



APPENDIX 10

2025 BIRD SURVEY
EFFORT & DATA

Appendix 7-2a - Addendum Survey Effort

Umma More Renewable
Energy Development, Co.
Westmeath





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Table 7 - 2 - 1 Vantage Point survey effort

Date	Survey	Location	Duration (h)	Weather Conditions	Comments	Surveyor
15/01/2022	Vantage Point Survey	VP1	1:00 starting at 14:30	Visibility: good; Wind speed and direction: gentle breeze SSW; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		FLM
15/01/2022	Vantage Point Survey	VP1	1:00 starting at 15:30	Visibility: moderate; Wind speed and direction: light breeze SSW; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		FLM
15/01/2022	Vantage Point Survey	VP1	1:00 starting at 16:30	Visibility: moderate; Wind speed and direction: gentle breeze SSW; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		FLM
20/10/2022	Vantage Point Survey	VP1	1:00 starting at 13:00	Visibility: good; Wind speed and direction: light breeze SW; Cloud cover and height: 0-33% 150-500m; Rain: none; Frost: none; Snow: none		MW
20/10/2022	Vantage Point Survey	VP1	1:00 starting at 14:00	Visibility: good; Wind speed and direction: light breeze SW; Cloud cover and height: 0-33% 150-500m; Rain: none; Frost: none; Snow: none		MW
20/10/2022	Vantage Point Survey	VP1	1:00 starting at 15:00	Visibility: good; Wind speed and direction: light breeze SW; Cloud cover and height: 0-33% 150-500m; Rain: none; Frost: none; Snow: none		MW
20/10/2022	Vantage Point Survey	VP1	1:00 starting at 16:30	Visibility: good; Wind speed and direction: light breeze SW; Cloud cover and height: 0-33% 150-500m; Rain: none; Frost: none; Snow: none		MW
20/10/2022	Vantage Point Survey	VP1	1:00 starting at 17:30	Visibility: moderate; Wind speed and direction: gentle breeze SW; Cloud cover and height: 33-66% 150-500m; Rain: none; Frost: none; Snow: none		MW
20/10/2022	Vantage Point Survey	VP1	1:00 starting at 18:30	Visibility: moderate; Wind speed and direction: gentle breeze SW; Cloud cover and height: 33-66% 150-500m; Rain: none; Frost: none; Snow: none		MW
21/10/2022	Vantage Point Survey	VP3	1:00 starting at 13:00	Visibility: good; Wind speed and direction: moderate breeze NW; Cloud cover and height: 33-66% 150-500m; Rain: none; Frost: none; Snow: none		MW
21/10/2022	Vantage Point Survey	VP3	1:00 starting at 14:00	Visibility: good; Wind speed and direction: moderate breeze NW; Cloud cover and height: 33-66% 150-500m; Rain: none; Frost: none; Snow: none		MW
21/10/2022	Vantage Point Survey	VP3	1:00 starting at 15:00	Visibility: moderate; Wind speed and direction: fresh breeze NW; Cloud cover and height: 33-66% 150-500m; Rain: drizzle; Frost: none; Snow: none		MW
21/10/2022	Vantage Point Survey	VP3	1:00 starting at 16:30	Visibility: moderate; Wind speed and direction: fresh breeze NW; Cloud cover and height: 66-100% 150-500m; Rain: drizzle; Frost: none; Snow: none		MW



Date	Survey	Location	Duration (h)	Weather Conditions	Comments	Surveyor
21/10/2022	Vantage Point Survey	VP3	1:00 starting at 17:30	Visibility: poor; Wind speed and direction: moderate breeze NW; Cloud cover and height: 66-100% 150-500m; Rain: light showers; Frost: none; Snow: none		MW
21/10/2022	Vantage Point Survey	VP3	1:00 starting at 18:30	Visibility: poor; Wind speed and direction: moderate breeze NW; Cloud cover and height: 66-100% 150-500m; Rain: heavy showers; Frost: none; Snow: none		MW
22/11/2022	Vantage Point Survey	VP3	1:00 starting at 07:07	Visibility: moderate; Wind speed and direction: light air W; Cloud cover and height: 66-100% <150m; Rain: drizzle; Frost: none; Snow: none		MW
22/11/2022	Vantage Point Survey	VP3	1:00 starting at 08:07	Visibility: moderate; Wind speed and direction: light air W; Cloud cover and height: 66-100% <150m; Rain: none; Frost: none; Snow: none		MW
22/11/2022	Vantage Point Survey	VP3	1:00 starting at 09:07	Visibility: moderate; Wind speed and direction: light air W; Cloud cover and height: 66-100% <150m; Rain: none; Frost: none; Snow: none		MW
22/11/2022	Vantage Point Survey	VP3	1:00 starting at 10:37	Visibility: poor; Wind speed and direction: light breeze W; Cloud cover and height: 66-100% <150m; Rain: none; Frost: none; Snow: none		MW
22/11/2022	Vantage Point Survey	VP3	1:00 starting at 11:37	Visibility: poor; Wind speed and direction: light breeze W; Cloud cover and height: 66-100% <150m; Rain: drizzle; Frost: none; Snow: none		MW
22/11/2022	Vantage Point Survey	VP3	1:00 starting at 12:37	Visibility: moderate; Wind speed and direction: light breeze W; Cloud cover and height: 66-100% <150m; Rain: none; Frost: none; Snow: none		MW
25/11/2022	Vantage Point Survey	VP1	1:00 starting at 07:05	Visibility: good; Wind speed and direction: moderate breeze NW; Cloud cover and height: 0-33% 150-500m; Rain: none; Frost: none; Snow: none		MW
25/11/2022	Vantage Point Survey	VP1	1:00 starting at 08:05	Visibility: good; Wind speed and direction: moderate breeze NW; Cloud cover and height: 0-33% 150-500m; Rain: none; Frost: none; Snow: none		MW
25/11/2022	Vantage Point Survey	VP1	1:00 starting at 09:05	Visibility: good; Wind speed and direction: gentle breeze NW; Cloud cover and height: 0-33% 150-500m; Rain: none; Frost: none; Snow: none		MW
25/11/2022	Vantage Point Survey	VP1	1:00 starting at 10:35	Visibility: good; Wind speed and direction: gentle breeze NW; Cloud cover and height: 33-66% 150-500m; Rain: drizzle; Frost: none; Snow: none		MW
25/11/2022	Vantage Point Survey	VP1	1:00 starting at 11:35	Visibility: good; Wind speed and direction: gentle breeze NW; Cloud cover and height: 33-66% 150-500m; Rain: none; Frost: none; Snow: none		MW
25/11/2022	Vantage Point Survey	VP1	1:00 starting at 12:35	Visibility: good; Wind speed and direction: gentle breeze NW; Cloud cover and height: 0-33% 150-500m; Rain: none; Frost: none; Snow: none		MW
10/02/2023	Vantage Point Survey	VP3	1:00 starting at 07:00	Visibility: poor; Wind speed and direction: light breeze N; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS



Date	Survey	Location	Duration (h)	Weather Conditions	Comments	Surveyor
10/02/2023	Vantage Point Survey	VP3	1:00 starting at 08:00	Visibility: moderate; Wind speed and direction: light breeze N; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS
10/02/2023	Vantage Point Survey	VP3	1:00 starting at 09:00	Visibility: good; Wind speed and direction: gentle breeze NW; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS
10/02/2023	Vantage Point Survey	VP3	1:00 starting at 10:30	Visibility: good; Wind speed and direction: gentle breeze NW; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS
10/02/2023	Vantage Point Survey	VP3	1:00 starting at 11:30	Visibility: good; Wind speed and direction: gentle breeze NW; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS
10/02/2023	Vantage Point Survey	VP3	1:00 starting at 12:30	Visibility: good; Wind speed and direction: gentle breeze NW; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS
13/02/2023	Vantage Point Survey	VP1	1:00 starting at 07:00	Visibility: poor; Wind speed and direction: gentle breeze SE; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS
13/02/2023	Vantage Point Survey	VP1	1:00 starting at 08:00	Visibility: moderate; Wind speed and direction: gentle breeze SE; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS
13/02/2023	Vantage Point Survey	VP1	1:00 starting at 09:00	Visibility: good; Wind speed and direction: gentle breeze SE; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS
13/02/2023	Vantage Point Survey	VP1	1:00 starting at 10:30	Visibility: moderate; Wind speed and direction: gentle breeze SE; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS
13/02/2023	Vantage Point Survey	VP1	1:00 starting at 11:30	Visibility: moderate; Wind speed and direction: gentle breeze SE; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS
13/02/2023	Vantage Point Survey	VP1	1:00 starting at 12:30	Visibility: moderate; Wind speed and direction: gentle breeze SE; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS
15/02/2023	Vantage Point Survey	VP1	1:00 starting at 11:00	Visibility: good; Wind speed and direction: moderate breeze SSW; Cloud cover and height: 33-66% 150-500m; Rain: none; Frost: none; Snow: none		FLM
15/02/2023	Vantage Point Survey	VP1	1:00 starting at 12:00	Visibility: good; Wind speed and direction: moderate breeze SSW; Cloud cover and height: 33-66% 150-500m; Rain: none; Frost: none; Snow: none		FLM
15/02/2023	Vantage Point Survey	VP1	1:00 starting at 13:00	Visibility: good; Wind speed and direction: gentle breeze SSW; Cloud cover and height: 33-66% 150-500m; Rain: none; Frost: none; Snow: none		FLM
24/02/2023	Vantage Point Survey	VP3	1:00 starting at 12:30	Visibility: moderate; Wind speed and direction: gentle breeze NW; Cloud cover and height: 66-100% 150-500m; Rain: drizzle; Frost: none; Snow: none		MS

Date	Survey	Location	Duration (h)	Weather Conditions	Comments	Surveyor
24/02/2023	Vantage Point Survey	VP3	1:00 starting at 13:30	Visibility: moderate; Wind speed and direction: moderate breeze NW; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		MS
24/02/2023	Vantage Point Survey	VP3	1:00 starting at 14:30	Visibility: moderate; Wind speed and direction: gentle breeze NW; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		MS
24/02/2023	Vantage Point Survey	VP3	1:00 starting at 16:00	Visibility: moderate; Wind speed and direction: gentle breeze N; Cloud cover and height: 66-100% 150-500m; Rain: drizzle; Frost: none; Snow: none		MS
24/02/2023	Vantage Point Survey	VP3	1:00 starting at 17:00	Visibility: poor; Wind speed and direction: gentle breeze NW; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		MS
24/02/2023	Vantage Point Survey	VP3	1:00 starting at 18:00	Visibility: limited; Wind speed and direction: gentle breeze N; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		MS
27/02/2023	Vantage Point Survey	VP1	1:00 starting at 12:50	Visibility: good; Wind speed and direction: gentle breeze W; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS
27/02/2023	Vantage Point Survey	VP1	1:00 starting at 13:50	Visibility: good; Wind speed and direction: gentle breeze W; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS
27/02/2023	Vantage Point Survey	VP1	1:00 starting at 14:50	Visibility: good; Wind speed and direction: moderate breeze SW; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS
27/02/2023	Vantage Point Survey	VP1	1:00 starting at 16:20	Visibility: good; Wind speed and direction: gentle breeze SW; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS
27/02/2023	Vantage Point Survey	VP1	1:00 starting at 17:20	Visibility: moderate; Wind speed and direction: light breeze W; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none		MS
27/02/2023	Vantage Point Survey	VP1	1:00 starting at 18:20	Visibility: poor; Wind speed and direction: light breeze W; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS
18/03/2023	Vantage Point Survey	VP3	1:00 starting at 13:10	Visibility: good; Wind speed and direction: gentle breeze ESE; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none		MS
18/03/2023	Vantage Point Survey	VP3	1:00 starting at 14:10	Visibility: good; Wind speed and direction: gentle breeze ESE; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none		MS
18/03/2023	Vantage Point Survey	VP3	1:00 starting at 15:10	Visibility: good; Wind speed and direction: light breeze SE; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none		MS
18/03/2023	Vantage Point Survey	VP3	1:00 starting at 16:40	Visibility: good; Wind speed and direction: light breeze SE; Cloud cover and height: 0-33% >500m; Rain: none; Frost: none; Snow: none		MS



Date	Survey	Location	Duration (h)	Weather Conditions	Comments	Surveyor
18/03/2023	Vantage Point Survey	VP3	1:00 starting at 17:40	Visibility: moderate; Wind speed and direction: light breeze ESE; Cloud cover and height: 0-33% >500m; Rain: none; Frost: none; Snow: none		MS
18/03/2023	Vantage Point Survey	VP3	1:00 starting at 18:40	Visibility: poor; Wind speed and direction: light breeze E; Cloud cover and height: 0-33% >500m; Rain: none; Frost: none; Snow: none		MS
28/03/2023	Vantage Point Survey	VP1	1:00 starting at 15:00	Visibility: good; Wind speed and direction: moderate breeze S; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS
28/03/2023	Vantage Point Survey	VP1	1:00 starting at 16:00	Visibility: good; Wind speed and direction: moderate breeze S; Cloud cover and height: 66-100% 150-500m; Rain: drizzle; Frost: none; Snow: none		MS
28/03/2023	Vantage Point Survey	VP1	1:00 starting at 17:00	Visibility: good; Wind speed and direction: gentle breeze S; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		MS
28/03/2023	Vantage Point Survey	VP1	1:00 starting at 18:30	Visibility: moderate; Wind speed and direction: gentle breeze S; Cloud cover and height: 66-100% >500m; Rain: drizzle; Frost: none; Snow: none		MS
28/03/2023	Vantage Point Survey	VP1	1:00 starting at 19:30	Visibility: moderate; Wind speed and direction: moderate breeze S; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS
28/03/2023	Vantage Point Survey	VP1	1:00 starting at 20:30	Visibility: limited; Wind speed and direction: moderate breeze S; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS
04/04/2023	Vantage Point Survey	VP3	1:00 starting at 05:55	Visibility: limited; Wind speed and direction: moderate breeze SE; Cloud cover and height: 66-100% 150-500m; Rain: drizzle; Frost: none; Snow: none		MS
04/04/2023	Vantage Point Survey	VP3	1:00 starting at 06:55	Visibility: moderate; Wind speed and direction: moderate breeze SE; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS
04/04/2023	Vantage Point Survey	VP3	1:00 starting at 07:55	Visibility: moderate; Wind speed and direction: moderate breeze SE; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS
04/04/2023	Vantage Point Survey	VP3	1:00 starting at 09:30	Visibility: good; Wind speed and direction: gentle breeze SE; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS
04/04/2023	Vantage Point Survey	VP3	1:00 starting at 10:30	Visibility: good; Wind speed and direction: gentle breeze SE; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none		MS
04/04/2023	Vantage Point Survey	VP3	1:00 starting at 11:30	Visibility: good; Wind speed and direction: moderate breeze SE; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none		MS
16/04/2023	Vantage Point Survey	VP1	1:00 starting at 05:36	Visibility: limited; Wind speed and direction: light breeze S; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		MS



Date	Survey	Location	Duration (h)	Weather Conditions	Comments	Surveyor
16/04/2023	Vantage Point Survey	VP1	1:00 starting at 06:36	Visibility: moderate; Wind speed and direction: light air S; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		MS
16/04/2023	Vantage Point Survey	VP1	1:00 starting at 07:36	Visibility: moderate; Wind speed and direction: light air S; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		MS
16/04/2023	Vantage Point Survey	VP1	1:00 starting at 09:06	Visibility: good; Wind speed and direction: light breeze S; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		MS
16/04/2023	Vantage Point Survey	VP1	0:30 starting at 10:36	Visibility: good; Wind speed and direction: light air S; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		MS
16/04/2023	Vantage Point Survey	VP1	1:00 starting at 11:06	Visibility: good; Wind speed and direction: light air S; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		MS
16/05/2023	Vantage Point Survey	VP1	1:00 starting at 16:00	Visibility: good; Wind speed and direction: gentle breeze NW; Cloud cover and height: 0-33% 150-500m; Rain: none; Frost: none; Snow: none		FLM
16/05/2023	Vantage Point Survey	VP1	1:00 starting at 17:00	Visibility: good; Wind speed and direction: light breeze NW; Cloud cover and height: 0-33% 150-500m; Rain: none; Frost: none; Snow: none		FLM
16/05/2023	Vantage Point Survey	VP1	1:00 starting at 18:00	Visibility: good; Wind speed and direction: light breeze NW; Cloud cover and height: 0-33% 150-500m; Rain: none; Frost: none; Snow: none		FLM
16/05/2023	Vantage Point Survey	VP1	1:00 starting at 19:30	Visibility: good; Wind speed and direction: light breeze NNW; Cloud cover and height: 0-33% 150-500m; Rain: none; Frost: none; Snow: none		FLM
16/05/2023	Vantage Point Survey	VP1	1:00 starting at 20:30	Visibility: moderate; Wind speed and direction: light breeze NNW; Cloud cover and height: 0-33% 150-500m; Rain: none; Frost: none; Snow: none		FLM
16/05/2023	Vantage Point Survey	VP1	1:00 starting at 21:30	Visibility: poor; Wind speed and direction: light breeze NNW; Cloud cover and height: 0-33% 150-500m; Rain: none; Frost: none; Snow: none		FLM
17/05/2023	Vantage Point Survey	VP3	1:00 starting at 15:30	Visibility: good; Wind speed and direction: gentle breeze W; Cloud cover and height: 33-66% 150-500m; Rain: none; Frost: none; Snow: none		FLM
17/05/2023	Vantage Point Survey	VP3	1:00 starting at 16:30	Visibility: good; Wind speed and direction: gentle breeze W; Cloud cover and height: 33-66% 150-500m; Rain: none; Frost: none; Snow: none		FLM
17/05/2023	Vantage Point Survey	VP3	1:00 starting at 17:30	Visibility: good; Wind speed and direction: gentle breeze W; Cloud cover and height: 0-33% 150-500m; Rain: none; Frost: none; Snow: none		FLM
24/05/2023	Vantage Point Survey	vp3	1:00 starting at 19:00	Visibility: good; Wind speed and direction: gentle breeze NNW; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		FLM



Date	Survey	Location	Duration (h)	Weather Conditions	Comments	Surveyor
24/05/2023	Vantage Point Survey	vp3	1:00 starting at 20:00	Visibility: good; Wind speed and direction: gentle breeze NNW; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		FLM
24/05/2023	Vantage Point Survey	vp3	1:00 starting at 21:00	Visibility: moderate; Wind speed and direction: gentle breeze NNW; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		FLM
12/06/2023	Vantage Point Survey	VP3	1:00 starting at 07:30	Visibility: moderate; Wind speed and direction: gentle breeze E; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		MS
12/06/2023	Vantage Point Survey	VP3	1:00 starting at 08:30	Visibility: good; Wind speed and direction: moderate breeze SE; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		MS
12/06/2023	Vantage Point Survey	VP3	1:00 starting at 09:30	Visibility: good; Wind speed and direction: gentle breeze E; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS
12/06/2023	Vantage Point Survey	VP3	1:00 starting at 11:00	Visibility: good; Wind speed and direction: gentle breeze NE; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS
12/06/2023	Vantage Point Survey	VP3	1:00 starting at 12:00	Visibility: good; Wind speed and direction: moderate breeze E; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS
12/06/2023	Vantage Point Survey	VP3	1:00 starting at 13:00	Visibility: good; Wind speed and direction: moderate breeze E; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS
13/06/2023	Vantage Point Survey	VP1	1:00 starting at 07:00	Visibility: moderate; Wind speed and direction: light air E; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		MS
13/06/2023	Vantage Point Survey	VP1	1:00 starting at 08:00	Visibility: moderate; Wind speed and direction: light air E; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		MS
13/06/2023	Vantage Point Survey	VP1	1:00 starting at 09:00	Visibility: moderate; Wind speed and direction: calm E; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		MS
13/06/2023	Vantage Point Survey	VP1	1:00 starting at 10:30	Visibility: moderate; Wind speed and direction: light air E; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS
13/06/2023	Vantage Point Survey	VP1	1:00 starting at 11:30	Visibility: moderate; Wind speed and direction: light air E; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS
13/06/2023	Vantage Point Survey	VP1	0:30 starting at 12:30	Visibility: moderate; Wind speed and direction: light breeze E; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS
10/07/2023	Vantage Point Survey	VP1	1:00 starting at 08:00	Visibility: good; Wind speed and direction: gentle breeze WNW; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS
10/07/2023	Vantage Point Survey	VP1	1:00 starting at 09:00	Visibility: good; Wind speed and direction: gentle breeze WNW; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS



Date	Survey	Location	Duration (h)	Weather Conditions	Comments	Surveyor
10/07/2023	Vantage Point Survey	VP1	1:00 starting at 10:00	Visibility: good; Wind speed and direction: gentle breeze WNW; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS
10/07/2023	Vantage Point Survey	VP1	1:00 starting at 11:30	Visibility: good; Wind speed and direction: light breeze WNW; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS
10/07/2023	Vantage Point Survey	VP1	1:00 starting at 12:30	Visibility: good; Wind speed and direction: gentle breeze WNW; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS
10/07/2023	Vantage Point Survey	VP1	1:00 starting at 13:30	Visibility: good; Wind speed and direction: moderate breeze WNW; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS
19/07/2023	Vantage Point Survey	VP3	1:00 starting at 07:30	Visibility: good; Wind speed and direction: light breeze WNW; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none		MS
19/07/2023	Vantage Point Survey	VP3	1:00 starting at 08:30	Visibility: good; Wind speed and direction: fresh breeze WNW; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS
19/07/2023	Vantage Point Survey	VP3	1:00 starting at 09:30	Visibility: good; Wind speed and direction: moderate breeze NW; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS
19/07/2023	Vantage Point Survey	VP3	1:00 starting at 11:00	Visibility: good; Wind speed and direction: moderate breeze NW; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		MS
19/07/2023	Vantage Point Survey	VP3	1:00 starting at 12:00	Visibility: good; Wind speed and direction: fresh breeze NW; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		MS
19/07/2023	Vantage Point Survey	VP3	1:00 starting at 13:00	Visibility: good; Wind speed and direction: fresh breeze NW; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		MS
02/08/2023	Vantage Point Survey	vp1	1:00 starting at 09:00	Visibility: good; Wind speed and direction: gentle breeze N; Cloud cover and height: 66-100% 150-500m; Rain: persistent; Frost: none; Snow: none		FLM
02/08/2023	Vantage Point Survey	vp1	1:00 starting at 10:00	Visibility: good; Wind speed and direction: gentle breeze N; Cloud cover and height: 66-100% 150-500m; Rain: light showers; Frost: none; Snow: none		FLM
02/08/2023	Vantage Point Survey	vp1	1:00 starting at 11:00	Visibility: good; Wind speed and direction: moderate breeze N; Cloud cover and height: 66-100% 150-500m; Rain: drizzle; Frost: none; Snow: none		FLM
02/08/2023	Vantage Point Survey	vp1	1:00 starting at 12:30	Visibility: good; Wind speed and direction: moderate breeze N; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		FLM



Date	Survey	Location	Duration (h)	Weather Conditions	Comments	Surveyor
02/08/2023	Vantage Point Survey	vp1	1:00 starting at 13:30	Visibility: good; Wind speed and direction: moderate breeze N; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		FLM
02/08/2023	Vantage Point Survey	vp1	1:00 starting at 14:30	Visibility: good; Wind speed and direction: moderate breeze N; Cloud cover and height: 66-100% 150-500m; Rain: light showers; Frost: none; Snow: none		FLM
03/08/2023	Vantage Point Survey	vp3	1:00 starting at 09:30	Visibility: good; Wind speed and direction: gentle breeze NW; Cloud cover and height: 66-100% 150-500m; Rain: light showers; Frost: none; Snow: none		FLM
03/08/2023	Vantage Point Survey	vp3	1:00 starting at 10:30	Visibility: good; Wind speed and direction: gentle breeze NW; Cloud cover and height: 66-100% 150-500m; Rain: persistent; Frost: none; Snow: none		FLM
03/08/2023	Vantage Point Survey	vp3	1:00 starting at 11:30	Visibility: good; Wind speed and direction: moderate breeze NW; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		FLM
03/08/2023	Vantage Point Survey	vp3	1:00 starting at 13:00	Visibility: good; Wind speed and direction: moderate breeze NW; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		FLM
03/08/2023	Vantage Point Survey	vp3	1:00 starting at 14:00	Visibility: good; Wind speed and direction: moderate breeze NW; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		FLM
03/08/2023	Vantage Point Survey	vp3	1:00 starting at 15:00	Visibility: good; Wind speed and direction: moderate breeze NW; Cloud cover and height: 66-100% 150-500m; Rain: light showers; Frost: none; Snow: none		FLM
18/09/2023	Vantage Point Survey	vp1	1:00 starting at 06:00	Visibility: poor; Wind speed and direction: gentle breeze W; Cloud cover and height: 66-100% 150-500m; Rain: light showers; Frost: none; Snow: none		FLM
18/09/2023	Vantage Point Survey	vp1	1:00 starting at 07:00	Visibility: moderate; Wind speed and direction: gentle breeze W; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none		FLM
18/09/2023	Vantage Point Survey	vp1	1:00 starting at 08:00	Visibility: good; Wind speed and direction: gentle breeze W; Cloud cover and height: 33-66% 150-500m; Rain: none; Frost: none; Snow: none		FLM
18/09/2023	Vantage Point Survey	vp1	1:00 starting at 09:30	Visibility: good; Wind speed and direction: gentle breeze W; Cloud cover and height: 66-100% 150-500m; Rain: light showers; Frost: none; Snow: none		FLM
18/09/2023	Vantage Point Survey	vp1	1:00 starting at 10:30	Visibility: good; Wind speed and direction: gentle breeze W; Cloud cover and height: 0-33% 150-500m; Rain: none; Frost: none; Snow: none		FLM



Date	Survey	Location	Duration (h)	Weather Conditions	Comments	Surveyor
18/09/2023	Vantage Point Survey	vp1	1:00 starting at 11:30	Visibility: good; Wind speed and direction: moderate breeze W; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		FLM
19/09/2023	Vantage Point Survey	vp3	1:00 starting at 06:00	Visibility: poor; Wind speed and direction: moderate breeze SW; Cloud cover and height: 66-100% 150-500m; Rain: heavy showers; Frost: none; Snow: none		FLM
19/09/2023	Vantage Point Survey	vp3	1:00 starting at 07:00	Visibility: moderate; Wind speed and direction: moderate breeze SW; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		FLM
19/09/2023	Vantage Point Survey	vp3	1:00 starting at 08:00	Visibility: moderate; Wind speed and direction: moderate breeze SW; Cloud cover and height: 66-100% 150-500m; Rain: drizzle; Frost: none; Snow: none		FLM
19/09/2023	Vantage Point Survey	vp3	1:00 starting at 09:30	Visibility: moderate; Wind speed and direction: gentle breeze SW; Cloud cover and height: 66-100% 150-500m; Rain: drizzle; Frost: none; Snow: none		FLM
19/09/2023	Vantage Point Survey	vp3	1:00 starting at 10:30	Visibility: moderate; Wind speed and direction: moderate breeze SW; Cloud cover and height: 66-100% 150-500m; Rain: drizzle; Frost: none; Snow: none		FLM
19/09/2023	Vantage Point Survey	vp3	1:00 starting at 11:30	Visibility: moderate; Wind speed and direction: moderate breeze SW; Cloud cover and height: 66-100% 150-500m; Rain: drizzle; Frost: none; Snow: none		FLM
06/10/2023	Vantage Point Survey	VP1	6:00 starting at 13:50	Visibility: moderate; Wind speed and direction: light air SW; Cloud cover and height: 66-100% 150-500m; Rain: drizzle; Frost: none; Snow: none	Grey and dark throughout, light drizzle for long period and moderate visibility. Close and mild for the most part with very little breeze, 11 - 16°C. Dusk survey. Sunset - 18:53	NM
11/10/2023	Vantage Point Survey	VP3	6:00 starting at 13:40	Visibility: good; Wind speed and direction: gentle breeze SE; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none		NM
20/11/2023	Vantage Point Survey	VP3	6:00 starting at 07:05	Visibility: good; Wind speed and direction: gentle breeze SW; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none	Largely fair and clear for long periods, occasionally clouding over. Dawn survey. Sunrise - 08:06	NM
22/11/2023	Vantage Point Survey	VP1	6:00 starting at 07:10	Visibility: moderate; Wind speed and direction: gentle breeze SSE; Cloud cover and height: 33-66% >500m; Rain: drizzle; Frost: none; Snow: none	Fair and clear for long period, with occasional light drizzle. Widespread bright	NM



Date	Survey	Location	Duration (h)	Weather Conditions	Comments	Surveyor
					spells along with periods of hazy cloud and light showers, cold with gentle SSE breeze, 4 -8°C. Dawn survey. Sunrise - 08:10	
12/12/2023	Vantage Point Survey	VP1	6:00 starting at 11:00	Visibility: good; Wind speed and direction: moderate breeze SW; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none	Dusk survey. Sunset - 16:07	NM
15/12/2023	Vantage Point Survey	VP3	6:00 starting at 11:00	Visibility: moderate; Wind speed and direction: fresh breeze SW; Cloud cover and height: 66-100% <150m; Rain: light showers; Frost: none; Snow: none	Dusk survey. Sunset - 16:07	NM
11/01/2024	Vantage Point Survey	VP3	3:00 starting at 07:43	Visibility: good; Wind speed and direction: light breeze NE; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none	Dawn survey. Sunrise - 08:43	NM
11/01/2024	Vantage Point Survey	VP3	3:00 starting at 10:45	Visibility: good; Wind speed and direction: gentle breeze NE; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		NM
18/01/2024	Vantage Point Survey	VP1	3:00 starting at 07:37	Visibility: good; Wind speed and direction: light air W; Cloud cover and height: 0-33% >500m; Rain: none; Frost: heavy; Snow: none	Dawn survey. Sunrise - 08:37	NM
18/01/2024	Vantage Point Survey	VP1	3:00 starting at 10:55	Visibility: good; Wind speed and direction: light breeze W; Cloud cover and height: 0-33% >500m; Rain: none; Frost: light; Snow: none		NM
06/02/2024	Vantage Point Survey	VP1	3:00 starting at 12:10	Visibility: good; Wind speed and direction: fresh breeze SW; Cloud cover and height: 0-33% >500m; Rain: none; Frost: none; Snow: none	Largely fair and clear	NM
06/02/2024	Vantage Point Survey	VP1	3:00 starting at 15:20	Visibility: good; Wind speed and direction: moderate breeze SW; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none	Clouding over slightly as afternoon progressed, wind dropping slightly. Dusk survey. Sunset - 17:19	NM
13/02/2024	Vantage Point Survey	VP3	3:00 starting at 12:35	Visibility: good; Wind speed and direction: gentle breeze SE; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none		NM
13/02/2024	Vantage Point Survey	VP3	3:00 starting at 15:35	Visibility: moderate; Wind speed and direction: gentle breeze SE; Cloud cover and height: 66-100% >500m; Rain: light showers; Frost: none; Snow: none	Conditions dropping as survey progressed - becoming wetter in the evening. Dusk survey. Sunset - 17:34	NM
14/03/2024	Vantage Point Survey	VP1	3:00 starting at 05:50	Visibility: moderate; Wind speed and direction: gentle breeze S; Cloud cover and height: 66-100% 150-500m; Rain: heavy showers; Frost: none; Snow: none	Persistent rain throughout the morning. Mild, 8 - 13°C. Dawn survey. Sunrise - 06:46	NM



Date	Survey	Location	Duration (h)	Weather Conditions	Comments	Surveyor
14/03/2024	Vantage Point Survey	VP1	3:00 starting at 09:00	Visibility: moderate; Wind speed and direction: gentle breeze S; Cloud cover and height: 66-100% 150-500m; Rain: light showers; Frost: none; Snow: none	Rain easing slightly but remaining widespread.	NM
26/03/2024	Vantage Point Survey	VP3	3:00 starting at 05:15	Visibility: good; Wind speed and direction: gentle breeze SW; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none	Largely fair and bright, cool breeze bringing with it light drizzle. Dawn survey. Sunrise - 06:16	NM
26/03/2024	Vantage Point Survey	VP3	3:00 starting at 08:30	Visibility: good; Wind speed and direction: moderate breeze SW; Cloud cover and height: 33-66% >500m; Rain: light showers; Frost: none; Snow: none	Sunny spells and scattered showers. 5 - 12°C	NM
09/04/2024	Vantage Point Survey	VP1	1:00 starting at 14:50	Visibility: good; Wind speed and direction: moderate breeze WNW; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none		MS
09/04/2024	Vantage Point Survey	VP1	1:00 starting at 15:50	Visibility: good; Wind speed and direction: moderate breeze WNW; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none		MS
09/04/2024	Vantage Point Survey	VP1	1:00 starting at 16:50	Visibility: good; Wind speed and direction: gentle breeze W; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none		MS
09/04/2024	Vantage Point Survey	VP1	1:00 starting at 18:20	Visibility: good; Wind speed and direction: gentle breeze SW; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none		MS
09/04/2024	Vantage Point Survey	VP1	1:00 starting at 19:20	Visibility: poor; Wind speed and direction: light breeze WSW; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none		MS
09/04/2024	Vantage Point Survey	VP1	0:59 starting at 20:20	Visibility: limited; Wind speed and direction: light breeze WSW; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none		MS
12/04/2024	Vantage Point Survey	VP3	1:00 starting at 14:50	Visibility: good; Wind speed and direction: moderate breeze SW; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		MS
12/04/2024	Vantage Point Survey	VP3	1:00 starting at 15:50	Visibility: good; Wind speed and direction: moderate breeze SW; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		MS
12/04/2024	Vantage Point Survey	VP3	1:00 starting at 16:50	Visibility: good; Wind speed and direction: gentle breeze SW; Cloud cover and height: 66-100% 150-500m; Rain: drizzle; Frost: none; Snow: none		MS
12/04/2024	Vantage Point Survey	VP3	1:00 starting at 18:20	Visibility: moderate; Wind speed and direction: gentle breeze SW; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		MS



Date	Survey	Location	Duration (h)	Weather Conditions	Comments	Surveyor
12/04/2024	Vantage Point Survey	VP3	1:00 starting at 19:20	Visibility: moderate; Wind speed and direction: gentle breeze SW; Cloud cover and height: 66-100% 150-500m; Rain: drizzle; Frost: none; Snow: none		MS
12/04/2024	Vantage Point Survey	VP3	1:00 starting at 20:20	Visibility: limited; Wind speed and direction: gentle breeze SW; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		MS
20/05/2024	Vantage Point Survey	VP3	3:00 starting at 04:30	Visibility: moderate; Wind speed and direction: light air SW; Cloud cover and height: 33-66% 150-500m; Rain: drizzle; Frost: none; Snow: none	Hazy and misty early in the morning. Dawn survey. Sunrise - 05:18	NM
20/05/2024	Vantage Point Survey	VP3	3:00 starting at 08:00	Visibility: moderate; Wind speed and direction: light air SW; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none	Mist burning off and visibility improving. Largely fair. 8 - 18°C	NM
24/05/2024	Vantage Point Survey	vp1	1:00 starting at 04:15	Visibility: none; Wind speed and direction: light breeze W; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		FLM
24/05/2024	Vantage Point Survey	vp1	1:00 starting at 05:15	Visibility: moderate; Wind speed and direction: light breeze W; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		FLM
24/05/2024	Vantage Point Survey	vp1	1:00 starting at 06:15	Visibility: good; Wind speed and direction: light breeze W; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		FLM
24/05/2024	Vantage Point Survey	vp1	1:00 starting at 07:45	Visibility: good; Wind speed and direction: light breeze W; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		FLM
24/05/2024	Vantage Point Survey	vp1	1:00 starting at 08:45	Visibility: good; Wind speed and direction: light breeze W; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		FLM
24/05/2024	Vantage Point Survey	vp1	1:00 starting at 09:45	Visibility: good; Wind speed and direction: light breeze W; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		FLM
18/06/2024	Vantage Point Survey	vp1	3:00 starting at 11:10	Visibility: good; Wind speed and direction: moderate breeze NNW; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		EOB
18/06/2024	Vantage Point Survey	vp1	3:00 starting at 14:40	Visibility: good; Wind speed and direction: moderate breeze NNW; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		EOB
19/06/2024	Vantage Point Survey	vp3	3:00 starting at 11:30	Visibility: good; Wind speed and direction: gentle breeze WNW; Cloud cover and height: 33-66% 150-500m; Rain: none; Frost: none; Snow: none		EOB
19/06/2024	Vantage Point Survey	vp3	3:00 starting at 15:00	Visibility: good; Wind speed and direction: gentle breeze W; Cloud cover and height: 33-66% 150-500m; Rain: none; Frost: none; Snow: none		EOB



Date	Survey	Location	Duration (h)	Weather Conditions	Comments	Surveyor
12/07/2024	Vantage Point Survey	VP1	3:00 starting at 13:30	Visibility: good; Wind speed and direction: gentle breeze SW; Cloud cover and height: 33-66% >500m; Rain: drizzle; Frost: none; Snow: none	Largely brights with prolonged periods of sun. Short periods of light drizzle coming and going throughout	NM
12/07/2024	Vantage Point Survey	VP1	3:00 starting at 17:00	Visibility: good; Wind speed and direction: moderate breeze SSW; Cloud cover and height: 33-66% >500m; Rain: drizzle; Frost: none; Snow: none		NM
23/07/2024	Vantage Point Survey	VP3	3:00 starting at 14:30	Visibility: good; Wind speed and direction: light air SSE; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none	Largely fair and bright, but cloudy. Warm and humid, 15 - 21°C. Brief sunny periods	NM
23/07/2024	Vantage Point Survey	VP3	3:00 starting at 18:00	Visibility: good; Wind speed and direction: light breeze SE; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none	Somewhat brighter in evening	NM
12/08/2024	Vantage Point Survey	VP1	3:00 starting at 14:00	Visibility: good; Wind speed and direction: light breeze WSW; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none	Fair and clear throughout. Mild and humid, 15 - 21°C	NM
12/08/2024	Vantage Point Survey	VP1	3:00 starting at 17:30	Visibility: good; Wind speed and direction: light breeze WSW; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none		NM
20/08/2024	Vantage Point Survey	VP3	3:00 starting at 10:00	Visibility: good; Wind speed and direction: fresh breeze SW; Cloud cover and height: 33-66% >500m; Rain: drizzle; Frost: none; Snow: none	Sunny and largely fair early on. Scattered drizzly showers blowing, becoming steadily wetter. Cool in breeze, 12 - 15°C	NM
20/08/2024	Vantage Point Survey	VP3	3:00 starting at 13:20	Visibility: good; Wind speed and direction: fresh breeze SW; Cloud cover and height: 33-66% >500m; Rain: heavy showers; Frost: none; Snow: none	Sunny spells and scattered heavy showers. Squalls, blustery	NM
11/09/2024	Vantage Point Survey	VP1	3:00 starting at 05:55	Visibility: good; Wind speed and direction: fresh breeze NW; Cloud cover and height: 33-66% >500m; Rain: light showers; Frost: none; Snow: none	Cool NW breeze, 9 - 14°C. Dawn survey. Sunrise - 06:56	NM
11/09/2024	Vantage Point Survey	VP1	3:00 starting at 09:20	Visibility: good; Wind speed and direction: fresh breeze WNW; Cloud cover and height: 33-66% >500m; Rain: light showers; Frost: none; Snow: none	Sunny spells and scattered blustery showers	NM
12/09/2024	Vantage Point Survey	VP3	3:00 starting at 05:58	Visibility: good; Wind speed and direction: moderate breeze NW; Cloud cover and height: 33-66% >500m; Rain: drizzle; Frost: none; Snow: none	Cool and breezy, light drizzle in early hours. Dawn survey. Sunrise - 06:58	NM



Date	Survey	Location	Duration (h)	Weather Conditions	Comments	Surveyor
12/09/2024	Vantage Point Survey	VP3	3:00 starting at 09:30	Visibility: moderate; Wind speed and direction: moderate breeze NW; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none	Sunny and cloudy, 9 - 15°C throughout	NM
01/10/2024	Vantage Point Survey	VP1	3:00 starting at 12:40	Visibility: good; Wind speed and direction: light breeze NNE; Cloud cover and height: 0-33% 150-500m; Rain: none; Frost: none; Snow: none		FOD
01/10/2024	Vantage Point Survey	VP1	3:00 starting at 16:10	Visibility: good; Wind speed and direction: light breeze N; Cloud cover and height: 0-33% 150-500m; Rain: none; Frost: none; Snow: none		FOD
02/10/2024	Vantage Point Survey	VP3	3:00 starting at 12:40	Visibility: good; Wind speed and direction: light breeze NE; Cloud cover and height: 0-33% 150-500m; Rain: none; Frost: none; Snow: none		FOD
02/10/2024	Vantage Point Survey	VP3	3:00 starting at 16:10	Visibility: good; Wind speed and direction: light breeze NE; Cloud cover and height: 0-33% 150-500m; Rain: none; Frost: none; Snow: none		FOD
18/11/2024	Vantage Point Survey	VP3	1:00 starting at 11:00	Visibility: good; Wind speed and direction: light breeze E; Cloud cover and height: 66-100% >500m; Rain: light showers; Frost: none; Snow: none		DM
18/11/2024	Vantage Point Survey	VP3	2:00 starting at 12:00	Visibility: good; Wind speed and direction: gentle breeze E; Cloud cover and height: 66-100% >500m; Rain: light showers; Frost: none; Snow: none		DM
18/11/2024	Vantage Point Survey	VP3	1:00 starting at 14:30	Visibility: moderate; Wind speed and direction: moderate breeze E; Cloud cover and height: 66-100% >500m; Rain: drizzle; Frost: none; Snow: none		DM
18/11/2024	Vantage Point Survey	VP3	2:00 starting at 15:30	Visibility: moderate; Wind speed and direction: moderate breeze NE; Cloud cover and height: 66-100% >500m; Rain: light showers; Frost: none; Snow: none		DM
20/11/2024	Vantage Point Survey	VP1	1:00 starting at 11:00	Visibility: good; Wind speed and direction: light breeze W; Cloud cover and height: 0-33% >500m; Rain: none; Frost: light; Snow: none		DM
20/11/2024	Vantage Point Survey	VP1	1:00 starting at 12:00	Visibility: good; Wind speed and direction: light breeze W; Cloud cover and height: 0-33% >500m; Rain: none; Frost: none; Snow: none		DM
20/11/2024	Vantage Point Survey	VP1	1:00 starting at 13:00	Visibility: good; Wind speed and direction: light breeze NW; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		DM
20/11/2024	Vantage Point Survey	VP1	1:00 starting at 14:30	Visibility: good; Wind speed and direction: light breeze NW; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		DM
20/11/2024	Vantage Point Survey	VP1	2:00 starting at 15:30	Visibility: good; Wind speed and direction: light breeze W; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		DM
26/11/2024	Vantage Point Survey	VP3	3:00 starting at 07:00	Visibility: good; Wind speed and direction: light breeze SW; Cloud cover and height: 0-33% >500m; Rain: none; Frost: light; Snow: none		DM



Date	Survey	Location	Duration (h)	Weather Conditions	Comments	Surveyor
26/11/2024	Vantage Point Survey	VP3	3:00 starting at 10:30	Visibility: good; Wind speed and direction: light breeze SW; Cloud cover and height: 0-33% >500m; Rain: none; Frost: none; Snow: none		DM
27/11/2024	Vantage Point Survey	VP1	2:00 starting at 07:15	Visibility: moderate; Wind speed and direction: light breeze N; Cloud cover and height: 0-33% >500m; Rain: none; Frost: light; Snow: none		DM
27/11/2024	Vantage Point Survey	VP1	1:00 starting at 09:15	Visibility: moderate; Wind speed and direction: light breeze NW; Cloud cover and height: 0-33% >500m; Rain: none; Frost: light; Snow: none		DM
27/11/2024	Vantage Point Survey	VP1	3:00 starting at 10:45	Visibility: moderate; Wind speed and direction: light breeze NW; Cloud cover and height: 0-33% >500m; Rain: none; Frost: light; Snow: none		DM
15/01/2025	Vantage Point Survey	VP1	2:00 starting at 07:30	Visibility: good; Wind speed and direction: gentle breeze S; Cloud cover and height: 0-33% >500m; Rain: none; Frost: none; Snow: none		DM
15/01/2025	Vantage Point Survey	VP1	1:00 starting at 09:30	Visibility: good; Wind speed and direction: moderate breeze S; Cloud cover and height: 0-33% >500m; Rain: none; Frost: none; Snow: none		DM
15/01/2025	Vantage Point Survey	VP1	2:00 starting at 11:00	Visibility: good; Wind speed and direction: moderate breeze S; Cloud cover and height: 0-33% >500m; Rain: none; Frost: none; Snow: none		DM
15/01/2025	Vantage Point Survey	VP1	1:00 starting at 13:00	Visibility: good; Wind speed and direction: gentle breeze S; Cloud cover and height: 0-33% >500m; Rain: none; Frost: none; Snow: none		DM
16/01/2025	Vantage Point Survey	VP3	1:00 starting at 07:30	Visibility: good; Wind speed and direction: gentle breeze S; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none		DM
16/01/2025	Vantage Point Survey	VP3	2:00 starting at 08:30	Visibility: good; Wind speed and direction: gentle breeze S; Cloud cover and height: 0-33% >500m; Rain: none; Frost: none; Snow: none		DM
16/01/2025	Vantage Point Survey	VP3	3:00 starting at 11:00	Visibility: good; Wind speed and direction: moderate breeze S; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none		DM
11/02/2025	Vantage Point Survey	VP1	3:00 starting at 12:00	Visibility: moderate; Wind speed and direction: moderate breeze E; Cloud cover and height: 66-100% 150-500m; Rain: drizzle; Frost: none; Snow: none		CC
11/02/2025	Vantage Point Survey	VP1	3:00 starting at 15:30	Visibility: moderate; Wind speed and direction: moderate breeze E; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none	Light mist	CC
12/02/2025	Vantage Point Survey	VP3	3:00 starting at 12:05	Visibility: moderate; Wind speed and direction: moderate breeze SE; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		CC
12/02/2025	Vantage Point Survey	VP3	3:00 starting at 15:35	Visibility: moderate; Wind speed and direction: moderate breeze SE; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		CC
20/03/2025	Vantage Point Survey	vp3	1:00 starting at 05:30	Visibility: good; Wind speed and direction: light breeze E; Cloud cover and height: 0-33% >500m; Rain: none; Frost: none; Snow: none		DM



Date	Survey	Location	Duration (h)	Weather Conditions	Comments	Surveyor
20/03/2025	Vantage Point Survey	vp3	2:00 starting at 06:30	Visibility: good; Wind speed and direction: light breeze E; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none		DM
20/03/2025	Vantage Point Survey	vp3	1:00 starting at 09:00	Visibility: good; Wind speed and direction: light breeze E; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none		DM
20/03/2025	Vantage Point Survey	vp3	2:00 starting at 10:00	Visibility: good; Wind speed and direction: gentle breeze SE; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none		DM
25/03/2025	Vantage Point Survey	vp1	1:00 starting at 05:30	Visibility: moderate; Wind speed and direction: gentle breeze NW; Cloud cover and height: 66-100% >500m; Rain: drizzle; Frost: none; Snow: none		DM
25/03/2025	Vantage Point Survey	vp1	2:00 starting at 06:30	Visibility: good; Wind speed and direction: gentle breeze NW; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		DM
25/03/2025	Vantage Point Survey	vp1	2:00 starting at 09:00	Visibility: good; Wind speed and direction: gentle breeze NW; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		DM
25/03/2025	Vantage Point Survey	vp1	1:00 starting at 11:00	Visibility: good; Wind speed and direction: light breeze NW; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		DM

Table 7 - 2 - 2 Winter Walkover survey effort.

