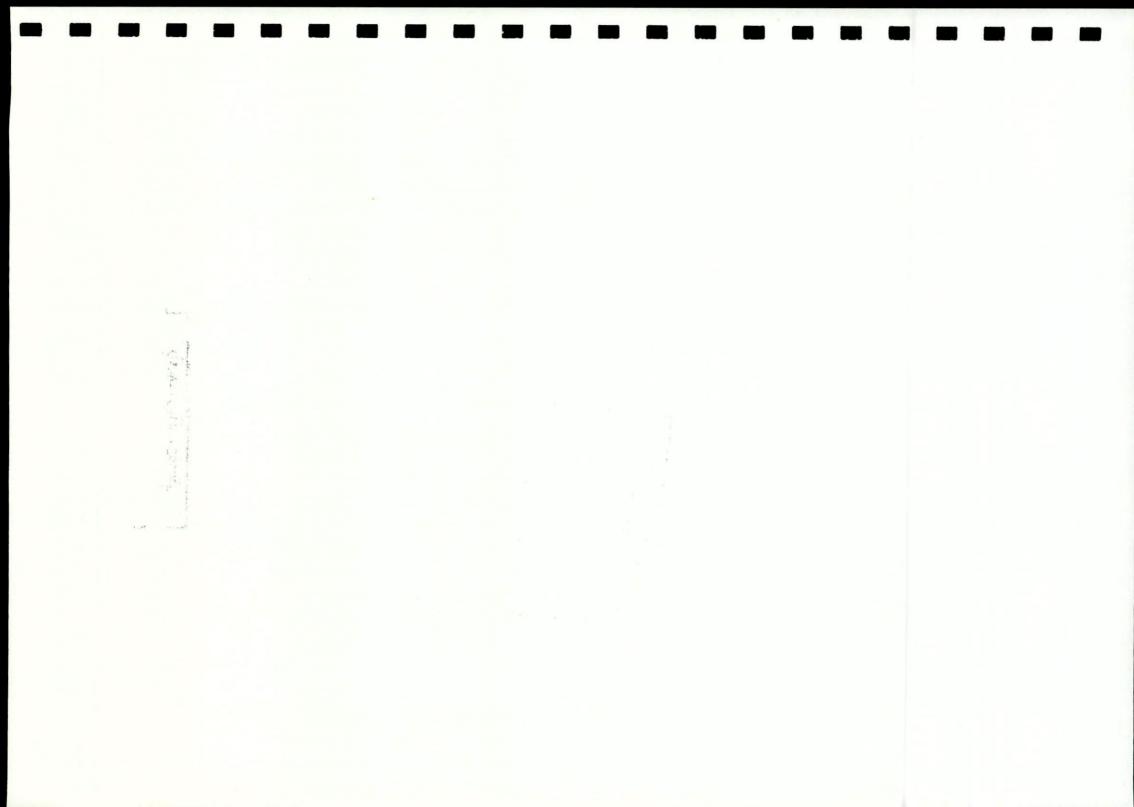
Table 5 Incidental records

Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surv	eyor
HG001	Breeding Merlin Survey; BR4	29/05/2023	08:37	Herring Gull	3	bogs and lakes and ponds; travelling	LDV	
HG002	Breeding Merlin Survey; BR4	29/05/2023	09:39	Herring Gull	2	lakes and ponds; travelling	LDV	
ZL001	Breeding Merlin Survey; BR4	29/05/2023	09:43	Feral Goose	13	lakes and ponds; travelling on surface water	LDV	7
CA001	Breeding Merlin Survey; BR4	29/05/2023	10:02	Cormorant	1	lakes and ponds and conifer plantation; travelling	LDV	7
CA002	Breeding Merlin Survey; BR4	29/05/2023	10:33	Cormorant	1	bogs and lakes and ponds; travelling	LDV	7
MP001	Breeding Merlin Survey; BR4	29/05/2023	12:48	Meadow Pipit	5	bogs; flying around	LDV	
MP002	Breeding Merlin Survey; BR2	29/05/2023	14:44	Meadow Pipit	5	bogs and conifer plantation; foraging	LDV	,
MP003	Breeding Golden Plover Survey; BR3	30/05/2023	08:59	Meadow Pipit	1	bogs and semi-natural grassland; travelling	LDV	
MP004	Breeding Golden Plover Survey; BR1	30/05/2023	12:16	Meadow Pipit	1	bogs; travelling	LDV	Plan
MP005	Breeding Merlin Survey; BR4	07/07/2023	11:20	Meadow Pipit	1	bogs and conifer plantation; travelling	MH	Ga
CM001	Breeding Merlin Survey; br4	07/07/2023	13:06	Common Gull	1	lakes and ponds, bogs and conifer plantation; travelling	МН	¥ 00
SI001	Breeding Merlin Survey; br4	07/07/2023	13:58	Swift	1	conifer plantation and bogs; in flight	MH	V D
MP006	Breeding Merlin Survey; BR2	18/07/2023	11:23	Meadow Pipit	1	conifer plantation and bogs; travelling	MH	ou ve
MP007	Breeding Merlin Survey; BR2	18/07/2023	12:13	Meadow Pipit	1	conifer plantation and bogs; travelling	МН	ounty
MP008	Breeding Merlin Survey; BR1	18/07/2023	15:05	Meadow Pipit	1	conifer plantation and bogs; travelling	МН	8 9
MP009	Breeding Merlin Survey; BR4	19/07/2023	10:25	Meadow Pipit	1	conifer plantation and bogs; perched	MH	1 30
MP010	Breeding Merlin Survey; BR4	19/07/2023	12:04	Meadow Pipit	1	conifer plantation and bogs; travelling	MH	County Council
MP011	Breeding Merlin Survey; BR4	19/07/2023	12:22	Meadow Pipit	1	conifer plantation and bogs; perched	MH	
MP012	Breeding Merlin Survey; BR4	19/07/2023	13:34	Meadow Pipit	1	conifer plantation and bogs; perched	MH	
MP013	Breeding Merlin Survey; BR3	19/07/2023	13:57	Meadow Pipit	1	bogs and conifer plantation; travelling	MH	
MP014	Breeding Merlin Survey; BR3	19/07/2023	15:20	Meadow Pipit	1	conifer plantation and bogs; travelling	MH	696
K.001	Breeding Merlin Survey; BR3	19/07/2023	15:35	Kestrel	1	conifer plantation and bogs; perched	MH	
MP015	Breeding Merlin Survey; BR2	20/07/2023	10:51	Meadow Pipit	2	bogs and conifer plantation; travelling	MH	
MP016	Breeding Merlin Survey; BR2	20/07/2023	10:56	Meadow Pipit	1	conifer plantation and bogs; calling	MH	
MP017	Breeding Merlin Survey; BR2	20/07/2023	12:07	Meadow Pipit	1	conifer plantation and bogs; calling	MH	