Date	Survey	Location	Duration (h)	Weather Conditions	Comments	Surveyor
28/10/2022	Winter Walkover Survey	500m Survey Radius	1:30 starting at 09:00	Visibility: good; Wind speed and direction: light breeze N; Cloud cover and height: 0-33% >500m; Rain: none; Frost: none; Snow: none		MW
28/10/2022	Winter Walkover Survey	500m Survey Radius	0:30 starting at 11:00	Visibility: good; Wind speed and direction: light breeze N; Cloud cover and height: 0-33% >500m; Rain: none; Frost: none; Snow: none		MW
28/10/2022	Winter Walkover Survey	500m Survey Radius	1:00 starting at 12:00	Visibility: good; Wind speed and direction: light breeze N; Cloud cover and height: 0-33% >500m; Rain: none; Frost: none; Snow: none		MW
28/10/2022	Winter Walkover Survey	500m Survey Radius	1:00 starting at 13:15	Visibility: good; Wind speed and direction: gentle breeze N; Cloud cover and height: 0-33% >500m; Rain: none; Frost: none; Snow: none		MW
13/12/2022	Winter Walkover Survey	500m Survey Radius	1:30 starting at 09:00	Visibility: good; Wind speed and direction: light air E; Cloud cover and height: 0-33% 150-500m; Rain: none; Frost: heavy; Snow: none		MW
13/12/2022	Winter Walkover Survey	500m Survey Radius	0:45 starting at 10:45	Visibility: good; Wind speed and direction: light air E; Cloud cover and height: 0-33% 150-500m; Rain: none; Frost: heavy; Snow: none		MW
13/12/2022	Winter Walkover Survey	500m Survey Radius	0:45 starting at 11:45	Visibility: good; Wind speed and direction: light air E; Cloud cover and height: 0-33% 150-500m; Rain: none; Frost: heavy; Snow: none		MW
13/12/2022	Winter Walkover Survey	500m Survey Radius	0:50 starting at 13:30	Visibility: good; Wind speed and direction: light air E; Cloud cover and height: 0-33% 150-500m; Rain: none; Frost: heavy; Snow: none		MW
16/03/2023	Winter Walkover Survey	500m Survey Radius	1:00 starting at 08:00	Visibility: good; Wind speed and direction: gentle breeze S; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS
16/03/2023	Winter Walkover Survey	500m Survey Radius	1:00 starting at 09:00	Visibility: good; Wind speed and direction: moderate breeze S; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		MS
16/03/2023	Winter Walkover Survey	500m Survey Radius	1:00 starting at 10:00	Visibility: moderate; Wind speed and direction: fresh breeze S; Cloud cover and height: 66-100% 150-500m; Rain: drizzle; Frost: none; Snow: none		MS
16/03/2023	Winter Walkover Survey	500m Survey Radius	1:00 starting at 11:30	Visibility: good; Wind speed and direction: moderate breeze S; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS

Date	Survey	Location	Duration (h)	Weather Conditions	Comments	Surveyor
16/03/2023	Winter Walkover Survey	500m Survey Radius	1:00 starting at 12:30	Visibility: good; Wind speed and direction: moderate breeze S; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS
16/03/2023	Winter Walkover Survey	500m Survey Radius	1:00 starting at 13:30	Visibility: good; Wind speed and direction: moderate breeze S; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS
17/10/2023	Winter Walkover Survey	500m Survey Radius	7:30 starting at 08:30	Visibility: good; Wind speed and direction: fresh breeze SE; Cloud cover and height: 66-100% >500m; Rain: drizzle; Frost: none; Snow: none	Wholly grey and overcast throughout with a fresh SE breeze, 9 - 14°C. It felt like rain all day, but stayed primarily clear - a few light bits of drizzle at times.	NM
21/11/2023	Winter Walkover Survey	500m Survey Radius	7:50 starting at 08:10	Visibility: good; Wind speed and direction: moderate breeze S; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none	Clear and bright for long periods in the morning, becoming cloudier as the afternoon progressed. Moderate S breeze, relatively cold, 4 - 7°C	NM
17/01/2024	Winter Walkover Survey	500m Survey Radius	8:30 starting at 09:00	Visibility: good; Wind speed and direction: light breeze NW; Cloud cover and height: 0-33% >500m; Rain: none; Frost: heavy; Snow: none		NM
15/02/2024	Winter Walkover Survey	500m Survey Radius	8:00 starting at 08:00	Visibility: good; Wind speed and direction: gentle breeze SSW; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none	Largely fair, darkening gradually in the evening, 5 - 11°C	NM
09/10/2024	Winter Walkover Survey	500m Survey Radius	7:30 starting at 09:00	Visibility: good; Wind speed and direction: light air NE; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none		FOD
29/11/2024	Winter Walkover Survey	500m Survey Radius	2:50 starting at 08:40	Visibility: good; Wind speed and direction: moderate breeze SE; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none	Overcast and breezy. Very mild, 10 - 13°C throughout	NM
29/11/2024	Winter Walkover Survey	500m Survey Radius	4:50 starting at 11:30	Visibility: good; Wind speed and direction: fresh breeze SSE; Cloud cover and height: 66-100% 150-500m; Rain: light showers; Frost: none; Snow: none	Cloud dropping and becoming wetter. Spells of blustery showers	NM
22/01/2025	Winter Walkover Survey	500m Survey Radius	7:00 starting at 09:00	Visibility: good; Wind speed and direction: light breeze SW; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		DM



Date	Survey	Location	Duration (h)	Weather Conditions	Comments	Surveyor
13/03/2025	Winter Walkover Survey	500m Survey Radius	5:50 starting at 08:20	Visibility: good; Wind speed and direction: gentle breeze N; Cloud cover and height: 66-100% <150m; Rain: none; Frost: none; Snow: none		CC

Table 7 - 2 - 3 Breeding Walkover survey effort.

Date	Survey	Location	Duration (h)	Weather Conditions	Comments	Surveyor
15/04/2023	Breeding Walkover Survey	500m Survey Radius	1:00 starting at 07:30	Visibility: moderate; Wind speed and direction: light air SE; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS
15/04/2023	Breeding Walkover Survey	500m Survey Radius	1:00 starting at 08:30	Visibility: good; Wind speed and direction: light air SE; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS
15/04/2023	Breeding Walkover Survey	500m Survey Radius	1:00 starting at 09:30	Visibility: good; Wind speed and direction: light air SE; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS
15/04/2023	Breeding Walkover Survey	500m Survey Radius	1:00 starting at 11:00	Visibility: good; Wind speed and direction: light air S; Cloud cover and height: 66-100% >500m; Rain: drizzle; Frost: none; Snow: none		MS
15/04/2023	Breeding Walkover Survey	500m Survey Radius	1:00 starting at 12:00	Visibility: good; Wind speed and direction: light air S; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS
15/04/2023	Breeding Walkover Survey	500m Survey Radius	1:00 starting at 13:00	Visibility: good; Wind speed and direction: light air S; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS
15/04/2023	Breeding Walkover Survey	500m Survey Radius	1:00 starting at 14:00	Visibility: good; Wind speed and direction: light air S; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS
19/05/2023	Breeding Walkover Survey	500m Survey Radius	1:00 starting at 06:00	Visibility: poor; Wind speed and direction: light air W; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none	heavy fog	FLM
19/05/2023	Breeding Walkover Survey	500m Survey Radius	1:00 starting at 07:00	Visibility: moderate; Wind speed and direction: light air W; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		FLM
19/05/2023	Breeding Walkover Survey	500m Survey Radius	1:00 starting at 08:00	Visibility: good; Wind speed and direction: light air WNW; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		FLM
19/05/2023	Breeding Walkover Survey	500m Survey Radius	1:00 starting at 09:00	Visibility: good; Wind speed and direction: light air WNW; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		FLM
19/05/2023	Breeding Walkover Survey	500m Survey Radius	1:00 starting at 10:00	Visibility: good; Wind speed and direction: light breeze NW; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		FLM



Date	Survey	Location	Duration (h)	Weather Conditions	Comments	Surveyor
19/05/2023	Breeding Walkover Survey	500m Survey Radius	1:00 starting at 11:00	Visibility: good; Wind speed and direction: light breeze NW; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		FLM
14/06/2023	Breeding Walkover Survey	500m Survey Radius	1:00 starting at 07:30	Visibility: moderate; Wind speed and direction: gentle breeze E; Cloud cover and height: 0-33% >500m; Rain: none; Frost: none; Snow: none		MS
14/06/2023	Breeding Walkover Survey	500m Survey Radius	1:00 starting at 08:30	Visibility: good; Wind speed and direction: gentle breeze E; Cloud cover and height: 0-33% >500m; Rain: none; Frost: none; Snow: none		MS
14/06/2023	Breeding Walkover Survey	500m Survey Radius	1:00 starting at 09:30	Visibility: good; Wind speed and direction: gentle breeze E; Cloud cover and height: 0-33% >500m; Rain: none; Frost: none; Snow: none		MS
14/06/2023	Breeding Walkover Survey	500m Survey Radius	1:00 starting at 11:00	Visibility: moderate; Wind speed and direction: moderate breeze E; Cloud cover and height: 0-33% >500m; Rain: none; Frost: none; Snow: none		MS
14/06/2023	Breeding Walkover Survey	500m Survey Radius	1:00 starting at 12:00	Visibility: good; Wind speed and direction: gentle breeze E; Cloud cover and height: 0-33% >500m; Rain: none; Frost: none; Snow: none		MS
14/06/2023	Breeding Walkover Survey	500m Survey Radius	1:00 starting at 13:00	Visibility: moderate; Wind speed and direction: light breeze E; Cloud cover and height: 0-33% >500m; Rain: none; Frost: none; Snow: none		MS
11/07/2023	Breeding Walkover Survey	500m Survey Radius	1:00 starting at 08:00	Visibility: good; Wind speed and direction: gentle breeze NW; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS
11/07/2023	Breeding Walkover Survey	500m Survey Radius	1:00 starting at 09:00	Visibility: good; Wind speed and direction: gentle breeze NW; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS
11/07/2023	Breeding Walkover Survey	500m Survey Radius	1:00 starting at 10:00	Visibility: good; Wind speed and direction: gentle breeze NW; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none		MS
11/07/2023	Breeding Walkover Survey	500m Survey Radius	1:00 starting at 11:30	Visibility: good; Wind speed and direction: moderate breeze NW; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none		MS
11/07/2023	Breeding Walkover Survey	500m Survey Radius	1:00 starting at 12:30	Visibility: good; Wind speed and direction: moderate breeze NW; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none		MS



Date	Survey	Location	Duration (h)	Weather Conditions	Comments	Surveyor
11/07/2023	Breeding Walkover Survey	500m Survey Radius	1:00 starting at 13:30	Visibility: good; Wind speed and direction: moderate breeze NW; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS
08/04/2024	Breeding Walkover Survey	500m Survey Radius	1:00 starting at 06:45	Visibility: moderate; Wind speed and direction: fresh breeze W; Cloud cover and height: 0-33% >500m; Rain: none; Frost: none; Snow: none		MS
08/04/2024	Breeding Walkover Survey	500m Survey Radius	1:00 starting at 07:45	Visibility: good; Wind speed and direction: fresh breeze WNW; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none		MS
08/04/2024	Breeding Walkover Survey	500m Survey Radius	1:00 starting at 08:45	Visibility: good; Wind speed and direction: fresh breeze WNW; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none		MS
08/04/2024	Breeding Walkover Survey	500m Survey Radius	1:00 starting at 10:15	Visibility: good; Wind speed and direction: fresh breeze WNW; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS
08/04/2024	Breeding Walkover Survey	500m Survey Radius	1:00 starting at 11:15	Visibility: good; Wind speed and direction: moderate breeze WNW; Cloud cover and height: 66-100% >500m; Rain: drizzle; Frost: none; Snow: none		MS
08/04/2024	Breeding Walkover Survey	500m Survey Radius	1:00 starting at 12:15	Visibility: good; Wind speed and direction: fresh breeze WNW; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS
30/05/2024	Breeding Walkover Survey	500m Survey Radius	7:45 starting at 08:15	Visibility: good; Wind speed and direction: gentle breeze S; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none	Fair throughout. Mild and humid, 11 - 18°C	NM
20/06/2024	Breeding Walkover Survey	500m Survey Radius	3:00 starting at 07:45	Visibility: good; Wind speed and direction: gentle breeze SSW; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		EOB
20/06/2024	Breeding Walkover Survey	500m Survey Radius	3:00 starting at 11:15	Visibility: good; Wind speed and direction: gentle breeze SW; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		EOB
24/07/2024	Breeding Walkover Survey	500m Survey Radius	9:40 starting at 07:50	Visibility: moderate; Wind speed and direction: gentle breeze SW; Cloud cover and height: 66-100% >500m; Rain: light showers; Frost: none; Snow: none	Overcast and damp throughout. Scattered light showers with periods of drier spells. Remaining damp throughout. Chill at times, 12 - 17°C	NM

Table 7 - 2 - 4 Waterbird Distribution survey effort

Date	Survey	Location	Duration (h)	Weather Conditions	Comments	Surveyor
13/10/2022	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 10:30	Visibility: good; Wind speed and direction: light air E; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		MW
13/10/2022	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 11:30	Visibility: good; Wind speed and direction: light air E; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		MW
13/10/2022	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 12:30	Visibility: good; Wind speed and direction: light air E; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		MW
13/10/2022	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 13:30	Visibility: good; Wind speed and direction: light breeze E; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		MW
13/10/2022	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 14:30	Visibility: moderate; Wind speed and direction: light breeze E; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		MW
13/10/2022	Waterbird Distribution and Abundance Survey	5km Survey Radius	16:30 starting at 00:00	Visibility: moderate; Wind speed and direction: gentle breeze E; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		MW
27/10/2022	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 08:45	Visibility: good; Wind speed and direction: gentle breeze SE; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none		MW
27/10/2022	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 09:45	Visibility: good; Wind speed and direction: gentle breeze SE; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none		MW
27/10/2022	Waterbird Distribution and Abundance Survey	5km Survey Radius	0:30 starting at 11:00	Visibility: good; Wind speed and direction: gentle breeze SE; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none		MW
27/10/2022	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:30 starting at 11:45	Visibility: good; Wind speed and direction: gentle breeze SE; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		MW
27/10/2022	Waterbird Distribution and Abundance Survey	5km Survey Radius	0:40 starting at 13:20	Visibility: good; Wind speed and direction: gentle breeze SE; Cloud cover and height: 33-66% 150-500m; Rain: none; Frost: none; Snow: none		MW
27/10/2022	Waterbird Distribution and Abundance Survey	5km Survey Radius	0:45 starting at 14:00	Visibility: good; Wind speed and direction: gentle breeze SE; Cloud cover and height: 33-66% 150-500m; Rain: none; Frost: none; Snow: none		MW
27/10/2022	Waterbird Distribution and Abundance Survey	5km Survey Radius	0:45 starting at 14:45	Visibility: good; Wind speed and direction: gentle breeze SE; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none		MW
10/11/2022	Waterbird Distribution and Abundance Survey	5km Survey Radius	0:40 starting at 10:30	Visibility: good; Wind speed and direction: moderate breeze NE; Cloud cover and height: 33-66% 150-500m; Rain: none; Frost: none; Snow: none		MW
10/11/2022	Waterbird Distribution and Abundance Survey	5km Survey Radius	0:13 starting at 11:22	Visibility: good; Wind speed and direction: moderate breeze NE; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none	Shorten time here due to tractor noise. To return at dusk	MW

Date	Survey	Location	Duration (h)	Weather Conditions	Comments	Surveyor
10/11/2022	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:40 starting at 11:42	Visibility: good; Wind speed and direction: moderate breeze NE; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		MW
10/11/2022	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:10 starting at 13:45	Visibility: good; Wind speed and direction: moderate breeze NE; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		MW
10/11/2022	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:30 starting at 15:00	Visibility: moderate; Wind speed and direction: moderate breeze NE; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		MW
23/11/2022	Waterbird Distribution and Abundance Survey	5km Survey Radius	0:20 starting at 08:45	Visibility: moderate; Wind speed and direction: moderate breeze NW; Cloud cover and height: 33-66% 150-500m; Rain: none; Frost: none; Snow: none		MW
23/11/2022	Waterbird Distribution and Abundance Survey	5km Survey Radius	0:15 starting at 09:20	Visibility: moderate; Wind speed and direction: gentle breeze NW; Cloud cover and height: 66-100% 150-500m; Rain: drizzle; Frost: none; Snow: none		MW
23/11/2022	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 09:45	Visibility: moderate; Wind speed and direction: gentle breeze NW; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none	Sky cleared	MW
23/11/2022	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:45 starting at 11:00	Visibility: moderate; Wind speed and direction: light breeze NW; Cloud cover and height: 66-100% 150-500m; Rain: drizzle; Frost: none; Snow: none	Heavy showers at end of hour	MW
23/11/2022	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:30 starting at 13:00	Visibility: moderate; Wind speed and direction: gentle breeze NW; Cloud cover and height: 66-100% 150-500m; Rain: heavy showers; Frost: none; Snow: none	Intermittent heavy rain	MW
07/12/2022	Waterbird Distribution and Abundance Survey	5km Survey Radius	0:30 starting at 09:46	Visibility: good; Wind speed and direction: gentle breeze N; Cloud cover and height: 0-33% 150-500m; Rain: none; Frost: light; Snow: none		MW
07/12/2022	Waterbird Distribution and Abundance Survey	5km Survey Radius	0:28 starting at 10:29	Visibility: good; Wind speed and direction: light air NW; Cloud cover and height: 0-33% 150-500m; Rain: none; Frost: none; Snow: none		MW
07/12/2022	Waterbird Distribution and Abundance Survey	5km Survey Radius	0:50 starting at 11:30	Visibility: good; Wind speed and direction: light air SW; Cloud cover and height: 33-66% 150-500m; Rain: none; Frost: none; Snow: none		MW
07/12/2022	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:05 starting at 12:20	Visibility: good; Wind speed and direction: light breeze SW; Cloud cover and height: 33-66% 150-500m; Rain: none; Frost: none; Snow: none		MW
07/12/2022	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:20 starting at 13:25	Visibility: good; Wind speed and direction: light breeze SW; Cloud cover and height: 33-66% 150-500m; Rain: none; Frost: none; Snow: none		MW
13/02/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	6:00 starting at 09:30	Visibility: good; Wind speed and direction: light breeze SSE; Cloud cover and height: 33-66% 150-500m; Rain: none; Frost: none; Snow: none		FLM

Date	Survey	Location	Duration (h)	Weather Conditions	Comments	Surveyor
18/02/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 07:30	Visibility: good; Wind speed and direction: light air NE; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS
18/02/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 08:30	Visibility: good; Wind speed and direction: light air NE; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS
18/02/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 09:30	Visibility: good; Wind speed and direction: light air NE; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS
18/02/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 11:00	Visibility: moderate; Wind speed and direction: gentle breeze NW; Cloud cover and height: 66-100% 150-500m; Rain: drizzle; Frost: none; Snow: none		MS
18/02/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 12:00	Visibility: moderate; Wind speed and direction: gentle breeze NW; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		MS
18/02/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 13:00	Visibility: moderate; Wind speed and direction: gentle breeze NW; Cloud cover and height: 66-100% 150-500m; Rain: drizzle; Frost: none; Snow: none		MS
24/02/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 11:00	Visibility: good; Wind speed and direction: light breeze NNW; Cloud cover and height: 66-100% 150-500m; Rain: drizzle; Frost: none; Snow: none		FLM
24/02/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 12:00	Visibility: moderate; Wind speed and direction: light breeze NNW; Cloud cover and height: 66-100% 150-500m; Rain: drizzle; Frost: none; Snow: none		FLM
24/02/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 13:00	Visibility: good; Wind speed and direction: light breeze NNW; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		FLM
24/02/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 14:00	Visibility: good; Wind speed and direction: light breeze NNW; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		FLM
24/02/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 15:00	Visibility: good; Wind speed and direction: light breeze NNW; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		FLM
24/02/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 16:00	Visibility: good; Wind speed and direction: light breeze NNW; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		FLM
28/02/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 08:00	Visibility: moderate; Wind speed and direction: gentle breeze NE; Cloud cover and height: 66-100% 150-500m; Rain: drizzle; Frost: none; Snow: none		MS



Date	Survey	Location	Duration (h)	Weather Conditions	Comments	Surveyor
28/02/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 09:00	Visibility: good; Wind speed and direction: gentle breeze NE; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		MS
28/02/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 10:00	Visibility: good; Wind speed and direction: gentle breeze NE; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS
28/02/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 12:30	Visibility: good; Wind speed and direction: gentle breeze NE; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS
28/02/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 13:30	Visibility: good; Wind speed and direction: gentle breeze NE; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS
28/02/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 14:30	Visibility: good; Wind speed and direction: gentle breeze NE; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS
14/03/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 08:00	Visibility: good; Wind speed and direction: gentle breeze NE; Cloud cover and height: 0-33% >500m; Rain: none; Frost: none; Snow: none		MS
14/03/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 09:00	Visibility: good; Wind speed and direction: moderate breeze NE; Cloud cover and height: 0-33% >500m; Rain: none; Frost: none; Snow: none		MS
14/03/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 10:00	Visibility: moderate; Wind speed and direction: light breeze NE; Cloud cover and height: 66-100% 150-500m; Rain: light showers; Frost: none; Snow: none	quick shower	MS
14/03/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 11:30	Visibility: moderate; Wind speed and direction: light breeze W; Cloud cover and height: 66-100% 150-500m; Rain: drizzle; Frost: none; Snow: none	clearing drizzle	MS
14/03/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 12:30	Visibility: good; Wind speed and direction: light breeze SW; Cloud cover and height: 33-66% 150-500m; Rain: none; Frost: none; Snow: none		MS
14/03/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 13:30	Visibility: good; Wind speed and direction: light breeze W; Cloud cover and height: 0-33% 150-500m; Rain: none; Frost: none; Snow: none		MS
27/03/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 08:30	Visibility: good; Wind speed and direction: gentle breeze E; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none		MS
27/03/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 09:30	Visibility: good; Wind speed and direction: gentle breeze E; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS
27/03/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 10:30	Visibility: good; Wind speed and direction: gentle breeze E; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none		MS
27/03/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 12:00	Visibility: good; Wind speed and direction: gentle breeze S; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none		MS
27/03/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 13:00	Visibility: good; Wind speed and direction: light breeze S; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none		MS
27/03/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 14:00	Visibility: good; Wind speed and direction: gentle breeze S; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none		MS



Date	Survey	Location	Duration (h)	Weather Conditions	Comments	Surveyor
06/04/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 08:30	Visibility: good; Wind speed and direction: moderate breeze W; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none		MS
06/04/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 09:30	Visibility: good; Wind speed and direction: gentle breeze W; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none		MS
06/04/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 10:30	Visibility: good; Wind speed and direction: moderate breeze W; Cloud cover and height: 0-33% >500m; Rain: none; Frost: none; Snow: none		MS
06/04/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 12:00	Visibility: good; Wind speed and direction: moderate breeze W; Cloud cover and height: 0-33% >500m; Rain: none; Frost: none; Snow: none		MS
06/04/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 13:00	Visibility: good; Wind speed and direction: gentle breeze W; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS
06/04/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 14:00	Visibility: good; Wind speed and direction: gentle breeze W; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS
21/04/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 07:30	Visibility: good; Wind speed and direction: moderate breeze ENE; Cloud cover and height: 0-33% >500m; Rain: none; Frost: none; Snow: none		MS
21/04/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 08:30	Visibility: good; Wind speed and direction: moderate breeze ENE; Cloud cover and height: 0-33% >500m; Rain: none; Frost: none; Snow: none		MS
21/04/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 09:30	Visibility: good; Wind speed and direction: moderate breeze ENE; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none		MS
21/04/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 11:00	Visibility: good; Wind speed and direction: moderate breeze ENE; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS
21/04/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 12:00	Visibility: good; Wind speed and direction: moderate breeze ENE; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS
21/04/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 13:00	Visibility: good; Wind speed and direction: moderate breeze ENE; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS
18/05/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 10:00	Visibility: good; Wind speed and direction: light breeze SW; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		FLM
18/05/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 11:00	Visibility: good; Wind speed and direction: light breeze WSW; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		FLM
18/05/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 12:00	Visibility: good; Wind speed and direction: light breeze SW; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		FLM
18/05/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 13:00	Visibility: good; Wind speed and direction: light breeze WSW; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		FLM

Date	Survey	Location	Duration (h)	Weather Conditions	Comments	Surveyor
18/05/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 14:00	Visibility: good; Wind speed and direction: light breeze WNW; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		FLM
18/05/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 15:00	Visibility: good; Wind speed and direction: light breeze W; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		FLM
30/05/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 06:00	Visibility: good; Wind speed and direction: light air ENE; Cloud cover and height: 0-33% >500m; Rain: none; Frost: none; Snow: none		FLM
30/05/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 07:00	Visibility: good; Wind speed and direction: light breeze E; Cloud cover and height: 0-33% >500m; Rain: none; Frost: none; Snow: none		FLM
30/05/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 08:00	Visibility: good; Wind speed and direction: light breeze E; Cloud cover and height: 0-33% >500m; Rain: none; Frost: none; Snow: none		FLM
30/05/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 09:00	Visibility: good; Wind speed and direction: light breeze E; Cloud cover and height: 0-33% >500m; Rain: none; Frost: none; Snow: none		FLM
30/05/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 10:00	Visibility: good; Wind speed and direction: light breeze E; Cloud cover and height: 0-33% >500m; Rain: none; Frost: none; Snow: none		FLM
30/05/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 11:00	Visibility: good; Wind speed and direction: light breeze E; Cloud cover and height: 0-33% >500m; Rain: none; Frost: none; Snow: none		FLM
01/08/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 09:30	Visibility: good; Wind speed and direction: gentle breeze W; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		FLM
01/08/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 10:30	Visibility: good; Wind speed and direction: light breeze W; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		FLM
01/08/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 11:30	Visibility: good; Wind speed and direction: light breeze W; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		FLM
01/08/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 12:30	Visibility: good; Wind speed and direction: light breeze W; Cloud cover and height: 66-100% 150-500m; Rain: light showers; Frost: none; Snow: none		FLM
01/08/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 13:30	Visibility: good; Wind speed and direction: light breeze W; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		FLM
23/08/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 09:15	Visibility: good; Wind speed and direction: light breeze S; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		FLM
23/08/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 10:15	Visibility: good; Wind speed and direction: light breeze S; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		FLM
23/08/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 11:15	Visibility: good; Wind speed and direction: light breeze SW; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		FLM
23/08/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 12:15	Visibility: good; Wind speed and direction: light breeze SW; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		FLM

Date	Survey	Location	Duration (h)	Weather Conditions	Comments	Surveyor
23/08/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 13:15	Visibility: good; Wind speed and direction: light breeze SW; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		FLM
23/08/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 14:15	Visibility: good; Wind speed and direction: light breeze SW; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		FLM
05/09/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 09:00	Visibility: good; Wind speed and direction: light breeze E; Cloud cover and height: 0-33% >500m; Rain: none; Frost: none; Snow: none		FLM
05/09/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 10:00	Visibility: good; Wind speed and direction: gentle breeze E; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		FLM
05/09/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 11:00	Visibility: good; Wind speed and direction: gentle breeze E; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		FLM
05/09/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 12:00	Visibility: good; Wind speed and direction: gentle breeze E; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none		FLM
05/09/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 13:00	Visibility: good; Wind speed and direction: gentle breeze E; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		FLM
05/09/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 14:00	Visibility: good; Wind speed and direction: moderate breeze E; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		FLM
26/09/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 09:30	Visibility: good; Wind speed and direction: moderate breeze SW; Cloud cover and height: 33-66% 150-500m; Rain: none; Frost: none; Snow: none		FLM
26/09/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 10:30	Visibility: good; Wind speed and direction: moderate breeze SW; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		FLM
26/09/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 11:30	Visibility: good; Wind speed and direction: moderate breeze SW; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		FLM
26/09/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 12:30	Visibility: good; Wind speed and direction: moderate breeze SW; Cloud cover and height: 66-100% 150-500m; Rain: light showers; Frost: none; Snow: none		FLM
26/09/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 13:30	Visibility: good; Wind speed and direction: moderate breeze SW; Cloud cover and height: 66-100% 150-500m; Rain: light showers; Frost: none; Snow: none		FLM
26/09/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 14:30	Visibility: good; Wind speed and direction: moderate breeze SW; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		FLM
10/10/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	7:30 starting at 08:00	Visibility: good; Wind speed and direction: moderate breeze S; Cloud cover and height: 66-100% >500m; Rain: drizzle; Frost: none; Snow: none	Grey and overcast throughout, with occasional brightenings. Very autumnal with moderate	NM

Date	Survey	Location	Duration (h)	Weather Conditions	Comments	Surveyor
					S breeze, cool at times, 8 - 15°C. Occasional very light drizzle but never very much	
31/10/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	8:40 starting at 09:00	Visibility: good; Wind speed and direction: gentle breeze E; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none	Mostly overcast - but thin and rather bright at times. Numerous attempts by the sun to burst through - brightening (sunny periods) in afternoon for brief periods. Light E breeze, cool, 7 - 11°C. Getting darker towards evening	NM
09/11/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	8:00 starting at 08:20	Visibility: good; Wind speed and direction: gentle breeze W; Cloud cover and height: 33-66% >500m; Rain: drizzle; Frost: none; Snow: none	Largely fair throughout with prolonged clear spells. Occasional light drizzle coming and going throughout. Light W breeze (more apparent in open areas). Cold throughout, 4 - 7°C. Clearing gradually as the afternoon progressed producing a bright evening.	NM
29/11/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	7:00 starting at 09:00	Visibility: limited; Wind speed and direction: light breeze NE; Cloud cover and height: 0-33% <150m; Rain: none; Frost: light; Snow: none	Visibility limited throughout survey due to cold mist. Sun attempting to burn through throughout the day - only began at lunchtime. Light NE breeze, cold throughout, -2 - 4°C	NM
05/12/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 10:00	Visibility: good; Wind speed and direction: light breeze N; Cloud cover and height: 33-66% 150-500m; Rain: none; Frost: none; Snow: none		FLM
05/12/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 11:00	Visibility: good; Wind speed and direction: light breeze N; Cloud cover and height: 0-33% 150-500m; Rain: none; Frost: none; Snow: none		FLM
05/12/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 12:00	Visibility: good; Wind speed and direction: light breeze N; Cloud cover and height: 0-33% >500m; Rain: none; Frost: none; Snow: none		FLM
05/12/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 13:00	Visibility: good; Wind speed and direction: light breeze N; Cloud cover and height: 0-33% >500m; Rain: none; Frost: none; Snow: none		FLM



Date	Survey	Location	Duration (h)	Weather Conditions	Comments	Surveyor
05/12/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 14:00	Visibility: good; Wind speed and direction: light breeze N; Cloud cover and height: 0-33% >500m; Rain: none; Frost: none; Snow: none		FLM
05/12/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 15:00	Visibility: good; Wind speed and direction: light air N; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		FLM
18/12/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 09:30	Visibility: good; Wind speed and direction: gentle breeze SW; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		FLM
18/12/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 10:30	Visibility: good; Wind speed and direction: gentle breeze SW; Cloud cover and height: 66-100% 150-500m; Rain: drizzle; Frost: none; Snow: none		FLM
18/12/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 11:30	Visibility: good; Wind speed and direction: gentle breeze SW; Cloud cover and height: 66-100% 150-500m; Rain: drizzle; Frost: none; Snow: none		FLM
18/12/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 12:30	Visibility: good; Wind speed and direction: gentle breeze SW; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		FLM
18/12/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 13:30	Visibility: good; Wind speed and direction: gentle breeze SW; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		FLM
18/12/2023	Waterbird Distribution and Abundance Survey	5km Survey Radius	0:30 starting at 14:30	Visibility: good; Wind speed and direction: gentle breeze SW; Cloud cover and height: 66-100% 150-500m; Rain: drizzle; Frost: none; Snow: none		FLM
05/01/2024	Waterbird Distribution and Abundance Survey	5km Survey Radius	8:10 starting at 08:50	Visibility: good; Wind speed and direction: light breeze NW; Cloud cover and height: 0-33% >500m; Rain: none; Frost: heavy; Snow: none		NM
30/01/2024	Waterbird Distribution and Abundance Survey	5km Survey Radius	7:45 starting at 09:00	Visibility: good; Wind speed and direction: gentle breeze SW; Cloud cover and height: 0-33% >500m; Rain: none; Frost: none; Snow: none		NM
07/02/2024	Waterbird Distribution and Abundance Survey	5km Survey Radius	7:15 starting at 09:15	Visibility: good; Wind speed and direction: moderate breeze SE; Cloud cover and height: 66-100% 150-500m; Rain: drizzle; Frost: light; Snow: none	Grey and dark throughout. Cold and damp. Light frost. Drizzly rain became more apparent in afternoon	NM
21/02/2024	Waterbird Distribution and Abundance Survey	5km Survey Radius	8:15 starting at 08:00	Visibility: good; Wind speed and direction: moderate breeze SSW; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none	Started off quite bright, but darkening as the survey went on. 3 - 8°C	NM
12/03/2024	Waterbird Distribution and Abundance Survey	5km Survey Radius	3:00 starting at 09:30	Visibility: good; Wind speed and direction: light breeze SW; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none	Entirely overcast (thin and bright). Dry in the morning. Mild, 8 - 11°C	NM
12/03/2024	Waterbird Distribution and Abundance Survey	5km Survey Radius	4:45 starting at 13:00	Visibility: moderate; Wind speed and direction: moderate breeze SSW; Cloud cover and height: 66-100% >500m; Rain: light showers; Frost: none; Snow: none	Wet and breezy in the afternoon. Visibility reducing. Mild, 7 - 12°C	NM
27/03/2024	Waterbird Distribution and Abundance Survey	5km Survey Radius	7:30 starting at 07:30	Visibility: good; Wind speed and direction: gentle breeze S; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none	Fair with bright spells.	NM



Date	Survey	Location	Duration (h)	Weather Conditions	Comments	Surveyor
04/04/2024	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 07:00	Visibility: good; Wind speed and direction: light breeze E; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		MS
04/04/2024	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 08:00	Visibility: good; Wind speed and direction: light breeze E; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		MS
04/04/2024	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 09:00	Visibility: good; Wind speed and direction: light breeze E; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		MS
04/04/2024	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 10:30	Visibility: good; Wind speed and direction: light breeze E; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		MS
04/04/2024	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 11:30	Visibility: good; Wind speed and direction: light breeze E; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		MS
04/04/2024	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 12:30	Visibility: good; Wind speed and direction: light breeze E; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		MS
08/04/2024	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 08:30	Visibility: good; Wind speed and direction: light air SE; Cloud cover and height: 66-100% 150-500m; Rain: drizzle; Frost: none; Snow: none		FLM
08/04/2024	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 09:30	Visibility: good; Wind speed and direction: light air SE; Cloud cover and height: 66-100% 150-500m; Rain: drizzle; Frost: none; Snow: none		FLM
08/04/2024	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 10:30	Visibility: good; Wind speed and direction: light air E; Cloud cover and height: 66-100% 150-500m; Rain: drizzle; Frost: none; Snow: none		FLM
08/04/2024	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 11:30	Visibility: good; Wind speed and direction: light air NE; Cloud cover and height: 66-100% 150-500m; Rain: drizzle; Frost: none; Snow: none		FLM
08/04/2024	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 12:30	Visibility: good; Wind speed and direction: light air NE; Cloud cover and height: 66-100% 150-500m; Rain: persistent; Frost: none; Snow: none		FLM
18/04/2024	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 08:00	Visibility: good; Wind speed and direction: gentle breeze WNW; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		MS
18/04/2024	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 09:00	Visibility: good; Wind speed and direction: gentle breeze WNW; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		MS
18/04/2024	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 10:00	Visibility: good; Wind speed and direction: gentle breeze WNW; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		MS
18/04/2024	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 11:30	Visibility: good; Wind speed and direction: gentle breeze WNW; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		MS

Date	Survey	Location	Duration (h)	Weather Conditions	Comments	Surveyor
18/04/2024	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 12:30	Visibility: good; Wind speed and direction: light breeze WNW; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		MS
18/04/2024	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 13:30	Visibility: good; Wind speed and direction: light breeze WNW; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		MS
22/04/2024	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 10:00	Visibility: good; Wind speed and direction: light breeze N; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		FLM
22/04/2024	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 11:00	Visibility: good; Wind speed and direction: light breeze N; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		FLM
22/04/2024	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 12:00	Visibility: good; Wind speed and direction: light breeze N; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		FLM
22/04/2024	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 13:00	Visibility: good; Wind speed and direction: light breeze N; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		FLM
22/04/2024	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 14:00	Visibility: good; Wind speed and direction: light breeze N; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		FLM
03/05/2024	Waterbird Distribution and Abundance Survey	5km Survey Radius	6:30 starting at 14:30	Visibility: good; Wind speed and direction: light breeze NNW; Cloud cover and height: 66-100% >500m; Rain: drizzle; Frost: none; Snow: none	Largely dry. Overcast throughout. Mild, heavy and humid, 10 - 15°C. Light drizzle in evening but brief	NM
28/05/2024	Waterbird Distribution and Abundance Survey	5km Survey Radius	8:20 starting at 09:00	Visibility: good; Wind speed and direction: moderate breeze SW; Cloud cover and height: 66-100% >500m; Rain: drizzle; Frost: none; Snow: none	Overcast but bright. Occasional light drizzle. Mild, 10 - 15°C	NM
13/08/2024	Waterbird Distribution and Abundance Survey	5km Survey Radius	7:00 starting at 08:30	Visibility: good; Wind speed and direction: light breeze S; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none	Largely fair and clear with cloudy spells. Humid, warm, 14 - 19°C	NM
29/08/2024	Waterbird Distribution and Abundance Survey	5km Survey Radius	7:45 starting at 10:15	Visibility: good; Wind speed and direction: gentle breeze SW; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none	Fair throughout, 15 - 21°C. Sunny spells and scattered cloud. Gusty breeze. Light drizzle but brief and seldom.	NM
04/09/2024	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 10:30	Visibility: good; Wind speed and direction: gentle breeze NW; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		FLM
04/09/2024	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 11:30	Visibility: good; Wind speed and direction: gentle breeze NW; Cloud cover and height: 66-100% 150-500m; Rain: drizzle; Frost: none; Snow: none		FLM



Date	Survey	Location	Duration (h)	Weather Conditions	Comments	Surveyor
04/09/2024	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 12:30	Visibility: good; Wind speed and direction: gentle breeze NW; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		FLM
04/09/2024	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 13:30	Visibility: good; Wind speed and direction: gentle breeze NW; Cloud cover and height: 66-100% 150-500m; Rain: heavy showers; Frost: none; Snow: none		FLM
04/09/2024	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 14:30	Visibility: good; Wind speed and direction: gentle breeze NW; Cloud cover and height: 66-100% 150-500m; Rain: light showers; Frost: none; Snow: none		FLM
04/09/2024	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 15:30	Visibility: good; Wind speed and direction: gentle breeze NW; Cloud cover and height: 66-100% 150-500m; Rain: light showers; Frost: none; Snow: none		FLM
25/09/2024	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 10:00	Visibility: moderate; Wind speed and direction: light breeze NE; Cloud cover and height: 66-100% <150m; Rain: none; Frost: none; Snow: none		FLM
25/09/2024	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 11:00	Visibility: good; Wind speed and direction: light breeze ENE; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		FLM
25/09/2024	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 12:00	Visibility: good; Wind speed and direction: light breeze ENE; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		FLM
25/09/2024	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 13:00	Visibility: good; Wind speed and direction: light breeze ENE; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		FLM
25/09/2024	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 14:00	Visibility: good; Wind speed and direction: light breeze ENE; Cloud cover and height: 66-100% 150-500m; Rain: drizzle; Frost: none; Snow: none		FLM
25/09/2024	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 15:00	Visibility: good; Wind speed and direction: light breeze ENE; Cloud cover and height: 66-100% 150-500m; Rain: drizzle; Frost: none; Snow: none		FLM
08/10/2024	Waterbird Distribution and Abundance Survey	5km Survey Radius	7:30 starting at 09:00	Visibility: good; Wind speed and direction: gentle breeze NE; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		FOD
29/10/2024	Waterbird Distribution and Abundance Survey	5km Survey Radius	7:30 starting at 09:00	Visibility: good; Wind speed and direction: light air NW; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none		FOD
11/11/2024	Waterbird Distribution and Abundance Survey	5km Survey Radius	5:00 starting at 10:30	Visibility: good; Wind speed and direction: light air SE; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none		DM
25/11/2024	Waterbird Distribution and Abundance Survey	5km Survey Radius	5:30 starting at 09:30	Visibility: good; Wind speed and direction: moderate breeze SW; Cloud cover and height: 0-33% >500m; Rain: none; Frost: none; Snow: none		DM
04/12/2024	Waterbird Distribution and Abundance Survey	5km Survey Radius	2:00 starting at 10:00	Visibility: good; Wind speed and direction: moderate breeze S; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		DM

Date	Survey	Location	Duration (h)	Weather Conditions	Comments	Surveyor
04/12/2024	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 12:00	Visibility: good; Wind speed and direction: moderate breeze S; Cloud cover and height: 66-100% >500m; Rain: light showers; Frost: none; Snow: none		DM
04/12/2024	Waterbird Distribution and Abundance Survey	5km Survey Radius	2:00 starting at 13:00	Visibility: good; Wind speed and direction: fresh breeze S; Cloud cover and height: 66-100% >500m; Rain: light showers; Frost: none; Snow: none		DM
04/12/2024	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 15:00	Visibility: good; Wind speed and direction: fresh breeze S; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		DM
21/12/2024	Waterbird Distribution and Abundance Survey	5km Survey Radius	3:00 starting at 11:00	Visibility: good; Wind speed and direction: fresh breeze W; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none		DM
21/12/2024	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 14:00	Visibility: good; Wind speed and direction: fresh breeze W; Cloud cover and height: 66-100% >500m; Rain: light showers; Frost: none; Snow: none		DM
21/12/2024	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:30 starting at 15:00	Visibility: good; Wind speed and direction: fresh breeze W; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		DM
11/01/2025	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 10:00	Visibility: good; Wind speed and direction: gentle breeze S; Cloud cover and height: 66-100% >500m; Rain: light showers; Frost: none; Snow: none		DM
11/01/2025	Waterbird Distribution and Abundance Survey	5km Survey Radius	1:00 starting at 11:00	Visibility: good; Wind speed and direction: gentle breeze S; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		DM
11/01/2025	Waterbird Distribution and Abundance Survey	5km Survey Radius	3:00 starting at 12:00	Visibility: good; Wind speed and direction: gentle breeze SW; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		DM
30/01/2025	Waterbird Distribution and Abundance Survey	5km Survey Radius	2:00 starting at 10:00	Visibility: good; Wind speed and direction: gentle breeze W; Cloud cover and height: 0-33% >500m; Rain: none; Frost: light; Snow: none		DM
30/01/2025	Waterbird Distribution and Abundance Survey	5km Survey Radius	4:00 starting at 12:00	Visibility: good; Wind speed and direction: light breeze W; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none		DM
05/02/2025	Waterbird Distribution and Abundance Survey	5km Survey Radius	6:30 starting at 10:00	Visibility: good; Wind speed and direction: light breeze W; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none		SD
19/02/2025	Waterbird Distribution and Abundance Survey	5km Survey Radius	6:30 starting at 08:30	Visibility: good; Wind speed and direction: moderate breeze SSE; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none		SD
06/03/2025	Waterbird Distribution and Abundance Survey	5km Survey Radius	6:00 starting at 09:30	Visibility: good; Wind speed and direction: gentle breeze S; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		DM
24/03/2025	Waterbird Distribution and Abundance Survey	5km Survey Radius	5:30 starting at 08:30	Visibility: good; Wind speed and direction: light breeze W; Cloud cover and height: 0-33% >500m; Rain: none; Frost: none; Snow: none		DM

Table 7 - 2 - 5 Breeding Raptor survey effort.

Date	Survey	Location	Duration (h)	Weather Conditions	Comments	Surveyor
07/04/2023	Breeding Raptor Survey	BR1	starting at 08:00	Visibility: good; Wind speed and direction: gentle breeze E; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none		MS
07/04/2023	Breeding Raptor Survey	BR1	1:00 starting at 09:00	Visibility: good; Wind speed and direction: gentle breeze E; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none		MS
07/04/2023	Breeding Raptor Survey	BR1	1:00 starting at 10:00	Visibility: good; Wind speed and direction: gentle breeze E; Cloud cover and height: 0-33% >500m; Rain: none; Frost: none; Snow: none		MS
07/04/2023	Breeding Raptor Survey	BR1	1:00 starting at 11:30	Visibility: good; Wind speed and direction: gentle breeze SE; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none		MS
07/04/2023	Breeding Raptor Survey	BR1	1:00 starting at 12:30	Visibility: good; Wind speed and direction: gentle breeze SE; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none		MS
07/04/2023	Breeding Raptor Survey	BR1	1:00 starting at 13:30	Visibility: good; Wind speed and direction: gentle breeze SE; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none		MS
11/04/2023	Breeding Raptor Survey	BR4	1:55 starting at 17:15	Visibility: moderate; Wind speed and direction: moderate breeze SSW; Cloud cover and height: 66-100% 150-500m; Rain: light showers; Frost: none; Snow: none		NM
20/04/2023	Breeding Raptor Survey	Transects	1:00 starting at 07:30	Visibility: good; Wind speed and direction: strong breeze E; Cloud cover and height: 0-33% >500m; Rain: none; Frost: none; Snow: none		MS
20/04/2023	Breeding Raptor Survey	Transects	1:00 starting at 08:30	Visibility: good; Wind speed and direction: fresh breeze E; Cloud cover and height: 0-33% >500m; Rain: none; Frost: none; Snow: none		MS
20/04/2023	Breeding Raptor Survey	Transects	1:00 starting at 09:30	Visibility: good; Wind speed and direction: fresh breeze E; Cloud cover and height: 0-33% >500m; Rain: none; Frost: none; Snow: none		MS
20/04/2023	Breeding Raptor Survey	Transects	1:00 starting at 11:00	Visibility: good; Wind speed and direction: fresh breeze E; Cloud cover and height: 0-33% >500m; Rain: none; Frost: none; Snow: none		MS
20/04/2023	Breeding Raptor Survey	Transects	1:00 starting at 12:00	Visibility: good; Wind speed and direction: fresh breeze E; Cloud cover and height: 0-33% >500m; Rain: none; Frost: none; Snow: none		MS
20/04/2023	Breeding Raptor Survey	Transects	1:00 starting at 13:00	Visibility: good; Wind speed and direction: strong breeze E; Cloud cover and height: 0-33% >500m; Rain: none; Frost: none; Snow: none		MS
23/05/2023	Breeding Raptor Survey	BR3	1:00 starting at 06:00	Visibility: good; Wind speed and direction: light air NW; Cloud cover and height: 33-66% 150-500m; Rain: none; Frost: none; Snow: none		FLM
23/05/2023	Breeding Raptor Survey	BR3 & BR6	1:00 starting at 07:00	Visibility: good; Wind speed and direction: light air NW; Cloud cover and height: 33-66% 150-500m; Rain: none; Frost: none; Snow: none		FLM
23/05/2023	Breeding Raptor Survey	BR6 & Transects	1:00 starting at 08:00	Visibility: good; Wind speed and direction: light breeze NW; Cloud cover and height: 33-66% 150-500m; Rain: none; Frost: none; Snow: none		FLM



Date	Survey	Location	Duration (h)	Weather Conditions	Comments	Surveyor
23/05/2023	Breeding Raptor Survey	Transects & BR5	1:00 starting at 09:00	Visibility: good; Wind speed and direction: light breeze NW; Cloud cover and height: 0-33% 150-500m; Rain: none; Frost: none; Snow: none		FLM
23/05/2023	Breeding Raptor Survey	BR4	1:00 starting at 10:00	Visibility: good; Wind speed and direction: light breeze NW; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		FLM
23/05/2023	Breeding Raptor Survey	BR6	1:00 starting at 11:00	Visibility: good; Wind speed and direction: light breeze NW; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		FLM
25/05/2023	Breeding Raptor Survey	BR8	1:00 starting at 06:00	Visibility: good; Wind speed and direction: light air NNW; Cloud cover and height: 0-33% 150-500m; Rain: none; Frost: none; Snow: none		FLM
25/05/2023	Breeding Raptor Survey	BR8 & BR2	1:00 starting at 07:00	Visibility: good; Wind speed and direction: light air NNW; Cloud cover and height: 0-33% 150-500m; Rain: none; Frost: none; Snow: none		FLM
25/05/2023	Breeding Raptor Survey	BR2	1:00 starting at 08:00	Visibility: good; Wind speed and direction: light air N; Cloud cover and height: 0-33% 150-500m; Rain: none; Frost: none; Snow: none		FLM
25/05/2023	Breeding Raptor Survey	BR2 & BR1	1:00 starting at 09:00	Visibility: good; Wind speed and direction: light breeze N; Cloud cover and height: 0-33% 150-500m; Rain: none; Frost: none; Snow: none		FLM
25/05/2023	Breeding Raptor Survey	BR1	1:00 starting at 10:00	Visibility: good; Wind speed and direction: light breeze NNW; Cloud cover and height: 0-33% 150-500m; Rain: none; Frost: none; Snow: none		FLM
25/05/2023	Breeding Raptor Survey	BR7	1:00 starting at 11:00	Visibility: good; Wind speed and direction: light breeze NNW; Cloud cover and height: 33-66% 150-500m; Rain: none; Frost: none; Snow: none		FLM
06/06/2023	Breeding Raptor Survey	BR1	1:00 starting at 07:30	Visibility: good; Wind speed and direction: gentle breeze ESE; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none		MS
06/06/2023	Breeding Raptor Survey	BR1	1:00 starting at 08:30	Visibility: good; Wind speed and direction: moderate breeze ESE; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none		MS
06/06/2023	Breeding Raptor Survey	BR1	1:00 starting at 09:30	Visibility: good; Wind speed and direction: gentle breeze ESE; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none		MS
06/06/2023	Breeding Raptor Survey	BR2	1:00 starting at 11:45	Visibility: good; Wind speed and direction: gentle breeze ESE; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none		MS
06/06/2023	Breeding Raptor Survey	BR2	1:00 starting at 12:45	Visibility: good; Wind speed and direction: gentle breeze ESE; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none		MS
06/06/2023	Breeding Raptor Survey	BR2	1:00 starting at 13:45	Visibility: moderate; Wind speed and direction: gentle breeze ESE; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none		MS



Date	Survey	Location	Duration (h)	Weather Conditions	Comments	Surveyor
07/06/2023	Breeding Raptor Survey	BR3	1:00 starting at 07:30	Visibility: moderate; Wind speed and direction: gentle breeze ESE; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS
07/06/2023	Breeding Raptor Survey	BR3	1:00 starting at 08:30	Visibility: good; Wind speed and direction: moderate breeze ESE; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS
07/06/2023	Breeding Raptor Survey	BR3	1:00 starting at 09:30	Visibility: good; Wind speed and direction: gentle breeze ESE; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS
07/06/2023	Breeding Raptor Survey	BR4	1:00 starting at 11:00	Visibility: good; Wind speed and direction: moderate breeze ESE; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS
07/06/2023	Breeding Raptor Survey	BR4	1:00 starting at 12:00	Visibility: good; Wind speed and direction: gentle breeze ESE; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS
07/06/2023	Breeding Raptor Survey	BR4	1:00 starting at 13:00	Visibility: good; Wind speed and direction: gentle breeze ESE; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none		MS
24/07/2023	Breeding Raptor Survey	BR8	1:00 starting at 19:30	Visibility: good; Wind speed and direction: gentle breeze NW; Cloud cover and height: 0-33% >500m; Rain: none; Frost: none; Snow: none		FLM
24/07/2023	Breeding Raptor Survey	BR8	1:00 starting at 20:30	Visibility: good; Wind speed and direction: light breeze NW; Cloud cover and height: 0-33% >500m; Rain: none; Frost: none; Snow: none		FLM
24/07/2023	Breeding Raptor Survey	BR8	1:00 starting at 21:30	Visibility: moderate; Wind speed and direction: light breeze NW; Cloud cover and height: 33-66% 150-500m; Rain: none; Frost: none; Snow: none		FLM
31/07/2023	Breeding Raptor Survey	BR8	1:00 starting at 19:30	Visibility: good; Wind speed and direction: moderate breeze W; Cloud cover and height: 66-100% 150-500m; Rain: none; Frost: none; Snow: none		FLM
31/07/2023	Breeding Raptor Survey	BR8	1:00 starting at 20:30	Visibility: good; Wind speed and direction: gentle breeze W; Cloud cover and height: 33-66% 150-500m; Rain: none; Frost: none; Snow: none		FLM
31/07/2023	Breeding Raptor Survey	BR8	1:00 starting at 21:30	Visibility: moderate; Wind speed and direction: gentle breeze W; Cloud cover and height: 33-66% 150-500m; Rain: none; Frost: none; Snow: none		FLM
10/04/2024	Breeding Raptor Survey	BR4, BR5 & BR6	6:30 starting at 11:00	Visibility: moderate; Wind speed and direction: gentle breeze SSW; Cloud cover and height: 66-100% >500m; Rain: drizzle; Frost: none; Snow: none	Wet, persistent light drizzle, mild, 10 - 14°C	NM
11/04/2024	Breeding Raptor Survey	BR2	3:00 starting at 10:30	Visibility: good; Wind speed and direction: gentle breeze S; Cloud cover and height: 66-100% >500m; Rain: drizzle; Frost: none; Snow: none	Largely overcast but bright at times. Mild, 10 - 14°C. Light drizzle starting at end	NM



Date	Survey	Location	Duration (h)	Weather Conditions	Comments	Surveyor
11/04/2024	Breeding Raptor Survey	BR3	3:00 starting at 14:00	Visibility: moderate; Wind speed and direction: moderate breeze SSW; Cloud cover and height: 66-100% 150-500m; Rain: light showers; Frost: none; Snow: none	Blustery and damp, visibility deteriorating at times	NM
12/04/2024	Breeding Raptor Survey	BR7	5:15 starting at 09:15	Visibility: good; Wind speed and direction: gentle breeze S; Cloud cover and height: 66-100% >500m; Rain: drizzle; Frost: none; Snow: none	Grey and overcast, light drizzle at times (mostly after 13:00). Mild, 10 - 13°C	NM
30/04/2024	Breeding Raptor Survey	Transects	5:45 starting at 10:00	Visibility: good; Wind speed and direction: gentle breeze SE; Cloud cover and height: 33-66% >500m; Rain: light showers; Frost: none; Snow: none	Clear for long periods with intermittent cloudier spells. Some showers moving across but fleeting. Changeable, 7 - 11°C	NM
16/05/2024	Breeding Raptor Survey	BR5 & BR6	6:00 starting at 10:00	Visibility: good; Wind speed and direction: gentle breeze SSE; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none	Largely fair with cloudy spells. Warm throughout, 12 - 18°C	NM
17/05/2024	Breeding Raptor Survey	BR1 & BR4	8:35 starting at 08:45	Visibility: good; Wind speed and direction: moderate breeze SW; Cloud cover and height: 0-33% >500m; Rain: none; Frost: none; Snow: none	Clear and bright. With refreshing breeze. Warm throughout, 12 - 18°C	NM
24/05/2024	Breeding Raptor Survey	BR2 & BR7	7:00 starting at 13:00	Visibility: good; Wind speed and direction: gentle breeze SSW; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none	Partly overcast but fair. Prolonged sunny periods. Cooler, 9 - 16°	NM
29/05/2024	Breeding Raptor Survey	BR3 & BOVP1 (BR8)	6:30 starting at 14:00	Visibility: good; Wind speed and direction: moderate breeze SW; Cloud cover and height: 33-66% >500m; Rain: drizzle; Frost: none; Snow: none	Largely fair with sunny spells. Drizzle at times in evening, 12 - 18°C	NM
07/06/2024	Breeding Raptor Survey	BR4 & BR5	8:15 starting at 12:00	Visibility: good; Wind speed and direction: gentle breeze S; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none	Fair and clear with bright sunny spells. Remaining cool, 9 - 14°C	NM
11/06/2024	Breeding Raptor Survey	BR1 & BR6	8:00 starting at 11:30	Visibility: good; Wind speed and direction: moderate breeze NW; Cloud cover and height: 33-66% >500m; Rain: drizzle; Frost: none; Snow: none	Sunny spells but largely overcast. Fair, but with very brief light showers. Moderate breeze with fresh gusts, 9 - 14°C	NM
20/06/2024	Breeding Raptor Survey	BR3	3:00 starting at 15:00	Visibility: good; Wind speed and direction: gentle breeze SSW; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none		NM
21/06/2024	Breeding Raptor Survey	BR2 & BR7	7:30 starting at 10:00	Visibility: moderate; Wind speed and direction: gentle breeze S; Cloud cover and height: 66-100% >500m; Rain: light showers; Frost: none; Snow: none	Grey and overcast. Mild with scattered light showers. Visibility was poor at times	NM



Date	Survey	Location	Duration (h)	Weather Conditions	Comments	Surveyor
					due to drizzle passing through, 12 - 21°	
11/07/2024	Breeding Raptor Survey	BR3 & BR5	6:45 starting at 11:30	Visibility: good; Wind speed and direction: gentle breeze W; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none	Hazy and humid, 15 - 22°C. Sunny spells	NM
25/07/2024	Breeding Raptor Survey	BR1 & BR6	7:15 starting at 11:45	Visibility: good; Wind speed and direction: gentle breeze SW; Cloud cover and height: 33-66% >500m; Rain: light showers; Frost: none; Snow: none	Largely fair throughout, 15 - 21°C. Prolonged sunny spells, sporadic light showers. Threatening clouds throughout.	NM
26/07/2024	Breeding Raptor Survey	BR4 & BR2	7:00 starting at 13:00	Visibility: good; Wind speed and direction: gentle breeze SSW; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none	Largely fair and clear with patchy cloud. Overcast and showery spells but these were fleeting and short-lived	NM
31/07/2024	Breeding Raptor Survey	BR7	3:15 starting at 10:00	Visibility: good; Wind speed and direction: light breeze W; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none	Largely fair and clear. Bright with hazy cloud. Warm and humid with light W breeze	NM

Table 7 - 2 - 6 Breeding Hen Harrier survey effort.

Date	Survey	Location	Duration (h)	Weather Conditions	Comments	Surveyor
10/04/2024	Breeding Raptor Survey	HHVP1	3:00 starting at 18:00	Visibility: poor; Wind speed and direction: moderate breeze SSW; Cloud cover and height: 66-100% >500m; Rain: light showers; Frost: none; Snow: none	Breeding HH survey - Abbeyshrule bog. Blustery and showery. Dusk survey. Sunset - 20:23	NM
30/04/2024	Breeding Raptor Survey	HHVP2a	3:00 starting at 16:15	Visibility: good; Wind speed and direction: moderate breeze SE; Cloud cover and height: 33-66% >500m; Rain: drizzle; Frost: none; Snow: none	Largely fair with scattered cloud and occasional drizzle. 9 - 13°C	NM
16/05/2024	Breeding Raptor Survey	HHVP2a	3:15 starting at 06:00	Visibility: moderate; Wind speed and direction: gentle breeze SE; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none	Mist early in the morning hampering visibility. Burned off quickly.	NM
24/05/2024	Breeding Raptor Survey	HHVP1	3:30 starting at 06:30	Visibility: good; Wind speed and direction: light breeze SSW; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none	Partly overcast but fair.	NM
20/06/2024	Breeding Raptor Survey	HHVP1	3:30 starting at 07:30	Visibility: good; Wind speed and direction: light breeze SW; Cloud cover and height: 0-33% >500m; Rain: none; Frost: none; Snow: none	Fair and clear for entire day. Warm, 11 - 18°C	NM
20/06/2024	Breeding Raptor Survey	HHVP2a	3:00 starting at 18:45	Visibility: good; Wind speed and direction: light breeze SW; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none	Clouding over gradually in the evening but remaining fair	NM
11/07/2024	Breeding Raptor Survey	HHVP1	3:00 starting at 19:00	Visibility: good; Wind speed and direction: gentle breeze WNW; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none	Clouding over gradually, sunset - 21:56	NM
31/07/2024	Breeding Raptor Survey	HHVP2a	3:15 starting at 15:30	Visibility: good; Wind speed and direction: light breeze W; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none	16 - 21°C (throughout entire day)	NM

Table 7 - 2 - 7 Breeding Barn Owl survey effort.

Date	Survey	Location	Duration (h)	Weather Conditions	Comments	Surveyor
11/04/2024	Breeding Barn Owl Survey	BOVP2	2:10 starting at 19:20	Visibility: moderate; Wind speed and direction: moderate breeze SSE; Cloud cover and height: 66-100% 150-500m; Rain: light showers; Frost: none; Snow: none	Blustery and damp, rain getting steadily worse towards dusk. Grey and overcast, mild, 11 - 13°C. Dusk survey. Sunset - 20:25	NM
12/04/2024	Breeding Barn Owl Survey	BOVP1 (BR8)	3:15 starting at 05:15	Visibility: good; Wind speed and direction: gentle breeze S; Cloud cover and height: 66-100% >500m; Rain: drizzle; Frost: none; Snow: none	Combined RVP & BOVP. Grey, overcast and damp, 9 - 12°C. Dawn survey. Sunrise - 06:35	NM
30/04/2024	Breeding Barn Owl Survey	BOVP3	2:05 starting at 19:50	Visibility: good; Wind speed and direction: gentle breeze SSE; Cloud cover and height: 0-33% >500m; Rain: none; Frost: none; Snow: none	Clear and bright throughout. Cold in evening, 6 - 10°C. Dusk survey. Sunset - 20:53	NM
17/05/2024	Breeding Barn Owl Survey	BOVP3	2:05 starting at 20:30	Visibility: good; Wind speed and direction: gentle breeze WSW; Cloud cover and height: 0-33% >500m; Rain: none; Frost: none; Snow: none	Cooling gradually in the evening. Dusk survey. Sunset - 21:30	NM
24/05/2024	Breeding Barn Owl Survey	BOVP2	2:00 starting at 20:40	Visibility: good; Wind speed and direction: gentle breeze SSE; Cloud cover and height: 66-100% >500m; Rain: drizzle; Frost: none; Snow: none	Partly overcast but fair. Becoming darker and cloudier in evening, light drizzle. Dusk survey. Sunset - 21:41	NM
29/05/2024	Breeding Barn Owl Survey	BOVP1 (BR8)	2:00 starting at 20:50	Visibility: good; Wind speed and direction: gentle breeze SW; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none	Wind dropping slightly. Remaining fair. Dusk survey. Sunset - 21:48	NM
07/06/2024	Breeding Barn Owl Survey	BOVP3	2:05 starting at 20:55	Visibility: good; Wind speed and direction: gentle breeze S; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none	Remaining fair. Dusk survey. Sunset - 21:58	NM
11/06/2024	Breeding Barn Owl Survey	BOVP2	2:00 starting at 21:00	Visibility: good; Wind speed and direction: gentle breeze NW; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none	Fair and clear. Wind dropping in the evening. Dusk survey. Sunset - 22:01	NM
21/06/2024	Breeding Barn Owl Survey	BOVP1 (BR8)	3:10 starting at 20:00	Visibility: good; Wind speed and direction: gentle breeze SSW; Cloud cover and height: 33-66% >500m; Rain: none; Frost: none; Snow: none	Fair and clear for the evening. Damp but mild, 11 - 19°C. Dusk survey. Sunset - 22:06	NM
25/07/2024	Breeding Barn Owl Survey	BOVP3	2:05 starting at 20:35	Visibility: good; Wind speed and direction: light breeze SW; Cloud cover and height: 0-33% >500m; Rain: none; Frost: none; Snow: none	Fair and clear with light scattered cloud, showers ceased. Dusk survey. Sunset - 21:38	NM

Appendix 7-4a – Addendum Survey Data

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1.

WHOOPER SWAN

Table 7 - 4a - 1 Whooper Swan Vantage Point Survey

Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0 -15m)	Band 2 (15-25m)	Band 3 (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
WS001	VP3	22/11/2022	10:02	Whooper Swan	9	180	0	80	100	0	improved agricultural grassland; flyover	MW
WS002	VP3	11/10/2023	17:51	Whooper Swan	9	220	0	0	220	0	improved agricultural grassland and linear woodland/scrub; commuting s across farmland, off site	NM
WS003	VP3	11/10/2023	18:37	Whooper Swan	16	280	0	90	190	0	improved agricultural grassland and linear woodland/scrub; commuting sw across farmland, flying across site	NM

Table 7 - 4a - 2 Whooper Swan Winter Walkover Survey

Ref.	Date	Time	Transect	Species	Number	Habitat and activity	Surveyor
WS001	17/10/2023	08:32	-	Whooper Swan	21	improved agricultural grassland and linear woodland/scrub; commuting across farmland (wintering)	NM
WS002	17/10/2023	13:45	-	Whooper Swan	37	improved agricultural grassland and linear woodland/scrub; commuting across farmland, moving along s 500m buffer (wintering)	NM
WS003	17/10/2023	16:35	-	Whooper Swan	9	improved agricultural grassland and linear woodland/scrub; commuting across farmland (wintering)	NM

Table 7 - 4a - 3 Whooper Swan Waterbird Distribution Survey

Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
WS001	Moyvoughly	10/10/2023	10:58	Whooper Swan	17	improved agricultural grassland and linear woodland/scrub; commuting across farmland, moving nw	NM
WS002	R. Tang - across farmland	10/10/2023	14:13	Whooper Swan	16	improved agricultural grassland and linear woodland/scrub; commuting across farmland, moving ne	NM
WS003	D1	21/12/2024	14:00	Whooper Swan		improved agricultural grassland; calling, heard only	DM

Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
WS004	Keel/Tang river	21/12/2024	15:00	Whooper Swan	45	improved agricultural grassland; feeding	DM



- Map Legend
- EIAR Site Boundary
 - Proposed Turbine Layout
 - 500m Radius of Turbines
 - VP Locations
 - Flight Observation



Drawing Title
**Whooper Swan Vantage Point
Survey Observations**

Project Title
**Umma More Renewable Energy
Development**

Drawn By KS	Checked By PC
Project No. 201050	Drawing No. Fig. 7-4a-1
Scale 1:40,000	Date 13.06.2025

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 - 500m Radius of Turbines
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Drawing Title	
Whooper Swan Winter Walkover Survey Observations	
Project Title	
Umma More Renewable Energy Development	
Drawn By	Checked By
KS	PC
Project No.	Drawing No.
201050	Fig. 7-4a-2
Scale	Date
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-  EIA Site Boundary
 -  Proposed Turbine Layout
 -  5km Survey Radius
 -  Observation



Drawing Title
**Whooper Swan Waterbird
Distribution Survey Observations**

Project Title
**Umma More Renewable Energy
Development**

Drawn By KS	Checked By PC
Project No. 201050	Drawing No. Fig. 7-4a-3
Scale 1:80,000	Date 13.06.2025

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2.

GOLDEN PLOVER

Table 7 - 4a - 4 Golden Plover Vantage Point Survey

Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0 -15m)	Band 2 (15-25m)	Band 3 (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
GP001	VP1	20/10/2022	18:44	Golden Plover	6	100	100	0	0	0	improved agricultural grassland; flying round in circles low to the ground, flying intermittently from around 18:40	MW
GP002	VP1	25/11/2022	07:06	Golden Plover	10	-	-	-	-	-	improved agricultural grassland; calling from start of survey for 10 mins, heard not seen. heard again at 09.45. number a guess.	MW
GP003	VP1	13/02/2023	07:45	Golden Plover	38	180	50	30	100	0	amenity grassland (improved); on ground then flight, 0-150m	MS
GP004	VP1	28/03/2023	16:40	Golden Plover	11	260	30	70	160	0	improved agricultural grassland and wet grassland; fleeing then landing, 0-80m	MS
GP005	VP3	04/04/2023	08:05	Golden Plover	21	48	0	0	0	48	wet grassland; fly over	MS
GP006	VP1	16/04/2023	08:14	Golden Plover	80	340	10	10	320	0	improved agricultural grassland; fly in and landed	MS
GP007	VP1	16/04/2023	09:52	Golden Plover	53	275	5	20	250	0	improved agricultural grassland; fly and land	MS
GP008	VP3	11/01/2024	09:34	Golden Plover	114	3000	0	0	2700	300	improved agricultural grassland; flying	NM
GP009	VP1	09/04/2024	19:40	Golden Plover	36	622	10	40	40	532	improved agricultural grassland and treelines; flying, landed, same field as always	MS
GP010	VP3	12/04/2024	19:20	Golden Plover	8	134	0	0	0	134	treelines and improved agricultural grassland; flying	MS

Table 7 - 4 - 5 Golden Plover Winter Walkover Survey

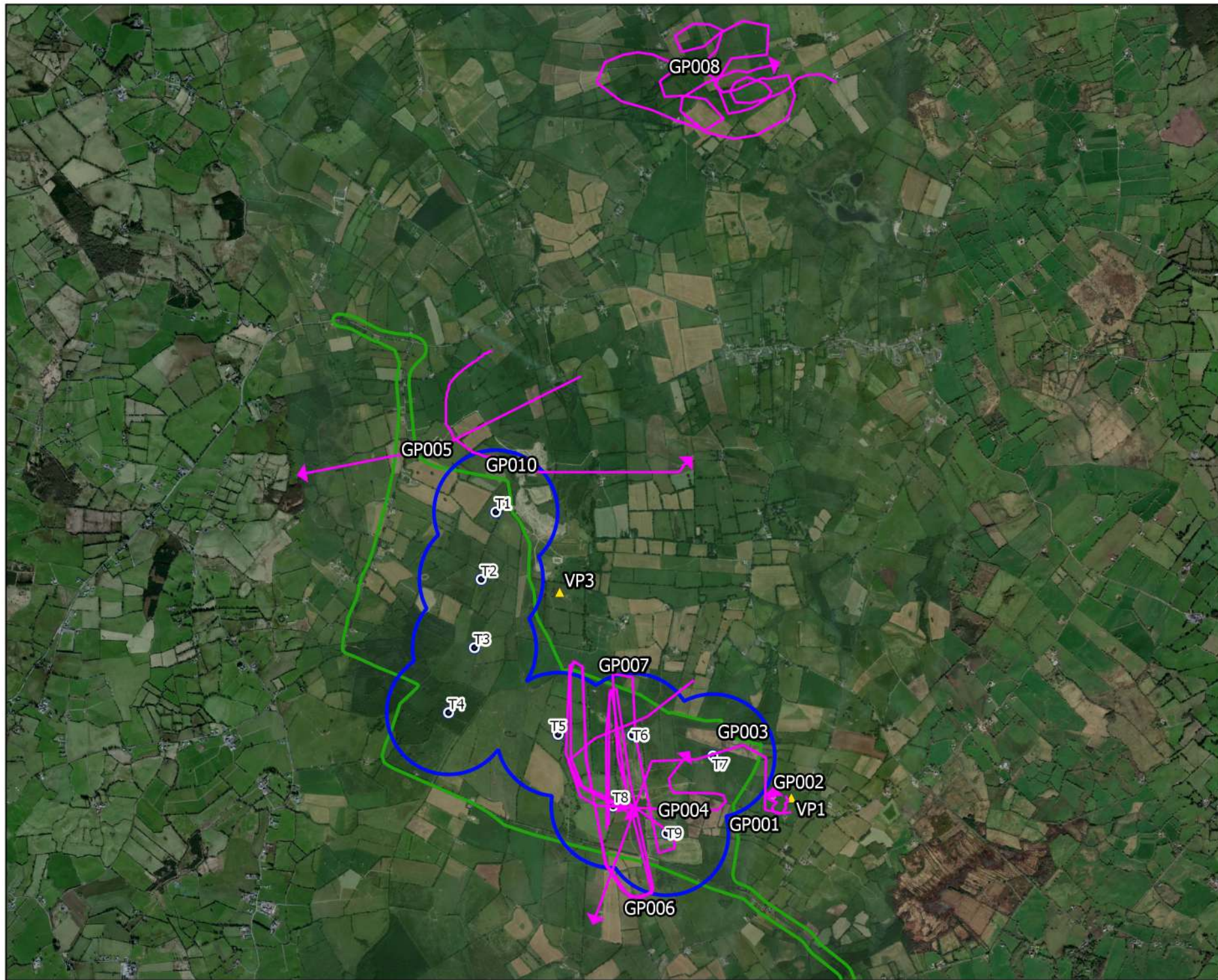
Ref.	Date	Time	Transect	Species	Number	Habitat and activity	Surveyor
GP001	17/01/2024	13:51	-	Golden Plover	6	improved agricultural grassland; flying (wintering)	NM

Table 7 – 4a - 6 Golden Plover Waterbird Distribution Survey

Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
GP001	Streamstown	07/12/2022	12:40	Golden Plover	49	improved agricultural grassland; foraging, same location as two weeks before	MW
GP002	Ballynagrenia & Ballinderry bogs	30/01/2024	16:03	Golden Plover	64	raised bog and scrub; commuting, calling	NM
GP003	Ardnacranney	07/02/2024	10:48	Golden Plover	117	improved agricultural grassland; circling, swirling, calling, moving gradually southwest	NM
GP004	Moyvoughly	07/02/2024	14:48	Golden Plover	87	improved agricultural grassland and bogs; circling, swirling, moving west	NM
GP005	Lough Sewdy S1	08/04/2024	09:00	Golden Plover	65	improved agricultural grassland and dystrophic lakes; circling	FLM

Table 7 – 4a - 7 Golden Plover Incidental Records

Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
GP001	Waterbird Distribution Survey; Lough Sewdy (northbof)	07/12/2022	11:06	Golden Plover	80	improved agricultural grassland and dystrophic lakes; flight, circling	MW
GP002	Breeding Raptor Survey; Drumraney	11/04/2024	17:04	Golden Plover	81	improved agricultural grassland; swirling, travelling	NM
GP003	Breeding Raptor Survey; HHVP1 / Abbeyshrule bog	10/04/2024	21:05	Golden Plover	13	bogs and scrub/transitional woodland; travelling, calling	NM
GP004	Vantage Point Survey; Behind VP3	21/10/2022	15:13	Golden Plover	65	improved agricultural grassland; flight	MW



- Map Legend
- EIAR Site Boundary
 - Proposed Turbine Layout
 - 500m Radius of Turbines
 - ▲ VP Locations
 - Flight Observation
 - ◆ Non-flight Observation



Drawing Title	
Golden Plover Vantage Point Survey Observations	
Project Title	
Umma More Renewable Energy Development	
Drawn By	Checked By
KS	PC
Project No.	Drawing No.
201050	Fig. 7-4a-4
Scale	Date
1:40,000	13.06.2025
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 - 500m Radius of Turbines
 - Flight Observation



Drawing Title
**Golden Plover Winter Walkover
Survey Observations**

Project Title
**Umma More Renewable Energy
Development**

Drawn By KS	Checked By PC
Project No. 201050	Drawing No. Fig. 7-4a-5
Scale 1:30,000	Date 13.06.2025

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 - Observation



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Golden Plover Waterbird Distribution Survey Observations	
Project Title	
Umma More Renewable Energy Development	
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KS	PC
Project No.	Drawing No.
201050	Fig. 7-4a-6
Scale	Date
1:80,000	13.06.2025

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 - Flight Observation



Drawing Title
Golden Plover Incidental Records

Project Title
Umma More Renewable Energy Development

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Project No. 201050	Drawing No. Fig. 7-4a-7
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3.

PEREGRINE FALCON

Table 7 - 4a - 8 Peregrine Vantage Point Survey

Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0 -15m)	Band 2 (15-25m)	Band 3 (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
PE001	VP1	13/02/2023	09:10	Peregrine Falcon	1	32	0	32	0	0	amenity grassland (improved) and hedgerows; feed flight, 20m	MS
PE002	VP1	02/08/2023	10:15	Peregrine Falcon	1	137	15	22	100	0	improved agricultural grassland and hedgerows; hunting	FLM
PE003	VP1	02/08/2023	10:45	Peregrine Falcon	1	10	10	0	0	0	improved agricultural grassland; hunting	FLM
PE004	VP3	03/08/2023	14:00	Peregrine Falcon	1	370	0	0	0	370	improved agricultural grassland; travelling/ circling	FLM
PE005	VP3	11/10/2023	15:42	Peregrine Falcon	1	260	0	0	230	30	improved agricultural grassland and linear woodland/scrub; soaring over farmland, harried by hooded crow and moving NW	NM
PE006	VP3	20/11/2023	08:10	Peregrine Falcon	1	200	0	30	170	0	improved agricultural grassland and hedgerows; commuting and soaring high across site	NM
PE007	VP3	20/05/2024	05:48	Peregrine Falcon	1	60	0	0	60	0	improved agricultural grassland and linear woodland/scrub; travelling, male	NM
PE008	VP3	02/10/2024	17:05	Peregrine Falcon	1	8	8	0	0	0	active quarries and mines; coming in to perch	FOD
PE009	VP3	02/10/2024	17:15	Peregrine Falcon	1	-	-	-	-	-	active quarries and mines; perched, perched for 55 mins	FOD
PE010	VP3	02/10/2024	17:57	Peregrine Falcon	1	8	8	0	0	0	active quarries and mines; travelling	FOD

Table 7 - 4a - 9 Peregrine Winter Walkover Survey

Ref.	Date	Time	Transect	Species	Number	Habitat and activity	Surveyor
PE001	17/01/2024	16:34	-	Peregrine Falcon	1	improved agricultural grassland and linear woodland/scrub; commuting - low (wintering)	NM
PE002	22/01/2025	10:40		Peregrine Falcon	1	improved agricultural grassland and active quarries and mines; hunting (wintering)	DM

Table 7 – 4a - 10 Peregrine Breeding Walkover Survey

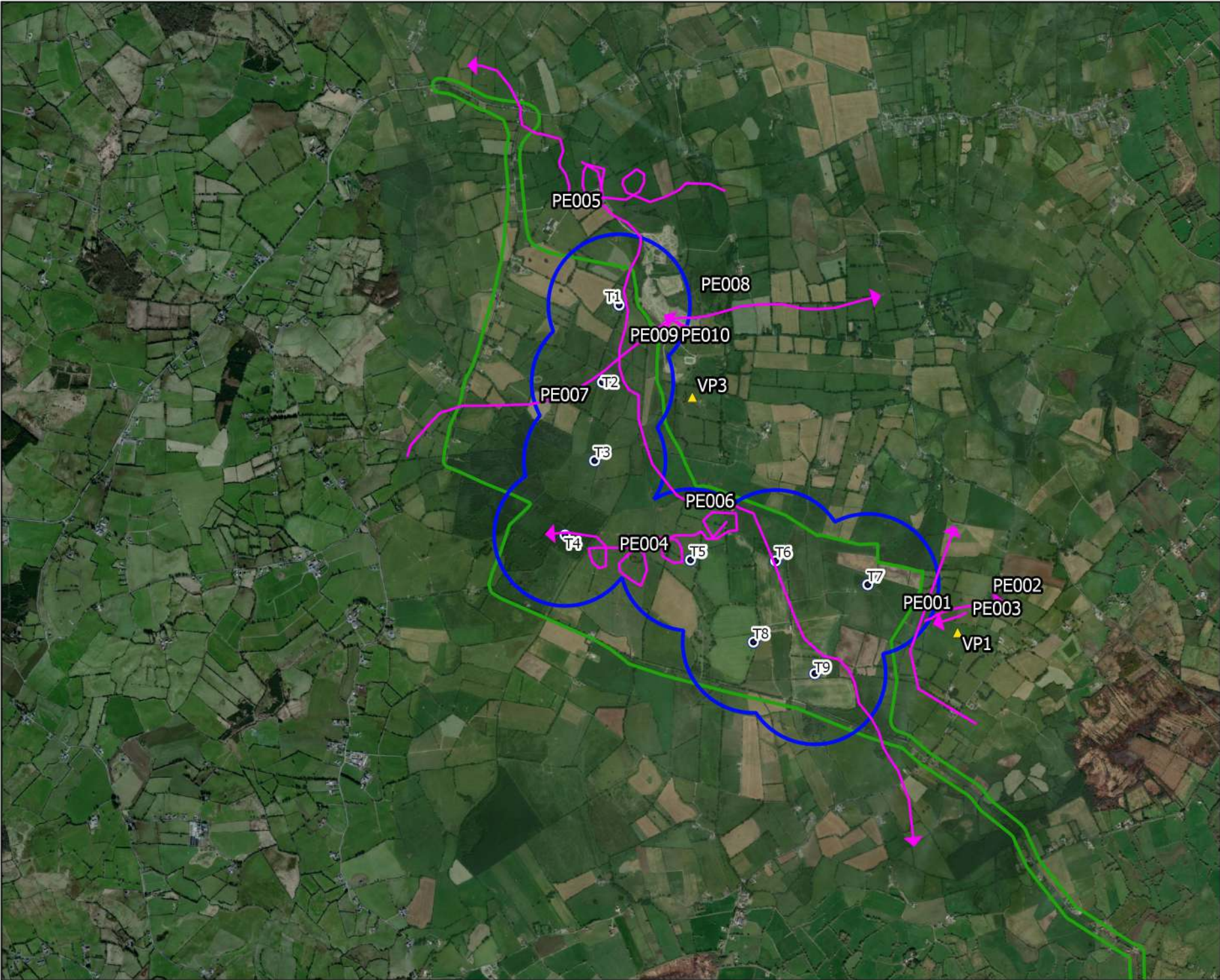
Ref.	Date	Time	Transect	Species	Number	Habitat and activity	Surveyor
PE001	19/05/2023	07:15	-	Peregrine Falcon	1	improved agricultural grassland; travelling (suitable nesting habitat; possible breeder)	FLM

Table 7 – 4a - 11 Peregrine Breeding Raptor Survey

Ref.	BR	Date	Time	Species	Number	Habitat and activity	Breeding status	Surveyor
PE001	BR6	23/05/2023	09:00	Peregrine Falcon	1	improved agricultural grassland, travelling	suitable nesting habitat; possible breeder	FLM

Table 7 – 4a - 12 Peregrine Incidental Records

Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
PE001	Waterbird Distribution Survey; Moyvoully	05/09/2023	12:35	Peregrine Falcon	1	hedgerows and raised bog; female flushed, flying over	FLM
PE002	Waterbird Distribution Survey; R. Tang farmland	31/10/2023	13:00	Peregrine Falcon	1	improved agricultural grassland and linear woodland/scrub; soaring and circling over farmland, harried by hooded crow	NM
PE003	Waterbird Distribution Survey; Ardnacranny	29/11/2023	12:17	Peregrine Falcon	1	improved agricultural grassland; commuting high across farmland	NM
PE004	Waterbird Distribution Survey; Ballinlig	05/01/2024	13:27	Peregrine Falcon	1	bogs, highly modified/non-native woodland and improved agricultural grassland; soaring, commuting	NM
PE005	Waterbird Distribution Survey; Ardnacranny	30/01/2024	10:32	Peregrine Falcon	1	improved agricultural grassland and highly modified/non-native woodland; soaring, stooping, male	NM
PE006	Waterbird Distribution Survey; Collierstown	03/05/2024	15:45	Peregrine Falcon	1	improved agricultural grassland; soaring, hunting	NM
PE007	Waterbird Distribution Survey; Umma Beg	25/09/2024	13:22	Peregrine Falcon	1	improved agricultural grassland; flying, male, low	FLM



- Map Legend
- EIAR Site Boundary
 - Proposed Turbine Layout
 - 500m Radius of Turbines
 - VP Locations
 - Flight Observation
 - Non-flight Observation



Drawing Title	
Peregrine Vantage Point Survey Observations	
Project Title	
Umma More Renewable Energy Development	
Drawn By	Checked By
KS	PC
Project No.	Drawing No.
201050	Fig. 7-4a-8
Scale	Date
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- EIAR Site Boundary
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 - 500m Radius of Turbines
 - Flight Observation



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Project Title	
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Scale	Date
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- Map Legend
- EIA Site Boundary
 - Proposed Turbine Layout
 - 500m Radius of Turbines
 - Flight Observation



Drawing Title	
Peregrine Breeding Walkover Survey Observations	
Project Title	
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Project No.	Drawing No.
201050	Fig. 7-4a-10
Scale	Date
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- EIA Site Boundary
 - Proposed Turbine Layout
 - 2km Survey Radius
 - RVP Location
 - Flight Observation



Drawing Title
Peregrine Breeding Raptor Survey Observations

Project Title
Umma More Renewable Energy Development

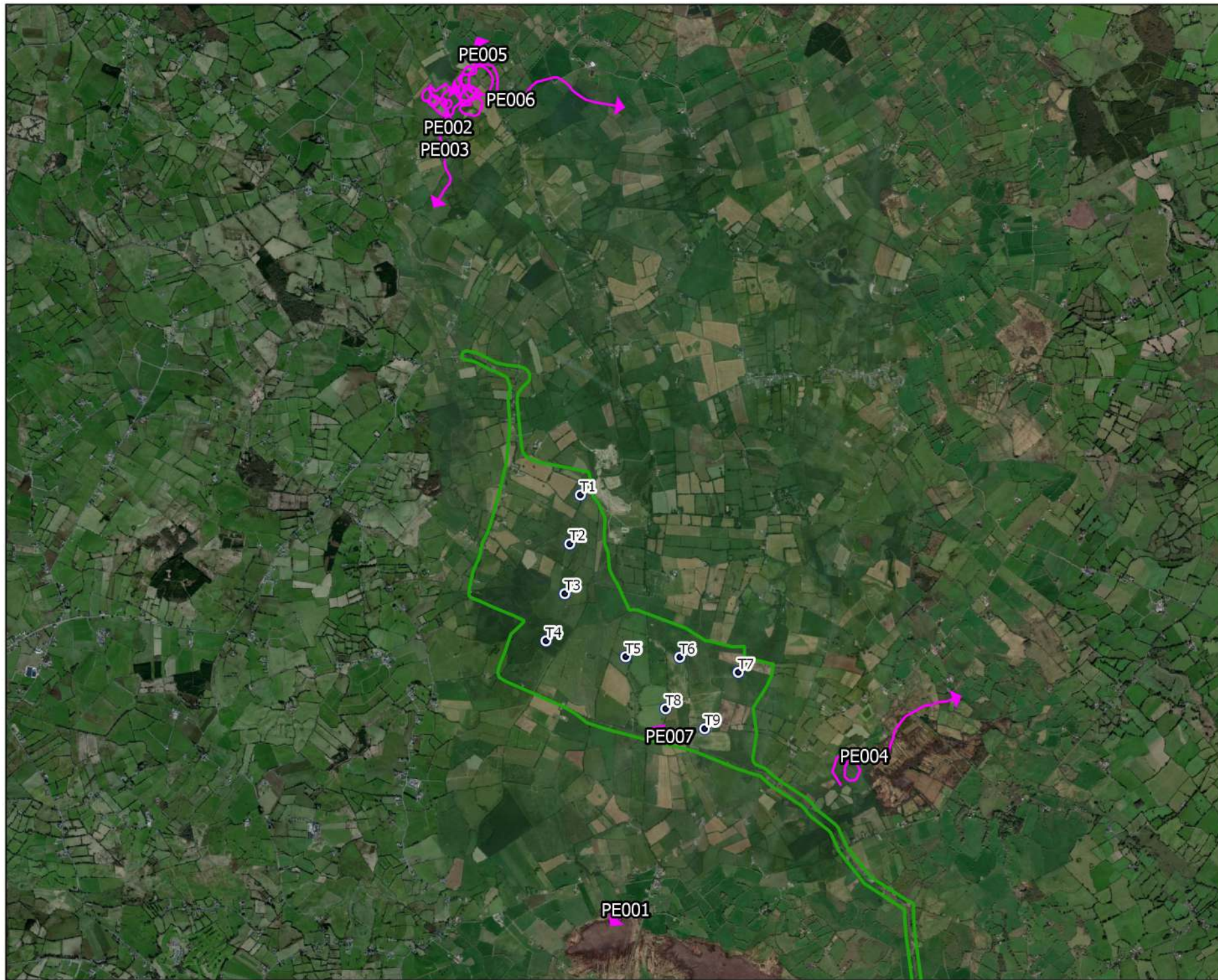
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Scale 1:40,000	Date 13.06.2025



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 - ➔ Flight Observation



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Peregrine Incidental Records

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Fig. 7-4a-12

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Date

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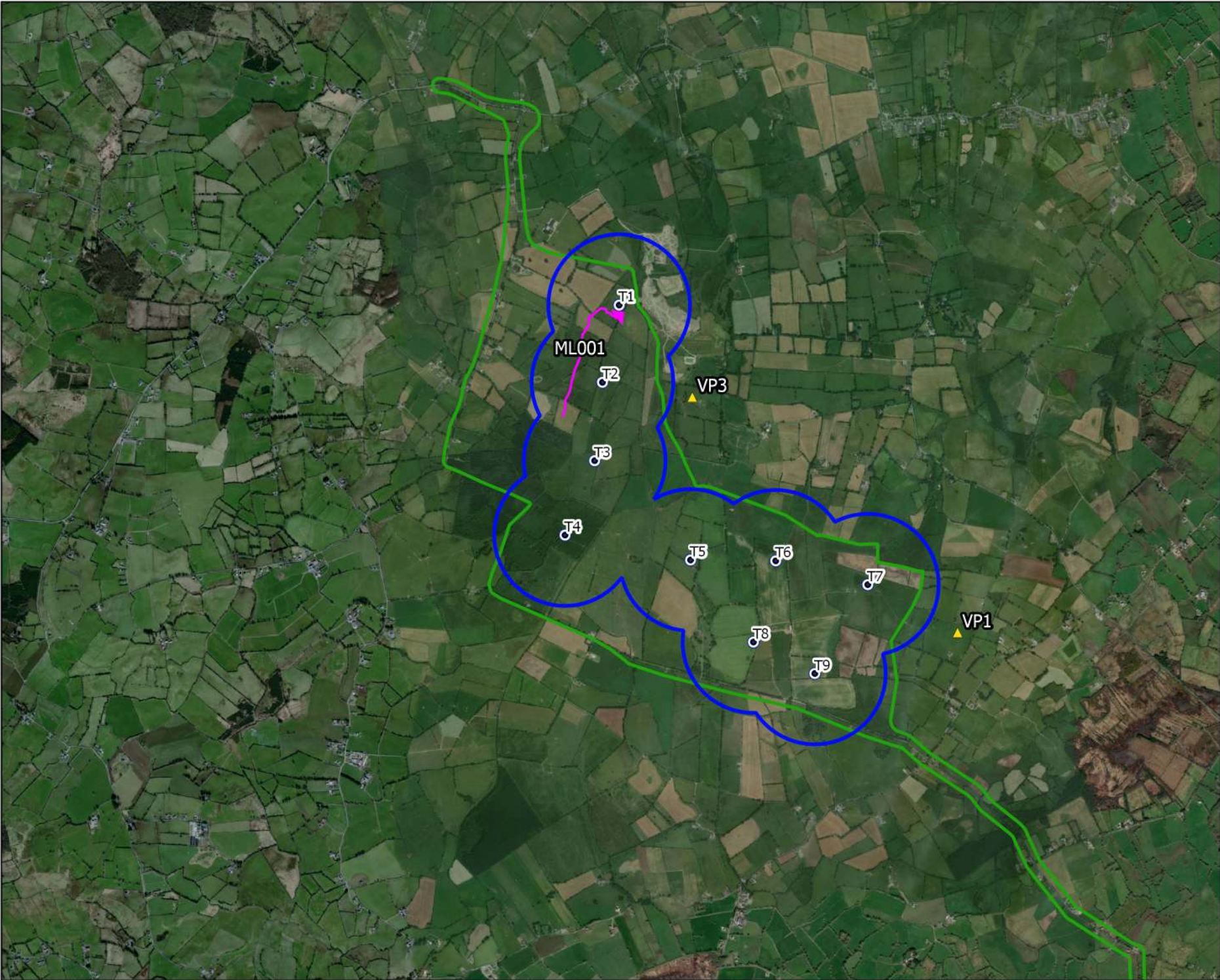
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4.

MERLIN

Table 7 - 4a - 13 Merlin Vantage Point Survey

Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0 -15m)	Band 2 (15-25m)	Band 3 (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
ML001	VP3	21/10/2022	17:24	Merlin	1	45	45	0	0	0	improved agricultural grassland and scrub; flight, landed in scrub	MW



- Map Legend
- EIAR Site Boundary
 - Proposed Turbine Layout
 - 500m Radius of Turbines
 - VP Locations
 - Flight Observation



Drawing Title	
Merlin Vantage Point Survey Observations	
Project Title	
Umma More Renewable Energy Development	
Drawn By	Checked By
KS	PC
Project No.	Drawing No.
201050	Fig. 7-4a-13
Scale	Date
1:35,000	13.06.2025
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5.