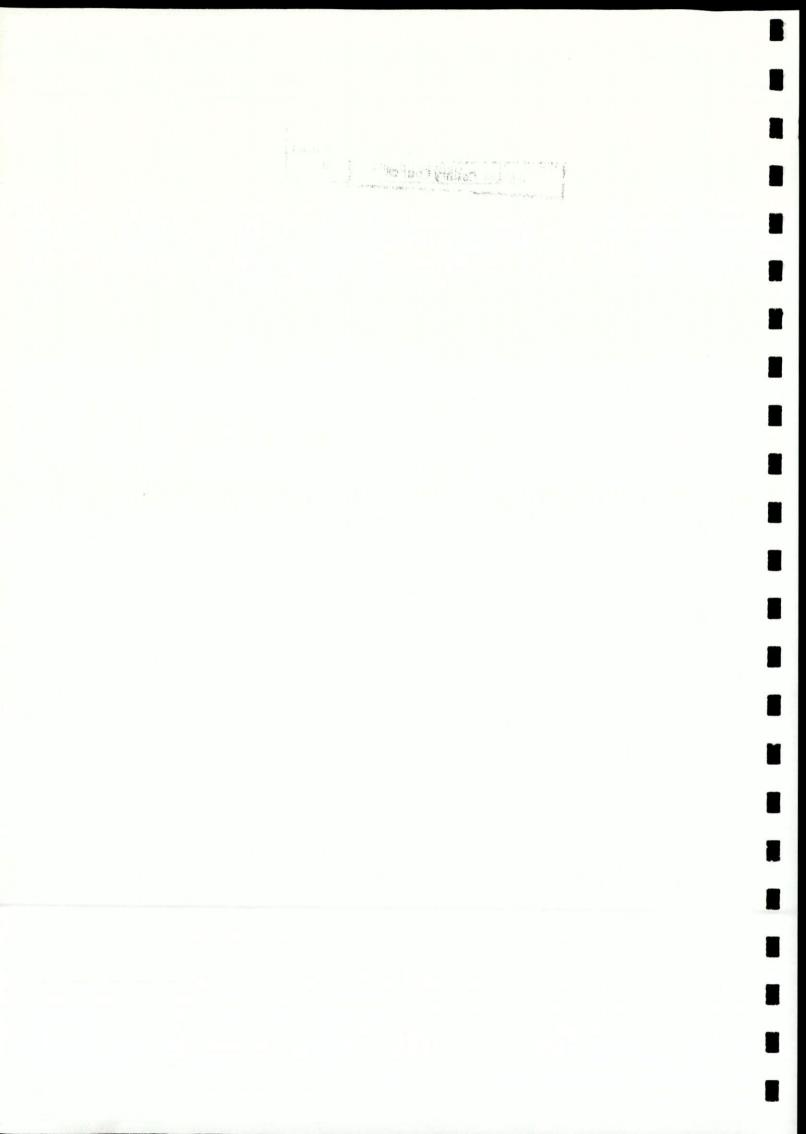


Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
MP018	Breeding Merlin Survey; BR1	20/07/2023	15:01	Meadow Pipit	1	conifer plantation and bogs; travelling	MH
MP019	Breeding Merlin Survey; BR1	20/07/2023	15:56	Meadow Pipit	1	conifer plantation and bogs; travelling	MH
MP020	Breeding Cormorant Survey; T1	21/07/2023	11:37	Meadow Pipit	3	grassland and marsh; foraging, fluttering around the roadside verge	SD