LAPWING

Table 7 - 4a - 14 Lapwing Vantage Point Survey

Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0 -15m)	Band 2 (15-25m)	Band 3 (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
L.001	VP3	21/10/2022	15:05	Lapwing	50	18	18	0	0	0	improved agricultural grassland; flight	MW
L.002	VP1	28/03/2023	15:20	Lapwing	1	15	15	0	0	0	wet grassland and improved agricultural grassland; low territory flight, 5m	MS
L.003	VP1	16/04/2023	06:45	Lapwing	1	5	5	0	0	0	hedgerows and improved agricultural grassland; flight in/chases	MS
L.004	VP1	16/04/2023	08:00	Lapwing	3	45	45	0	0	0	wet grassland and improved agricultural grassland; territory flying/chases	MS
L.005	VP1	16/04/2023	10:15	Lapwing	4	-	-	-	-	-	wet grassland and improved agricultural grassland; all birds still present around wet area and nearby pasture	MS
L.006	VP1	16/05/2023	17:10	Lapwing	1	6	6	0	0	0	improved agricultural grassland and wet grassland; calling	FLM
L.007	VP1	16/05/2023	20:15	Lapwing	4	86	86	0	0	0	improved agricultural grassland, marsh and wet grassland; calling, chasing crows, strong nesting evidence	FLM
L.008	VP3	17/05/2023	16:00	Lapwing	1	-	-	-	-	-	improved agricultural grassland; calling, individual heard calling	FLM
L.009	VP1	12/12/2023	14:17	Lapwing	32	1400	0	300	1100	0	improved agricultural grassland; swirling over farmland, moving steadily e	NM
L.010	VP1	12/12/2023	16:01	Lapwing	3	130	0	0	130	0	improved agricultural grassland and linear woodland/scrub; commuting sw across site	NM
L.011	VP3	26/03/2024	07:04	Lapwing	13	-	-	-	-	-	improved agricultural grassland; perched, grazing	NM
L.012	VP3	26/03/2024	09:53	Lapwing	13	50	10	30	10	0	improved agricultural grassland and highly modified/non-native woodland; departing	NM
L.013	VP1	24/05/2024	08:11	Lapwing	1	98	8	90	0	0	improved agricultural grassland and wet grassland; landing	FLM
L.014	VP3	19/06/2024	12:56	Lapwing	1	198	0	63	135	0	improved agricultural grassland; circling, calling	EOB

Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0 -15m)	Band 2 (15-25m)	Band 3 (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
L.015	VP3	19/06/2024	12:59	Lapwing	1	-	-	-	-	-	active quarries and mines, spoil and bare ground and recolonising bare ground; calling, adult	EOB
L.016	VP3	19/06/2024	16:57	Lapwing	1	-	-	-	-	-	spoil and bare ground and active quarries and mines; perched, calling	EOB
L.017	VP3	23/07/2024	17:00	Lapwing	3	-	-	-	-	-	improved agricultural grassland; grazing, calling	NM
L.018	VP3	23/07/2024	17:12	Lapwing	1	15	15	0	0	0	improved agricultural grassland and disturbed ground; departing, calling, fluttering away and landing within quarry, lost from view. others remaining	NM
L.019	VP1	11/09/2024	07:34	Lapwing	17	125	0	40	85	0	improved agricultural grassland and highly modified/non-native woodland; travelling, swooping, moving away southwest	NM
L.020	VP1	11/09/2024	10:59	Lapwing	6	50	0	50	0	0	improved agricultural grassland; travelling, swooping, moving towards north site area and quarry - landing not confirmed, disappearing behind terrain	NM
L.021	VP3	12/09/2024	08:13	Lapwing	6	0	0	0	0	0	improved agricultural grassland; perched, foraging, adjacent to quarry. were not seen departing	NM
L.022	VP3	12/09/2024	09:42	Lapwing	3	40	0	0	40	0	improved agricultural grassland, linear woodland/scrub and scrub/transitional woodland; travelling	NM
L.023	VP3	12/09/2024	10:18	Lapwing	21	75	25	40	10	0	improved agricultural grassland and linear woodland/scrub; travelling, swooping, landing, landing on farmland on site	NM
L.024	VP3	12/09/2024	10:20	Lapwing	21	0	0	0	0	0	improved agricultural grassland; perched, foraging, group that arrived from northwest, present for remainder of survey	NM
L.025	VP3	12/09/2024	12:07	Lapwing	7	50	0	20	30	0	improved agricultural grassland and highly modified/non-native woodland; travelling	NM

Table 7 – 4a - 15 Lapwing Winter Walkover Survey

Ref.	Date	Time	Transect	Species	Number	Habitat and activity	Surveyor
L.001	16/03/2023	10:44	-	Lapwing	18	amenity grassland (improved) and riparian woodland; flock flight across field, 13m (wintering)	MS
L.002	16/03/2023	12:43	-	Lapwing	23	wet grassland; feeding, same flock as earlier +5 (wintering)	MS
L.003	17/10/2023	12:27	-	Lapwing	14	improved agricultural grassland; perched on farmland on site (wintering)	NM
L.004	21/11/2023	10:24	-	Lapwing	37	improved agricultural grassland; perched and foraging on grassland (wintering)	NM
L.005	21/11/2023	12:20	-	Lapwing	16	improved agricultural grassland; perched and foraging on farmland (wintering)	NM
L.006	21/11/2023	14:09	-	Lapwing	143	improved agricultural grassland and scrub; swirling over farmland off site (wintering)	NM
L.007	21/11/2023	15:17	-	Lapwing	9	improved agricultural grassland; perched on grassland (wintering)	NM
L.008	21/11/2023	16:04	-	Lapwing	67	improved agricultural grassland and linear woodland/scrub; swirling over farmland - ne buffer (wintering)	NM
L.009	15/02/2024	15:10	-	Lapwing	16	improved agricultural grassland; perched, foraging (wintering)	NM
L.010	29/11/2024	10:05	T1	Lapwing	19	improved agricultural grassland, linear woodland/scrub and highly modified/non-native woodland; travelling, calling (wintering)	NM
L.011	13/03/2025	11:45	T2	Lapwing	2	improved agricultural grassland and wet grassland; travelling (wintering)	CC

Table 7 – 4a - 16 Lapwing Breeding Walkover Survey

Ref.	Date	Time	Transect	Species	Number	Habitat and activity	Surveyor
L.001	15/04/2023	08:48	-	Lapwing	3	wet grassland and improved agricultural grassland; territory defence, southern transects (permanent territory; probable breeding)	MS
L.002	08/04/2024	10:42	WO	Lapwing	1	wet grassland; territorial , male (suitable nesting habitat; possible breeder)	MS
L.003	24/07/2024	08:11	-	Lapwing	5	improved agricultural grassland and hedgerows; travelling, swooping, descending, moving low across site, descending into north of site but exact landing location unknown (summering; non-breeding)	NM

Ref.	Date	Time	Transect	Species	Number	Habitat and activity	Surveyor
L.004	24/07/2024	10:06	-	Lapwing	2	improved agricultural grassland and semi-natural grassland; travelling, swooping, landing, dropping into southeast corner of site, location of landing unknown (summering; non-breeding)	NM
L.005	24/07/2024	12:04	-	Lapwing	8	improved agricultural grassland; grazing on ground, calling, freshly cut field (summering; non-breeding)	NM
L.006	24/07/2024	17:06	-	Lapwing	8	improved agricultural grassland and linear woodland/scrub; travelling (flyover; non-breeding)	NM
L.007	24/07/2024	16:44	-	Lapwing	3	improved agricultural grassland, semi-natural grassland and highly modified/non-native woodland; flushed, departing (summering; non-breeding)	NM

Table 7 – 4a - 17 Lapwing Waterbird Distribution Survey

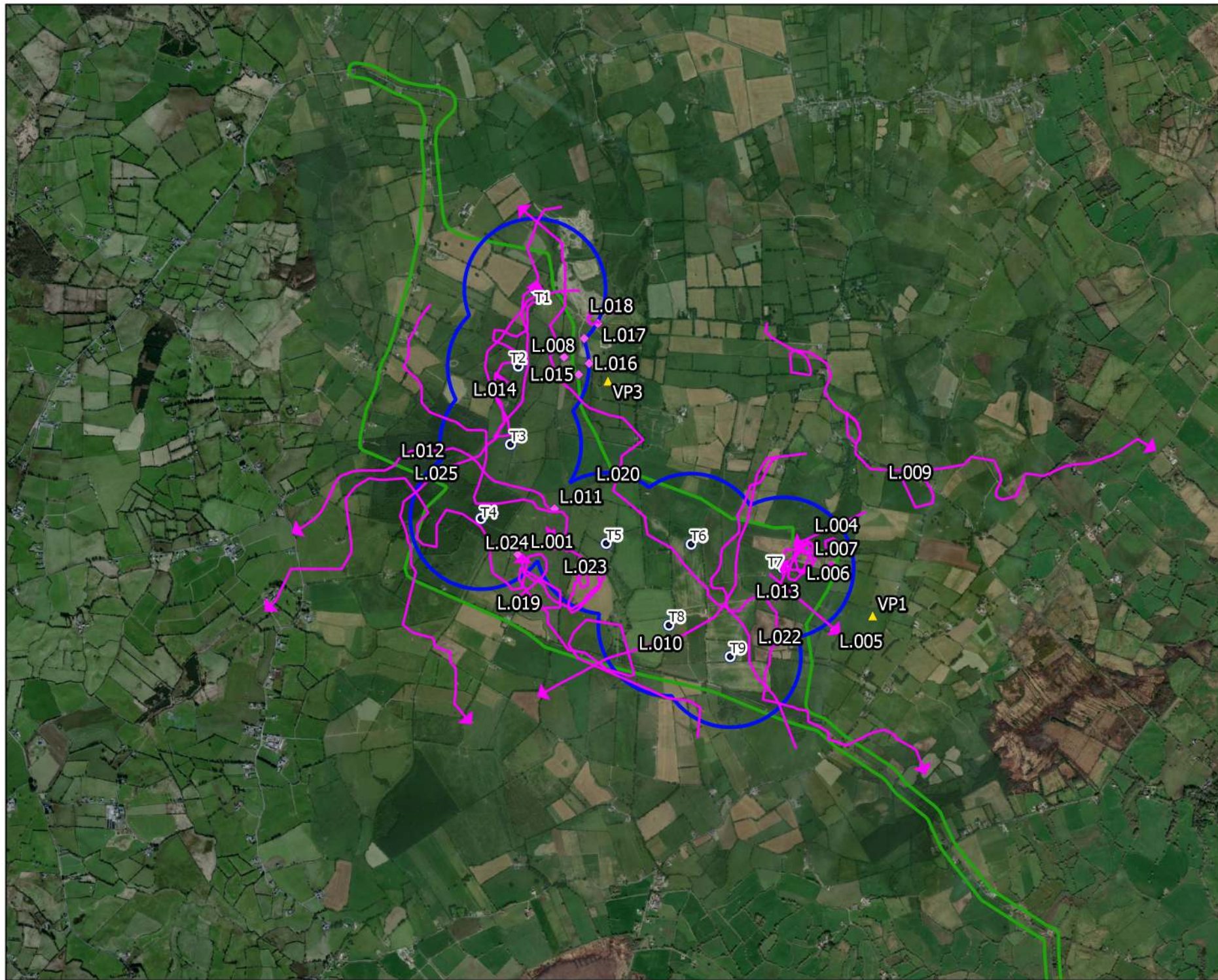
Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
L.001	Lough Sewdy	23/11/2022	09:41	Lapwing	3	dystrophic lakes; flew from northern bank off in a south west direction	MW
L.002	Ardnagragh	23/11/2022	11:43	Lapwing	49	improved agricultural grassland; gathered together with 67 bh, feeding	MW
L.003	Streamstown	07/12/2022	12:41	Lapwing	41	improved agricultural grassland; foraging, same location as two weeks before	MW
L.004	Uma More	05/09/2023	12:20	Lapwing	2	improved agricultural grassland; in field, circling, calling, flying north east	FLM
L.005	Ballynagrenia & Ballinderry Bog	10/10/2023	09:01	Lapwing	216	improved agricultural grassland and linear woodland/scrub; swirling and swooping over farmland to n of bog area, moving gradually e	NM
L.006	Ballymore	10/10/2023	15:26	Lapwing	86	improved agricultural grassland; flying across farmland, moving wsw	NM
L.007	Ballinlig	31/10/2023	15:39	Lapwing	39	improved agricultural grassland and linear woodland/scrub; swirling over farmland, descending gradually and lost from view	NM
L.008	R. Tang farmland	09/11/2023	09:16	Lapwing	25	improved agricultural grassland; commuting across farmland, moving ne	NM
L.009	R. Tang	09/11/2023	10:01	Lapwing	43	improved agricultural grassland; perched with semi-flooded farmland along river	NM
L.010	Drumraney	09/11/2023	10:28	Lapwing	51	improved agricultural grassland; swirling over farmland	NM
L.011	Ballymore	09/11/2023	11:33	Lapwing	57	improved agricultural grassland; swirling over farmland	NM

L.012	Moyvoughly	09/11/2023	15:27	Lapwing	48	improved agricultural grassland; perched within farmland	NM
L.013	Ballymore	29/11/2023	10:58	Lapwing	132	improved agricultural grassland and semi-natural grassland; swirling over farmland	NM
L.014	On site	29/11/2023	15:54	Lapwing	54	improved agricultural grassland and hedgerows; commuting w across site in the evening	NM
L.015	Umma Beg (VP1 area)	30/01/2024	12:06	Lapwing	97	improved agricultural grassland; soaring, travelling	NM
L.016	Lugacaha	21/02/2024	08:28	Lapwing	19	improved agricultural grassland; travelling south	NM
L.017	Adjacent to R. Tang	21/02/2024	09:03	Lapwing	11	improved agricultural grassland; perched, foraging	NM
L.018	Clonybane	21/02/2024	11:28	Lapwing	11	improved agricultural grassland and highly modified/non-native woodland; travelling northwest	NM
L.019	Ballynagall	21/02/2024	13:58	Lapwing	31	improved agricultural grassland; travelling, swirling, moving south	NM
L.020	Gortmore	27/03/2024	09:28	Lapwing	47	improved agricultural grassland; travelling southwest	NM
L.021	Ballynagrenia & Ballinderry bogs	27/03/2024	14:36	Lapwing	8	bogs; travelling, swooping, descending, possibly evidence of displaying	NM
L.022	Umma More	13/08/2024	11:40	Lapwing	13	improved agricultural grassland; grazing, perched	NM
L.023	Ballynagrenia & Ballinderry bogs	13/08/2024	14:33	Lapwing	7	scrub, bogs and improved agricultural grassland; travelling, moving east	NM
L.024	Lough Sewdy	25/09/2024	11:10	Lapwing	1	dystrophic lakes and improved agricultural grassland; flying, over lake	FLM
L.025	Lough Sewdy S1	11/01/2025	14:00	Lapwing	1	lakes and ponds and improved agricultural grassland; travelling	DM
L.026	Lough Sewdy S1	30/01/2025	15:00	Lapwing	2	lakes and ponds and wet grassland; roosting	DM

Table 7 – 4a - 18 Lapwing Incidental Records

Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
L.001	Waterbird Distribution Survey; Lough Sewdy	07/12/2022	11:03	Lapwing	15	dystrophic lakes and improved agricultural grassland; flight	MW





- Map Legend
- EIAR Site Boundary
 - Proposed Turbine Layout
 - 500m Radius of Turbines
 - ▲ VP Locations
 - Flight Observation
 - ◆ Non-flight Observation



Drawing Title
Lapwing Vantage Point Survey Observations

Project Title
Umma More Renewable Energy Development

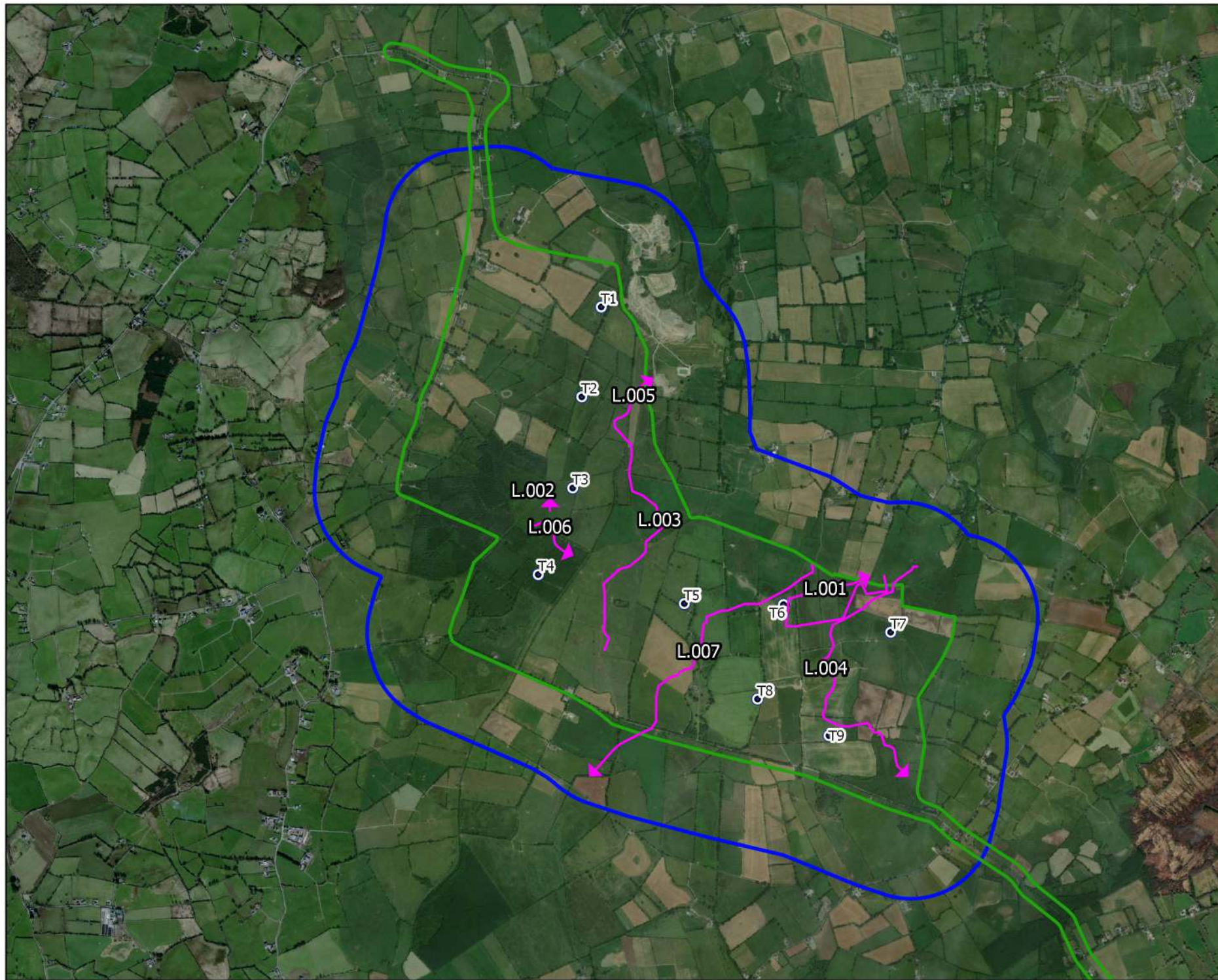
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- EIAR Site Boundary
 - Proposed Turbine Layout
 - 500m Radius of Turbines
 - Flight Observation



Drawing Title
Lapwing Breeding Walkover Survey
Observations

Project Title
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Map Legend

- EIAR Site Boundary
- Proposed Turbine Layout
- 5km Survey Radius
- Observation



Drawing Title

Lapwing Waterbird Distribution
Survey Observations

Project Title

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Fig. 7-4a-17

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- Map Legend
-  EIAR Site Boundary
 -  Proposed Turbine Layout
 -  Flight Observation



Drawing Title	
Lapwing Incidental Records	
Project Title	
Umma More Renewable Energy Development	
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KS	PC
Project No.	Drawing No.
201050	Fig. 7-4a-18
Scale	Date
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6.

TUFTED DUCK

Table 7 - 4 - 19 Tufted Duck Waterbird Distribution Surveys

Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
TU001	s1/ ballymore/ lough sewdy	30/05/2023	06:40	Tufted Duck	3	dystrophic lakes; flying over, two males and one female	FLM
TU002	L. Sewdy	09/11/2023	09:30	Tufted Duck	23	lakes and ponds; swimming and diving on lake	NM
TU003	L. Sewdy	29/11/2023	11:25	Tufted Duck	83	lakes and ponds; swimming on lake	NM



- Map Legend
- EIAR Site Boundary
 - Proposed Turbine Layout
 - 5km Survey Radius
 - Observation



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Drawing Title
Tufted Duck Waterbird Distribution
Survey Observations

Project Title
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7.

BLACK-HEADED GULL

Table 7 - 4a - 20 Black-headed Gull Vantage Point Survey

Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0 -15m)	Band 2 (15-25m)	Band 3 (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
BH001	VP1	25/11/2022	12:44	Black-headed Gull	6	60	20	40	0	0	improved agricultural grassland; slow undulating commute flight, other gull species possible	MW
BH002	VP3	11/10/2023	15:49	Black-headed Gull	23	780	100	350	330	0	disturbed ground, improved agricultural grassland and linear woodland/scrub; swirling and swooping over quarry area for a long period, eventually moving away sw	NM
BH003	VP1	22/11/2023	10:23	Black-headed Gull	5	180	0	0	180	0	improved agricultural grassland; commuting across farmland	NM
BH004	VP3	15/12/2023	11:30	Black-headed Gull	33	1600	250	250	1100	0	improved agricultural grassland; swirling and swooping over farmland, moving e, often swirling close to ground - but never landing	NM
BH005	VP3	15/12/2023	15:09	Black-headed Gull	5	80	0	0	80	0	improved agricultural grassland; commuting across farmland	NM
BH006	VP1	06/02/2024	14:39	Black-headed Gull	18	70	0	70	0	0	improved agricultural grassland and linear woodland/scrub; travelling, swooping	NM
BH007	VP1	06/02/2024	16:06	Black-headed Gull	1	60	0	0	60	0	improved agricultural grassland and highly modified/non-native woodland; travelling	NM
BH008	VP1	24/05/2024	09:14	Black-headed Gull	5	88	0	0	88	0	improved agricultural grassland; flying	FLM
BH009	VP1	11/09/2024	08:38	Black-headed Gull	8	65	0	0	65	0	improved agricultural grassland and linear woodland/scrub; travelling	NM

Table 7 - 4a - 21 Black-headed Gull Winter Walkover Survey

Ref.	Date	Time	Transect	Species	Number	Habitat and activity	Surveyor
BH001	15/02/2024	12:40	-	Black-headed Gull	4	improved agricultural grassland; travelling (wintering)	NM

Table 7 – 4a - 22 Black-headed Gull Breeding Walkover Survey

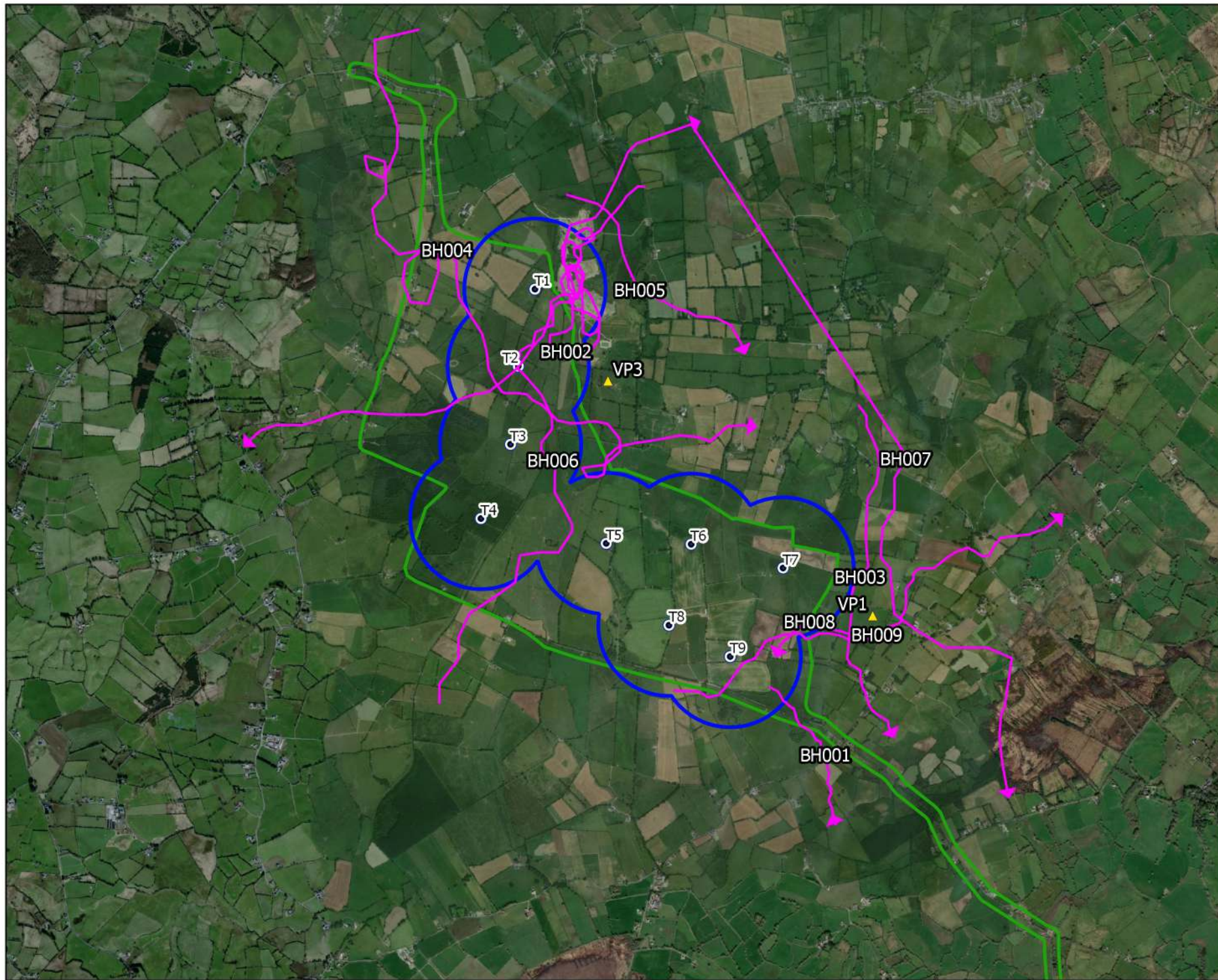
Ref.	Date	Time	Transect	Species	Number	Habitat and activity	Surveyor
BH001	11/07/2023	08:15	-	Black-headed Gull	2	improved agricultural grassland; feeding in manured field (summering; non-breeding)	MS

Table 7 – 4a - 23 Black-headed Gull Waterbird Distribution Survey

Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
BH001	Ardnagragh	23/11/2022	11:40	Black-headed Gull	67	improved agricultural grassland; feeding on paddock, patrolling surroundings over considerable area. with 49 l.	MW
BH002	L. Sewdy	09/11/2023	09:30	Black-headed Gull	16	lakes and ponds; floating on lake	NM
BH003	Moyvoughly	09/11/2023	13:29	Black-headed Gull	5	improved agricultural grassland; commuting across farmland, moving nw	NM
BH004	Ballynagrenia & Ballinderry Bog	29/11/2023	09:27	Black-headed Gull	26	bogs and scrub; commuting across bog, moving sw	NM
BH005	Knockastia	29/11/2023	10:41	Black-headed Gull	12	improved agricultural grassland; soaring over farmland	NM
BH006	Ballinacorra	07/02/2024	11:54	Black-headed Gull	4	improved agricultural grassland and highly modified/non-native woodland; travelling, on site, moving northeast	NM
BH007	Curragh	07/02/2024	13:33	Black-headed Gull	2	improved agricultural grassland; travelling west	NM
BH008	Ballymore	21/02/2024	09:35	Black-headed Gull	5	improved agricultural grassland and buildings and artificial surfaces; travelling east	NM
BH009	Ballymore	27/03/2024	08:09	Black-headed Gull	15	improved agricultural grassland and buildings and artificial surfaces; travelling north, swooping	NM
BH010	Ballymore	03/05/2024	14:02	Black-headed Gull	3	improved agricultural grassland; travelling southwest	NM
BH011	Ballynagrenia & Ballinderry bogs	03/05/2024	19:04	Black-headed Gull	8	bogs and scrub; travelling northeast	NM
BH012	Sewdy lough	25/11/2024	14:00	Black-headed Gull	12	lakes and ponds and improved agricultural grassland; travelling	DM

Table 7 - 4a - 24 Black-headed Gull Incidental Records

Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
BH001	Breeding Raptor Survey; Raheen	24/05/2024	16:45	Black-headed Gull	25	improved agricultural grassland; perched, foraging	NM
BH002	Breeding Raptor Survey; BR1	11/06/2024	12:17	Black-headed Gull	3	improved agricultural grassland, bogs and scrub; travelling	NM
BH003	Breeding Raptor Survey; BR1	11/06/2024	12:56	Black-headed Gull	7	improved agricultural grassland and linear woodland/scrub; travelling, swooping	NM
BH004	Breeding Barn Owl Survey; BOVP2	11/06/2024	21:48	Black-headed Gull	1	improved agricultural grassland and linear woodland/scrub; travelling	NM



- Map Legend
- EIAR Site Boundary
 - Proposed Turbine Layout
 - 500m Radius of Turbines
 - ▲ VP Locations
 - Flight Observation



Drawing Title
**Black-headed Gull Vantage Point
Survey Observations**

Project Title
**Umma More Renewable Energy
Development**

Drawn By KS	Checked By PC
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Project No. 201050	Drawing No. Fig. 7-4a-20
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Scale 1:35,000	Date 13.06.2025
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 Website: www.mkofireland.ie



- Map Legend
- EIA Site Boundary
 - Proposed Turbine Layout
 - 500m Radius of Turbines
 - Flight Observation



Drawing Title
**Black-headed Gull Winter Walkover
Survey Observations**

Project Title
**Umma More Renewable Energy
Development**

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Project No. 201050	Drawing No. Fig. 7-4a-21
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 - Flight Observation



Drawing Title
Black-headed Gull Breeding Walkover
Survey Observations

Project Title
Umma More Renewable Energy
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Project No. 201050	Drawing No. Fig. 7-4a-22
Scale 1:30,000	Date 13.06.2025

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 - 5km Survey Radius
 - Observation



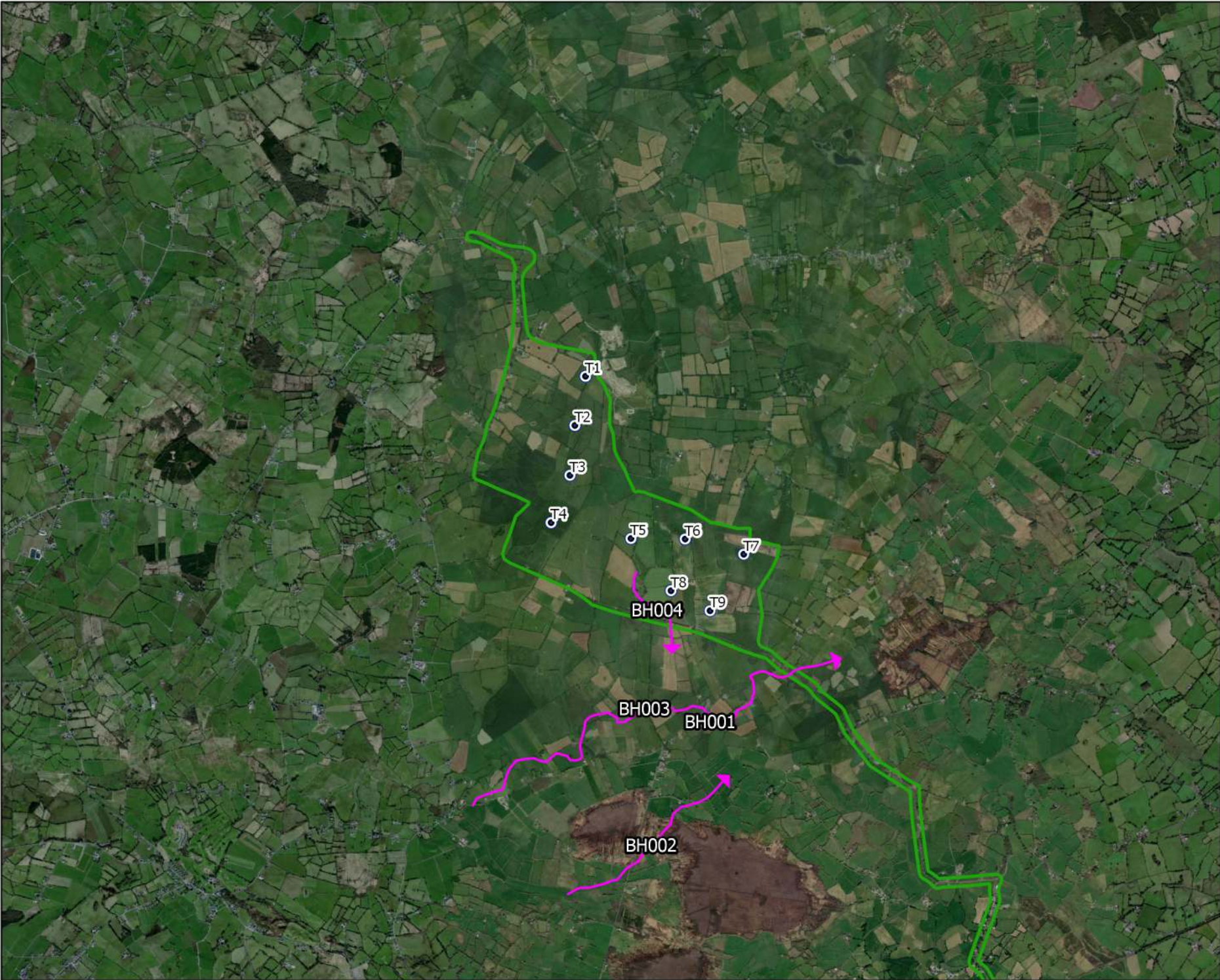
Drawing Title:
**Black-headed Gull Waterbird
Distribution Survey Observations**

Project Title:
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 - Proposed Turbine Layout
 - Flight Observation



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Project No.	Drawing No.
201050	Fig. 7-4a-24
Scale	Date
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8.

LITTLE GREBE

Table 7 – 4a - 25 Little Grebe Vantage Point Surveys

Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0 -15m)	Band 2 (15-25m)	Band 3 (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
LG001	VP3	19/06/2024	16:13	Little Grebe	1	-	-	-	-	-	other artificial lakes and ponds and active quarries and mines; foraging	EOB
LG002	VP4	02/10/2024	18:23	Little Grebe	1	-	-	-	-	-	lakes and ponds; fishing	FOD

Table 7 – 4a - 26 Little Grebe Winter Walkover Surveys

Ref.	Date	Time	Transect	Species	Number	Habitat and activity	Surveyor
LG001	13/03/2025	09:25	T1	Little Grebe	1	other artificial lakes and ponds; swimming, feeding, seen briefly before diving (wintering)	CC

Table 7 – 4a - 27 Little Grebe Waterbird Distribution Surveys

Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
LG001	s1	14/03/2023	13:45	Little Grebe	1	eutrophic lakes and marsh; swim/ dive	MS
LG002	L. Sewdy	10/10/2023	15:11	Little Grebe	7	lakes and ponds; swimming and diving on lake	NM
LG003	L. Sewdy	21/02/2024	08:20	Little Grebe	27	lakes and ponds and reed and large sedge swamps; swimming, calling, diving, scattered within lake and fringes, numbers were rough	NM
LG004	L. Sewdy	03/05/2024	14:43	Little Grebe	5	lakes and ponds and reed and large sedge swamps; swimming, calling	NM
LG005	L. Sewdy	29/08/2024	11:51	Little Grebe	3	lakes and ponds; swimming, diving	NM



- Map Legend
- EIAR Site Boundary
 - Proposed Turbine Layout
 - 500m Radius of Turbines
 - VP Locations
 - Non-flight Observation



Drawing Title
Little Grebe Vantage Point Survey Observations

Project Title
Umma More Renewable Energy Development

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Project No. 201050	Drawing No. Fig. 7-4a-25
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- Map Legend
- EIAR Site Boundary
 - Proposed Turbine Layout
 - 500m Radius of Turbines
 - Flight Observation



Drawing Title	
Little Grebe Winter Walkover Survey Observations	
Project Title	
Umma More Renewable Energy Development	
Drawn By	Checked By
KS	PC
Project No.	Drawing No.
201050	Fig. 7-4a-26
Scale	Date
1:30,000	13.06.2025
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- Map Legend
- EIAR Site Boundary
 - Proposed Turbine Layout
 - 5km Survey Radius
 - Observation



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Drawing Title
Little Grebe Waterbird Distribution
Survey Observations

Project Title
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Scale 1:80,000	Date 13.06.2025

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9.

MALLARD

Table 7 - 4a - 28 Mallard Vantage Point Survey

Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0 -15m)	Band 2 (15-25m)	Band 3 (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
MA001	VP3	21/10/2022	14:26	Mallard	30	60	10	50	0	0	scrub; landed in wet scrub and concealed	MW
MA002	VP3	22/11/2022	07:16	Mallard	10	-	-	-	-	-	improved agricultural grassland; contact calls, mw	MW
MA003	VP3	22/11/2022	07:17	Mallard	1	-	-	-	-	-	improved agricultural grassland; calling, heard not seen	MW
MA004	VP3	22/11/2022	08:28	Mallard	5	70	0	45	25	0	improved agricultural grassland; flight	MW
MA005	VP3	24/02/2023	14:18	Mallard	2	20	20	0	0	0	riparian woodland and improved agricultural grassland; flight along creek, 8m	MS
MA006	VP3	04/04/2023	08:11	Mallard	4	10	0	10	0	0	wet grassland; fly over	MS
MA007	VP1	16/04/2023	06:34	Mallard	2	-	-	-	-	-	wet grassland; pair on wet area	MS
MA008	VP1	16/04/2023	06:40	Mallard	7	-	-	-	-	-	wet grassland; loafing on wet area	MS
MA009	VP3	19/07/2023	08:40	Mallard	3	22	0	22	0	0	improved agricultural grassland and treelines; flight, 20m	MS
MA010	VP3	19/07/2023	09:00	Mallard	2	24	0	22	2	0	improved agricultural grassland and treelines; direct flight, 20m	MS
MA011	VP3	19/09/2023	08:10	Mallard	4	15	0	15	0	0	improved agricultural grassland; flying form roost	FLM
MA012	VP3	15/12/2023	16:06	Mallard	16	140	0	30	110	0	improved agricultural grassland and linear woodland/scrub; commuting s across site	NM
MA013	VP1	14/03/2024	10:49	Mallard	8	40	0	25	15	0	improved agricultural grassland and linear woodland/scrub; travelling	NM
MA014	VP3	12/04/2024	19:00	Mallard	1	45	15	30	0	0	treelines and improved agricultural grassland; flying	MS
MA015	VP3	23/07/2024	19:13	Mallard	3	75	40	30	5	0	improved agricultural grassland and lakes and ponds; travelling, landing, landing on quarry lake	NM

Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0 -15m)	Band 2 (15-25m)	Band 3 (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
MA016	VP3	23/07/2024	19:15	Mallard	3	-	-	-	-	-	lakes and ponds and disturbed ground; swimming, calling, present for remainder of survey. same individuals that flew in and landed	NM
MA017	VP3	02/10/2024	17:32	Mallard	2	-	-	-	-	-	active quarries and mines and lakes and ponds; on water	FOD
MA018	VP1	20/11/2024	16:56	Mallard	2	60	0	60	0	0	improved agricultural grassland; travelling	DM
MA019	VP3	26/11/2024	09:50	Mallard	17	0	0	0	0	0	active quarries and mines; feeding, pond in sand-pit	DM
MA020	VP3	16/01/2025	09:48	Mallard	4	60	60	0	0	0	improved agricultural grassland and depositing/lowland rivers; travelling, probably landed	DM
MA021	VP3	16/01/2025	11:25	Mallard	8	240	60	60	120	0	improved agricultural grassland and depositing/lowland rivers; travelling	DM
MA022	VP3	16/01/2025	13:05	Mallard	7	60	30	30	0	0	improved agricultural grassland and depositing/lowland rivers; travelling	DM
MA023	VP3	12/02/2025	14:43	Mallard	7	47	0	20	27	0	improved agricultural grassland; traveling	CC

Table 7 - 4a - 29 Mallard Winter Walkover Survey

Ref.	Date	Time	Transect	Species	Number	Habitat and activity	Surveyor
MA001	16/03/2023	08:53	-	Mallard	1	hedgerows, riparian woodland and amenity grassland (improved); over flight, 20m (wintering)	MS
MA002	16/03/2023	09:18	-	Mallard	2	depositing/lowland rivers and riparian woodland; flush from river (wintering)	MS
MA003	21/11/2023	11:09	-	Mallard	18	improved agricultural grassland; commuting and calling across farmland (wintering)	NM
MA004	15/02/2024	09:41	-	Mallard	5	drainage ditches and improved agricultural grassland; flushed, calling (wintering)	NM
MA005	29/11/2024	11:42	T2	Mallard	5	depositing/lowland rivers and improved agricultural grassland; flushed, calling (wintering)	NM
MA006	22/01/2025	10:17		Mallard	2	depositing/lowland rivers and improved agricultural grassland; feeding (wintering)	DM

Ref.	Date	Time	Transect	Species	Number	Habitat and activity	Surveyor
MA007	22/01/2025	13:38		Mallard	1	depositing/lowland rivers; feeding (wintering)	DM

Table 7 – 4a - 30 Mallard Breeding Walkover Survey

Ref.	Date	Time	Transect	Species	Number	Habitat and activity	Surveyor
MA001	19/05/2023	08:15	-	Mallard	1	improved agricultural grassland and depositing/lowland rivers; flying over to river (suitable nesting habitat; possible breeder)	FLM
MA002	19/05/2023	10:20	-	Mallard	1	improved agricultural grassland and depositing/lowland rivers; flying over to river, male (suitable nesting habitat; possible breeder)	FLM
MA003	19/05/2023	11:15	-	Mallard	1	improved agricultural grassland; flying over, male (suitable nesting habitat; possible breeder)	FLM
MA004	15/04/2023	13:42	-	Mallard	2	depositing/lowland rivers, wet willow-alder-ash woodland and improved agricultural grassland; pair on river, northern transects (pair; probable breeding)	MS
MA005	14/06/2023	08:50	-	Mallard	6	wet willow-alder-ash woodland, improved agricultural grassland and amenity grassland (improved); 2 adults 4 fledglings (fledged young; confirmed breeding)	MS
MA006	11/07/2023	12:22	-	Mallard	1	improved agricultural grassland, other artificial lakes and ponds and active quarries and mines; female flying across pond area (suitable nesting habitat; possible breeder)	MS
MA007	08/04/2024	07:20	WO	Mallard	2	depositing/lowland rivers, wet willow-alder-ash woodland and wet grassland; flying, landed, courting, pair (suitable nesting habitat; possible breeder)	MS

Table 7 – 4a - 31 Mallard Waterbird Distribution Survey

Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
MA001	Umma More	12/10/2022	17:28	Mallard	30	improved agricultural grassland and scrub; roost site	MW
MA002	Lough Sewdy	07/12/2022	11:14	Mallard	1	dystrophic lakes; resting waters edge	MW
MA003	Lough Sewdy	07/12/2022	11:15	Mallard	5	dystrophic lakes; heard not seen, guess location and number	MW
MA004	G1 Ballinlig	13/02/2023	13:00	Mallard	2	improved agricultural grassland; on winter flood pond	FLM

Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
MA005	Sunderlin lough S1	18/02/2023	07:35	Mallard	5	eutrophic lakes; swim and flying	MS
MA006	umma g6	18/02/2023	10:14	Mallard	1	riparian woodland and drainage ditches; flying and landed	MS
MA007	lough sewdy	24/02/2023	11:30	Mallard	7	lakes and ponds; flying/ on lake	FLM
MA008	umma d6	28/02/2023	10:10	Mallard	2	riparian woodland; flight	MS
MA009	Sunderlin lough S1	28/02/2023	15:00	Mallard	6	eutrophic lakes; swimming	MS
MA010	g1	14/03/2023	09:10	Mallard	2	wet willow-alder-ash woodland, cutover bog and recently-felled woodland; pair/flight/calling	MS
MA011	s1	14/03/2023	13:44	Mallard	1	eutrophic lakes and riparian woodland; fly in/ swim	MS
MA012	s1	14/03/2023	14:02	Mallard	2	eutrophic lakes, marsh and riparian woodland; pair/ fly in/ land	MS
MA013	B3	06/04/2023	14:45	Mallard	3	acid oligotrophic lakes and upland blanket bog; on bog ditch water	MS
MA014	B3	06/04/2023	14:53	Mallard	1	upland blanket bog and acid oligotrophic lakes; fly in and land	MS
MA015	B3	21/04/2023	07:43	Mallard	4	other artificial lakes and ponds and upland blanket bog; flush/feeding	MS
MA016	S1 Ballymore	18/05/2023	11:20	Mallard	2	dystrophic lakes; foraging	FLM
MA017	S1/ Ballymore Lough Sewdy	30/05/2023	06:20	Mallard	2	dystrophic lakes; flying away from roost	FLM
MA018	Raheen	01/08/2023	12:40	Mallard	4	improved agricultural grassland; roosting/ foraging, adult with young	FLM
MA019	Raheen	05/09/2023	11:50	Mallard	2	improved agricultural grassland; foraging, on pond	FLM
MA020	L. Sewdy	10/10/2023	15:10	Mallard	18	lakes and ponds and reed and large sedge swamps; swimming on lake - primarily calling within reedy margins, numbers were rough	NM
MA021	L. Sewdy	31/10/2023	11:58	Mallard	17	reed and large sedge swamps and lakes and ponds; swimming and calling with reedy margins	NM
MA022	L. Sewdy	09/11/2023	09:29	Mallard	8	lakes and ponds; swimming on lake	NM

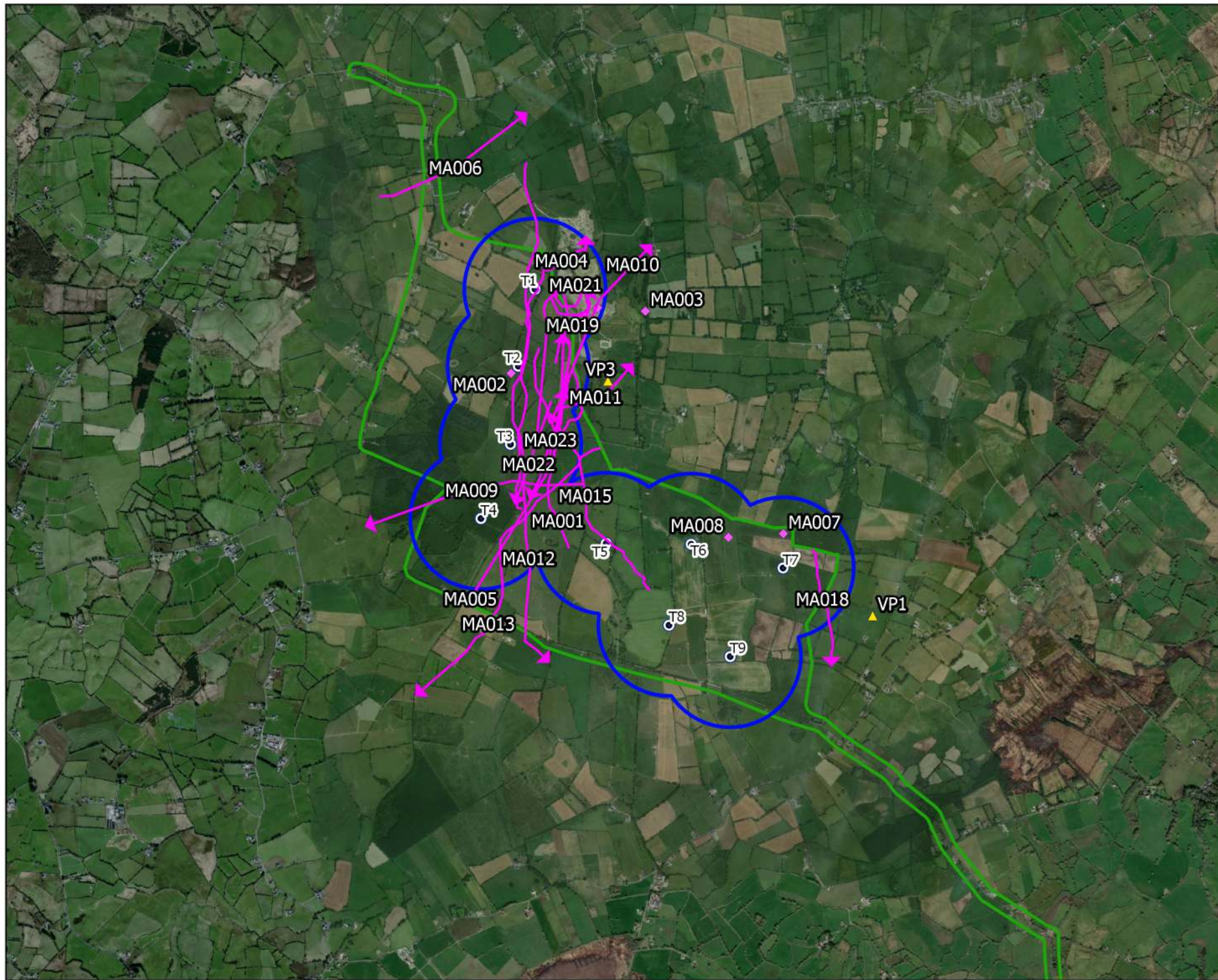
Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
MA023	L. Sewdy	29/11/2023	11:21	Mallard	117	lakes and ponds and reed and large sedge swamps; swimming and calling on lake and along fringes, scattered throughout	NM
MA024	Umma More	29/11/2023	15:02	Mallard	24	improved agricultural grassland; commuting across farmland, moving w	NM
MA025	Lecade	05/12/2023	11:20	Mallard	5	improved agricultural grassland and canals; foraging	FLM
MA026	Lough Sewdy	18/12/2023	14:30	Mallard	8	dystrophic lakes and improved agricultural grassland; flying	FLM
MA027	Ballynagrenia & Ballinderry bogs	30/01/2024	15:45	Mallard	9	cutover bog and lakes and ponds; dabbling, flushed	NM
MA028	L. Sewdy	12/03/2024	15:06	Mallard	24	lakes and ponds and reed and large sedge swamps; swimming, calling, numbers were rough, likely to be more	NM
MA029	L. Sewdy	12/03/2024	15:11	Mallard	48	lakes and ponds and reed and large sedge swamps; swimming, dabbling	NM
MA030	L. Sewdy	12/03/2024	15:13	Mallard	3	lakes and ponds and reed and large sedge swamps; travelling low across lake, landing with reedbed fringe	NM
MA031	L. Sewdy	12/03/2024	15:19	Mallard	6	lakes and ponds and reed and large sedge swamps; departing, calling	NM
MA032	L. Sewdy	12/03/2024	15:21	Mallard	2	lakes and ponds; swimming	NM
MA033	R. Tang	12/03/2024	15:30	Mallard	5	depositing/lowland rivers; swimming	NM
MA034	Ballinderry and Ballynagrenia bogs	12/03/2024	16:52	Mallard	2	bogs and scrub; travelling, calling	NM
MA035	Dungolman river (Umma More)	12/03/2024	17:04	Mallard	13	depositing/lowland rivers; swimming, foraging	NM
MA036	L. Sewdy	27/03/2024	07:48	Mallard	24	lakes and ponds and reed and large sedge swamps; swimming, calling	NM
MA037	R. Tang	27/03/2024	08:22	Mallard	7	depositing/lowland rivers; swimming, calling	NM
MA038	Ballinlig	27/03/2024	11:47	Mallard	8	depositing/lowland rivers; swimming	NM
MA039	S1-lough	04/04/2024	07:22	Mallard	1	reed and large sedge swamps and dystrophic lakes; flying, landed	MS
MA040	S1-lough	04/04/2024	07:35	Mallard	1	reed and large sedge swamps and dystrophic lakes; flying, landed	MS

Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
MA041	G1	04/04/2024	10:37	Mallard	1	cutover bog, scrub and wet heath; flying	MS
MA042	Raheen	08/04/2024	10:20	Mallard	1	improved agricultural grassland; flushed, on pond	FLM
MA043	S1-lough	18/04/2024	08:15	Mallard	1	eutrophic lakes, reed and large sedge swamps and wet willow-alder-ash woodland; flying, landed	MS
MA044	Lough Sewdy S1	22/04/2024	10:13	Mallard	3	dystrophic lakes; loafing	FLM
MA045	Umma More	22/04/2024	13:15	Mallard	3	improved agricultural grassland; flying	FLM
MA046	Raheen	22/04/2024	13:45	Mallard	1	improved agricultural grassland; loafing, female with ducklings	FLM
MA047	L. Sewdy	03/05/2024	14:41	Mallard	12	lakes and ponds and reed and large sedge swamps; swimming, calling	NM
MA048	L. Sewdy	29/08/2024	11:48	Mallard	2	reed and large sedge swamps and lakes and ponds; flushed, calling	NM
MA049	L. Sewdy	29/08/2024	11:50	Mallard	16	lakes and ponds and reed and large sedge swamps; swimming, dabbling, scattered	NM
MA050	Lough Sewdy S1	04/09/2024	10:40	Mallard	2	dystrophic lakes; loafing	FLM
MA051	Baskin D2	04/09/2024	11:50	Mallard	1	depositing/lowland rivers and improved agricultural grassland; flushed	FLM
MA052	Raheen	04/09/2024	13:10	Mallard	2	other artificial lakes and ponds and improved agricultural grassland; loafing	FLM
MA053	Lough Sewdy	25/09/2024	10:16	Mallard	8	dystrophic lakes; loafing, male	FLM
MA054	a	08/10/2024	10:26	Mallard	3	bogs; flushed	FOD
MA055	a	08/10/2024	12:36	Mallard	1	lakes and ponds; foraging	FOD
MA056	s1	29/10/2024	13:36	Mallard	1	watercourses; loafing	FOD
MA057	D3	25/11/2024	13:00	Mallard	15	improved agricultural grassland; feeding, flooded field	DM
MA058	D1	25/11/2024	13:40	Mallard	34	improved agricultural grassland; feeding, flooded field	DM

Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
MA059	Sewdy lough	25/11/2024	14:00	Mallard	29	lakes and ponds; feeding	DM
MA060	S1, Lough Sewdy	04/12/2024	14:30	Mallard	15	lakes and ponds; feeding	DM
MA061	D1	21/12/2024	14:00	Mallard	2	depositing/lowland rivers and improved agricultural grassland; travelling, landed on river	DM
MA062	S1, Lough Sewdy	21/12/2024	16:00	Mallard	2	lakes and ponds; feeding	DM
MA063	Lough Sewdy S1	11/01/2025	14:00	Mallard	3	lakes and ponds and depositing/lowland rivers; feeding	DM
MA064	D5-D7	30/01/2025	11:00	Mallard	1	cutover bog; travelling	DM
MA065	D1	30/01/2025	14:00	Mallard	1	depositing/lowland rivers and improved agricultural grassland; feeding	DM
MA066	Lough Sewdy S1	30/01/2025	15:00	Mallard	17	lakes and ponds; feeding	DM
MA067	Lough Sewdy	05/02/2025	14:14	Mallard	3	lakes and ponds; roosting	SD
MA068	Tang River	05/02/2025	15:30	Mallard	10	lakes and ponds; foraging	SD
MA069	Lough Sewdy	19/02/2025	12:29	Mallard	3	lakes and ponds; roosting	SD
MA070	S1 Lough Sewdy	06/03/2025	14:30	Mallard	5	lakes and ponds; feeding	DM
MA071	B1	24/03/2025	11:15	Mallard	1	cutover bog and improved agricultural grassland; travelling	DM
MA072	D1	24/03/2025	12:15	Mallard	1	depositing/lowland rivers and improved agricultural grassland; feeding	DM
MA073	S1 Lough Sewdy	24/03/2025	13:00	Mallard	8	lakes and ponds; feeding	DM

Table 7 – 4a - 32 Mallard Incidental Records

Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
MA001	Breeding Raptor Survey; East quarry	23/05/2023	11:05	Mallard	1	improved agricultural grassland and hedgerows; flying over	FLM
MA002	Breeding Raptor Survey; rvp2	25/05/2023	07:40	Mallard	2	raised bog and improved agricultural grassland; flying over	FLM
MA003	Waterbird Distribution and Abundance Survey; Pasture east of G1; 53.454373, -7.708977	04/04/2024	09:35	Mallard	11	wet grassland; swimming, feeding, 1 female, 10 chicks	MS
MA004	Breeding Raptor Survey; BR2	11/04/2024	13:32	Mallard	1	bogs and scrub; travelling, calling	NM
MA005	Breeding Raptor Survey; BOVP1 (BRVP8)	12/04/2024	05:49	Mallard	5	improved agricultural grassland and linear woodland/scrub; travelling, calling	NM
MA006	Breeding Raptor Survey; HHVP2 / RVP7	12/04/2024	09:47	Mallard	2	bogs and scrub; calling, circling	NM
MA007	Breeding Raptor Survey; HHVP2 / RVP7	12/04/2024	09:59	Mallard	1	bogs and scrub; travelling	NM
MA008	Breeding Raptor Survey; HHVP2 / RVP7	12/04/2024	10:51	Mallard	2	bogs and scrub; departing	NM
MA009	Breeding Raptor Survey; Ballinderry bog	12/04/2024	13:49	Mallard	3	improved agricultural grassland, bogs and scrub; flying, calling	NM
MA010	Breeding Raptor Survey; T2	30/04/2024	10:47	Mallard	1	improved agricultural grassland and linear woodland/scrub; travelling, calling	NM
MA011	Breeding Raptor Survey; T2 / Dungolman river	30/04/2024	11:02	Mallard	2	improved agricultural grassland, watercourses and linear woodland/scrub; travelling, calling, landing on small river	NM
MA012	Breeding Raptor Survey; T1	30/04/2024	12:56	Mallard	3	improved agricultural grassland; travelling, calling	NM
MA013	Breeding Raptor Survey; T1	30/04/2024	12:45	Mallard	1	improved agricultural grassland; travelling, male	NM
MA014	Breeding Raptor Survey; HHVP2a	30/04/2024	16:37	Mallard	2	bogs and scrub/transitional woodland; flying, calling	NM
MA015	Breeding Barn Owl Survey; BOVP3	30/04/2024	20:30	Mallard	1	improved agricultural grassland; travelling	NM



- Map Legend
- EIAR Site Boundary
 - Proposed Turbine Layout
 - 500m Radius of Turbines
 - ▲ VP Locations
 - Flight Observation
 - ◆ Non-flight Observation



Drawing Title
Mallard Vantage Point Survey Observations

Project Title
Umma More Renewable Energy Development

Drawn By: **KS** Checked By: **PC**

Project No.: **201050** Drawing No.: **Fig. 7-4a-28**

Scale: **1:35,000** Date: **13.06.2025**

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- EIAR Site Boundary
 - Proposed Turbine Layout
 - Flight Observation



Drawing Title
Mallard Winter Walkover Survey Observations

Project Title
Umma More Renewable Energy Development

Drawn By KS	Checked By PC
Project No. 201050	Drawing No. Fig. 7-4a-29
Scale 1:30,000	Date 13.06.2025


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- EIAR Site Boundary
 - Proposed Turbine Layout
 - 500m Radius of Turbines
 - Flight Observation



Drawing Title	
Mallard Breeding Walkover Survey Observations	
Project Title	
Umma More Renewable Energy Development	
Drawn By	Checked By
KS	PC
Project No.	Drawing No.
201050	Fig. 7-4a-30
Scale	Date
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 - 5km Survey Radius
 - ◆ Observation

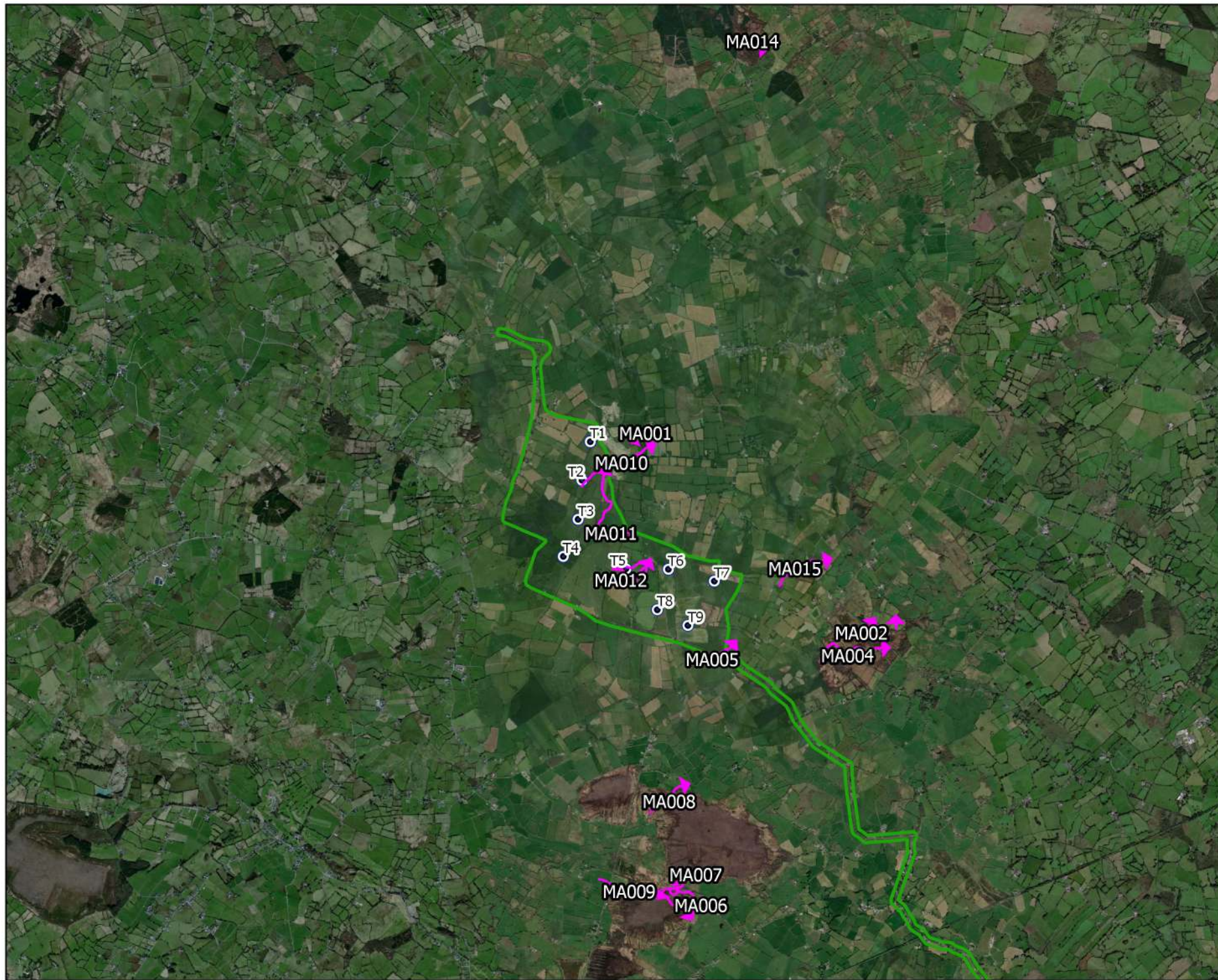


Drawing Title: Mallard Waterbird Distribution Survey Observations	
Project Title: Umma More Renewable Energy Development	
Drawn By: KS	Checked By: PC
Project No.: 201050	Drawing No.: Fig. 7-4a-31
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- Map Legend
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 -  Flight Observation



Drawing Title

Mallard Incidental Records

Project Title

Umma More Renewable Energy Development

Drawn By

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Checked By

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Project No.

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Drawing No.

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10.

TEAL

Table 7 – 4a - 33 Teal Vantage Point Survey

Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0 -15m)	Band 2 (15-25m)	Band 3 (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
T.001	VP3	16/01/2025	13:21	Teal	28	90	30	60	0	0	improved agricultural grassland and depositing/lowland rivers; travelling	DM
T.002	vp3	20/03/2025	07:55	Teal	3	30	30	0	0	0	depositing/lowland rivers and improved agricultural grassland; travelling	DM

Table 7 – 4a - 34 Teal Winter Walkover Survey

Ref.	Date	Time	Transect	Species	Number	Habitat and activity	Surveyor
T.001	16/03/2023	09:20	-	Teal	14	depositing/lowland rivers and riparian woodland; flush from river (wintering)	MS
T.002	16/03/2023	10:30	-	Teal	12	depositing/lowland rivers, riparian woodland and amenity grassland (improved); flush creek, 5m (wintering)	MS
T.003	17/01/2024	12:24	-	Teal	42	watercourses and improved agricultural grassland; swimming, calling (wintering)	NM
T.004	17/01/2024	12:31	-	Teal	7	watercourses; flushed (wintering)	NM
T.005	17/01/2024	16:42	-	Teal	2	drainage ditches and improved agricultural grassland; flushed (wintering)	NM
T.006	17/01/2024	16:52	-	Teal	7	drainage ditches and improved agricultural grassland; flushed (wintering)	NM
T.007	17/01/2024	17:30	-	Teal	5	improved agricultural grassland; calling (wintering)	NM
T.008	15/02/2024	15:17	-	Teal	19	depositing/lowland rivers; swimming, calling (wintering)	NM
T.009	22/01/2025	09:40		Teal	3	depositing/lowland rivers and improved agricultural grassland; feeding (wintering)	DM
T.010	22/01/2025	09:50		Teal	5	depositing/lowland rivers and improved agricultural grassland; feeding (wintering)	DM
T.011	22/01/2025	10:05		Teal	2	depositing/lowland rivers and improved agricultural grassland; feeding (wintering)	DM

Ref.	Date	Time	Transect	Species	Number	Habitat and activity	Surveyor
T.012	22/01/2025	10:17		Teal	4	depositing/lowland rivers and improved agricultural grassland; feeding (wintering)	DM
T.013	22/01/2025	12:05		Teal	12	other artificial lakes and ponds and improved agricultural grassland; feeding, pond on farm (wintering)	DM
T.014	22/01/2025	13:35		Teal	1	depositing/lowland rivers; feeding (wintering)	DM
T.015	22/01/2025	13:37		Teal	2	depositing/lowland rivers; feeding (wintering)	DM
T.016	22/01/2025	13:38		Teal	3	depositing/lowland rivers; feeding (wintering)	DM
T.017	22/01/2025	13:52		Teal	2	drainage ditches and wet grassland; feeding (wintering)	DM
T.018	22/01/2025	13:56		Teal	3	drainage ditches and wet grassland; feeding (wintering)	DM

Table 7 - 4a - 35 Teal Waterbird Distribution Survey

Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
T.001	Rosemount	24/02/2023	14:00	Teal	7	improved agricultural grassland and turloughs; foraging	FLM
T.002	Ardnacranny	29/11/2023	12:36	Teal	150	improved agricultural grassland; swirling over farmland, moving w, exact numbers were hard due to distance	NM
T.003	Lough Sewdy	05/12/2023	15:00	Teal	10	dystrophic lakes; foraging	FLM
T.004	Raheen	18/12/2023	12:00	Teal	6	improved agricultural grassland; foraging, on winter pond	FLM
T.005	Umma More	18/12/2023	12:20	Teal	8	improved agricultural grassland; foraging, on winter pond	FLM
T.006	Lough Sewdy	30/01/2024	09:17	Teal	12	reed and large sedge swamps and lakes and ponds; flushed, departing	NM
T.007	Lough Sewdy	30/01/2024	09:22	Teal	87	lakes and ponds and reed and large sedge swamps; foraging, calling	NM
T.008	River Tang	30/01/2024	10:18	Teal	18	depositing/lowland rivers; foraging, calling	NM

Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
T.009	L. Sewdy	12/03/2024	15:24	Teal	15	lakes and ponds; swimming, calling	NM
T.010	Dungolman river	27/03/2024	11:54	Teal	12	depositing/lowland rivers; swimming, calling	NM
T.011	D3 Raheen	08/04/2024	11:00	Teal	2	improved agricultural grassland; loafing	FLM
T.012	L. Sewdy	29/08/2024	11:56	Teal	8	lakes and ponds; swimming, dabbling	NM
T.013	Sewdy lough	11/11/2024	14:30	Teal	3	lakes and ponds; feeding	DM
T.014	Lough Sewdy S1	30/01/2025	15:00	Teal	3	lakes and ponds; feeding	DM
T.015	S1 Lough Sewdy	06/03/2025	14:30	Teal	3	lakes and ponds; feeding	DM
T.016	D3	24/03/2025	11:30	Teal	2	depositing/lowland rivers and improved agricultural grassland; feeding	DM
T.017	S1 Lough Sewdy	24/03/2025	13:00	Teal	2	lakes and ponds; feeding	DM

Table 7 - 4a - 36 Teal Incidental Records

Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
T.001	Waterbird Distribution and Abundance Survey; Pasture east of G1	04/04/2024	09:35	Teal	9	wet grassland; swimming, feeding,	MS



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- EIAR Site Boundary
 - Proposed Turbine Layout
 - 500m Radius of Turbines
 - VP Locations
 - Flight Observation



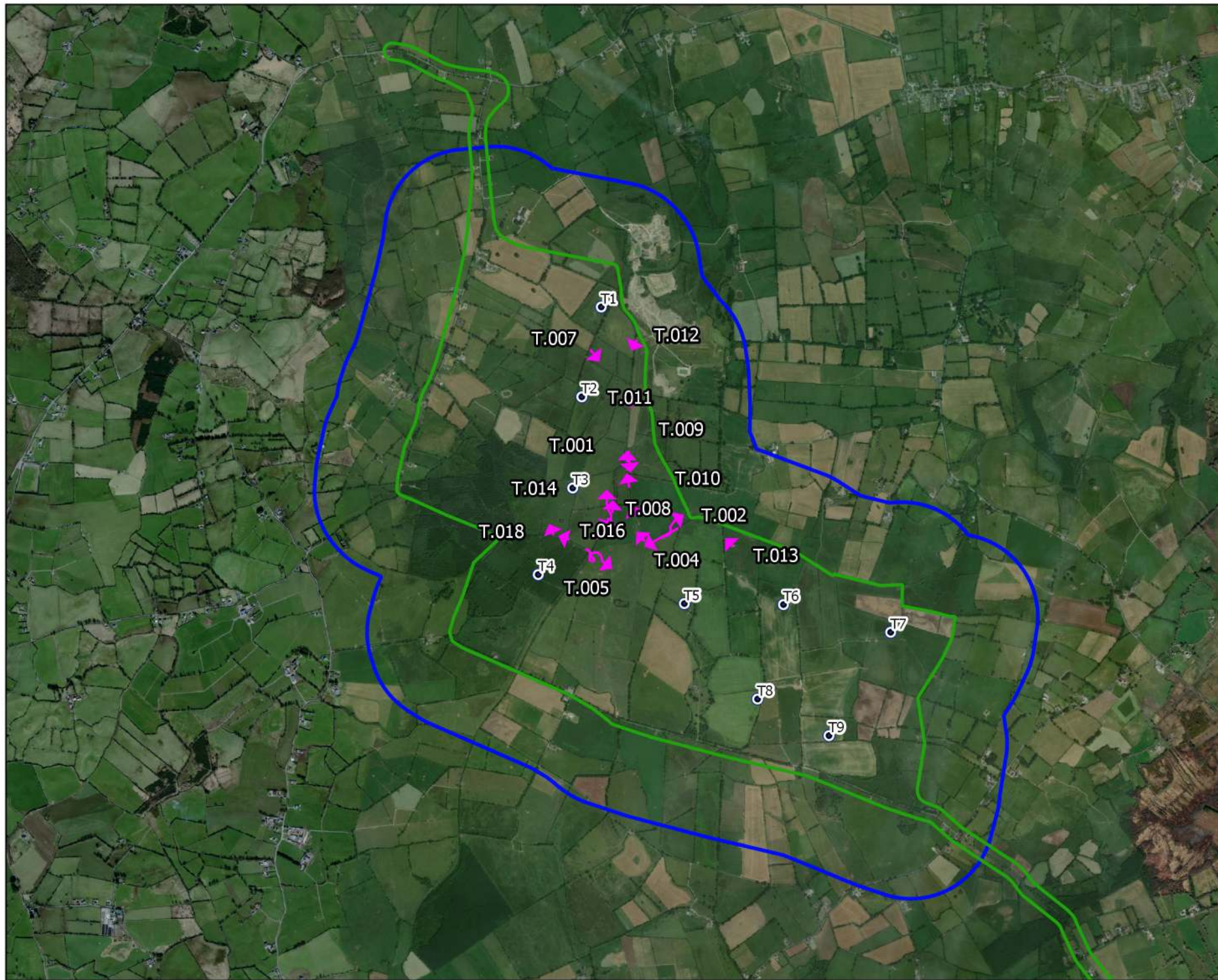
Drawing Title
Teal Vantage Point Survey Observations

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 - ◆ Observation



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11.

SNIPE

Table 7 - 4a - 37 Snipe Vantage Point Survey

Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0 -15m)	Band 2 (15-25m)	Band 3 (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
SN001	VP3	21/10/2022	17:38	Snipe	1	20	5	15	0	0	improved agricultural grassland; high flight	MW
SN002	VP1	25/11/2022	07:10	Snipe	1	-	-	-	-	-	improved agricultural grassland; flushed	MW
SN003	VP01	13/06/2023	09:22	Snipe	2	600	0	100	500	0	dry meadows and grassy verges; display flights	MS
SN004	VP01	13/06/2023	09:50	Snipe	1	600	0	0	600	0	dry meadows and grassy verges; display flights, almost continuous flights	MS
SN005	VP1	06/10/2023	13:54	Snipe	1	80	15	65	0	0	improved agricultural grassland; flushed from farmland	NM
SN006	VP1	06/10/2023	16:13	Snipe	3	80	0	20	60	0	improved agricultural grassland; flying and alarm calling across farmland	NM
SN007	VP1	06/10/2023	17:57	Snipe	2	110	0	0	110	0	improved agricultural grassland and linear woodland/scrub; flying frantically and alarm calling across farmland	NM
SN008	VP1	22/11/2023	07:41	Snipe	2	35	0	35	0	0	improved agricultural grassland and hedgerows; flying and alarm calling across farmland at dawn	NM
SN009	VP1	22/11/2023	08:01	Snipe	6	65	0	25	40	0	improved agricultural grassland and linear woodland/scrub; flying frantically across farmland	NM
SN010	VP1	12/12/2023	15:06	Snipe	1	55	0	0	55	0	improved agricultural grassland; flying frantically across farmland	NM
SN011	VP1	12/12/2023	16:24	Snipe	3	850	0	250	600	0	improved agricultural grassland; alarm calling over farmland at dusk, exact numbers were an estimate	NM
SN012	VP3	15/12/2023	16:11	Snipe	2	175	0	0	175	0	improved agricultural grassland and linear woodland/scrub; flying and alarm calling across site at dusk	NM
SN013	VP1	18/01/2024	09:33	Snipe	2	125	0	0	125	0	improved agricultural grassland and linear woodland/scrub; commuting, alarming	NM

Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0 -15m)	Band 2 (15-25m)	Band 3 (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
SN014	VP3	13/02/2024	17:40	Snipe	6	35	0	15	20	0	improved agricultural grassland; travelling, calling	NM
SN015	VP1	14/03/2024	06:38	Snipe	1	25	0	25	0	0	improved agricultural grassland; travelling, alarming	NM
SN016	VP1	14/03/2024	07:18	Snipe	3	35	0	35	0	0	improved agricultural grassland; travelling, alarming	NM
SN017	VP3	26/03/2024	05:55	Snipe	1	30	0	0	30	0	improved agricultural grassland and linear woodland/scrub; travelling, alarming	NM
SN018	VP3	26/03/2024	07:47	Snipe	4	55	10	20	25	0	improved agricultural grassland; travelling, alarming, gradually descending into farmland	NM
SN019	VP3	20/05/2024	06:18	Snipe	3	45	0	0	45	0	improved agricultural grassland and linear woodland/scrub; travelling frantically, alarming	NM
SN020	VP3	20/05/2024	06:23	Snipe	2	1200	0	300	900	0	improved agricultural grassland; drumming, chasing	NM
SN021	VP3	20/05/2024	07:04	Snipe	1	30	0	15	15	0	improved agricultural grassland and linear woodland/scrub; travelling, calling	NM
SN022	VP1	12/07/2024	14:05	Snipe	2	50	0	35	15	0	improved agricultural grassland; travelling, alarming	NM
SN023	VP1	12/07/2024	17:04	Snipe	3	45	10	20	15	0	improved agricultural grassland and linear woodland/scrub; travelling, alarming, dropping into farmland adjacent to br8	NM
SN024	VP1	12/07/2024	18:18	Snipe	1	25	0	25	0	0	improved agricultural grassland; travelling, calling	NM
SN025	VP3	20/08/2024	11:19	Snipe	2	50	0	0	50	0	improved agricultural grassland and linear woodland/scrub; travelling, calling	NM
SN026	VP1	11/09/2024	06:24	Snipe	1	15	10	5	0	0	improved agricultural grassland; flushed, alarming	NM
SN027	VP1	11/09/2024	06:41	Snipe	2	20	0	20	0	0	improved agricultural grassland; travelling, alarming	NM
SN028	VP1	11/09/2024	07:03	Snipe	1	25	10	15	0	0	improved agricultural grassland; travelling, alarming, dropping into farmland	NM
SN029	VP1	01/10/2024	18:46	Snipe	1	32	0	0	32	0	improved agricultural grassland; travelling	FOD

Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0 -15m)	Band 2 (15-25m)	Band 3 (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
SN030	VP3	02/10/2024	16:49	Snipe	2	86	0	0	52	34	improved agricultural grassland; circling with flight calls	FOD
SN031	VP1	27/11/2024	08:28	Snipe	1	30	30	0	0	0	drainage ditches and improved agricultural grassland; flushed from stream	DM
SN032	VP1	27/11/2024	09:02	Snipe	1	20	20	0	0	0	improved agricultural grassland; travelling, flew behind hedge	DM
SN033	VP1	27/11/2024	09:52	Snipe	1	75	25	50	0	0	drainage ditches and improved agricultural grassland; travelling, flushed from stream	DM
SN034	VP1	27/11/2024	09:59	Snipe	1	60	25	35	0	0	improved agricultural grassland; travelling	DM
SN035	VP1	27/11/2024	12:55	Snipe	1	45	15	30	0	0	improved agricultural grassland; travelling, flushed from grass field	DM
SN036	VP1	11/02/2025	17:51	Snipe	2	12	12	0	0	0	improved agricultural grassland; calling, emerging	CC
SN037	VP1	11/02/2025	18:00	Snipe	1	5	5	0	0	0	improved agricultural grassland; calling	CC
SN038	VP1	11/02/2025	18:06	Snipe	2	-	-	-	-	-	improved agricultural grassland; calling, heard not seen	CC

Table 7 - 4a - 38 Snipe Winter Walkover Survey

Ref.	Date	Time	Transect	Species	Number	Habitat and activity	Surveyor
SN001	13/12/2022	12:25	-	Snipe	1	improved agricultural grassland; flushed from pasture (wintering)	MW
SN002	16/03/2023	09:10	-	Snipe	1	wet grassland; flush (wintering)	MS
SN003	16/03/2023	09:47	-	Snipe	1	amenity grassland (improved); flush, 5m (wintering)	MS
SN004	17/10/2023	09:43	-	Snipe	2	improved agricultural grassland; flushed from farmland (wintering)	NM
SN005	17/10/2023	13:23	-	Snipe	1	improved agricultural grassland; flushed from farmland (wintering)	NM
SN006	17/10/2023	15:21	-	Snipe	6	improved agricultural grassland; flying frantically and alarm calling across farmland (wintering)	NM

Ref.	Date	Time	Transect	Species	Number	Habitat and activity	Surveyor
SN007	17/10/2023	15:58	-	Snipe	2	improved agricultural grassland; flushed from farmland by bz flyover (wintering)	NM
SN008	17/01/2024	11:35	-	Snipe	3	improved agricultural grassland; flushed (wintering)	NM
SN009	17/01/2024	12:09	-	Snipe	3	improved agricultural grassland and drainage ditches; flushed (wintering)	NM
SN010	17/01/2024	12:11	-	Snipe	1	improved agricultural grassland; flushed (wintering)	NM
SN011	17/01/2024	12:14	-	Snipe	3	improved agricultural grassland; flying low, landed (wintering)	NM
SN012	17/01/2024	12:27	-	Snipe	1	improved agricultural grassland; flushed (wintering)	NM
SN013	17/01/2024	13:07	-	Snipe	1	improved agricultural grassland; flying, calling (wintering)	NM
SN014	17/01/2024	13:11	-	Snipe	4	improved agricultural grassland and drainage ditches; flushed (wintering)	NM
SN015	17/01/2024	13:36	-	Snipe	7	improved agricultural grassland; foraging (wintering)	NM
SN016	17/01/2024	14:01	-	Snipe	3	improved agricultural grassland and drainage ditches; flushed (wintering)	NM
SN017	17/01/2024	14:12	-	Snipe	1	improved agricultural grassland; flushed (wintering)	NM
SN018	17/01/2024	14:49	-	Snipe	2	improved agricultural grassland; flushed (wintering)	NM
SN019	17/01/2024	15:49	-	Snipe	2	drainage ditches and hedgerows; flushed (wintering)	NM
SN020	17/01/2024	16:01	-	Snipe	3	improved agricultural grassland; flushed (wintering)	NM
SN021	17/01/2024	16:14	-	Snipe	1	improved agricultural grassland; flushed (wintering)	NM
SN022	17/01/2024	16:20	-	Snipe	6	improved agricultural grassland; flushed, very wet farmland - partially flooded (wintering)	NM
SN023	17/01/2024	16:24	-	Snipe	1	improved agricultural grassland; flushed (wintering)	NM
SN024	17/01/2024	16:26	-	Snipe	2	improved agricultural grassland; flushed (wintering)	NM

Ref.	Date	Time	Transect	Species	Number	Habitat and activity	Surveyor
SN025	17/01/2024	16:30	-	Snipe	3	drainage ditches, scrub and improved agricultural grassland; flushed (wintering)	NM
SN026	17/01/2024	17:10	-	Snipe	1	linear woodland/scrub and drainage ditches; flushed (wintering)	NM
SN027	17/01/2024	17:29	-	Snipe	1	improved agricultural grassland; calling, flying (wintering)	NM
SN028	15/02/2024	09:01	-	Snipe	5	improved agricultural grassland; flushed from rushy field (wintering)	NM
SN029	15/02/2024	09:34	-	Snipe	7	improved agricultural grassland; flushed (wintering)	NM
SN030	15/02/2024	09:49	-	Snipe	3	improved agricultural grassland; flushed, alarming (wintering)	NM
SN031	15/02/2024	11:29	-	Snipe	1	improved agricultural grassland; flushed (wintering)	NM
SN032	15/02/2024	11:40	-	Snipe	4	improved agricultural grassland; flushed, alarming (wintering)	NM
SN033	15/02/2024	14:48	-	Snipe	3	improved agricultural grassland; flushed, alarming (wintering)	NM
SN034	15/02/2024	15:01	-	Snipe	6	improved agricultural grassland and drainage ditches; flushed, alarming (wintering)	NM
SN035	15/02/2024	15:31	-	Snipe	2	improved agricultural grassland; flushed (wintering)	NM
SN036	29/11/2024	09:17	T1	Snipe	1	improved agricultural grassland; flushed, alarming (wintering)	NM
SN037	29/11/2024	09:22	T1	Snipe	2	improved agricultural grassland; flushed, alarming (wintering)	NM
SN038	29/11/2024	11:31	T2	Snipe	3	improved agricultural grassland; flushed, alarming (wintering)	NM
SN039	29/11/2024	11:56	T2	Snipe	1	improved agricultural grassland; flushed (wintering)	NM

Table 7 – 4a - 39 Snipe Breeding Walkover Survey

Ref.	Date	Time	Transect	Species	Number	Habitat and activity	Surveyor
SN001	15/04/2023	09:19	-	Snipe	2	wet grassland; pair flushed, southern transects (pair; probable breeding)	MS
SN002	15/04/2023	11:22	-	Snipe	2	wet grassland; flushed pair, middle transects (pair; probable breeding)	MS
SN003	14/06/2023	10:18	-	Snipe	1	rich fen and flush; distraction (distraction display; confirmed breeding)	MS
SN004	14/06/2023	13:32	-	Snipe	1	dry-humid acid grassland, improved agricultural grassland and canals; courtship, high flyers (courtship and display; probable breeding)	MS
SN005	20/06/2024	10:29	T2	Snipe	1	improved agricultural grassland and freshwater marsh; called (suitable nesting habitat; possible breeder)	EOB
SN006	30/05/2024	11:16	-	Snipe	1	improved agricultural grassland and semi-natural grassland; travelling, calling (flyover; non-breeding)	NM
SN007	30/05/2024	09:06	-	Snipe	3	improved agricultural grassland; flushed, alarming (summering; non-breeding)	NM
SN008	30/05/2024	09:45	-	Snipe	1	improved agricultural grassland; flushed, calling (suitable nesting habitat; possible breeder)	NM
SN009	30/05/2024	12:18	-	Snipe	1	improved agricultural grassland; travelling, calling (flyover; non-breeding)	NM
SN010	30/05/2024	13:51	-	Snipe	2	improved agricultural grassland and linear woodland/scrub; travelling, calling (flyover; non-breeding)	NM
SN011	30/05/2024	14:06	-	Snipe	5	improved agricultural grassland; flushed, not all at once, but in quick succession (summering; non-breeding)	NM
SN012	24/07/2024	07:54	-	Snipe	2	improved agricultural grassland, semi-natural grassland and linear woodland/scrub; travelling, alarming (suitable nesting habitat; possible breeder)	NM
SN013	24/07/2024	08:31	-	Snipe	5	improved agricultural grassland; flushed, alarming, from wet farmland, not all at once (suitable nesting habitat; possible breeder)	NM
SN014	24/07/2024	09:06	-	Snipe	1	improved agricultural grassland; flushed, alarming (suitable nesting habitat; possible breeder)	NM
SN015	24/07/2024	09:36	-	Snipe	1	improved agricultural grassland and linear woodland/scrub; travelling, alarming (suitable nesting habitat; possible breeder)	NM
SN016	24/07/2024	09:51	-	Snipe	3	improved agricultural grassland and semi-natural grassland; travelling, alarming, chasing (suitable nesting habitat; possible breeder)	NM
SN017	24/07/2024	10:28	-	Snipe	1	improved agricultural grassland; travelling, alarming (suitable nesting habitat; possible breeder)	NM

Ref.	Date	Time	Transect	Species	Number	Habitat and activity	Surveyor
SN018	24/07/2024	11:34	-	Snipe	1	improved agricultural grassland and linear woodland/scrub; flushed, alarming (suitable nesting habitat; possible breeder)	NM
SN019	24/07/2024	11:43	-	Snipe	3	improved agricultural grassland and linear woodland/scrub; travelling, alarming (flyover; non-breeding)	NM
SN020	24/07/2024	12:18	-	Snipe	1	disturbed ground, improved agricultural grassland and scrub; travelling, alarming (flyover; non-breeding)	NM
SN021	24/07/2024	14:39	-	Snipe	2	improved agricultural grassland; flushed, alarming (pair; probable breeding)	NM
SN022	24/07/2024	16:02	-	Snipe	2	improved agricultural grassland; flushed, alarming, flushed from rushy pasture (pair; probable breeding)	NM
SN023	24/07/2024	16:42	-	Snipe	13	improved agricultural grassland and semi-natural grassland; flushed, alarming, not all at once, sporadic eruptions in area during walkover (suitable nesting habitat; possible breeder)	NM

Table 7 - 4a - 40 Snipe Waterbird Distribution Survey

Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
SN001	Ballymore Road north of Clonthead	12/10/2022	16:05	Snipe	4	wet grassland; flight, flew in arc south west	MW
SN002	umma g1	18/02/2023	09:37	Snipe	3	cutover bog and riparian woodland; flushed on survey	MS
SN003	umma g6	18/02/2023	10:14	Snipe	1	upland blanket bog; flushed on survey	MS
SN004	umma d7	18/02/2023	11:55	Snipe	4	upland blanket bog and cutover bog; flushed on survey	MS
SN005	umma d7	28/02/2023	09:35	Snipe	3	cutover bog; flushed on survey	MS
SN006	umma d5	28/02/2023	09:50	Snipe	2	upland blanket bog; flushed on survey	MS
SN007	umma g1	28/02/2023	11:40	Snipe	1	cutover bog and wet willow-alder-ash woodland; flushed on survey	MS
SN008	g1	14/03/2023	09:55	Snipe	24	wet willow-alder-ash woodland, cutover bog and recently-felled woodland; flushed on walk, scattered groups	MS
SN009	sn1	27/03/2023	11:20	Snipe	21	cutover bog and wet grassland; flushed on walk	MS

Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
SN010	sn2	27/03/2023	13:10	Snipe	7	cutover bog and dry calcareous and neutral grassland; flushed on walk	MS
SN011	G1	06/04/2023	10:30	Snipe	15	cutover bog and wet grassland; flushed	MS
SN012	B7	06/04/2023	12:45	Snipe	1	cutover bog; flushed	MS
SN013	s1/ ballymore/ lough sewdy	30/05/2023	06:30	Snipe	8	dystrophic lakes and marsh; calling/ display, strong nidification signs	FLM
SN014	Ballynagrenia & Ballinderry Bog	10/10/2023	08:19	Snipe	5	bogs and semi-natural grassland; flying frantically and alarm calling across bog and fringes	NM
SN015	Ballynagrenia & Ballinderry Bog	10/10/2023	10:29	Snipe	4	bogs and semi-natural grassland; flushed from bog fringes	NM
SN016	Ballinlig	31/10/2023	14:36	Snipe	2	semi-natural grassland and cutover bog; flushed from bog fringes	NM
SN017	Ballynagrenia & Ballinderry Bog	31/10/2023	17:35	Snipe	2	bogs; alarm calling across bog	NM
SN018	Ballinlig	09/11/2023	12:56	Snipe	2	semi-natural grassland and bogs; flushed from bog fringes	NM
SN019	Ballynagrenia & Ballinderry Bog	09/11/2023	13:54	Snipe	1	improved agricultural grassland and scrub; flying and alarm calling across rough farmland	NM
SN020	Ballynagrenia & Ballinderry Bog	09/11/2023	14:20	Snipe	3	raised bog; flushed from heather bog	NM
SN021	Ballynagrenia & Ballinderry Bog	09/11/2023	15:10	Snipe	2	semi-natural grassland and bogs; flushed from grassy fringes of bog	NM
SN022	Lecade	05/12/2023	11:30	Snipe	1	improved agricultural grassland; flushed	FLM
SN023	Ballynagrenia & Ballinderry bogs	05/01/2024	15:31	Snipe	2	bogs and semi-natural grassland; flushed	NM
SN024	Ballynagrenia & Ballinderry bogs	05/01/2024	15:55	Snipe	2	bogs; flying, alarm calling	NM
SN025	Ballinlig	30/01/2024	12:19	Snipe	2	bogs and semi-natural grassland; flushed	NM
SN026	Ballinlig	30/01/2024	12:54	Snipe	3	bogs and semi-natural grassland; flushed	NM
SN027	Ballinlig	30/01/2024	13:31	Snipe	1	bogs and semi-natural grassland; flushed	NM

Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
SN028	Ballynagrenia & Ballinderry bogs	30/01/2024	16:32	Snipe	2	drainage ditches and improved agricultural grassland; flushed	NM
SN029	Ballinlig	07/02/2024	12:35	Snipe	1	bogs and semi-natural grassland; flushed	NM
SN030	Ballinlig	07/02/2024	13:03	Snipe	5	bogs and semi-natural grassland; flushed	NM
SN031	Ballynagrenia & Ballinderry bogs	07/02/2024	16:18	Snipe	3	bogs; flying, alarming	NM
SN032	Ballinlig	21/02/2024	12:38	Snipe	5	bogs; flying, alarming	NM
SN033	Ballynagrenia & Ballinderry bogs	21/02/2024	13:02	Snipe	1	bogs; flying, calling	NM
SN034	Ballynagrenia & Ballinderry bogs	21/02/2024	14:16	Snipe	3	bogs and semi-natural grassland; flushed, alarming	NM
SN035	Ballynagrenia & Ballinderry bogs	21/02/2024	14:56	Snipe	1	improved agricultural grassland and scrub; flying, alarming	NM
SN036	Ballynagrenia & Ballinderry bogs	21/02/2024	15:21	Snipe	7	bogs and scrub; travelling, alarming	NM
SN037	Ballynagrenia & Ballinderry bogs	21/02/2024	15:47	Snipe	2	bogs and semi-natural grassland; flushed, alarming	NM
SN038	Ballinlig	12/03/2024	16:22	Snipe	2	bogs and semi-natural grassland; flushed, alarming	NM
SN039	Ballinlig	27/03/2024	10:37	Snipe	5	semi-natural grassland and bogs; flushed	NM
SN040	Ballinlig	27/03/2024	10:56	Snipe	1	bogs and scrub; travelling, alarming	NM
SN041	Ballynagrenia & Ballinderry bogs	27/03/2024	12:33	Snipe	3	bogs and scrub; travelling, alarming	NM
SN042	Ballynagrenia & Ballinderry bogs	27/03/2024	14:11	Snipe	1	bogs; travelling, alarming	NM
SN043	Ballynagrenia & Ballinderry bogs	27/03/2024	14:28	Snipe	3	bogs; travelling, alarming	NM
SN044	G1	04/04/2024	10:35	Snipe	2	cutover bog, scrub and wet heath; flushed	MS
SN045	Raheen	08/04/2024	10:45	Snipe	1	improved agricultural grassland; drumming	FLM

Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
SN046	S1-lough	18/04/2024	08:05	Snipe	1	eutrophic lakes, reed and large sedge swamps and wet willow-alder-ash woodland; display, calling	MS
SN047	D3	18/04/2024	10:42	Snipe	2	lowland blanket bog, scrub and wet willow-alder-ash woodland; flushed	MS
SN048	Ballinlig	03/05/2024	17:14	Snipe	2	improved agricultural grassland and scrub; flying, alarming	NM
SN049	Ballynagrenia & Ballinderry bogs	03/05/2024	19:51	Snipe	2	bogs; drumming, separate territories	NM
SN050	Ballynagrenia & Ballinderry bogs	03/05/2024	20:10	Snipe	5	bogs and semi-natural grassland; drumming, separate territories. along fringes of bog	NM
SN051	Ballynagrenia & Ballinderry bogs	03/05/2024	20:25	Snipe	1	bogs, semi-natural grassland and scrub; drumming	NM
SN052	Dungolman	28/05/2024	09:35	Snipe	2	improved agricultural grassland; flushed, alarming	NM
SN053	Dungolman	28/05/2024	10:49	Snipe	1	improved agricultural grassland; travelling, calling	NM
SN054	L. Sewdy	28/05/2024	12:00	Snipe	2	improved agricultural grassland and reed and large sedge swamps; flying, swirling	NM
SN055	Ballinlig bog	28/05/2024	15:30	Snipe	2	bogs and semi-natural grassland; flushed, alarming	NM
SN056	Ballinlig bog	28/05/2024	15:48	Snipe	3	bogs; travelling, alarming	NM
SN057	Ballynagrenia & Ballinderry bogs	28/05/2024	17:00	Snipe	3	bogs; travelling, calling	NM
SN058	Ballynagrenia & Ballinderry bogs	28/05/2024	17:07	Snipe	3	bogs; chirping	NM
SN059	Ballinlig	13/08/2024	10:31	Snipe	1	bogs and scrub; flying, calling	NM
SN060	Ballynagrenia & Ballinderry bogs	13/08/2024	14:07	Snipe	1	bogs; flushed, alarming	NM
SN061	Ballynagrenia & Ballinderry bogs	13/08/2024	14:51	Snipe	2	bogs and scrub; flying, calling	NM
SN062	Lough Sewdy	25/09/2024	11:10	Snipe	1	reed and large sedge swamps and improved agricultural grassland; flying	FLM
SN063	Lough Sewdy	25/09/2024	14:33	Snipe	6	dystrophic lakes; flying, over lake	FLM

Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
SN064	D7	11/11/2024	11:15	Snipe	7	cutover bog; roosting	DM
SN065	B4	11/11/2024	12:30	Snipe	1	raised bog; roosting	DM
SN066	Sewdy lough	11/11/2024	14:30	Snipe	13	wet grassland and lakes and ponds; roosting	DM
SN067	G1	25/11/2024	09:30	Snipe	15	cutover bog; roosting	DM
SN068	D5,D6,D7	25/11/2024	10:30	Snipe	23	cutover bog; roosting	DM
SN069	B4	25/11/2024	11:30	Snipe	1	raised bog; roosting	DM
SN070	D1	25/11/2024	13:40	Snipe	1	depositing/lowland rivers; feeding	DM
SN071	Sewdy lough	25/11/2024	14:00	Snipe	16	lakes and ponds and wet grassland; roosting	DM
SN072	G1	04/12/2024	10:00	Snipe	1	cutover bog; roosting	DM
SN073	D5-D7	04/12/2024	11:00	Snipe	14	cutover bog; roosting	DM
SN074	Raheen, moyvoughly	04/12/2024	13:00	Snipe	6	improved agricultural grassland; travelling	DM
SN075	S1, Lough Sewdy	04/12/2024	14:30	Snipe	16	lakes and ponds and wet grassland; roosting	DM
SN076	G1	21/12/2024	11:00	Snipe	6	cutover bog; roosting	DM
SN077	D5-D7	21/12/2024	11:30	Snipe	58	cutover bog; roosting	DM
SN078	S1, Lough Sewdy	21/12/2024	16:00	Snipe	22	lakes and ponds and wet grassland; roosting	DM
SN079	D5-D7	11/01/2025	11:00	Snipe	4	cutover bog; roosting	DM
SN080	Lough Sewdy S1	11/01/2025	14:00	Snipe	11	wet grassland; roosting	DM
SN081	G1	30/01/2025	10:00	Snipe	3	cutover bog; roosting	DM

Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
SN082	D5-D7	30/01/2025	11:00	Snipe	12	cutover bog; roosting	DM
SN083	D1	30/01/2025	14:00	Snipe	1	depositing/lowland rivers and improved agricultural grassland; roosting	DM
SN084	Lough Sewdy S1	30/01/2025	15:00	Snipe	16	lakes and ponds and wet grassland; roosting	DM
SN085	Ballinderry Bog	05/02/2025	11:50	Snipe	4	cutover bog; flushed	SD
SN086	Ballinlig	05/02/2025	12:30	Snipe	3	cutover bog; flushed	SD
SN087	D7	19/02/2025	10:32	Snipe	48	cutover bog; roosting	SD
SN088	G1	19/02/2025	11:38	Snipe	25	cutover bog; roosting	SD
SN089	G1	06/03/2025	09:30	Snipe	15	cutover bog; roosting	DM
SN090	D5,D6,D7	06/03/2025	10:30	Snipe	8	cutover bog; roosting	DM
SN091	D3	06/03/2025	12:30	Snipe	1	improved agricultural grassland and depositing/lowland rivers; roosting	DM
SN092	S1 Lough Sewdy	06/03/2025	14:30	Snipe	21	wet grassland and lakes and ponds; roosting	DM
SN093	G1	24/03/2025	08:30	Snipe	1	cutover bog; roosting	DM
SN094	D5,D6,D7	24/03/2025	09:30	Snipe	2	cutover bog; roosting	DM
SN095	S1 Lough Sewdy	24/03/2025	13:00	Snipe	22	wet grassland and lakes and ponds; roosting	DM

Table 7 – 4a - 41 Snipe Incidental Records

Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
SN001	Waterbird Distribution Survey; Ballynagrenia & Ballinderry bogs	27/03/2024	18:50	Snipe	1	bogs and semi-natural grassland; drumming, swooping	NM
SN002	Waterbird Distribution Survey; Ballynagrenia & Ballinderry bogs	27/03/2024	18:57	Snipe	3	bogs and semi-natural grassland; drumming, swooping, chasing	NM

Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
SN003	Waterbird Distribution Survey; Ballynagrenia & Ballinderry bogs	27/03/2024	19:07	Snipe	2	bogs; drumming, swooping, chasing	NM
SN004	Waterbird Distribution Survey; Ballynagrenia & Ballinderry bogs	27/03/2024	19:25	Snipe	1	bogs, scrub and semi-natural grassland; drumming	NM
SN005	Breeding Red Grouse Survey; VP3 approach	26/03/2024	11:39	Snipe	2	improved agricultural grassland; flushed	NM
SN006	Breeding Raptor Survey; BR2	11/04/2024	11:46	Snipe	2	bogs and semi-natural grassland; flushed, alarming	NM
SN007	Breeding Raptor Survey; BOVP1 (BRVP8)	12/04/2024	05:34	Snipe	1	improved agricultural grassland; drumming	NM
SN008	Breeding Raptor Survey; BOVP1 (BRVP8)	12/04/2024	05:40	Snipe	1	improved agricultural grassland; drumming	NM
SN009	Breeding Raptor Survey; BOVP1 (BRVP8)	12/04/2024	05:43	Snipe	1	improved agricultural grassland and semi-natural grassland; drumming	NM
SN010	Breeding Raptor Survey; BOVP1 (BRVP8)	12/04/2024	05:46	Snipe	1	improved agricultural grassland; drumming	NM
SN011	Breeding Raptor Survey; BOVP1 (BRVP8)	12/04/2024	05:59	Snipe	2	improved agricultural grassland and semi-natural grassland; drumming, swirling	NM
SN012	Breeding Raptor Survey; BOVP1 (BRVP8)	12/04/2024	06:07	Snipe	1	improved agricultural grassland; drumming	NM
SN013	Breeding Raptor Survey; BOVP1 (BRVP8)	12/04/2024	06:33	Snipe	2	improved agricultural grassland; drumming, swirling	NM
SN014	Breeding Raptor Survey; HHVP2 / RVP7	12/04/2024	10:11	Snipe	2	bogs and semi-natural grassland; flushed, alarming	NM
SN015	Breeding Raptor Survey; Ballinderry bog	12/04/2024	13:02	Snipe	2	bogs and semi-natural grassland; flushed	NM
SN016	Breeding Raptor Survey; Ballinderry bog	12/04/2024	13:09	Snipe	1	bogs and scrub; flushed, alarming	NM
SN017	Breeding Raptor Survey; Ballinderry bog	12/04/2024	13:17	Snipe	2	bogs; flushed	NM
SN018	Breeding Raptor Survey; Ballinderry bog	12/04/2024	13:31	Snipe	2	bogs; flushed, alarming	NM
SN019	Breeding Raptor Survey; Ballinderry bog	12/04/2024	13:48	Snipe	5	bogs and semi-natural grassland; flushed, alarming	NM
SN020	Breeding Raptor Survey; HHVP1 / Abbeyshrule bog	10/04/2024	18:56	Snipe	1	bogs; flushed, alarming	NM

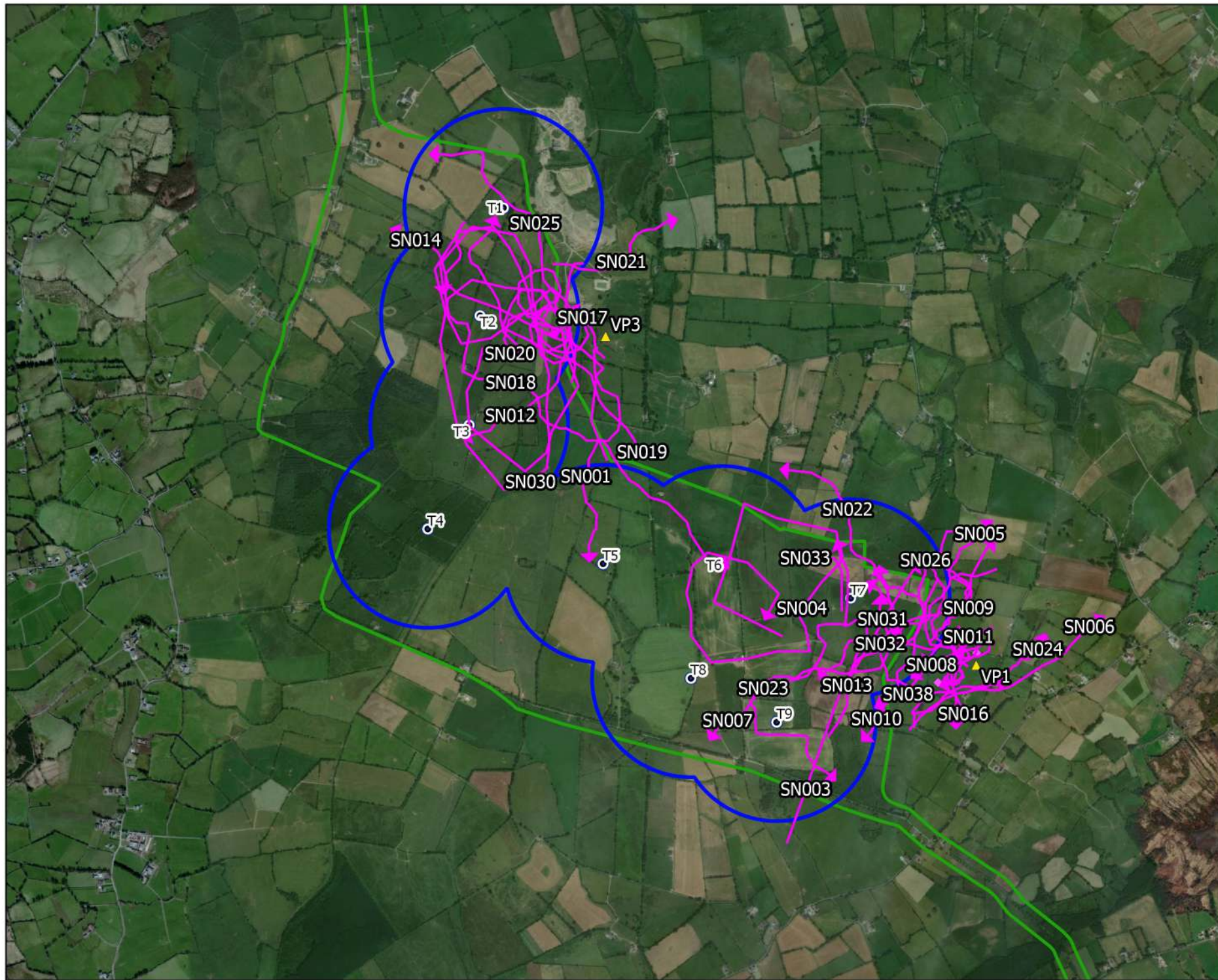
Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
SN021	Breeding Raptor Survey; HHVP1 / Abbeyshrule bog	10/04/2024	19:06	Snipe	3	bogs; flushed, alarming	NM
SN022	Breeding Raptor Survey; HHVP1 / Abbeyshrule bog	10/04/2024	19:53	Snipe	2	bogs; travelling, alarming	NM
SN023	Breeding Raptor Survey; HHVP1 / Abbeyshrule bog	10/04/2024	20:37	Snipe	4	bogs; travelling, alarming, descending	NM
SN024	Breeding Raptor Survey; HHVP1 / Abbeyshrule bog	10/04/2024	20:52	Snipe	2	bogs and scrub; drumming, chasing, swooping	NM
SN025	Breeding Raptor Survey; HHVP1 / Abbeyshrule bog	10/04/2024	21:06	Snipe	2	bogs; flushed, alarming	NM
SN026	Breeding Raptor Survey; HHVP1 / Abbeyshrule bog	10/04/2024	21:16	Snipe	6	bogs; flushed, alarming	NM
SN027	Breeding Raptor Survey; Abbeyshrule bog	10/04/2024	21:20	Snipe	2	bogs; drumming, swirling	NM
SN028	Breeding Raptor Survey; HHVP2a	16/05/2024	06:03	Snipe	2	bogs; flushed, alarming	NM
SN029	Breeding Raptor Survey; HHVP2a	16/05/2024	07:43	Snipe	1	bogs; flushed, alarming	NM
SN030	Breeding Raptor Survey; HHVP2a	16/05/2024	06:30	Snipe	1	bogs and scrub/transitional woodland; travelling, calling	NM
SN031	Breeding Raptor Survey; HHVP2a	16/05/2024	06:15	Snipe	1	bogs and scrub; drumming, until 07:06	NM
SN032	Breeding Raptor Survey; HHVP2a	16/05/2024	06:22	Snipe	2	bogs; drumming, chasing, until 07:49	NM
SN033	Breeding Raptor Survey; BR6	16/05/2024	16:09	Snipe	1	improved agricultural grassland; flushed	NM
SN034	Breeding Raptor Survey; BR1	17/05/2024	08:53	Snipe	5	bogs; flushed, alarming, circling, flew in wide low circle before landing once again on heather bog closeby	NM
SN035	Breeding Raptor Survey; HHVP1	24/05/2024	06:22	Snipe	3	bogs; drumming, individual territories	NM
SN036	Breeding Raptor Survey; HHVP1	24/05/2024	06:44	Snipe	2	bogs; drumming, individual territories	NM
SN037	Breeding Raptor Survey; BR2	24/05/2024	16:18	Snipe	2	bogs; flushed, alarming	NM
SN038	Breeding Raptor Survey; BR2	24/05/2024	13:31	Snipe	1	bogs; flushed	NM

Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
SN039	Breeding Raptor Survey; BR2	24/05/2024	15:02	Snipe	3	bogs, recently-felled woodland and highly modified/non-native woodland; travelling, alarming	NM
SN040	Breeding Raptor Survey; BR&	24/05/2024	17:07	Snipe	2	bogs and scrub; travelling, alarming	NM
SN041	Breeding Raptor Survey; BR7	24/05/2024	17:16	Snipe	4	bogs; flushed, alarming	NM
SN042	Breeding Raptor Survey; BR7	24/05/2024	19:26	Snipe	2	bogs; flushed, alarming	NM
SN043	Breeding Raptor Survey; BR7	24/05/2024	19:55	Snipe	1	bogs; flushed	NM
SN044	Breeding Raptor Survey; BR7	24/05/2024	20:03	Snipe	8	bogs and semi-natural grassland; flushed, alarming, not flushed in one go - groups of 1' & 2's in quick succession	NM
SN045	Breeding Barn Owl Survey; BOVP2	24/05/2024	21:38	Snipe	1	improved agricultural grassland and linear woodland/scrub; drumming	NM
SN046	Breeding Barn Owl Survey; BOVP2	24/05/2024	22:06	Snipe	2	improved agricultural grassland and linear woodland/scrub; drumming, chasing	NM
SN047	Breeding Barn Owl Survey; BOVP2 / Umma Beg	24/05/2024	22:43	Snipe	1	improved agricultural grassland and linear woodland/scrub; drumming	NM
SN048	Breeding Raptor Survey; BOVP1 (BRVP8)	29/05/2024	17:36	Snipe	1	improved agricultural grassland; flushed	NM
SN049	Breeding Raptor Survey; BOVP1 (BRVP8)	29/05/2024	21:17	Snipe	2	improved agricultural grassland; flushed, alarming	NM
SN050	Breeding Raptor Survey; BOVP1 (BRVP8)	29/05/2024	22:14	Snipe	1	improved agricultural grassland; drumming	NM
SN051	Breeding Raptor Survey; BOVP1 (BRVP8)	29/05/2024	22:54	Snipe	3	improved agricultural grassland; drumming, separate territories	NM
SN052	Breeding Raptor Survey; BR4	07/06/2024	15:22	Snipe	3	improved agricultural grassland, semi-natural grassland and linear woodland/scrub; flying, alarming	NM
SN053	Breeding Barn Owl Survey; BOVP3	07/06/2024	21:19	Snipe	1	improved agricultural grassland and linear woodland/scrub; travelling	NM
SN054	Breeding Barn Owl Survey; BOVP3	07/06/2024	21:37	Snipe	2	improved agricultural grassland and linear woodland/scrub; flying, swirling, alarming	NM
SN055	Breeding Barn Owl Survey; BOVP3	07/06/2024	21:59	Snipe	1	improved agricultural grassland and semi-natural grassland; drumming	NM
SN056	Breeding Barn Owl Survey; BOVP3	07/06/2024	22:27	Snipe	2	improved agricultural grassland and semi-natural grassland; drumming	NM

Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
SN057	Breeding Raptor Survey; BR6	11/06/2024	16:25	Snipe	1	improved agricultural grassland; flushed, alarming	NM
SN058	Breeding Barn Owl Survey; BOVP2	11/06/2024	22:56	Snipe	2	improved agricultural grassland; drumming, off site, drumming until end of survey. numbers were rough	NM
SN059	Breeding Raptor Survey; BR2	21/06/2024	13:09	Snipe	2	bogs and semi-natural grassland; flushed, alarming	NM
SN060	Breeding Raptor Survey; BR2	21/06/2024	12:19	Snipe	2	bogs, scrub/transitional woodland and semi-natural grassland; travelling, alarming	NM
SN061	Breeding Raptor Survey; BR2 (Ballinlig)	21/06/2024	13:17	Snipe	2	semi-natural grassland and bogs; chirping	NM
SN062	Breeding Raptor Survey; BR7	21/06/2024	13:54	Snipe	1	bogs and semi-natural grassland; flushed, alarming	NM
SN063	Breeding Raptor Survey; BR7	21/06/2024	15:11	Snipe	3	bogs; flushed	NM
SN064	Breeding Raptor Survey; BOVP1 (BRVP8)	21/06/2024	20:25	Snipe	1	improved agricultural grassland; flushed	NM
SN065	Breeding Raptor Survey; BOVP1 (BRVP8)	21/06/2024	21:58	Snipe	1	improved agricultural grassland; travelling, swooping, landing	NM
SN066	Breeding Raptor Survey; BOVP1 (BRVP8)	21/06/2024	22:23	Snipe	2	improved agricultural grassland; travelling, alarming	NM
SN067	Breeding Raptor Survey; BOVP1 (BRVP8)	21/06/2024	22:47	Snipe	2	improved agricultural grassland; alarming	NM
SN068	Breeding Raptor Survey; HHVP1 (Abbeyshrule bog)	20/06/2024	07:25	Snipe	3	bogs; flushed, alarming	NM
SN069	Breeding Raptor Survey; HHVP1 (Abbeyshrule bog)	20/06/2024	07:30	Snipe	2	bogs; drumming, separate territories	NM
SN070	Breeding Raptor Survey; HHVP1 (Abbeyshrule bog)	20/06/2024	07:39	Snipe	7	bogs; drumming, scattered across open bog, seperate territories. ceasing at ~08:30	NM
SN071	Breeding Raptor Survey; HHVP1 (Abbeyshrule bog)	20/06/2024	09:17	Snipe	2	bogs; flying, alarming, landing, landing within fringes	NM
SN072	Breeding Raptor Survey; HHVP1 (Abbeyshrule bog)	20/06/2024	09:39	Snipe	1	bogs, scrub/transitional woodland and highly modified/non-native woodland; travelling, alarming	NM
SN073	Breeding Barn Owl Survey; BOVP2	26/07/2024	20:56	Snipe	2	improved agricultural grassland and linear woodland/scrub; travelling, alarming	NM
SN074	Breeding Barn Owl Survey; BOVP2	26/07/2024	21:39	Snipe	1	improved agricultural grassland and linear woodland/scrub; travelling, calling	NM

Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
SN075	Breeding Barn Owl Survey; BOVP2	26/07/2024	22:41	Snipe	5	improved agricultural grassland and semi-natural grassland; calling at dusk, flights not seen, only calling within rushy farmland on s boundary. numbers were rough	NM
SN076	Breeding Barn Owl Survey; BOVP3	25/07/2024	21:28	Snipe	1	improved agricultural grassland and semi-natural grassland; travelling, alarming, dropping into grassland to north of vp	NM
SN077	Breeding Barn Owl Survey; BOVP3	25/07/2024	21:51	Snipe	2	improved agricultural grassland and semi-natural grassland; travelling, swooping, alarming, dropping into grassland	NM
SN078	Breeding Raptor Survey; BR5	11/07/2024	17:09	Snipe	1	improved agricultural grassland; travelling, alarming	NM
SN079	Breeding Raptor Survey; BR5	11/07/2024	16:23	Snipe	2	improved agricultural grassland and linear woodland/scrub; travelling, swooping, alarming	NM
SN080	Breeding Raptor Survey; HHVP1 (Abbeyshrule bog)	11/07/2024	18:46	Snipe	3	bogs and scrub; flushed, alarming, dropping into bog fringes	NM
SN081	Breeding Raptor Survey; HHVP1 (Abbeyshrule bog)	11/07/2024	18:53	Snipe	1	bogs; flushed	NM
SN082	Breeding Raptor Survey; HHVP1 (Abbeyshrule bog)	11/07/2024	22:06	Snipe	2	bogs; flushed, alarming	NM
SN083	Breeding Raptor Survey; HHVP1 (Abbeyshrule bog)	11/07/2024	22:09	Snipe	1	bogs; flushed	NM
SN084	Breeding Raptor Survey; HHVP1 (Abbeyshrule bog)	11/07/2024	22:15	Snipe	3	bogs and scrub; flushed, alarming	NM
SN085	Breeding Raptor Survey; HHVP1 (Abbeyshrule bog)	11/07/2024	22:26	Snipe	2	improved agricultural grassland and highly modified/non-native woodland; flying, alarming	NM
SN086	Breeding Raptor Survey; HHVP1 (Abbeyshrule bog)	11/07/2024	20:53	Snipe	5	bogs, semi-natural grassland and scrub; travelling, swooping, alarming, dropping into bog fringes, swooping low	NM
SN087	Breeding Raptor Survey; BR1	25/07/2024	12:09	Snipe	1	bogs, semi-natural grassland and scrub; travelling, alarming, dropping into fringe	NM
SN088	Breeding Raptor Survey; BR1	25/07/2024	14:22	Snipe	3	bogs and scrub; travelling, alarming	NM
SN089	Breeding Raptor Survey; BR1	25/07/2024	14:50	Snipe	1	bogs, scrub and improved agricultural grassland; travelling, alarming	NM
SN090	Breeding Raptor Survey; BR1	25/07/2024	15:08	Snipe	1	bogs; flushed, alarming	NM
SN091	Breeding Raptor Survey; BR1	25/07/2024	15:12	Snipe	7	bogs; flushed, alarming, not all as one. dropping back into bog fringes	NM

Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
SN092	Breeding Raptor Survey; Ballynegrenia & Ballinderry bogs	31/07/2024	09:29	Snipe	2	improved agricultural grassland, scrub and bogs; flying, alarming	NM
SN093	Breeding Raptor Survey; Ballynegrenia & Ballinderry bogs	31/07/2024	09:52	Snipe	2	bogs; flushed, alarming	NM
SN094	Breeding Raptor Survey; Ballynegrenia & Ballinderry bogs	31/07/2024	09:56	Snipe	1	bogs and scrub; flushed, alarming	NM
SN095	Breeding Raptor Survey; Ballynegrenia & Ballinderry bogs	31/07/2024	09:53	Snipe	2	bogs; flushed	NM
SN096	Breeding Raptor Survey; BR7	31/07/2024	12:02	Snipe	3	bogs and scrub; travelling, alarming, descending, descending into fringes	NM
SN097	Breeding Raptor Survey; BR7	31/07/2024	11:19	Snipe	2	bogs; flushed, alarming	NM
SN098	Breeding Raptor Survey; BR7	31/07/2024	10:19	Snipe	1	bogs; travelling, calling	NM
SN099	Breeding Raptor Survey; BR7	31/07/2024	12:04	Snipe	3	bogs; travelling, alarming, descending into fringe	NM
SN100	Breeding Raptor Survey; BR7	31/07/2024	13:11	Snipe	1	scrub and bogs; travelling, calling	NM
SN101	Breeding Raptor Survey; BR7	31/07/2024	10:37	Snipe	4	bogs and scrub; travelling, calling	NM
SN102	Breeding Raptor Survey; BR7 area	31/07/2024	13:26	Snipe	2	bogs; flushed, alarming	NM
SN103	Breeding Raptor Survey; BOVP1 (BRVP8)	31/07/2024	21:15	Snipe	2	improved agricultural grassland; travelling, calling	NM
SN104	Breeding Raptor Survey; BOVP1 (BRVP8)	31/07/2024	22:12	Snipe	1	improved agricultural grassland and linear woodland/scrub; flying, calling, dusk	NM
SN105	Vantage Point Survey; VP01	20/10/2022	19:38	Snipe	1	improved agricultural grassland; dusk flight	MW



Map Legend

- EIA Site Boundary
- Proposed Turbine Layout
- 500m Radius of Turbines
- ▲ VP Locations
- Flight Observation
- ◆ Non-flight Observation



Drawing Title
Snipe Vantage Point Survey Observations

Project Title
Umma More Renewable Energy Development

Drawn By
KS

Checked By
PC

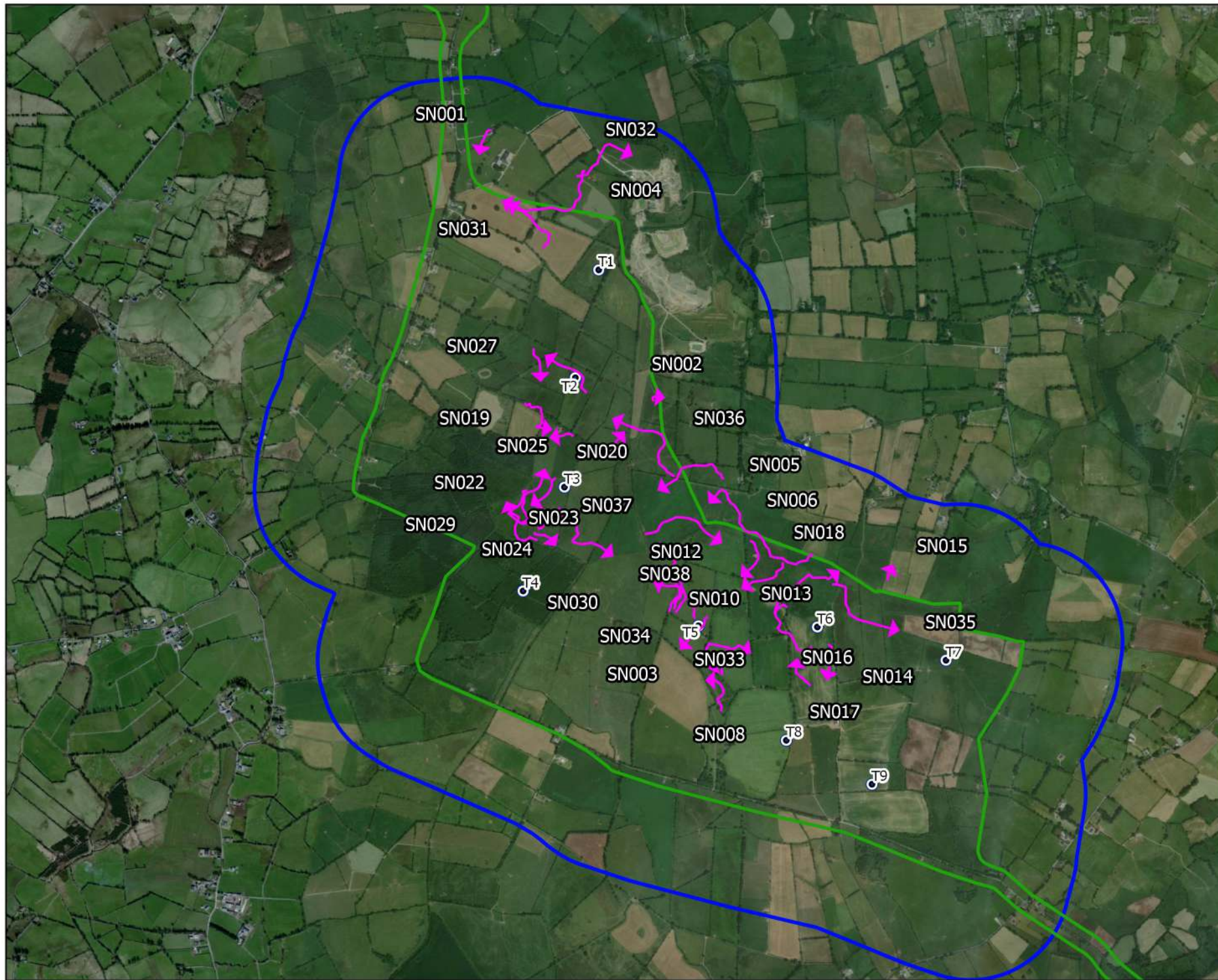
Project No.
201050

Drawing No.
Fig. 7-4a-37

Scale
1:25,000

Date
13.06.2025

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Map Legend

- EIA Site Boundary
- Proposed Turbine Layout
- 500m Radius of Turbines
- Flight Observation



Drawing Title

Snipe Winter Walkover Survey Observations

Project Title

Umma More Renewable Energy Development

Drawn By

KS

Checked By

PC

Project No.

201050

Drawing No.

Fig. 7-4a-38

Scale

1:25,000

Date

13.06.2025



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- Map Legend
- EIA Site Boundary
 - Proposed Turbine Layout
 - 500m Radius of Turbines
 - Flight Observation



Drawing Title	
Shipe Breeding Walkover Survey Observations	
Project Title	
Umma More Renewable Energy Development	
Drawn By	Checked By
KS	PC
Project No.	Drawing No.
201050	Fig. 7-4a-39
Scale	Date
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- Map Legend
- EIA Site Boundary
 - Proposed Turbine Layout
 - 5km Survey Radius
 - Observation



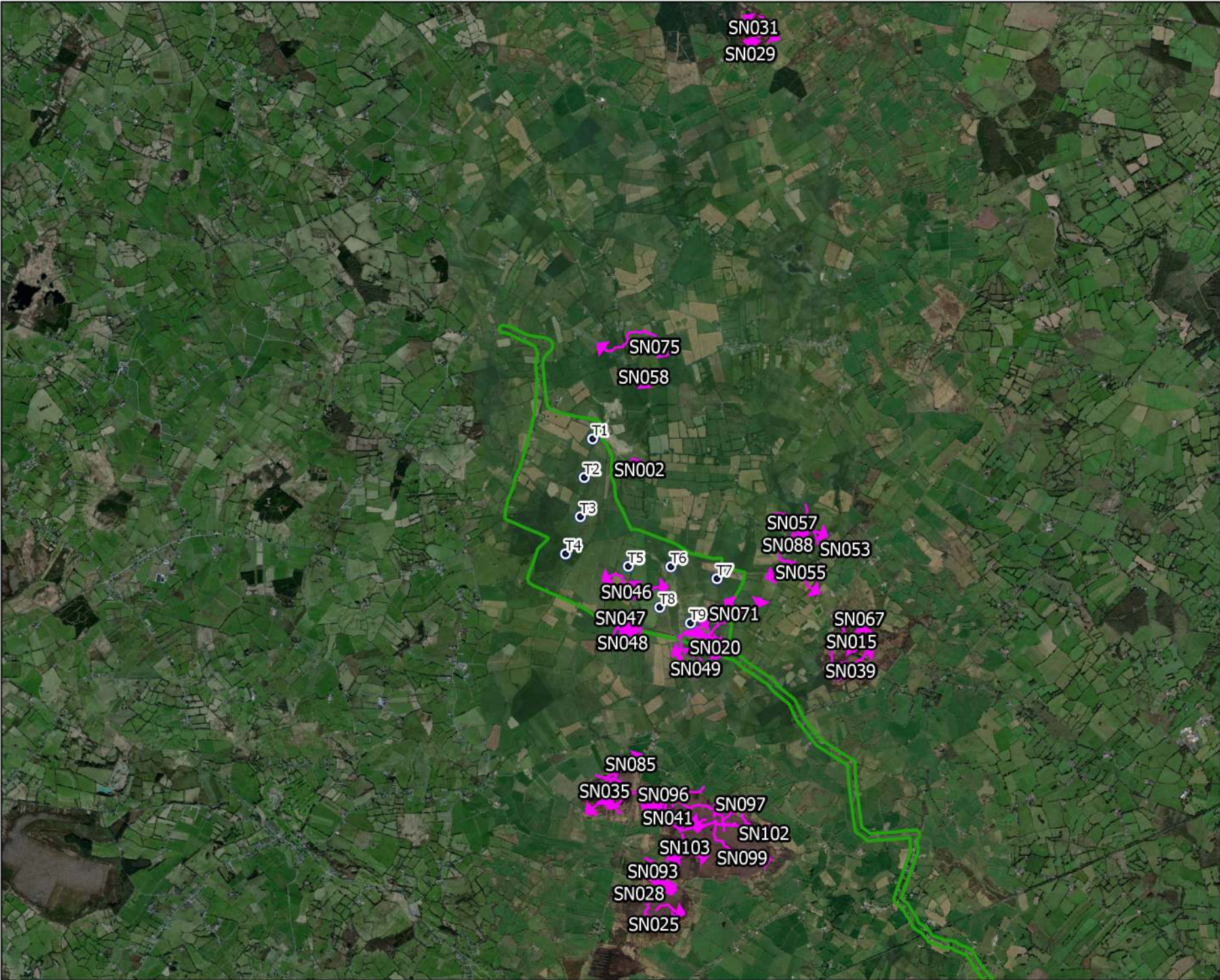
Drawing Title
Snipe Waterbird Distribution Survey Observations

Project Title
Umma More Renewable Energy Development

Drawn By KS	Checked By PC
Project No. 201050	Drawing No. Fig. 7-4a-40
Scale 1:80,000	Date 13.06.2025

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- Map Legend
- EIAR Site Boundary
 - Proposed Turbine Layout
 - Flight Observation



Drawing Title	
Snipe Incidental Records	
Project Title	
Umma More Renewable Energy Development	
Drawn By	Checked By
KS	PC
Project No.	Drawing No.
201050	Fig. 7-4a-41
Scale	Date
1:70,000	13.06.2025
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12.

KESTREL

Table 7 - 4a - 42 Kestrel Vantage Point Survey

Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0 -15m)	Band 2 (15-25m)	Band 3 (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
K.001	VP3	21/10/2022	15:49	Kestrel	1	48	15	25	8	0	improved agricultural grassland; hunting	MW
K.002	VP3	22/11/2022	08:06	Kestrel	1	10	2	6	2	0	improved agricultural grassland; flight, landing	MW
K.003	VP1	25/11/2022	08:17	Kestrel	1	10	0	10	0	0	improved agricultural grassland; flight	MW
K.004	VP1	25/11/2022	08:48	Kestrel	2	105	20	60	25	0	improved agricultural grassland; gliding, undulating flight, male female pair, possibly display flights	MW
K.005	VP1	25/11/2022	09:00	Kestrel	1	10	10	0	0	0	improved agricultural grassland; flight	MW
K.006	VP1	25/11/2022	10:42	Kestrel	1	5	0	0	5	0	improved agricultural grassland; soaring, lost sight of	MW
K.007	VP1	25/11/2022	13:21	Kestrel	1	20	0	0	20	0	improved agricultural grassland; straight commute flight, male	MW
K.008	VP3	10/02/2023	07:42	Kestrel	1	35	0	35	0	0	amenity grassland (improved), hedgerows and riparian woodland; soaring/hover, 20m	MS
K.009	VP3	10/02/2023	11:15	Kestrel	1	45	0	45	0	0	hedgerows, amenity grassland (improved) and riparian woodland; soaring flight, 20m	MS
K.010	VP3	24/02/2023	12:52	Kestrel	1	90	90	0	0	0	improved agricultural grassland, hedgerows and mixed broadleaved woodland; perch/flight, 15m	MS
K.011	VP3	24/02/2023	16:35	Kestrel	1	260	260	0	0	0	improved agricultural grassland and hedgerows; perch/flight, 15m	MS
K.012	VP1	27/02/2023	15:15	Kestrel	1	5	5	0	0	0	improved agricultural grassland and treelines; perch/drop, 10m	MS
K.013	VP1	27/02/2023	18:10	Kestrel	1	65	40	25	0	0	improved agricultural grassland and treelines; soar/perch, 15-25m	MS
K.014	VP3	18/03/2023	14:53	Kestrel	1	15	15	0	0	0	amenity grassland (improved) and treelines; flight/perch, 15m	MS

Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0 -15m)	Band 2 (15-25m)	Band 3 (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
K.015	VP3	18/03/2023	18:08	Kestrel	1	25	25	0	0	0	amenity grassland (improved); hovering, 10m	MS
K.016	VP1	28/03/2023	18:25	Kestrel	1	135	135	0	0	0	treelines and improved agricultural grassland; hover/ move/ hover/ perch, 5-15m	MS
K.017	VP3	04/04/2023	11:22	Kestrel	1	75	60	15	0	0	amenity grassland (improved) and treelines; hover/ move	MS
K.018	VP1	16/04/2023	07:00	Kestrel	1	10	10	0	0	0	improved agricultural grassland and hedgerows; flight	MS
K.019	VP1	10/07/2023	13:08	Kestrel	1	25	0	25	0	0	treelines and improved agricultural grassland; hover/dive, 20m	MS
K.020	VP1	10/07/2023	14:20	Kestrel	1	105	0	105	0	0	mixed broadleaved/conifer woodland; hover/move/hover, 20m	MS
K.021	VP3	19/07/2023	11:10	Kestrel	1	25	0	25	0	0	mixed conifer woodland; hover/hunt, 30m	MS
K.022	VP1	02/08/2023	15:10	Kestrel	1	18	0	0	18	0	improved agricultural grassland; travelling	FLM
K.023	VP3	03/08/2023	10:50	Kestrel	2	180	0	0	180	0	improved agricultural grassland; circling	FLM
K.024	VP3	19/09/2023	07:05	Kestrel	1	88	0	88	0	0	improved agricultural grassland; travelling	FLM
K.025	VP1	06/10/2023	16:29	Kestrel	1	135	0	0	135	0	improved agricultural grassland and linear woodland/scrub; flying across farmland, stopping occasionally to hover but	NM
K.026	VP3	15/12/2023	15:39	Kestrel	1	680	0	0	680	0	improved agricultural grassland and disturbed ground; hunting and hovering over farmland and fringes of quarry, high in breeze	NM
K.027	VP1	18/01/2024	08:35	Kestrel	1	380	50	330	0	0	improved agricultural grassland and linear woodland/scrub; travelling low	NM
K.028	VP1	09/04/2024	17:15	Kestrel	1	65	0	65	0	0	treelines and improved agricultural grassland; hovering, flying	MS
K.029	VP1	09/04/2024	17:45	Kestrel	1	45	20	25	0	0	treelines and improved agricultural grassland; flying	MS

Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0 -15m)	Band 2 (15-25m)	Band 3 (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
K.030	VP3	12/04/2024	17:25	Kestrel	1	184	0	110	74	0	conifer plantation and mixed broadleaved/conifer woodland; hovering, flying, male	MS
K.031	VP3	20/05/2024	06:18	Kestrel	1	110	0	90	20	0	improved agricultural grassland and linear woodland/scrub; travelling	NM
K.032	VP3	20/05/2024	08:57	Kestrel	1	740	0	150	590	0	improved agricultural grassland, built land and disturbed ground; hunting, hovering	NM
K.033	VP1	24/05/2024	08:01	Kestrel	1	137	0	37	100	0	improved agricultural grassland; hunting	FLM
K.034	VP1	18/06/2024	12:55	Kestrel	1	655	69	147	439	0	improved agricultural grassland; hunting, male	EOB
K.035	VP1	18/06/2024	13:05	Kestrel	1	126	0	0	126	0	improved agricultural grassland; hunting, female	EOB
K.036	VP1	18/06/2024	13:36	Kestrel	1	151	0	0	151	0	improved agricultural grassland; hunting	EOB
K.037	VP1	18/06/2024	15:15	Kestrel	2	211	0	23	188	0	improved agricultural grassland; hunting, male and female	EOB
K.038	VP1	18/06/2024	15:31	Kestrel	1	617	26	54	537	0	improved agricultural grassland; hunting, male	EOB
K.039	VP1	12/07/2024	17:35	Kestrel	1	430	40	200	190	0	improved agricultural grassland and linear woodland/scrub; hunting, hovering, perching	NM
K.040	VP1	12/07/2024	17:42	Kestrel	1	-	-	-	-	-	linear woodland/scrub and improved agricultural grassland; perched, present for ~50mins	NM
K.041	VP1	12/07/2024	18:35	Kestrel	1	35	20	15	0	0	linear woodland/scrub and improved agricultural grassland; departing, travelling, same individual	NM
K.042	VP1	12/08/2024	18:24	Kestrel	1	280	30	100	150	0	improved agricultural grassland and linear woodland/scrub; hunting, flying	NM
K.043	VP1	12/08/2024	18:48	Kestrel	1	50	20	30	0	0	improved agricultural grassland and linear woodland/scrub; travelling	NM
K.044	VP3	20/08/2024	10:28	Kestrel	1	330	20	140	170	0	improved agricultural grassland and linear woodland/scrub; hunting, hovering, travelling, dropping abruptly into farmland within north of site	NM

Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0 -15m)	Band 2 (15-25m)	Band 3 (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
K.045	VP3	20/08/2024	10:49	Kestrel	1	490	20	180	290	0	improved agricultural grassland and linear woodland/scrub; hunting, hovering, travelling	NM
K.046	VP3	20/08/2024	13:43	Kestrel	1	250	15	130	105	0	improved agricultural grassland, disturbed ground and scrub; hunting, hovering, male. disappearing into scrub adjacent to quarry	NM
K.047	VP3	12/09/2024	07:19	Kestrel	1	840	50	320	440	30	improved agricultural grassland, scrub and disturbed ground; hunting, hovering, travelling, disappearing into farmland on north boundary	NM
K.048	VP3	18/11/2024	15:14	Kestrel	1	60	0	30	30	0	improved agricultural grassland; travelling	DM
K.049	VP1	20/11/2024	12:37	Kestrel	2	90	0	30	60	0	improved agricultural grassland; travelling, m+f, landed in tree	DM
K.050	VP1	20/11/2024	12:50	Kestrel	1	30	15	15	0	0	improved agricultural grassland; travelling, m flew behind hedge	DM
K.051	VP1	20/11/2024	14:26	Kestrel	1	90	60	30	0	0	improved agricultural grassland; travelling	DM
K.052	VP1	11/02/2025	12:56	Kestrel	1	47	7	40	0	0	improved agricultural grassland; hunting, travelling	CC
K.053	VP1	11/02/2025	13:29	Kestrel	1	127	20	70	37	0	improved agricultural grassland; hunting	CC
K.054	VP3	12/02/2025	16:35	Kestrel	1	178	40	100	38	0	conifer plantation and improved agricultural grassland; hunting	CC
K.055	vp3	20/03/2025	10:42	Kestrel	1	120	60	60	0	0	improved agricultural grassland and mixed broadleaved/conifer woodland; hunting, flew behind trees	DM
K.056	vp1	25/03/2025	09:44	Kestrel	1	300	0	0	300	0	improved agricultural grassland; hunting	DM
K.057	vp1	25/03/2025	11:29	Kestrel	1	240	0	0	240	0	improved agricultural grassland; hunting	DM

Table 7 – 4a - 43 Kestrel Winter Walkover Survey

Ref.	Date	Time	Transect	Species	Number	Habitat and activity	Surveyor
K.001	16/03/2023	09:32	-	Kestrel	1	hedgerows, riparian woodland and amenity grassland (improved); perch/fly/perch, 10m (wintering)	MS
K.002	16/03/2023	13:20	-	Kestrel	1	treelines and amenity grassland (improved); perch/flight (wintering)	MS
K.003	17/10/2023	14:33	-	Kestrel	1	improved agricultural grassland; flying across farmland, occasionally stopping to hover briefly (wintering)	NM
K.004	17/01/2024	13:43	-	Kestrel	1	improved agricultural grassland; flying, hunting (wintering)	NM
K.005	15/02/2024	13:00	-	Kestrel	1	improved agricultural grassland and linear woodland/scrub; travelling (wintering)	NM
K.006	29/11/2024	09:01	T1	Kestrel	1	linear woodland/scrub, improved agricultural grassland and scrub; perched, departing, female (wintering)	NM
K.007	29/11/2024	12:21	T2	Kestrel	1	improved agricultural grassland and linear woodland/scrub; hunting, hovering, departing (wintering)	NM
K.008	13/03/2025	10:56	T1	Kestrel	2	improved agricultural grassland; travelling, male and female, flying together (courtship and display; probable breeding)	CC
K.009	13/03/2025	11:22	T1	Kestrel	1	improved agricultural grassland; mobbed, mobbed by corvids (wintering)	CC
K.010	13/03/2025	12:17	T3	Kestrel	1	improved agricultural grassland; hunting (wintering)	CC

Table 7 – 4a - 44 Kestrel Breeding Walkover Survey

Ref.	Date	Time	Transect	Species	Number	Habitat and activity	Surveyor
K.001	14/06/2023	13:11	-	Kestrel	2	treelines and improved agricultural grassland; agitated (agitated behaviour; probable breeding)	MS
K.002	11/07/2023	08:35	-	Kestrel	1	treelines, hedgerows and immature woodland; hover hunting (suitable nesting habitat; possible breeder)	MS
K.003	30/05/2024	10:37	-	Kestrel	1	improved agricultural grassland; hunting, hovering (suitable nesting habitat; possible breeder)	NM
K.004	30/05/2024	12:22	-	Kestrel	1	improved agricultural grassland, disturbed ground and scrub; hunting, hovering (suitable nesting habitat; possible breeder)	NM
K.005	30/05/2024	11:38	-	Kestrel	1	improved agricultural grassland and linear woodland/scrub; hunting, travelling, perching briefly before continuing (suitable nesting habitat; possible breeder)	NM

Ref.	Date	Time	Transect	Species	Number	Habitat and activity	Surveyor
K.006	24/07/2024	09:27	-	Kestrel	1	improved agricultural grassland and linear woodland/scrub; hunting, hovering, travelling, across east of site (suitable nesting habitat; possible breeder)	NM
K.007	24/07/2024	17:16	-	Kestrel	1	improved agricultural grassland and semi-natural grassland; hunting, hovering, very low a times. vp3 area (suitable nesting habitat; possible breeder)	NM