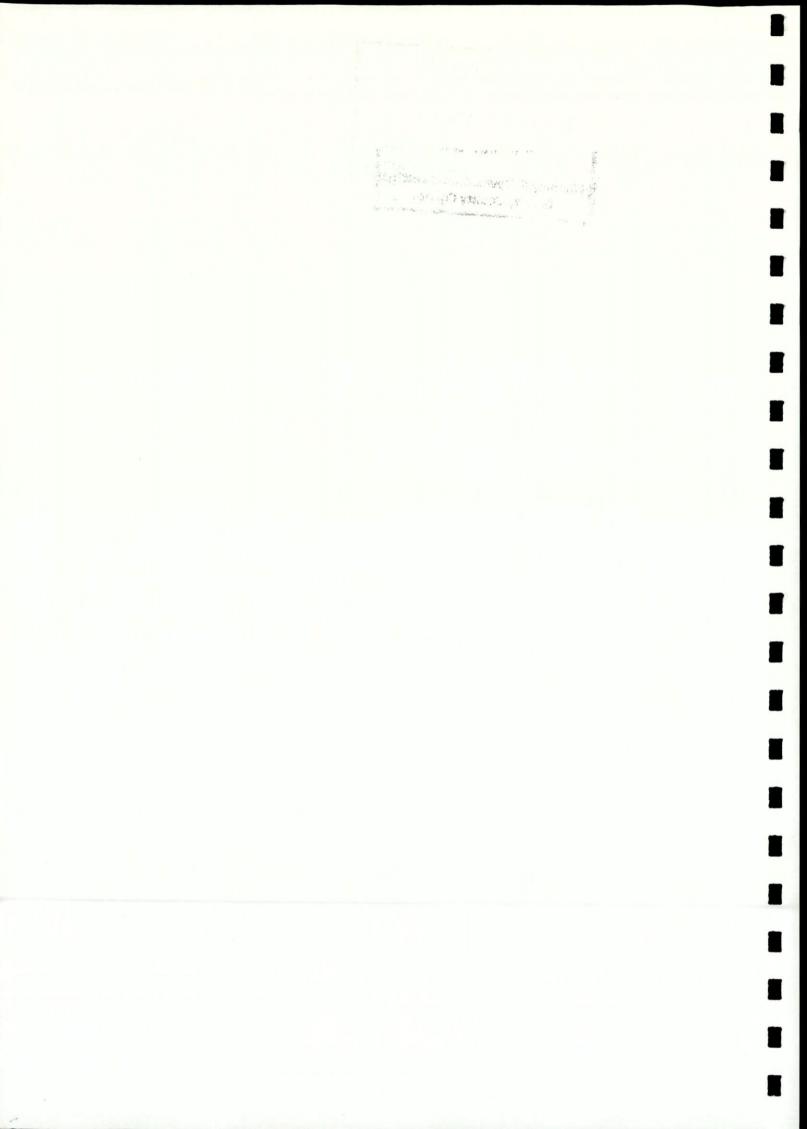




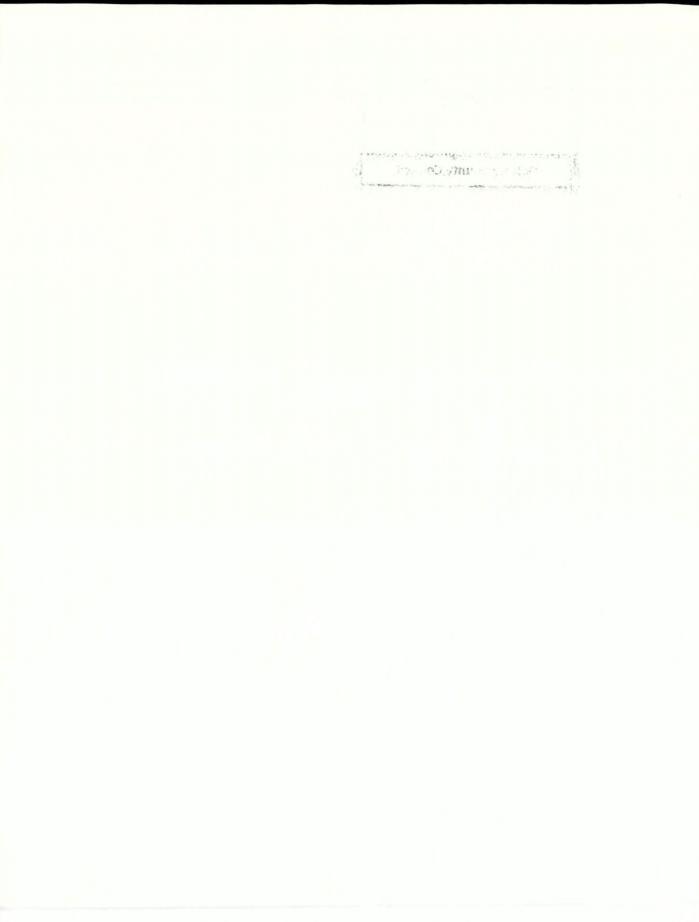


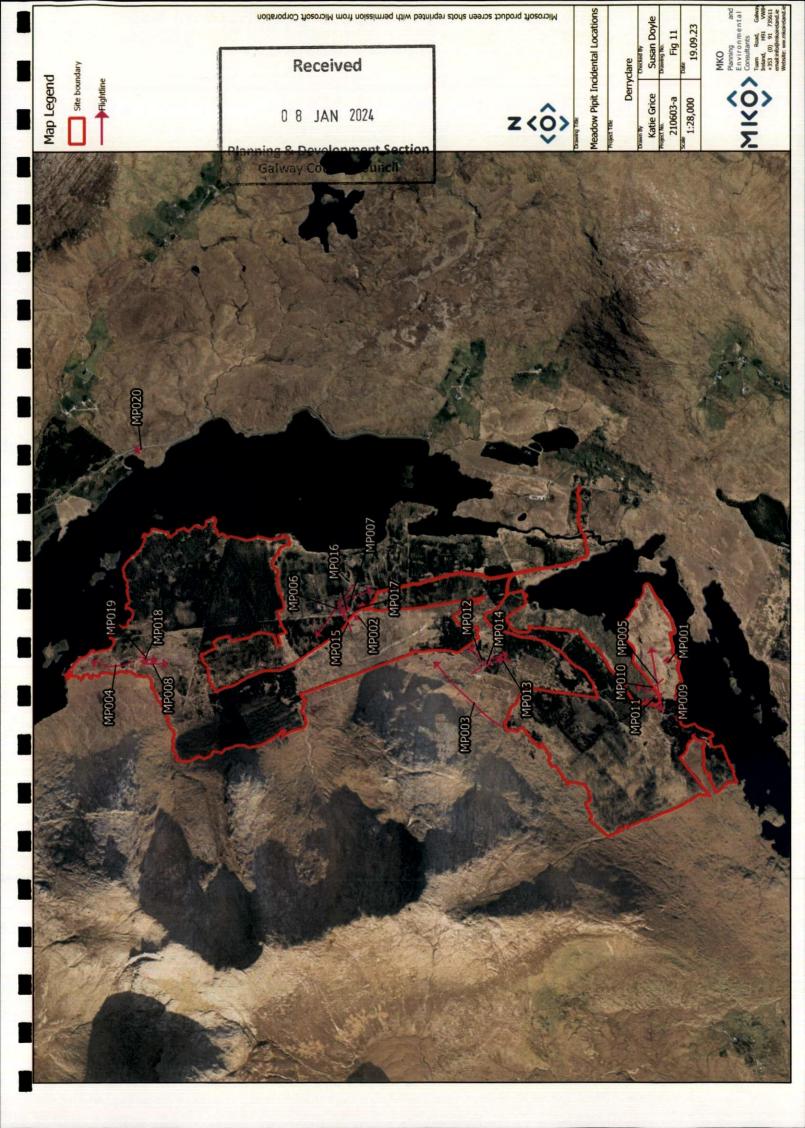




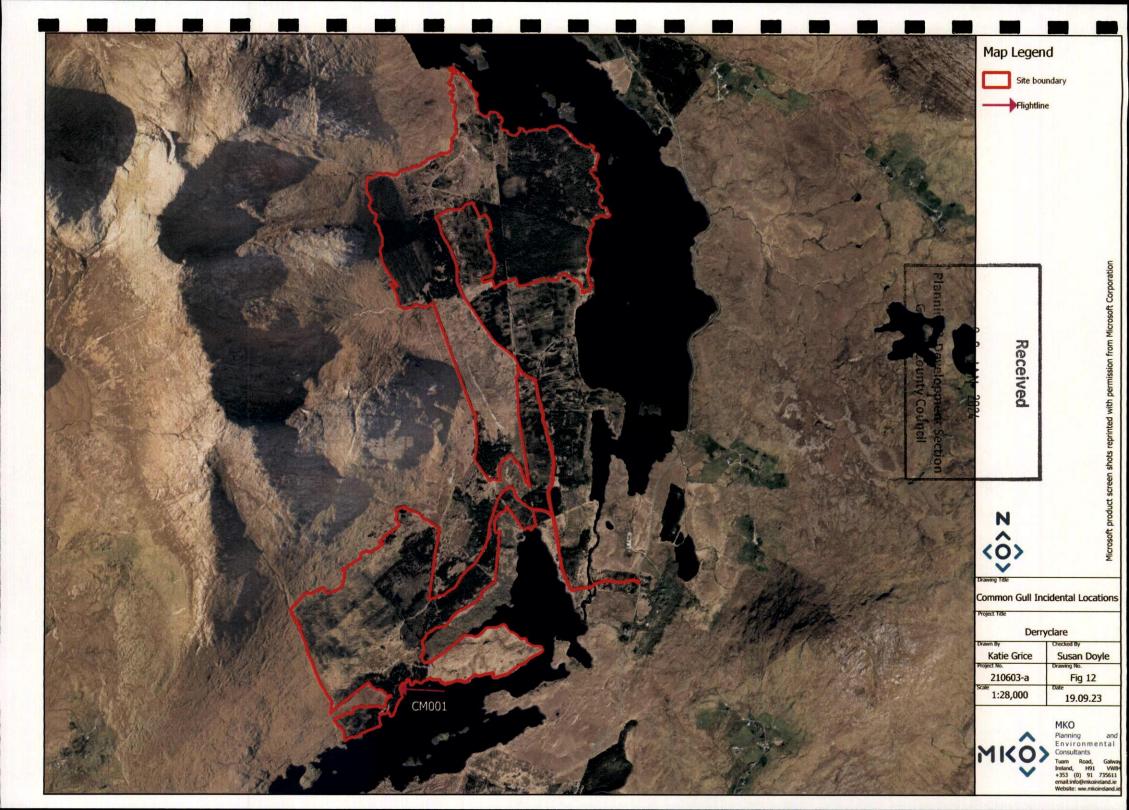








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DISCUSSION

Breeding bird surveys were conducted at the proposed development site in breeding season 2023 in response to the RFI from Galway County Council. The survey scope was designed to target merlin, cormorant, common gull and golden plover. Other incidental observations birds of conservation concern observed during these surveys were recorded.

Merlin, cormorant and common gull were recorded at the proposed development site and in the adjacent Lough Inagh and Derryclare Lough during surveys. Merlin are likely breeding on an islet in north Derryclare Lough, approximately 350m from the nearest proposed development site boundary. Through consultation with the National Parks and Wildlife Service during the preparation of the Biodiversity Chapter of the submitted EIAR, it was also confirmed that merlin were nesting in woodland on an island in south Derryclare Lough in the past. Although merlin may nest on conifer forestry edges, there were no records of merlin nesting within the proposed development site itself during the 2023 surveys, nor from the desk study and field surveys conducted to inform the Biodiversity Chapter of the submitted EIAR. Disturbance of breeding merlin during their breeding season (March to August) should be considered during the project works; a safe working distance of 400m is outlined by Forestry Commission of Scotland (2006) guidance.

Although present in small numbers in Lough Inagh and Derryclare Lough, there was no evidence to suggest that cormorant or common gull are dependent on the area for breeding. Golden plover was not recorded during surveys.

In conclusion, merlin were likely breeding in north Derryclare Lough during breeding season 2023, and have been recorded breeding in other areas of the same lake during previous surveys. Disturbance of breeding merlin on the north Derryclare Lough islet should be considered during the project works, and appropriate safe working distances applied.





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