Table 7 - 4a - 45 Kestrel Breeding Raptor Survey

Ref.	BR	Date	Time	Species	Number	Habitat and activity	Breeding status	Surveyor
K.001	BR5	23/05/2023	10:25	Kestrel	1	exposed sand, gravel or till, improved agricultural grassland and hedgerows, hunting	suitable nesting habitat; possible breeder	FLM
K.002	BR6	23/05/2023	11:35	Kestrel	1	improved agricultural grassland and hedgerows, travelling	suitable nesting habitat; possible breeder	FLM
K.003	BR2	25/05/2023	08:00	Kestrel	1	raised bog and improved agricultural grassland, hunting, male hunting	suitable nesting habitat; possible breeder	FLM
K.004	VP3	07/04/2023	10:05	Kestrel	1	amenity grassland (improved) and hedgerows, hovering/ moving, 10m	suitable nesting habitat; possible breeder	MS
K.005	BR1	07/04/2023	13:55	Kestrel	1	cutover bog, hover/ move/ hover, 10-15m	suitable nesting habitat; possible breeder	MS
K.006	BR7	07/04/2023	14:25	Kestrel	1	cutover bog, hover/ move/ hover, 10-15m	suitable nesting habitat; possible breeder	MS
K.007	BR01	06/06/2023	08:17	Kestrel	1	improved agricultural grassland, treelines and cutover bog, soaring/hovering, 15-25m	suitable nesting habitat; possible breeder	MS
K.008	BR01	06/06/2023	09:14	Kestrel	1	treelines and cutover bog, soaring/hovering, 2-25m	suitable nesting habitat; possible breeder	MS
K.009	BR01	06/06/2023	09:50	Kestrel	1	treelines and cutover bog, soaring/hovering, 40-50m	suitable nesting habitat; possible breeder	MS
K.010	BR01	06/06/2023	10:12	Kestrel	2	treelines and improved agricultural grassland, pair soaring, 40-60m	pair; probable breeding	MS
K.011	BR04	07/06/2023	11:00	Kestrel	1	improved agricultural grassland, hedgerows and scattered tress and parkland, soaring/searching/active hunting, 0-75m	adult carrying food/faecal sac; confirmed breeding	MS
K.012	BR04	07/06/2023	11:45	Kestrel	1	improved agricultural grassland, hedgerows and scattered tress and parkland, hover hunting, 25-75m	suitable nesting habitat; possible breeder	MS

Ref.	BR	Date	Time	Species	Number	Habitat and activity	Breeding status	Surveyor
K.013	BR04	07/06/2023	13:15	Kestrel	1	improved agricultural grassland, hedgerows and scattered tress and parkland, same bird hunting, 0-25m	suitable nesting habitat; possible breeder	MS
K.014	BR04	07/06/2023	13:40	Kestrel	1	improved agricultural grassland, hedgerows and scattered tress and parkland, hover hunting, 20-40m	suitable nesting habitat; possible breeder	MS
K.015	BR2	11/04/2024	11:53	Kestrel	1	bogs and scrub, travelling low, perched, female	suitable nesting habitat; possible breeder	NM
K.016	BR2	11/04/2024	12:05	Kestrel	1	bogs and scrub, departing, travelling	suitable nesting habitat; possible breeder	NM
K.017	BR2	11/04/2024	12:43	Kestrel	1	improved agricultural grassland and scrub, soaring, hovering, descending behind woodland	suitable nesting habitat; possible breeder	NM
K.018	BR2	11/04/2024	12:48	Kestrel	1	bogs, scrub and semi-natural grassland, hunting, dropping, dropping into bog fringes	suitable nesting habitat; possible breeder	NM
K.019	BR3	11/04/2024	16:48	Kestrel	1	improved agricultural grassland and treelines, hunting, hovering, perched	suitable nesting habitat; possible breeder	NM
K.020	BR3	11/04/2024	17:00	Kestrel	1	improved agricultural grassland and treelines, travelling, perched	suitable nesting habitat; possible breeder	NM
K.021	BOVP1 (BRVP8)	12/04/2024	08:27	Kestrel	1	improved agricultural grassland and semi-natural grassland, hunting, hovering	suitable nesting habitat; possible breeder	NM
K.022	BR7	12/04/2024	10:31	Kestrel	1	raised bog and scrub, hunting, hovering	suitable nesting habitat; possible breeder	NM
K.023	BR7	12/04/2024	10:44	Kestrel	1	improved agricultural grassland and scrub, hunting, hovering	suitable nesting habitat; possible breeder	NM
K.024	HHVP1	10/04/2024	18:06	Kestrel	1	bogs and scrub/transitional woodland, hunting, hovering, abbeyshrule bog (southeast)	suitable nesting habitat; possible breeder	NM
K.025	Transect 2	30/04/2024	10:43	Kestrel	1	improved agricultural grassland, scrub and semi-natural grassland, perched, hunting, travelling, t2, female	suitable nesting habitat; possible breeder	NM
K.026	Transect 2	30/04/2024	11:08	Kestrel	1	improved agricultural grassland, scrub and disturbed ground, hunting, hovering, t2 - dungolman	suitable nesting habitat; possible breeder	NM
K.027	BOVP3	30/04/2024	21:05	Kestrel	1	improved agricultural grassland, hunting, hovering, travelling, bovp3	suitable nesting habitat; possible breeder	NM
K.028	BOVP3	30/04/2024	22:24	Kestrel	1	improved agricultural grassland, hunting, travelling, roosting, bovp3. roosting within bovp building, possible nest site in coming weeks	suitable nesting habitat; possible breeder	NM

Ref.	BR	Date	Time	Species	Number	Habitat and activity	Breeding status	Surveyor
K.029	BR1	17/05/2024	08:48	Kestrel	1	bogs and scrub, hunting, hovering	suitable nesting habitat; possible breeder	NM
K.030	BR4	17/05/2024	14:41	Kestrel	1	improved agricultural grassland, travelling, hovering	flyover; non-breeding	NM
K.031	BR4	17/05/2024	15:04	Kestrel	1	improved agricultural grassland, hunting, travelling, perched, over farmland for a period before perching at old building (bovp3). same individual	suitable nesting habitat; possible breeder	NM
K.032	BR4	17/05/2024	13:25	Kestrel	1	improved agricultural grassland, semi-natural grassland and linear woodland/scrub, hunting, hovering	suitable nesting habitat; possible breeder	NM
K.033	BR4	17/05/2024	15:32	Kestrel	1	improved agricultural grassland and linear woodland/scrub, departing, travelling, departing from building. same individual	suitable nesting habitat; possible breeder	NM
K.034	BR4	17/05/2024	16:02	Kestrel	1	improved agricultural grassland, travelling, perched, perching once again in building, was not picked up again. same individual	suitable nesting habitat; possible breeder	NM
K.035	Clonickilroe	17/05/2024	17:16	Kestrel	1	improved agricultural grassland and semi-natural grassland, hunting, hovering	suitable nesting habitat; possible breeder	NM
K.036	Clare	17/05/2024	17:45	Kestrel	1	improved agricultural grassland and linear woodland/scrub, hunting, hovering	suitable nesting habitat; possible breeder	NM
K.037	HHVP1	24/05/2024	07:04	Kestrel	1	bogs and scrub, hunting, hovering	suitable nesting habitat; possible breeder	NM
K.038	HHVP1	24/05/2024	08:47	Kestrel	1	bogs and scrub/transitional woodland, hunting, hovering	suitable nesting habitat; possible breeder	NM
K.039	BR2	24/05/2024	13:24	Kestrel	1	bogs and scrub, hunting, hovering	suitable nesting habitat; possible breeder	NM
K.040	BR2	24/05/2024	13:58	Kestrel	1	bogs and scrub/transitional woodland, hunting, hovering, likely the same individual as was seen 20 mins previous	suitable nesting habitat; possible breeder	NM
K.041	BR2	24/05/2024	16:27	Kestrel	2	bogs, flying, courting, perched, chasing each other low, rapidly and frantically, perching together in birch on bog fringe	courtship and display; probable breeding	NM
K.042	BR7	24/05/2024	17:49	Kestrel	1	bogs and scrub, hunting, hovering	suitable nesting habitat; possible breeder	NM
K.043	BR3	29/05/2024	16:33	Kestrel	1	improved agricultural grassland and linear woodland/scrub, travelling, male	suitable nesting habitat; possible breeder	NM

Ref.	BR	Date	Time	Species	Number	Habitat and activity	Breeding status	Surveyor
K.044	BR4	07/06/2024	12:49	Kestrel	1	improved agricultural grassland and linear woodland/scrub, travelling low, perched	suitable nesting habitat; possible breeder	NM
K.045	BR4	07/06/2024	15:29	Kestrel	1	improved agricultural grassland, hunting, hovering	suitable nesting habitat; possible breeder	NM
K.046	BR4	07/06/2024	13:17	Kestrel	1	improved agricultural grassland and hedgerows, hunting, hovering	suitable nesting habitat; possible breeder	NM
K.047	BR4	07/06/2024	13:44	Kestrel	1	improved agricultural grassland and linear woodland/scrub, hunting, hovering, likely the same individual as ~20mins previous	suitable nesting habitat; possible breeder	NM
K.048	Carricknagower	11/06/2024	19:44	Kestrel	1	improved agricultural grassland, hunting, hovering	suitable nesting habitat; possible breeder	NM
K.049	BR2	21/06/2024	10:08	Kestrel	2	bogs and scrub, chasing, courting, chasing and swirling over bog, disappearing into fringes	courtship and display; probable breeding	NM
K.050	BR2	21/06/2024	11:54	Kestrel	1	bogs, semi-natural grassland and scrub, hunting, hovering, male	suitable nesting habitat; possible breeder	NM
K.051	BR7	21/06/2024	13:50	Kestrel	1	improved agricultural grassland and semi-natural grassland, hunting, hovering	suitable nesting habitat; possible breeder	NM
K.052	BR7	21/06/2024	14:06	Kestrel	1	bogs and scrub, hunting, hovering	suitable nesting habitat; possible breeder	NM
K.053	BR7	21/06/2024	16:31	Kestrel	1	bogs, hunting, hovering	suitable nesting habitat; possible breeder	NM
K.054	BR7	21/06/2024	15:43	Kestrel	1	bogs and semi-natural grassland, hunting, hovering, dropping abruptly within fringes	suitable nesting habitat; possible breeder	NM
K.055	BR7	21/06/2024	16:05	Kestrel	1	bogs and scrub/transitional woodland, hunting, hovering, travelling, likely the same individual as was seen ~15mins previous	suitable nesting habitat; possible breeder	NM
K.056	HHVP1 (Abbeyshrute bog)	20/06/2024	07:47	Kestrel	1	bogs and scrub, hunting, hovering	suitable nesting habitat; possible breeder	NM
K.057	HHVP1 (Abbeyshrute bog)	20/06/2024	09:47	Kestrel	1	bogs, hunting, hovering	suitable nesting habitat; possible breeder	NM
K.058	Abbeyshrute bog	11/07/2024	18:23	Kestrel	1	bogs and scrub, hunting, hovering	suitable nesting habitat; possible breeder	NM

Ref.	BR	Date	Time	Species	Number	Habitat and activity	Breeding status	Surveyor
K.059	HHVP1 (Abbeyshrule bog)	11/07/2024	20:31	Kestrel	1	bogs, scrub and semi-natural grassland, hunting hovering, dropping abruptly to the ground numerous times but always rising and continuing	suitable nesting habitat; possible breeder	NM
K.060	BR1	25/07/2024	13:51	Kestrel	1	bogs and scrub, hunting, hovering, dropping abruptly - vanishing for 20mins	suitable nesting habitat; possible breeder	NM
K.061	BR1	25/07/2024	14:12	Kestrel	1	bogs, departing, hunting, travelling, re-emerging from where it disappeared from 20mins previous. moving west and onto farmland	suitable nesting habitat; possible breeder	NM
K.062	BR7	31/07/2024	10:58	Kestrel	1	bogs and scrub, hunting, hovering, dropping abruptly into fringe	suitable nesting habitat; possible breeder	NM
K.063	VP3 area	31/07/2024	14:53	Kestrel	1	improved agricultural grassland, scrub and disturbed ground, flushed, travelling, disturbed from perch	suitable nesting habitat; possible breeder	NM
K.064	BOVP1 (BRVP8)	31/07/2024	20:54	Kestrel	1	improved agricultural grassland, linear woodland/scrub and semi-natural grassland, hunting, hovering	suitable nesting habitat; possible breeder	NM
K.065	BOVP1 (BRVP8)	31/07/2024	20:02	Kestrel	1	linear woodland/scrub and improved agricultural grassland, perched, travelling, perched within farmland, departing northeast	suitable nesting habitat; possible breeder	NM

Table 7 – 4a - 46 Kestrel Incidental Records

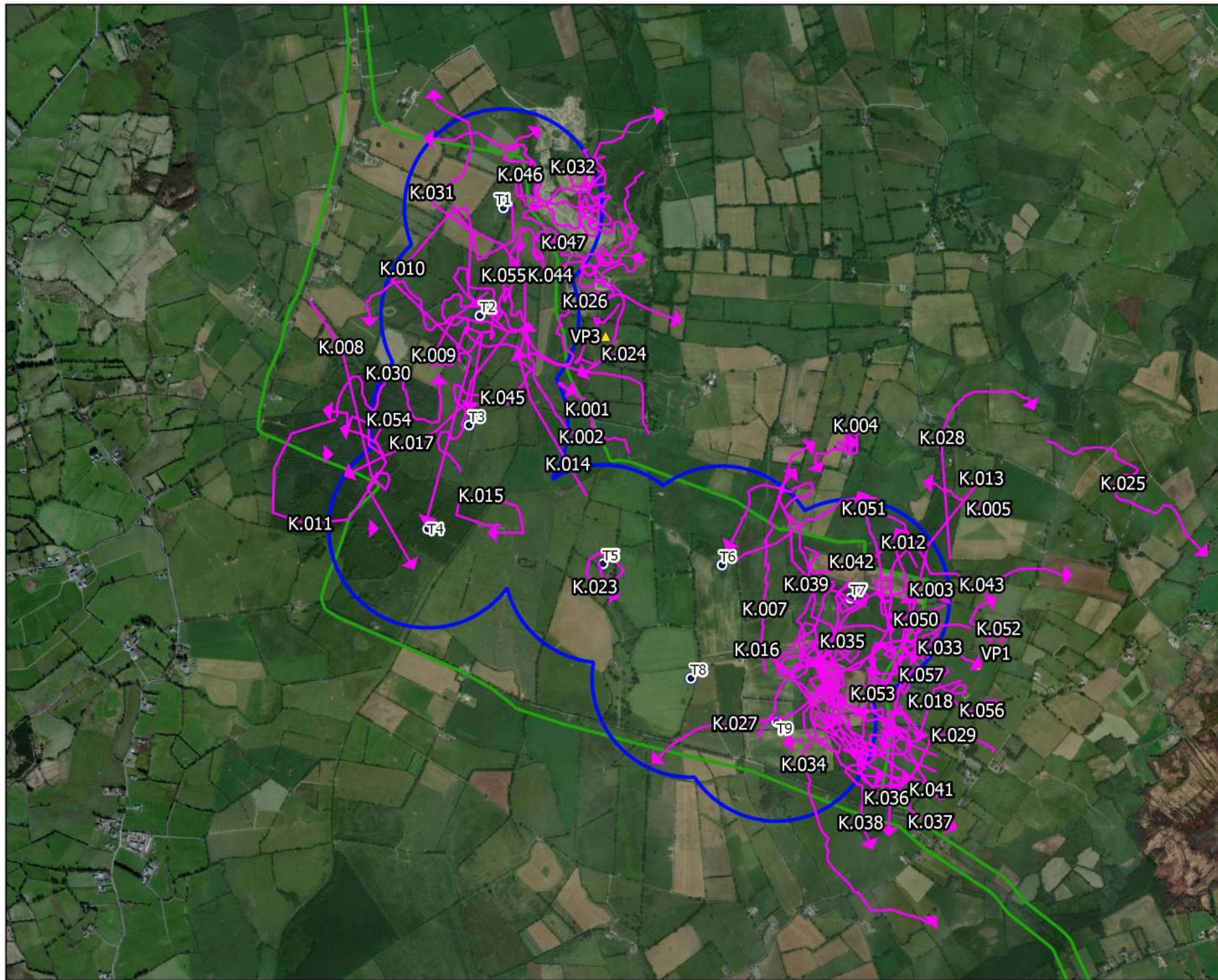
Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
K.001	Waterbird Distribution Survey; Dunolm	07/12/2022	13:09	Kestrel	1	improved agricultural grassland; flight	MW
K.002	Waterbird Distribution Survey; over bog	18/02/2023	13:40	Kestrel	1	upland blanket bog; flight across bog	MS
K.003	Waterbird Distribution Survey; b4	28/02/2023	08:50	Kestrel	1	upland blanket bog; flight	MS
	Waterbird Distribution Survey; D3	13/02/2023	11:50	Kestrel	1	improved agricultural grassland; flying then perched on side of road.	FLM
	Waterbird Distribution Survey; g1 ballinlig lower	24/02/2023	15:00	Kestrel	1	raised bog; landing then flying off	FLM
K.006	Waterbird Distribution Survey; D6	27/03/2023	12:15	Kestrel		upland blanket bog; hover/search flights	MS
K.007	Waterbird Distribution Survey; B1	27/03/2023	12:42	Kestrel	1	upland blanket bog; hover/search flights	MS

Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
K.008	Waterbird Distribution Survey; D7/ Moyvoughly	18/05/2023	14:45	Kestrel	1	raised bog; flying over	FLM
K.009	Waterbird Distribution Survey; lough sewdy	23/08/2023	13:50	Kestrel	1	marsh and improved agricultural grassland; hunting	FLM
K.010	Waterbird Distribution Survey; Lough Sewdy	05/09/2023	09:30	Kestrel	1	improved agricultural grassland; hovering/ hunting	FLM
K.011	Waterbird Distribution Survey; Ballinlig Lower	26/09/2023	13:15	Kestrel	1	raised bog; wind-hovering	FLM
K.012	Waterbird Distribution Survey; B4	06/04/2023	14:10	Kestrel	1	upland blanket bog; hover/ hunt/ hover, male	MS
K.013	Waterbird Distribution Survey; Ballinlig	31/10/2023	13:51	Kestrel	1	cutover bog and semi-natural grassland; hunting and hovering within bog fringes	NM
K.014	Waterbird Distribution Survey; Ballinlig	31/10/2023	14:43	Kestrel	1	bogs, scrub and semi-natural grassland; hunting and hovering, moving w	NM
K.015	Waterbird Distribution Survey; Ballynagrenia & Ballinderry Bog	10/10/2023	10:36	Kestrel	1	bogs; hunting and hovering across bog	NM
K.016	Waterbird Distribution Survey; 500m buffer	09/11/2023	10:46	Kestrel	1	improved agricultural grassland and disturbed ground; hunting and hovering over farmland and old quarry fringes	NM
K.017	Waterbird Distribution Survey; Ballinlig	09/11/2023	13:01	Kestrel	1	bogs, scrub and semi-natural grassland; hunting and hovering over bog	NM
K.018	Waterbird Distribution Survey; Ballynagrenia & Ballinderry Bog	09/11/2023	14:46	Kestrel	1	bogs, semi-natural grassland and scrub; hunting and hovering over bog and fringes	NM
K.019	Waterbird Distribution Survey; Ballynagrenia & Ballinderry Bog	29/11/2023	09:46	Kestrel	1	bogs and scrub; hunting and hovering across bog and fringes	NM
K.020	Waterbird Distribution Survey; Umma Beg	29/11/2023	16:04	Kestrel	1	improved agricultural grassland; commuting across farmland	NM
K.021	Waterbird Distribution Survey; Ballinlig	30/01/2024	12:56	Kestrel	1	bogs, semi-natural grassland and scrub; hunting, hovering	NM
K.022	Waterbird Distribution Survey; Ballinlig	30/01/2024	13:15	Kestrel	1	scrub and bogs; perched, flushed, departing	NM
K.023	Waterbird Distribution Survey; Ballynagrenia & Ballinderry bogs	30/01/2024	16:19	Kestrel	1	bogs, semi-natural grassland and scrub; hunting, hovering, male	NM
K.024	Waterbird Distribution Survey; Ballynagrenia & Ballinderry bogs	07/02/2024	16:05	Kestrel	1	bogs, scrub and semi-natural grassland; hunting, hovering	NM
K.025	Waterbird Distribution Survey; Ballinlig	27/03/2024	10:42	Kestrel	1	bogs, scrub and semi-natural grassland; hunting, hovering	NM

Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
K.026	Waterbird Distribution Survey; Ballynagrenia & Ballinderry bogs	27/03/2024	12:43	Kestrel	1	bogs and scrub; hunting, hovering	NM
K.027	Waterbird Distribution Survey; Knockastia	08/04/2024	13:00	Kestrel	1	cutover bog; hunting	FLM
K.028	Waterbird Distribution and Abundance Survey; G1	04/04/2024	10:35	Kestrel	1	scrub, wet willow-alder-ash woodland and scattered tress and parkland; flying	MS
K.029	Waterbird Distribution and Abundance Survey; G1	18/04/2024	10:53	Kestrel	1	cutover bog, scrub and wet willow-alder-ash woodland; flying, 10m	MS
K.030	Waterbird Distribution Survey; Ballinlig bog	28/05/2024	14:58	Kestrel	1	bogs and scrub; hunting, hovering	NM
K.031	Waterbird Distribution Survey; Ballinlig bog	28/05/2024	15:12	Kestrel	1	bogs and scrub; hunting, hovering, likely the same individual	NM
K.032	Waterbird Distribution Survey; Ballynagrenia & Ballinderry bogs	28/05/2024	16:48	Kestrel	1	bogs and scrub; hunting, hovering	NM
K.033	Waterbird Distribution Survey; Dungolman	03/05/2024	18:10	Kestrel	1	improved agricultural grassland, disturbed ground and scrub; hunting, hovering, travelling	NM
K.034	Waterbird Distribution Survey; Ballynagrenia & Ballinderry bogs	03/05/2024	20:35	Kestrel	1	improved agricultural grassland and scrub; hunting, hovering	NM
K.035	Waterbird Distribution Survey; Ballynagrenia & Ballinderry bogs	03/05/2024	19:32	Kestrel	1	bogs; travelling	NM
K.036	Waterbird Distribution Survey; Ballynagrenia & Ballinderry bogs	03/05/2024	19:47	Kestrel	1	bogs; hunting, hovering, dropping abruptly	NM
K.037	Waterbird Distribution Survey; Ballinlig	13/08/2024	10:24	Kestrel	1	bogs and scrub; hunting, hovering	NM
K.038	Waterbird Distribution Survey; Ballynagrenia & Ballinderry bogs	13/08/2024	14:26	Kestrel	1	bogs; hunting, hovering, dropping abruptly	NM
K.039	Waterbird Distribution Survey; Ballinacorra	29/08/2024	15:04	Kestrel	1	improved agricultural grassland and linear woodland/scrub; travelling	NM
K.040	Waterbird Distribution Survey; Moyvoughly bog	29/08/2024	16:10	Kestrel	1	bogs and scrub/transitional woodland; hunting, hovering, soaring, swooping, travelling, adult female. interacting with juvenile	NM
K.041	Waterbird Distribution Survey; Moyvoughly bog	29/08/2024	16:10	Kestrel	1	bogs, scrub and highly modified/non-native woodland; hovering, soaring, perched, juvenile. shadowing adult, but also doing its own thing	NM
K.042	Waterbird Distribution Survey; Ballynagrenia & Ballinderry bogs	29/08/2024	17:19	Kestrel	1	improved agricultural grassland; travelling	NM
K.043	Waterbird Distribution Survey; Ballynagrenia & Ballinderry bogs	29/08/2024	16:52	Kestrel	1	bogs and scrub/transitional woodland; calling, not seen	NM

Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
K.044	Waterbird Distribution Survey; Ballynagrenia & Ballinderry bogs	29/08/2024	17:54	Kestrel	1	bogs; hunting, hovering, dropping abruptly	NM
K.045	Breeding Barn Owl Survey; BOVP3	17/05/2024	21:12	Kestrel	1	improved agricultural grassland and semi-natural grassland; hunting, hovering, descending, dropping sharply into grass, was not seen rising again	NM
K.046	Breeding Barn Owl Survey; BOVP3	17/05/2024	21:43	Kestrel	1	improved agricultural grassland; travelling, roosting, perching and roosting in abandoned building, possibly a nest but no concrete evidence	NM
K.047	Breeding Barn Owl Survey; BOVP3	07/06/2024	21:35	Kestrel	1	improved agricultural grassland and hedgerows; hunting, hovering, perched, perching for a time	NM
K.048	Breeding Barn Owl Survey; BOVP3	07/06/2024	22:06	Kestrel	1	improved agricultural grassland, semi-natural grassland and linear woodland/scrub; hunting, hovering, travelling, roosting, departing from initial perch, vanishing into building at dusk	NM
K.049	Breeding Barn Owl Survey; BOVP3	25/07/2024	21:48	Kestrel	1	improved agricultural grassland; hunting, hovering, travelling, hovering for a brief time near to br, travelling away southeast at dusk	NM
K.050	Breeding Barn Owl Survey; BOVP3	25/07/2024	20:52	Kestrel	1	improved agricultural grassland and semi-natural grassland; hunting, hovering, dropping frequently but always rising once again, disappearing in mullaghmechan area	NM
K.051	Vantage Point Survey; VP01	20/10/2022	13:25	Kestrel	1	improved agricultural grassland; flight giving nominal calls vocally, landed and perched on vp01 access gate before flying off, female	MW
K.052	Waterbird Distribution Survey; Ballymore Road north of Clonthread	27/10/2022	14:00	Kestrel	1	improved agricultural grassland; flight, note two records of single birds near each other	MW
K.053	Waterbird Distribution Survey; Ballymore Road north of Clonthread	27/10/2022	14:00	Kestrel	1	improved agricultural grassland; flight	MW
K.054	Vantage Point Survey; Behind VP3	21/10/2022	13:53	Kestrel	1	improved agricultural grassland and mixed conifer woodland; hunting, male	MW
K.055	Waterbird Distribution Survey; Raheen	04/09/2024	13:10	Kestrel	1	improved agricultural grassland; hunting	FLM
K.056	Waterbird Distribution Survey; Raheen	25/09/2024	12:37	Kestrel	1	improved agricultural grassland; flying	FLM
K.057	Waterbird Distribution Survey; Raheen	25/09/2024	12:46	Kestrel	1	improved agricultural grassland; perched, flush, same individual	FLM
K.058	Vantage Point Survey; VP3	02/10/2024	15:30	Kestrel	1	improved agricultural grassland; hunting	FOD

Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
K.059	Waterbird Distribution Survey; B1	08/10/2024	10:28	Kestrel	1	bogs; hunting	FOD
K.060	Waterbird Distribution Survey; G1	04/12/2024	10:00	Kestrel	1	cutover bog and mixed broadleaved/conifer woodland; hunting	DM
K.061	Vantage Point Survey; VP3	16/01/2025	12:24	Kestrel	1	improved agricultural grassland and active quarries and mines; hunting, landed in sand-pit	DM
K.062	Vantage Point Survey; VP3	16/01/2025	12:32	Kestrel	1	improved agricultural grassland and active quarries and mines; travelling, flew behind hedge	DM
K.063	Waterbird Distribution Survey, G1	30/01/2025	10:00	Kestrel	1	cutover bog; roosting	DM
K.064	Waterbird Distribution Survey; D7	19/02/2025	10:30	Kestrel	1	hedgerows; travelling	SD



- Map Legend
- EIA Site Boundary
 - Proposed Turbine Layout
 - 500m Radius of Turbines
 - VP Locations
 - Flight Observation
 - Non-flight Observation



Drawing Title	
Kestrel Vantage Point Survey Observations	
Project Title	
Umma More Renewable Energy Development	
Drawn By	Checked By
KS	PC
Project No.	Drawing No.
201050	Fig. 7-4a-42
Scale	Date
1:25,000	13.06.2025
MKO Planning and Environmental Consultants	
MKO Planning and Environmental Consultants Tuam Road, Galway Ireland, E91 VV84 +353 (0) 91 235111 email: info@mkofireland.ie Website: www.mkofireland.ie	



- Map Legend
- EIA Site Boundary
 - Proposed Turbine Layout
 - 500m Radius of Turbines
 - Flight Observation



Drawing Title
Kestrel Winter Walkover Survey Observations

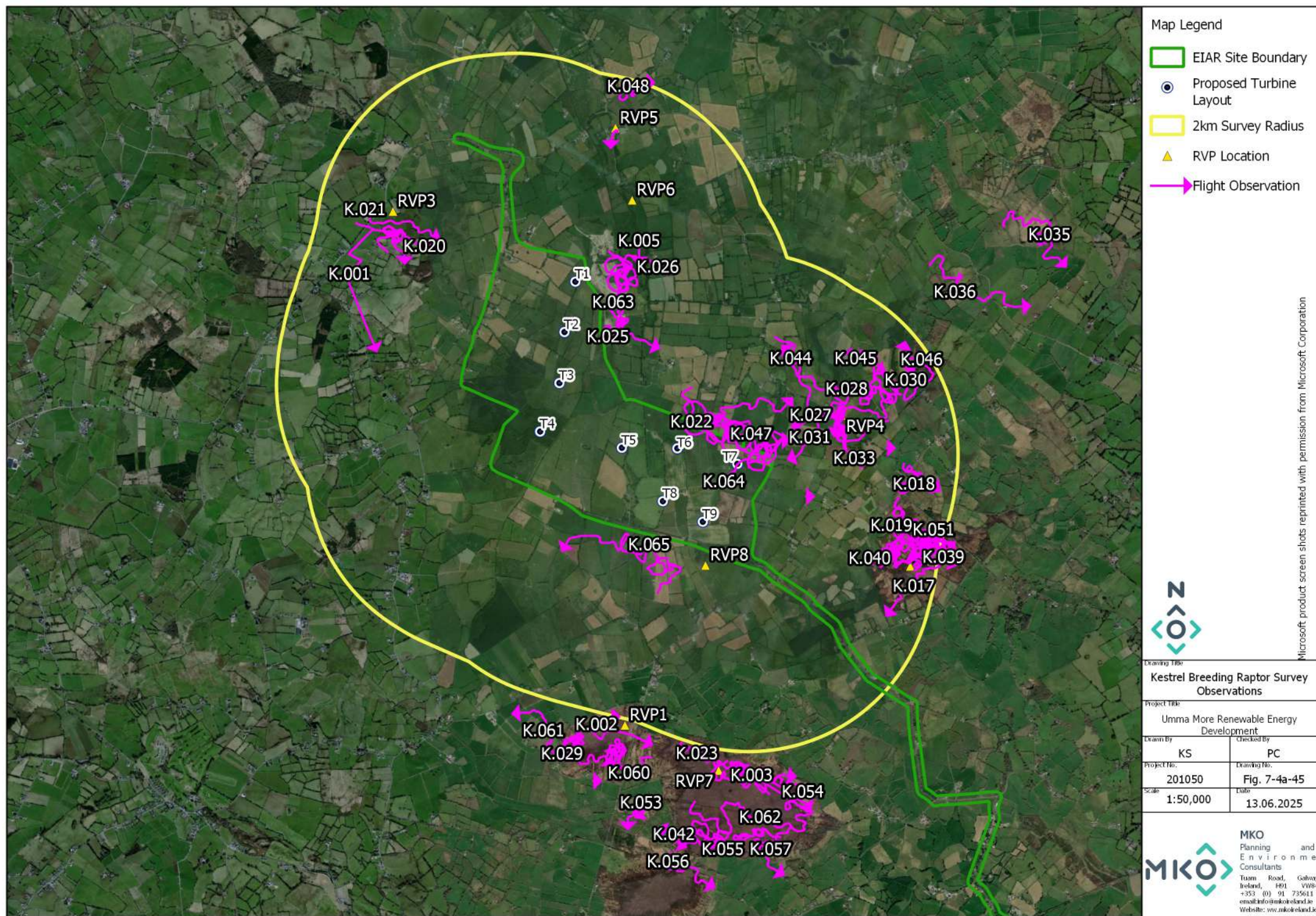
Project Title
Umma More Renewable Energy Development

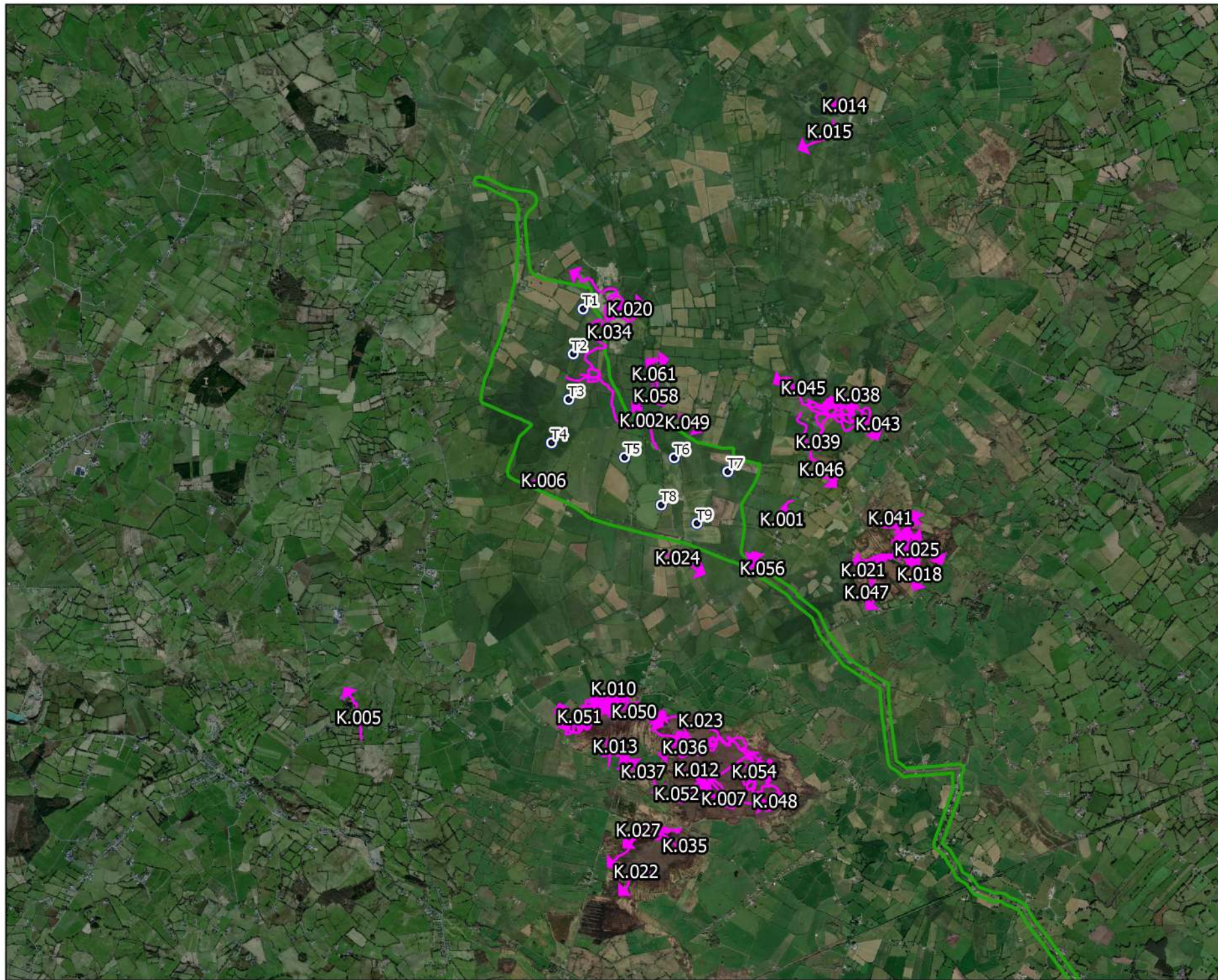
Drawn By: **KS** Checked By: **PC**

Project No.: **201050** Drawing No.: **Fig. 7-4a-43**




Scale: **1:30,000** Date: **13.06.2025**

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Map Legend

-  EIA Site Boundary
-  Proposed Turbine Layout
-  Flight Observation



Drawing Title

Kestrel Incidental Records

Project Title

Umma More Renewable Energy Development

Drawn By

KS

Checked By

PC

Project No.

201050

Drawing No.

Fig. 7-4a-46

Scale

1:60,000

Date

13.06.2025



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13.

BUZZARD

Table 7 - 4a - 47 Buzzard Vantage Point Survey

Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0 -15m)	Band 2 (15-25m)	Band 3 (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
BZ001	VP1	20/10/2022	13:49	Buzzard	1	-	-	-	-	-	improved agricultural grassland; heard not seen, could have also been behind viewshed	MW
BZ002	VP1	20/10/2022	13:58	Buzzard	1	60	10	50	0	0	improved agricultural grassland; flight, remainder of flight behind viewshed.	MW
BZ003	VP1	20/10/2022	16:09	Buzzard	1	-	-	-	-	-	hedgerows; perched at edge of field on posts	MW
BZ004	VP3	21/10/2022	15:59	Buzzard	1	40	0	40	0	0	improved agricultural grassland; chased by corvids	MW
BZ005	VP3	22/11/2022	07:38	Buzzard	1	-	-	-	-	-	improved agricultural grassland; calling, heard not seen	MW
BZ006	VP3	22/11/2022	07:44	Buzzard	1	-	-	-	-	-	improved agricultural grassland; calling, heard not seen	MW
BZ007	VP3	22/11/2022	08:47	Buzzard	1	-	-	-	-	-	improved agricultural grassland; calling	MW
BZ008	VP1	25/11/2022	11:21	Buzzard	1	50	0	5	45	0	improved agricultural grassland; gliding, obscured by trees after 50 secs	MW
BZ009	VP1	25/11/2022	13:14	Buzzard	1	45	45	0	0	0	improved agricultural grassland; mobbed by corvid while presumably foraging on grass	MW
BZ010	VP3	10/02/2023	08:15	Buzzard	1	125	15	110	0	0	riparian woodland, amenity grassland (improved) and hedgerows; soaring, 15-50m	MS
BZ011	VP3	10/02/2023	13:10	Buzzard	1	115	60	35	20	0	riparian woodland, hedgerows and amenity grassland (improved); flight, 15-100m	MS
BZ012	VP3	24/02/2023	13:24	Buzzard	1	35	35	0	0	0	improved agricultural grassland, hedgerows and mixed broadleaved woodland; perch/flight, 15m	MS
BZ013	VP3	24/02/2023	16:15	Buzzard	1	120	100	20	0	0	improved agricultural grassland and hedgerows; perch/flight, 20m	MS
BZ014	VP1	27/02/2023	13:42	Buzzard	1	45	0	40	5	0	improved agricultural grassland, treelines and dry meadows and grassy verges; soaring, 20-30m	MS

Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0 -15m)	Band 2 (15-25m)	Band 3 (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
BZ015	VP1	27/02/2023	16:15	Buzzard	1	25	25	0	0	0	improved agricultural grassland and treelines; low flight/perch, 5-15m	MS
BZ016	VP3	18/03/2023	14:08	Buzzard	1	94	0	94	0	0	amenity grassland (improved) and treelines; overflight only, 25m	MS
BZ017	VP3	18/03/2023	15:26	Buzzard	1	35	0	0	35	0	amenity grassland (improved) and treelines; flying high/soaring, 35m	MS
BZ018	VP3	18/03/2023	18:22	Buzzard	1	15	15	0	0	0	amenity grassland (improved) and treelines; low flight through, 8-10m	MS
BZ019	VP1	28/03/2023	16:53	Buzzard	1	20	20	0	0	0	improved agricultural grassland and wet grassland; straight flight, 10m	MS
BZ020	VP1	16/04/2023	07:28	Buzzard	1	8	8	0	0	0	improved agricultural grassland, wet grassland and hedgerows; flyin and exit	MS
BZ021	VP1	16/04/2023	10:40	Buzzard	1	-	-	-	-	-	wet grassland, improved agricultural grassland and hedgerows; perching+hunting low	MS
BZ022	VP3	17/05/2023	17:10	Buzzard	1	135	0	0	135	0	improved agricultural grassland and conifer plantation; flying over	FLM
BZ023	VP03	12/06/2023	10:15	Buzzard	1	-	-	-	-	-	treelines and improved agricultural grassland; perched drying	MS
BZ024	VP01	13/06/2023	08:13	Buzzard	1	-	-	-	-	-	hedgerows, dry meadows and grassy verges and improved agricultural grassland; perched	MS
BZ025	VP01	13/06/2023	11:10	Buzzard	1	8	8	0	0	0	hedgerows, treelines and improved agricultural grassland; low flight/land, 5m	MS
BZ026	VP01	13/06/2023	13:05	Buzzard	1	16	0	16	0	0	improved agricultural grassland and hedgerows; fly though zone, 20m	MS
BZ027	VP1	10/07/2023	09:25	Buzzard	1	6	6	0	0	0	treelines and improved agricultural grassland; tree to tree move, 5m	MS
BZ028	VP1	10/07/2023	12:15	Buzzard	1	128	0	0	128	0	improved agricultural grassland and treelines; soaring, 25-40m	MS
BZ029	VP3	19/07/2023	09:25	Buzzard	1	38	0	0	38	0	treelines and improved agricultural grassland; soar/dive, 40-60m	MS
BZ030	VP3	19/07/2023	10:20	Buzzard	2	320	0	0	320	0	mixed conifer woodland and mixed broadleaved/conifer woodland; pair soaring, 150-180m	MS

Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0 -15m)	Band 2 (15-25m)	Band 3 (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
BZ031	VP3	19/07/2023	11:15	Buzzard	1	85	5	45	35	0	improved agricultural grassland and treelines; soar/travel/land, 10-80m	MS
BZ032	VP1	02/08/2023	09:15	Buzzard	1	19	0	19	0	0	improved agricultural grassland; flying over, chased by swallows	FLM
BZ033	VP3	03/08/2023	09:45	Buzzard	1	-	-	-	-	-	improved agricultural grassland and hedgerows; young calling	FLM
BZ034	VP3	03/08/2023	10:10	Buzzard	1	173	0	0	173	0	improved agricultural grassland; circling	FLM
BZ035	VP3	03/08/2023	10:30	Buzzard	2	92	0	0	92	0	improved agricultural grassland and conifer plantation; travelling	FLM
BZ036	VP1	18/09/2023	07:15	Buzzard	1	19	19	0	0	0	improved agricultural grassland; flying from field, present through the survey at same location.	FLM
BZ037	VP3	19/09/2023	10:15	Buzzard	1	-	-	-	-	-	improved agricultural grassland and hedgerows; calling from roost	FLM
BZ038	VP1	06/10/2023	14:21	Buzzard	2	540	0	70	430	40	improved agricultural grassland and highly modified/non-native woodland; soaring and circling high over farmland and woodland	NM
BZ039	VP1	06/10/2023	16:07	Buzzard	1	260	0	0	180	80	improved agricultural grassland and highly modified/non-native woodland; soaring and circling high over farmland, se of site and moving away se	NM
BZ040	VP1	06/10/2023	18:04	Buzzard	1	270	50	220	0	0	improved agricultural grassland; flying low across farmland, moving n across e of site	NM
BZ041	VP3	11/10/2023	17:58	Buzzard	1	130	20	110	0	0	improved agricultural grassland and linear woodland/scrub; flying low across farmland, landing and perching in tree	NM
BZ042	VP3	11/10/2023	18:05	Buzzard	1	-	-	-	-	-	improved agricultural grassland; perched in tree on farmland, present for remainder of survey	NM
BZ043	VP3	20/11/2023	09:14	Buzzard	1	110	95	15	0	0	improved agricultural grassland and hedgerows; flying low across farmland and along hedgerows	NM
BZ044	VP3	20/11/2023	11:51	Buzzard	1	530	0	0	450	80	improved agricultural grassland; soaring and circling over farmland	NM

Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0 -15m)	Band 2 (15-25m)	Band 3 (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
BZ045	VP1	22/11/2023	08:19	Buzzard	1	90	0	0	90	0	improved agricultural grassland and linear woodland/scrub; flying across farmland	NM
BZ046	VP1	12/12/2023	12:04	Buzzard	1	-	-	-	-	-	treelines and improved agricultural grassland; perched in tree within farmland	NM
BZ047	VP1	12/12/2023	12:47	Buzzard	1	70	30	40	0	0	improved agricultural grassland and linear woodland/scrub; flying across farmland, departing from perch	NM
BZ048	VP1	12/12/2023	15:19	Buzzard	1	540	0	0	100	440	improved agricultural grassland and highly modified/non-native woodland; soaring high over farmland - s of site	NM
BZ049	VP3	11/01/2024	13:03	Buzzard	1	80	0	80	0	0	improved agricultural grassland and treelines; flying, calling, perched	NM
BZ050	VP3	11/01/2024	13:10	Buzzard	1	170	80	90	0	0	improved agricultural grassland and linear woodland/scrub; flying, calling, perched, joining other perched individual in same tree for a time	NM
BZ051	VP3	11/01/2024	13:13	Buzzard	2	-	-	-	-	-	treelines; perched, calling	NM
BZ052	VP1	18/01/2024	08:41	Buzzard	1	90	0	90	0	0	improved agricultural grassland; travelling, calling	NM
BZ053	VP1	18/01/2024	09:56	Buzzard	1	380	60	320	0	0	improved agricultural grassland and linear woodland/scrub; travelling, mobbed, mobbed by hooded crows	NM
BZ054	VP1	18/01/2024	11:18	Buzzard	1	670	40	90	540	0	mixed conifer woodland and improved agricultural grassland; soaring, circling	NM
BZ055	VP1	18/01/2024	11:19	Buzzard	1	150	0	130	20	0	improved agricultural grassland and treelines; travelling, perching	NM
BZ056	VP1	18/01/2024	11:22	Buzzard	1	-	-	-	-	-	treelines, highly modified/non-native woodland and improved agricultural grassland; perched, perched for 46 mins mins before departing once again	NM
BZ057	VP1	18/01/2024	12:08	Buzzard	1	80	0	80	0	0	improved agricultural grassland; perched, flying	NM
BZ058	VP1	18/01/2024	13:37	Buzzard	2	1200	0	0	1200	0	improved agricultural grassland; soaring, pair	NM

Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0 -15m)	Band 2 (15-25m)	Band 3 (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
BZ059	VP1	06/02/2024	13:46	Buzzard	1	390	0	0	0	390	improved agricultural grassland and linear woodland/scrub; soaring, travelling	NM
BZ060	VP1	06/02/2024	15:29	Buzzard	1	65	0	65	0	0	improved agricultural grassland and linear woodland/scrub; travelling, calling	NM
BZ061	VP1	06/02/2024	16:19	Buzzard	1	-	-	-	-	-	treelines and improved agricultural grassland; perched	NM
BZ062	VP1	06/02/2024	16:57	Buzzard	1	140	0	90	50	0	improved agricultural grassland and treelines; travelling, perching	NM
BZ063	VP1	06/02/2024	17:12	Buzzard	1	30	0	30	0	0	improved agricultural grassland; departing, travelling	NM
BZ064	VP3	13/02/2024	14:52	Buzzard	1	65	0	50	15	0	improved agricultural grassland and linear woodland/scrub; travelling, calling	NM
BZ065	VP3	13/02/2024	16:05	Buzzard	1	105	0	0	105	0	improved agricultural grassland and mixed conifer woodland; gliding, travelling	NM
BZ066	VP1	14/03/2024	07:55	Buzzard	1	190	60	100	30	0	improved agricultural grassland and linear woodland/scrub; travelling, perching	NM
BZ067	VP1	14/03/2024	09:45	Buzzard	1	-	-	-	-	-	treelines and improved agricultural grassland; perched	NM
BZ068	VP1	14/03/2024	11:53	Buzzard	1	-	-	-	-	-	hedgerows and improved agricultural grassland; perched	NM
BZ069	VP3	26/03/2024	06:17	Buzzard	1	320	260	60	0	0	improved agricultural grassland and linear woodland/scrub; travelling, perched, moving within farmland, perching intermittently	NM
BZ070	VP3	26/03/2024	06:42	Buzzard	3	750	0	0	750	0	improved agricultural grassland; soaring, calling, courting	NM
BZ071	VP3	26/03/2024	07:03	Buzzard	1	60	0	60	0	0	improved agricultural grassland and highly modified/non-native woodland; traveling, calling	NM
BZ072	VP3	26/03/2024	07:56	Buzzard	2	270	100	170	0	0	highly modified/non-native woodland and improved agricultural grassland; gliding, courting, low over woodland	NM
BZ073	VP3	26/03/2024	09:02	Buzzard	6	2400	0	0	1500	900	improved agricultural grassland and linear woodland/scrub; soaring, courting, moving gradually south	NM

Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0 -15m)	Band 2 (15-25m)	Band 3 (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
BZ074	VP3	26/03/2024	09:04	Buzzard	2	450	100	350	0	0	treelines and improved agricultural grassland; perched, calling, travelling, within tree cluster before flying across site	NM
BZ075	VP3	26/03/2024	09:52	Buzzard	1	75	0	75	0	0	improved agricultural grassland and hedgerows; travelling	NM
BZ076	VP3	26/03/2024	10:47	Buzzard	1	1400	0	0	0	1400	improved agricultural grassland; soaring, calling	NM
BZ077	VP3	26/03/2024	11:10	Buzzard	2	560	0	250	310	0	improved agricultural grassland; gliding, circling, calling	NM
BZ078	VP1	09/04/2024	16:34	Buzzard	1	335	0	215	120	0	treelines and improved agricultural grassland; soaring	MS
BZ079	VP3	12/04/2024	15:15	Buzzard	1	50	50	0	0	0	treelines and improved agricultural grassland; flying, landed	MS
BZ080	VP3	12/04/2024	16:28	Buzzard	1	174	54	120	0	0	conifer plantation and mixed broadleaved/conifer woodland; flying, landed	MS
BZ081	VP3	12/04/2024	17:20	Buzzard	1	320	0	0	50	270	conifer plantation and mixed broadleaved/conifer woodland; soaring, flying	MS
BZ082	VP3	12/04/2024	17:20	Buzzard	2	280	40	110	130	0	conifer plantation and mixed broadleaved/conifer woodland; defence flying, pair	MS
BZ083	VP3	20/05/2024	05:31	Buzzard	1	55	0	55	0	0	improved agricultural grassland, linear woodland/scrub and highly modified/non-native woodland; travelling	NM
BZ084	VP3	20/05/2024	05:56	Buzzard	2	950	0	0	800	150	improved agricultural grassland and highly modified/non-native woodland; soaring, circling	NM
BZ085	VP3	20/05/2024	06:32	Buzzard	1	-	-	-	-	-	improved agricultural grassland and linear woodland/scrub; perched	NM
BZ086	VP3	20/05/2024	06:47	Buzzard	1	45	0	45	0	0	improved agricultural grassland and linear woodland/scrub; departing, calling	NM
BZ087	VP3	20/05/2024	09:08	Buzzard	1	2300	0	0	1750	550	improved agricultural grassland and linear woodland/scrub; soaring, circling	NM
BZ088	VP3	20/05/2024	09:54	Buzzard	2	1600	0	1400	200	0	improved agricultural grassland and linear woodland/scrub; travelling, calling,	NM

Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0 -15m)	Band 2 (15-25m)	Band 3 (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
											perching, moving across farmland and perching intermittently	
BZ089	VP3	20/05/2024	10:18	Buzzard	1	480	0	0	480	0	improved agricultural grassland and highly modified/non-native woodland; soaring, travelling	NM
BZ090	VP3	20/05/2024	10:43	Buzzard	2	500	0	0	500	0	improved agricultural grassland and linear woodland/scrub; soaring, circling, calling	NM
BZ091	VP1	18/06/2024	11:10	Buzzard	1	78	0	0	78	0	improved agricultural grassland; circling, hunting	EOB
BZ092	VP1	18/06/2024	13:11	Buzzard	1	94	0	0	94	0	improved agricultural grassland; hunting	EOB
BZ093	VP3	19/06/2024	12:37	Buzzard	1	66	0	0	66	0	improved agricultural grassland; hunting	EOB
BZ094	VP3	19/06/2024	12:38	Buzzard	1	121	0	0	121	0	improved agricultural grassland; hunting	EOB
BZ095	VP3	19/06/2024	13:06	Buzzard	1	25	0	21	4	0	improved agricultural grassland; hunting	EOB
BZ096	VP3	19/06/2024	14:04	Buzzard	1	47	0	0	47	0	improved agricultural grassland; hunting	EOB
BZ097	VP3	19/06/2024	16:56	Buzzard	1	28	0	0	28	0	improved agricultural grassland and linear woodland/scrub; circling	EOB
BZ098	VP3	19/06/2024	17:47	Buzzard	1	125	0	0	125	0	improved agricultural grassland; hunting, circling	EOB
BZ099	VP1	12/07/2024	13:34	Buzzard	1	260	0	0	260	0	improved agricultural grassland and linear woodland/scrub; soaring, circling, travelling, moving off site	NM
BZ100	VP1	12/07/2024	14:17	Buzzard	2	890	0	40	650	200	improved agricultural grassland, linear woodland/scrub and highly modified/non-native woodland; soaring, circling, calling, for a long period, moving off site before being lost to west	NM
BZ101	VP1	12/07/2024	15:18	Buzzard	1	170	0	0	140	30	improved agricultural grassland; soaring, circling, mobbed, off site	NM
BZ102	VP1	12/07/2024	15:43	Buzzard	1	330	25	75	230	0	improved agricultural grassland and linear woodland/scrub; soaring, circling, travelling,	NM

Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0 -15m)	Band 2 (15-25m)	Band 3 (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
											along north rlb, descending into farmland and was lost	
BZ103	VP1	12/07/2024	17:47	Buzzard	1	75	30	45	0	0	improved agricultural grassland and linear woodland/scrub; travelling	NM
BZ104	VP1	12/07/2024	19:54	Buzzard	1	150	30	90	30	0	improved agricultural grassland, linear woodland/scrub and highly modified/non-native woodland; travelling, calling, gliding	NM
BZ105	VP3	23/07/2024	15:30	Buzzard	2	-	-	-	-	-	treelines and improved agricultural grassland; calling, perched, at least 2 juveniles, calling throughout survey. not seen for the majority, numbers were rough	NM
BZ106	VP3	23/07/2024	16:30	Buzzard	2	150	0	20	100	30	improved agricultural grassland and linear woodland/scrub; soaring, calling, adult with juvenile, descending gradually	NM
BZ107	VP3	23/07/2024	16:40	Buzzard	1	35	20	15	0	0	improved agricultural grassland and linear woodland/scrub; flying, calling	NM
BZ108	VP3	23/07/2024	17:26	Buzzard	1	45	35	10	0	0	improved agricultural grassland and linear woodland/scrub; flying, calling, juvenile	NM
BZ109	VP3	23/07/2024	17:47	Buzzard	1	85	30	55	0	0	improved agricultural grassland and linear woodland/scrub; travelling	NM
BZ110	VP3	23/07/2024	20:00	Buzzard	2	25	20	5	0	0	improved agricultural grassland and treelines; flying, calling, perching, 2 juveniles, disappearing into treetops but continuing to call	NM
BZ111	VP3	23/07/2024	20:52	Buzzard	3	760	500	260	0	0	improved agricultural grassland and linear woodland/scrub; calling, swooping, chasing, begging calls, 1 adult + 2 juveniles. swirling low and chasing, landing in lower boughs of treeline	NM
BZ112	VP1	12/08/2024	14:08	Buzzard	1	210	0	0	160	50	improved agricultural grassland and linear woodland/scrub; soaring, circling, moving off site	NM
BZ113	VP1	12/08/2024	15:41	Buzzard	2	1600	350	500	750	0	improved agricultural grassland and linear woodland/scrub; swooping, calling, soaring, swooping over farmland on site, moving away southwest gradually	NM

Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0 -15m)	Band 2 (15-25m)	Band 3 (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
BZ114	VP1	12/08/2024	15:56	Buzzard	1	50	0	50	0	0	improved agricultural grassland and linear woodland/scrub; travelling, gliding	NM
BZ115	VP1	12/08/2024	17:47	Buzzard	1	130	0	130	0	0	improved agricultural grassland and linear woodland/scrub; travelling, calling	NM
BZ116	VP1	12/08/2024	18:53	Buzzard	3	2200	200	800	1200	0	improved agricultural grassland and linear woodland/scrub; soaring, circling, calling, adult with two juveniles soaring for a long period, dropping into farmland on north site boundary	NM
BZ117	VP1	12/08/2024	20:09	Buzzard	1	180	0	50	130	0	highly modified/non-native woodland and improved agricultural grassland; swirling, mobbed	NM
BZ118	VP3	20/08/2024	10:05	Buzzard	1	-	-	-	-	-	improved agricultural grassland; perched	NM
BZ119	VP3	20/08/2024	10:12	Buzzard	1	70	30	40	0	0	improved agricultural grassland, linear woodland/scrub and scrub; departing, travelling	NM
BZ120	VP3	20/08/2024	10:17	Buzzard	1	-	-	-	-	-	improved agricultural grassland and linear woodland/scrub; perched, calling, juvenile	NM
BZ121	VP3	20/08/2024	10:56	Buzzard	1	220	0	80	140	0	improved agricultural grassland and linear woodland/scrub; circling, travelling	NM
BZ122	VP3	20/08/2024	11:17	Buzzard	1	-	-	-	-	-	treelines and improved agricultural grassland; perched, calling, juvenile, departing after 10mins and was lost immediately	NM
BZ123	VP3	20/08/2024	11:37	Buzzard	1	50	0	50	0	0	improved agricultural grassland and linear woodland/scrub; flying, calling, juvenile, disappearing into linear woodland	NM
BZ124	VP3	20/08/2024	11:41	Buzzard	1	-	-	-	-	-	improved agricultural grassland and linear woodland/scrub; perched, calling, juvenile	NM
BZ125	VP3	20/08/2024	14:06	Buzzard	2	-	-	-	-	-	linear woodland/scrub and improved agricultural grassland; calling, juveniles, at least two individuals calling within farmland.	NM
BZ126	VP3	20/08/2024	14:38	Buzzard	2	35	0	35	0	0	improved agricultural grassland and linear woodland/scrub; swirling, gliding, off site	NM

Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0 -15m)	Band 2 (15-25m)	Band 3 (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
BZ127	VP3	20/08/2024	15:04	Buzzard	1	760	0	0	460	300	improved agricultural grassland, highly modified/non-native woodland and linear woodland/scrub; soaring, circling, travelling	NM
BZ128	VP3	20/08/2024	15:31	Buzzard	1	-	-	-	-	-	linear woodland/scrub and improved agricultural grassland; calling, juvenile, exact location and numbers unknown	NM
BZ129	VP1	11/09/2024	07:09	Buzzard	1	110	0	110	0	0	improved agricultural grassland and linear woodland/scrub; travelling, calling	NM
BZ130	VP1	11/09/2024	08:21	Buzzard	2	470	25	145	300	0	improved agricultural grassland and highly modified/non-native woodland; soaring, circling, gradually dropping into north of site. possible juvenile but not confirmed	NM
BZ131	VP1	11/09/2024	09:23	Buzzard	1	90	30	60	0	0	improved agricultural grassland and linear woodland/scrub; travelling, gliding, fluttering, vanishing into woodland fringe	NM
BZ132	VP1	11/09/2024	11:58	Buzzard	2	35	0	25	10	0	improved agricultural grassland; circling, chasing, swooping, off site	NM
BZ133	VP1	11/09/2024	12:09	Buzzard	1	50	0	15	35	0	improved agricultural grassland; circling, off site. dropping into farmland	NM
BZ134	VP3	12/09/2024	07:14	Buzzard	1	0	0	0	0	0	linear woodland/scrub, scrub/transitional woodland and improved agricultural grassland; calling, juvenile. not seen - only heard	NM
BZ135	VP3	12/09/2024	07:19	Buzzard	1	85	20	30	35	0	improved agricultural grassland and linear woodland/scrub; travelling, soaring, mobbed	NM
BZ136	VP3	12/09/2024	07:40	Buzzard	1	0	0	0	0	0	improved agricultural grassland and linear woodland/scrub; calling, juvenile. not seen - only heard	NM
BZ137	VP3	12/09/2024	07:56	Buzzard	1	120	0	50	70	0	improved agricultural grassland; soaring, circling, travelling, lost behind terrain (bovp1 hill)	NM
BZ138	VP3	12/09/2024	09:47	Buzzard	3	770	30	200	540	0	improved agricultural grassland and scrub/transitional woodland; soaring, circling, calling, appeared to be adult with 2 juveniles shadowing and swooping.	NM

Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0 -15m)	Band 2 (15-25m)	Band 3 (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
											dropping into woodland fringes (ardborra area)	
BZ139	VP3	12/09/2024	10:07	Buzzard	1	0	0	0	0	0	linear woodland/scrub, highly modified/non-native woodland and improved agricultural grassland; perched, juvenile. not seen departing	NM
BZ140	VP3	12/09/2024	10:20	Buzzard	2	55	0	40	15	0	improved agricultural grassland, linear woodland/scrub and highly modified/non-native woodland; swooping, travelling, gliding, off site	NM
BZ141	VP3	12/09/2024	10:22	Buzzard	1	140	0	140	0	0	highly modified/non-native woodland and improved agricultural grassland; soaring, swooping, lost behind woodland	NM
BZ142	VP3	12/09/2024	11:51	Buzzard	1	90	30	60	0	0	improved agricultural grassland, scrub and disturbed ground; travelling, calling	NM
BZ143	VP1	01/10/2024	13:10	Buzzard	1	59	0	48	11	0	improved agricultural grassland; travelling	FOD
BZ144	VP1	01/10/2024	17:20	Buzzard	1	47	0	47	0	0	improved agricultural grassland; hunting	FOD
BZ145	VP3	02/10/2024	12:53	Buzzard	1	98	0	98	0	0	improved agricultural grassland; hunting	FOD
BZ146	VP3	02/10/2024	15:27	Buzzard	1	363	0	200	163	0	improved agricultural grassland, conifer plantation and semi-natural woodland; hunting	FOD
BZ147	VP3	18/11/2024	16:48	Buzzard	1	30	0	30	0	0	improved agricultural grassland; travelling	DM
BZ148	VP3	26/11/2024	12:17	Buzzard	1	30	30	0	0	0	improved agricultural grassland; travelling, flew low behind hedge	DM
BZ149	VP1	11/02/2025	16:02	Buzzard	1	34	0	10	24	0	improved agricultural grassland; travelling	CC
BZ150	vp3	20/03/2025	09:58	Buzzard	3	240	30	30	180	0	improved agricultural grassland and mixed broadleaved/conifer woodland; circling, 2 landed in tree	DM
BZ151	vp3	20/03/2025	10:15	Buzzard	2	75	75	0	0	0	improved agricultural grassland; travelling	DM

Table 7 – 4a - 48 Buzzard Winter Walkover Survey

Ref.	Date	Time	Transect	Species	Number	Habitat and activity	Surveyor
BZ001	13/12/2022	10:45	T2	Buzzard	1		MW
BZ002	16/03/2023	08:10	-	Buzzard	1	amenity grassland (improved), hedgerows and riparian woodland; flush/flight, 10m (wintering)	MS
BZ003	16/03/2023	12:55	-	Buzzard	1	treelines, amenity grassland (improved) and conifer plantation; flight, 10-15m (wintering)	MS
BZ004	17/10/2023	10:16	-	Buzzard	1	improved agricultural grassland and scrub/transitional woodland; flying low within farmland, perching (wintering)	NM
BZ005	17/10/2023	12:48	-	Buzzard	1	improved agricultural grassland and highly modified/non-native woodland; soaring and circling high over site (wintering)	NM
BZ006	17/10/2023	15:57	-	Buzzard	1	linear woodland/scrub and improved agricultural grassland; disturbed from perch in hedgerow, flying low across farmland (wintering)	NM
BZ007	21/11/2023	08:19	-	Buzzard	1	improved agricultural grassland and linear woodland/scrub; flying across farmland (wintering)	NM
BZ008	21/11/2023	13:06	-	Buzzard	1	improved agricultural grassland and highly modified/non-native woodland; flying across farmland and adjacent woodland (wintering)	NM
BZ009	21/11/2023	15:39	-	Buzzard	1	improved agricultural grassland and linear woodland/scrub; flying low across farmland (wintering)	NM
BZ010	17/01/2024	11:30	-	Buzzard	1	improved agricultural grassland and linear woodland/scrub; flying, calling (wintering)	NM
BZ011	17/01/2024	12:01	-	Buzzard	1	improved agricultural grassland; perched (wintering)	NM
BZ012	17/01/2024	12:19	-	Buzzard	1	improved agricultural grassland and linear woodland/scrub; flying, calling (wintering)	NM
BZ013	17/01/2024	12:43	-	Buzzard	1	improved agricultural grassland; flying (wintering)	NM
BZ014	17/01/2024	12:59	-	Buzzard	1	improved agricultural grassland; flying, gliding (wintering)	NM
BZ015	17/01/2024	17:19	-	Buzzard	1	improved agricultural grassland and linear woodland/scrub; calling (wintering)	NM
BZ016	15/02/2024	08:27	-	Buzzard	1	improved agricultural grassland and linear woodland/scrub; travelling, calling (wintering)	NM
BZ017	15/02/2024	10:20	-	Buzzard	1	improved agricultural grassland; perched, departing, flying (wintering)	NM

Ref.	Date	Time	Transect	Species	Number	Habitat and activity	Surveyor
BZ018	15/02/2024	16:00	-	Buzzard	1	improved agricultural grassland and hedgerows; flying low, perching (wintering)	NM
BZ019	09/10/2024	13:05	-	Buzzard	1	improved agricultural grassland; soaring (wintering)	FOD
BZ020	09/10/2024	13:17	-	Buzzard	3	improved agricultural grassland; soaring (wintering)	FOD
BZ021	29/11/2024	11:18	T2	Buzzard	1	improved agricultural grassland and linear woodland/scrub; soaring, circling, off site (wintering)	NM
BZ022	29/11/2024	12:56	T2	Buzzard	1	improved agricultural grassland and linear woodland/scrub; travelling, swooping, calling (wintering)	NM
BZ023	29/11/2024	14:21	T3	Buzzard	1	improved agricultural grassland, scrub/transitional woodland and disturbed ground; travelling, calling (wintering)	NM
BZ024	29/11/2024	15:42	T4	Buzzard	1	mixed conifer woodland; gliding, calling, low across woodland (wintering)	NM
BZ025	22/01/2025	11:48		Buzzard	1	#N/A	DM
BZ026	22/01/2025	15:20		Buzzard	1	#N/A	DM
BZ027	13/03/2025	10:40	T1	Buzzard	1	improved agricultural grassland; calling, heard not seen (wintering)	CC
BZ028	13/03/2025	10:55	T1	Buzzard	1	improved agricultural grassland; calling, heard not seen (wintering)	CC
BZ029	13/03/2025	11:23	T2	Buzzard	1	improved agricultural grassland and hedgerows; travelling (wintering)	CC
BZ030	13/03/2025	12:32	T3	Buzzard	1	improved agricultural grassland; calling, heard not seen (wintering)	CC

Table 7 - 4a - 49 Buzzard Breeding Walkover Survey

Ref.	Date	Time	Transect	Species	Number	Habitat and activity	Surveyor
BZ001	19/05/2023	11:50	-	Buzzard	1	improved agricultural grassland; flying over (suitable nesting habitat; possible breeder)	FLM
BZ002	15/04/2023	10:12	-	Buzzard	2	treelines and improved agricultural grassland; pair court flight, southern transects (courtship and display; probable breeding)	MS

Ref.	Date	Time	Transect	Species	Number	Habitat and activity	Surveyor
BZ003	15/04/2023	12:22	-	Buzzard	2	treelines, scattered tress and parkland and conifer plantation; pair courtship, middle transects (pair; probable breeding)	MS
BZ004	15/04/2023	14:48	-	Buzzard	1	treelines and improved agricultural grassland; fly/harassed by hc, northern transects (suitable nesting habitat; possible breeder)	MS
BZ005	14/06/2023	09:58	-	Buzzard	1	treelines and improved agricultural grassland; on nest, tall poplars (nest with young; confirmed breeding)	MS
BZ006	11/07/2023	09:25	-	Buzzard	1	treelines and improved agricultural grassland; high soar/aggravated calls (agitated behaviour; probable breeding)	MS
BZ007	11/07/2023	10:45	-	Buzzard	1	improved agricultural grassland and treelines; soaring (suitable nesting habitat; possible breeder)	MS
BZ008	11/07/2023	12:15	-	Buzzard	2	treelines and improved agricultural grassland; pair moving across area into trees (probable nest site; probable breeding)	MS
BZ009	20/06/2024	08:09	T1	Buzzard	1	improved agricultural grassland; calling (suitable nesting habitat; possible breeder)	EOB
BZ010	20/06/2024	08:11	T1	Buzzard	1	improved agricultural grassland; on grass, chick on ground (nest with young; confirmed breeding)	EOB
BZ011	20/06/2024	12:31	T3	Buzzard	1	improved agricultural grassland; hunting (suitable nesting habitat; possible breeder)	EOB
BZ012	21/06/2024	13:57	T4	Buzzard	1	improved agricultural grassland; circling, hunting (suitable nesting habitat; possible breeder)	EOB
BZ013	08/04/2024	06:50	WO	Buzzard	2	improved agricultural grassland and treelines; flying, landed, courting, pair (suitable nesting habitat; possible breeder)	MS
BZ014	08/04/2024	12:45	WO	Buzzard	2	treelines, wet grassland and improved agricultural grassland; courtship (courtship and display; probable breeding)	MS
BZ015	30/05/2024	09:24	-	Buzzard	2	improved agricultural grassland and linear woodland/scrub; flying low, calling, perching (pair; probable breeding)	NM
BZ016	30/05/2024	11:09	-	Buzzard	1	improved agricultural grassland; soaring, travelling (suitable nesting habitat; possible breeder)	NM
BZ017	30/05/2024	14:30	-	Buzzard	2	improved agricultural grassland and linear woodland/scrub; soaring, circling (pair; probable breeding)	NM
BZ018	30/05/2024	15:50	-	Buzzard	2	improved agricultural grassland and highly modified/non-native woodland; soaring, circling, for a long period (pair; probable breeding)	NM
BZ019	30/05/2024	14:24	-	Buzzard	1	improved agricultural grassland and linear woodland/scrub; travelling, calling, perching briefly before continuing (suitable nesting habitat; possible breeder)	NM
BZ020	30/05/2024	08:47	-	Buzzard	1	highly modified/non-native woodland and improved agricultural grassland; gliding, calling, same individual(s). potential nest in area (pair; probable breeding)	NM

Ref.	Date	Time	Transect	Species	Number	Habitat and activity	Surveyor
BZ021	30/05/2024	09:06	-	Buzzard	1	highly modified/non-native woodland; circling, calling, same individual(s). potential nest in area (agitated behaviour; probable breeding)	NM
BZ022	30/05/2024	09:18	-	Buzzard	2	highly modified/non-native woodland and improved agricultural grassland; soaring high, same individual(s). potential nest in area (pair; probable breeding)	NM
BZ023	30/05/2024	10:16	-	Buzzard	2	highly modified/non-native woodland and improved agricultural grassland; gliding low, calling, same individual(s). potential nest in area (pair; probable breeding)	NM
BZ024	30/05/2024	10:47	-	Buzzard	2	improved agricultural grassland and highly modified/non-native woodland; soaring, circling (pair; probable breeding)	NM
BZ025	30/05/2024	12:30	-	Buzzard	2	highly modified/non-native woodland and improved agricultural grassland; soaring, circling, descending, same individual(s). potential nest in area (pair; probable breeding)	NM
BZ026	30/05/2024	13:28	-	Buzzard	3	highly modified/non-native woodland and improved agricultural grassland; flying, chasing, appeared to be joined by another individual. chasing and swooping over forestry and surrounding farmland (agitated behaviour; probable breeding)	NM
BZ027	30/05/2024	15:26	-	Buzzard	1	improved agricultural grassland and highly modified/non-native woodland; soaring, circling (suitable nesting habitat; possible breeder)	NM
BZ028	24/07/2024	08:24	-	Buzzard	5	improved agricultural grassland and highly modified/non-native woodland; soaring, circling, calling, family soaring high - at least 2 juveniles present. soaring for ~30 and moving gradually west (fledged young; confirmed breeding)	NM
BZ029	24/07/2024	10:04	-	Buzzard	1	improved agricultural grassland and linear woodland/scrub; calling, gliding, perched, gliding low across site, perching for a brief time (in trees at house) before continuing west (suitable nesting habitat; possible breeder)	NM
BZ030	24/07/2024	09:19	-	Buzzard	1	improved agricultural grassland and linear woodland/scrub; soaring, circling, travelling, southeast buffer (suitable nesting habitat; possible breeder)	NM
BZ031	24/07/2024	10:10	-	Buzzard	2	improved agricultural grassland and highly modified/non-native woodland; soaring, calling, possible juvenile but not confirmed (pair; probable breeding)	NM
BZ032	24/07/2024	12:29	-	Buzzard	1	improved agricultural grassland, linear woodland/scrub and scrub; travelling, swooping (suitable nesting habitat; possible breeder)	NM
BZ033	24/07/2024	10:52	-	Buzzard	2	linear woodland/scrub and improved agricultural grassland; calling, juveniles calling within treeline. numbers were an estimate (fledged young; confirmed breeding)	NM
BZ034	24/07/2024	11:04	-	Buzzard	1	improved agricultural grassland and linear woodland/scrub; calling, not seen, only heard calling. location was an estimate (fledged young; confirmed breeding)	NM
BZ035	24/07/2024	11:09	-	Buzzard	1	improved agricultural grassland; calling, potential juvenile. not seen, only heard calling. location was an estimate (suitable nesting habitat; possible breeder)	NM

Ref.	Date	Time	Transect	Species	Number	Habitat and activity	Surveyor
BZ036	24/07/2024	12:06	-	Buzzard	1	linear woodland/scrub and improved agricultural grassland; calling, juvenile begging, not seen, only heard calling, location was an estimate (fledged young; confirmed breeding)	NM
BZ037	24/07/2024	12:14	-	Buzzard	2	linear woodland/scrub and improved agricultural grassland; begging calls, not seen, only heard calling, exact location was an estimate (fledged young; confirmed breeding)	NM
BZ038	24/07/2024	10:56	-	Buzzard	1	improved agricultural grassland and linear woodland/scrub; flying, gliding, juvenile flying low within farmland, vanishing into treeline (fledged young; confirmed breeding)	NM
BZ039	24/07/2024	12:21	-	Buzzard	1	improved agricultural grassland; flying, calling, perching, potential juvenile but not confirmed (suitable nesting habitat; possible breeder)	NM
BZ040	24/07/2024	13:02	-	Buzzard	1	improved agricultural grassland and linear woodland/scrub; travelling, calling, low across farmland (suitable nesting habitat; possible breeder)	NM
BZ041	24/07/2024	13:11	-	Buzzard	1	improved agricultural grassland and linear woodland/scrub; circling, travelling (suitable nesting habitat; possible breeder)	NM
BZ042	24/07/2024	15:05	-	Buzzard	2	improved agricultural grassland and highly modified/non-native woodland; soaring, circling, off site, ardnacranny area (pair; probable breeding)	NM
BZ043	24/07/2024	14:26	-	Buzzard	2	linear woodland/scrub; perched, two juveniles perched in treeline (fledged young; confirmed breeding)	NM
BZ044	24/07/2024	14:11	-	Buzzard	1	linear woodland/scrub and improved agricultural grassland; calling, potential juvenile, not seen but coming from same area as other calls (suitable nesting habitat; possible breeder)	NM
BZ045	24/07/2024	14:18	-	Buzzard	1	linear woodland/scrub and improved agricultural grassland; calling, juvenile, not seen (fledged young; confirmed breeding)	NM
BZ046	24/07/2024	14:21	-	Buzzard	1	linear woodland/scrub and improved agricultural grassland; calling, circling, perched, adult, disturbed from perch, showed agitation, young likely nearby (agitated behaviour; probable breeding)	NM
BZ047	24/07/2024	16:12	-	Buzzard	1	improved agricultural grassland and linear woodland/scrub; travelling low, calling (suitable nesting habitat; possible breeder)	NM
BZ048	24/07/2024	16:32	-	Buzzard	1	linear woodland/scrub, improved agricultural grassland and highly modified/non-native woodland; flushed from perch, flying, disappearing into woodland (suitable nesting habitat; possible breeder)	NM
BZ049	24/07/2024	16:56	-	Buzzard	1	improved agricultural grassland and linear woodland/scrub; soaring, circling (suitable nesting habitat; possible breeder)	NM
BZ050	24/07/2024	16:37	-	Buzzard	1	highly modified/non-native woodland; calling, not seen, adult heard calling within woodland (suitable nesting habitat; possible breeder)	NM

Ref.	Date	Time	Transect	Species	Number	Habitat and activity	Surveyor
BZ051	24/07/2024	15:37	-	Buzzard	2	linear woodland/scrub and improved agricultural grassland; calling, juveniles calling from similar area, heard only (fledged young; confirmed breeding)	NM
BZ052	24/07/2024	17:20	-	Buzzard	1	improved agricultural grassland and linear woodland/scrub; calling (suitable nesting habitat; possible breeder)	NM
BZ053	24/07/2024	16:15	-	Buzzard	1	improved agricultural grassland and linear woodland/scrub; flying, carrying prey, perching, arriving carrying prey, vanishing into treeline and greeted with flurry of begging calls (adult carrying food/faecal sac; confirmed breeding)	NM
BZ054	24/07/2024	16:16	-	Buzzard	2	linear woodland/scrub; calling, fluttering, commotion caused by arrival of adult carrying food (fledged young; confirmed breeding)	NM

Table 7 – 4a - 50 Buzzard Breeding Raptor Survey

Ref.	BR	Date	Time	Species	Number	Habitat and activity	Breeding status	Surveyor
BZ001	BR6	23/05/2023	08:30	Buzzard	1	improved agricultural grassland and hedgerows, flying over	suitable nesting habitat; possible breeder	FLM
BZ002	BR7	25/05/2023	11:00	Buzzard	1	raised bog, bog woodland and conifer plantation, circling	suitable nesting habitat; possible breeder	FLM
BZ003	BR7	25/05/2023	11:45	Buzzard	1	raised bog and conifer plantation, circling	suitable nesting habitat; possible breeder	FLM
BZ004	BR8	31/07/2023	21:05	Buzzard	1	improved agricultural grassland and hedgerows, flying over then perched	suitable nesting habitat; possible breeder	FLM
BZ005	500m survey radius	20/04/2023	11:22	Buzzard	1	treelines and improved agricultural grassland, flight low, 10-15m	suitable nesting habitat; possible breeder	MS
BZ006	BR2	11/04/2024	11:28	Buzzard	1	bogs and scrub, soaring, circling	suitable nesting habitat; possible breeder	NM
BZ007	BR2	11/04/2024	11:55	Buzzard	1	improved agricultural grassland and linear woodland/scrub, soaring, travelling	suitable nesting habitat; possible breeder	NM
BZ008	BR2	11/04/2024	13:27	Buzzard	1	immature woodland and improved agricultural grassland, travelling	flyover; non-breeding	NM
BZ009	BR2	11/04/2024	12:40	Buzzard	1	scrub/transitional woodland, bogs and improved agricultural grassland, travelling	flyover; non-breeding	NM
BZ010	BR4	11/04/2024	18:35	Buzzard	1	improved agricultural grassland, linear woodland/scrub and scrub/transitional woodland, flying, gliding, clare hill	suitable nesting habitat; possible breeder	NM

Ref.	BR	Date	Time	Species	Number	Habitat and activity	Breeding status	Surveyor
BZ011	BOVP1 (BRVP8)	12/04/2024	07:04	Buzzard	1	dry calcareous and neutral grassland and scrub, travelling low	suitable nesting habitat; possible breeder	NM
BZ012	BOVP1 (BRVP8)	12/04/2024	07:56	Buzzard	2	improved agricultural grassland and linear woodland/scrub, soaring, circling	pair; probable breeding	NM
BZ013	BR7	12/04/2024	11:31	Buzzard	1	improved agricultural grassland, soaring, travelling	flyover; non-breeding	NM
BZ014	BR6	10/04/2024	16:02	Buzzard	1	improved agricultural grassland, linear woodland/scrub and scrub, travelling, calling	suitable nesting habitat; possible breeder	NM
BZ015	BOVP2	11/04/2024	20:47	Buzzard	1	improved agricultural grassland and treelines, travelling, roosting, bovp2	suitable nesting habitat; possible breeder	NM
BZ016	BR7 / Ballinderry bog	12/04/2024	14:00	Buzzard	1	improved agricultural grassland and highly modified/non-native woodland, perched, departing, calling	suitable nesting habitat; possible breeder	NM
BZ017	BR7 / Ballinderry bog	12/04/2024	14:08	Buzzard	2	highly modified/non-native woodland and immature woodland, gliding, calling, low over woodland	pair; probable breeding	NM
BZ018	HHVP1	10/04/2024	18:11	Buzzard	1	hedgerows and improved agricultural grassland, perched, travelling low, williamstown	suitable nesting habitat; possible breeder	NM
BZ019	HHVP1	10/04/2024	21:17	Buzzard	1	bogs and highly modified/non-native woodland, travelling low, perched, abbeyshrule bog. perched briefly before continuing	flyover; non-breeding	NM
BZ020	Transect 2	30/04/2024	10:47	Buzzard	1	improved agricultural grassland and linear woodland/scrub, soaring, gliding, calling, descending, t2	suitable nesting habitat; possible breeder	NM
BZ021	Transect 2	30/04/2024	10:57	Buzzard	1	improved agricultural grassland, soaring, travelling	suitable nesting habitat; possible breeder	NM
BZ022	Transect 2	30/04/2024	11:21	Buzzard	2	improved agricultural grassland, soaring, circling high	pair; probable breeding	NM
BZ023	Transect 2	30/04/2024	12:07	Buzzard	1	improved agricultural grassland, linear woodland/scrub and scrub/transitional woodland, travelling, perching, umma more	suitable nesting habitat; possible breeder	NM
BZ024	Transect 1	30/04/2024	13:00	Buzzard	1	linear woodland/scrub and improved agricultural grassland, perching, calling, travelling, t1. moving along treelines, perching and calling intermittently	suitable nesting habitat; possible breeder	NM
BZ025	Transect 1	30/04/2024	15:37	Buzzard	2	improved agricultural grassland and linear woodland/scrub, soaring, circling (high)	courtship and display; probable breeding	NM

Ref.	BR	Date	Time	Species	Number	Habitat and activity	Breeding status	Surveyor
BZ026	HHVP2a	30/04/2024	17:02	Buzzard	2	immature woodland and highly modified/non-native woodland, soaring, swooping, hhvp2a	courtship and display; probable breeding	NM
BZ027	HHVP2a	30/04/2024	17:07	Buzzard	1	bogs, highly modified/non-native woodland and scrub/transitional woodland, soaring, swooping, hhvp2a	suitable nesting habitat; possible breeder	NM
BZ028	HHVP2a	30/04/2024	17:13	Buzzard	1	bogs and highly modified/non-native woodland, soaring, travelling, hhvp2a	suitable nesting habitat; possible breeder	NM
BZ029	Transect 1	30/04/2024	14:09	Buzzard	1	improved agricultural grassland, gliding, calling, t1	suitable nesting habitat; possible breeder	NM
BZ030	Transect 1	30/04/2024	13:14	Buzzard	2	linear woodland/scrub and improved agricultural grassland, perched, calling, t1	pair; probable breeding	NM
BZ031	Transect 1	30/04/2024	13:34	Buzzard	1	improved agricultural grassland, flying, calling, t1	suitable nesting habitat; possible breeder	NM
BZ032	Transect 1	30/04/2024	13:38	Buzzard	1	improved agricultural grassland and linear woodland/scrub, flying, calling, t1	suitable nesting habitat; possible breeder	NM
BZ033	Transect 1	30/04/2024	13:50	Buzzard	2	improved agricultural grassland, soaring, circling, t1	courtship and display; probable breeding	NM
BZ034	HHVP2a	16/05/2024	08:43	Buzzard	2	highly modified/non-native woodland and bogs, calling, gliding, flying low over woodland, perched and calling within	pair; probable breeding	NM
BZ035	HHVP2a	16/05/2024	07:29	Buzzard	1	highly modified/non-native woodland and bogs, soaring, carrying prey, perching, carrying prey to potential nest	adult carrying food/faecal sac; confirmed breeding	NM
BZ036	HHVP2a	16/05/2024	07:31	Buzzard	1	highly modified/non-native woodland and bogs, flying, calling, perching, appeared to greet individual arriving with prey	probable nest site; probable breeding	NM
BZ037	HHVP2a	16/05/2024	06:20	Buzzard	1	highly modified/non-native woodland and bogs, calling, flying, appeared to be agitated, swooping over woodland	agitated behaviour; probable breeding	NM
BZ038	Mullaghcloe	16/05/2024	09:35	Buzzard	1	improved agricultural grassland, linear woodland/scrub and scrub, soaring, circling	suitable nesting habitat; possible breeder	NM
BZ039	BR5	16/05/2024	10:49	Buzzard	1	improved agricultural grassland, disturbed ground and linear woodland/scrub, soaring, circling, over quarry area and vp3	suitable nesting habitat; possible breeder	NM
BZ040	BR5	16/05/2024	12:26	Buzzard	2	improved agricultural grassland, highly modified/non-native woodland and linear woodland/scrub, soaring, circling, kilcorman	pair; probable breeding	NM

Ref.	BR	Date	Time	Species	Number	Habitat and activity	Breeding status	Surveyor
BZ041	BR6	16/05/2024	14:40	Buzzard	1	improved agricultural grassland, highly modified/non-native woodland and linear woodland/scrub, travelling low	flyover; non-breeding	NM
BZ042	BR1	17/05/2024	09:29	Buzzard	1	improved agricultural grassland and linear woodland/scrub, travelling	suitable nesting habitat; possible breeder	NM
BZ043	BR1	17/05/2024	09:57	Buzzard	1	bogs, scrub and improved agricultural grassland, travelling	suitable nesting habitat; possible breeder	NM
BZ044	BR1	17/05/2024	09:03	Buzzard	2	improved agricultural grassland and highly modified/non-native woodland, soaring, circling	pair; probable breeding	NM
BZ045	BR1	17/05/2024	11:17	Buzzard	1	improved agricultural grassland and highly modified/non-native woodland, soaring, circling	suitable nesting habitat; possible breeder	NM
BZ046	BR1	17/05/2024	09:48	Buzzard	3	improved agricultural grassland, bogs and linear woodland/scrub, soaring, circling	courtship and display; probable breeding	NM
BZ047	BR1	17/05/2024	10:54	Buzzard	1	improved agricultural grassland, scrub and bogs, gliding, descending, appeared to land within scrubby bog fringe	suitable nesting habitat; possible breeder	NM
BZ048	HHVP1	24/05/2024	08:04	Buzzard	1	bogs and highly modified/non-native woodland, travelling low, perched briefly	suitable nesting habitat; possible breeder	NM
BZ049	BR7	24/05/2024	19:31	Buzzard	2	scrub/transitional woodland, improved agricultural grassland and bogs, soaring, circling, ballynagrenia	pair; probable breeding	NM
BZ050	BR7	24/05/2024	18:34	Buzzard	1	bogs and scrub/transitional woodland, soaring, circling, descending gradually, ballynagrenia	suitable nesting habitat; possible breeder	NM
BZ051	BR7	24/05/2024	18:57	Buzzard	1	bogs and scrub/transitional woodland, soaring, circling, ballinderry	suitable nesting habitat; possible breeder	NM
BZ052	Ardbuckan	29/05/2024	17:20	Buzzard	2	improved agricultural grassland and highly modified/non-native woodland, soaring, circling	pair; probable breeding	NM
BZ053	BOVP1 (BRVP8)	29/05/2024	20:19	Buzzard	1	improved agricultural grassland and linear woodland/scrub, travelling low	suitable nesting habitat; possible breeder	NM
BZ054	BOVP1 (BRVP8)	29/05/2024	17:58	Buzzard	2	highly modified/non-native woodland and improved agricultural grassland, soaring circling, ardbuckan. present for at least 1 hr	pair; probable breeding	NM
BZ055	BOVP1 (BRVP8)	29/05/2024	18:19	Buzzard	1	improved agricultural grassland and linear woodland/scrub, soaring, travelling, moving southeast along north rlb	suitable nesting habitat; possible breeder	NM

Ref.	BR	Date	Time	Species	Number	Habitat and activity	Breeding status	Surveyor
BZ056	BOVP1 (BRVP8)	29/05/2024	19:33	Buzzard	2	improved agricultural grassland, bogs and scrub/transitional woodland, soaring, circling, moyvoughly	pair; probable breeding	NM
BZ057	BOVP1 (BRVP8)	29/05/2024	21:20	Buzzard	1	improved agricultural grassland and highly modified/non-native woodland, soaring, circling	suitable nesting habitat; possible breeder	NM
BZ058	BOVP1 (BRVP8)	29/05/2024	21:41	Buzzard	1	improved agricultural grassland, travelling, calling, roosting, appeared to roost in tree cluster adjacent to bovp2	suitable nesting habitat; possible breeder	NM
BZ059	BR4	07/06/2024	14:03	Buzzard	1	improved agricultural grassland and linear woodland/scrub, soaring, circling, north site boundary (ballynacorra)	suitable nesting habitat; possible breeder	NM
BZ060	BR5	07/06/2024	16:47	Buzzard	2	improved agricultural grassland and highly modified/non-native woodland, soaring, circling, long period	pair; probable breeding	NM
BZ061	BR5	07/06/2024	18:14	Buzzard	1	improved agricultural grassland and linear woodland/scrub, travelling, calling	suitable nesting habitat; possible breeder	NM
BZ062	BR1	11/06/2024	13:17	Buzzard	1	scrub, bogs and improved agricultural grassland, travelling, calling	flyover; non-breeding	NM
BZ063	Clonybane	11/06/2024	15:41	Buzzard	1	improved agricultural grassland and linear woodland/scrub, travelling low	suitable nesting habitat; possible breeder	NM
BZ064	BR6	11/06/2024	16:33	Buzzard	1	linear woodland/scrub and improved agricultural grassland, perched, flushed, departing	suitable nesting habitat; possible breeder	NM
BZ065	BR6	11/06/2024	18:19	Buzzard	2	improved agricultural grassland, disturbed ground and linear woodland/scrub, soaring, travelling, descending gradually before being lost	pair; probable breeding	NM
BZ066	BR6	11/06/2024	18:50	Buzzard	1	improved agricultural grassland and linear woodland/scrub, travelling, swooping	suitable nesting habitat; possible breeder	NM
BZ067	BR2	21/06/2024	10:57	Buzzard	1	highly modified/non-native woodland, bogs and improved agricultural grassland, travelling, calling	suitable nesting habitat; possible breeder	NM
BZ068	BR2	21/06/2024	11:26	Buzzard	2	improved agricultural grassland, soaring, circling, curragh	pair; probable breeding	NM
BZ069	BR7	21/06/2024	15:53	Buzzard	1	bogs, improved agricultural grassland and scrub/transitional woodland, travelling	suitable nesting habitat; possible breeder	NM
BZ070	BR7	21/06/2024	16:54	Buzzard	1	bogs, scrub and improved agricultural grassland, soaring, travelling, circling	suitable nesting habitat; possible breeder	NM

Ref.	BR	Date	Time	Species	Number	Habitat and activity	Breeding status	Surveyor
BZ071	BR7	21/06/2024	14:57	Buzzard	2	improved agricultural grassland and bogs, soaring, circling	pair; probable breeding	NM
BZ072	BOVP1 (BRVP8)	21/06/2024	20:43	Buzzard	2	improved agricultural grassland, soaring, circling, moving steadily northwest	pair; probable breeding	NM
BZ073	BOVP1 (BRVP8)	21/06/2024	21:16	Buzzard	1	improved agricultural grassland and linear woodland/scrub, travelling, calling	suitable nesting habitat; possible breeder	NM
BZ074	BOVP1 (BRVP8)	21/06/2024	21:49	Buzzard	1	improved agricultural grassland and highly modified/non-native woodland, soaring, travelling, lissanode	suitable nesting habitat; possible breeder	NM
BZ075	BOVP1 (BRVP8)	21/06/2024	20:19	Buzzard	1	improved agricultural grassland and highly modified/non-native woodland, soaring, circling, curragh	suitable nesting habitat; possible breeder	NM
BZ076	HHVP1 (Abbeyshrule bog)	20/06/2024	08:17	Buzzard	1	bogs and highly modified/non-native woodland, travelling low, calling	suitable nesting habitat; possible breeder	NM
BZ077	BR3	20/06/2024	17:04	Buzzard	1	improved agricultural grassland, highly modified/non-native woodland and scrub/transitional woodland, travelling, gliding, ardborra	suitable nesting habitat; possible breeder	NM
BZ078	Cloncullen	20/06/2024	18:39	Buzzard	1	improved agricultural grassland and linear woodland/scrub, travelling, calling, perched, perching briefly before continuing	suitable nesting habitat; possible breeder	NM
BZ079	HHVP2a	20/06/2024	18:54	Buzzard	1	highly modified/non-native woodland, scrub and bogs, flushed, circling, calling, swirling over vp and calling for a time, appeared to be agitated - possible nest. dropping into woodland eventually	agitated behaviour; probable breeding	NM
BZ080	HHVP2a	20/06/2024	19:29	Buzzard	1	highly modified/non-native woodland, scrub and bogs, flying, calling, low across woodland fringes. emerging from similar place to where another disappeared	suitable nesting habitat; possible breeder	NM
BZ081	HHVP2a	20/06/2024	20:19	Buzzard	1	highly modified/non-native woodland and bogs, flying, carrying prey, landing, greeted by other adult, swirling and calling over woodland before dropping into probable nest site	adult carrying food/faecal sac; confirmed breeding	NM
BZ082	HHVP2a	20/06/2024	20:21	Buzzard	1	highly modified/non-native woodland and bogs, flying, swirling, calling, calling and chattering at individual carrying prey, dropping into woodland (probable nest site)	probable nest site; probable breeding	NM

Ref.	BR	Date	Time	Species	Number	Habitat and activity	Breeding status	Surveyor
BZ083	HHVP2a	20/06/2024	21:31	Buzzard	1	highly modified/non-native woodland, calling, possible young calling in nest, exact numbers not known	nest with young; confirmed breeder	NM
BZ084	HHVP2a	20/06/2024	20:12	Buzzard	1	improved agricultural grassland, soaring, travelling	suitable nesting habitat; possible breeder	NM
BZ085	BR4	26/07/2024	13:54	Buzzard	1	improved agricultural grassland and linear woodland/scrub, travelling, perching, gliding, calling, perching for ~7mins in tree adjacent bovp3 before continuing	suitable nesting habitat; possible breeder	NM
BZ086	BR4	26/07/2024	15:39	Buzzard	2	improved agricultural grassland, disturbed ground and scrub/transitional woodland, soaring, high over quarry area	pair; probable breeding	NM
BZ087	BR4	26/07/2024	14:29	Buzzard	1	improved agricultural grassland and linear woodland/scrub, travelling, gliding, disappearing behind wl	suitable nesting habitat; possible breeder	NM
BZ088	BR4	26/07/2024	14:35	Buzzard	1	improved agricultural grassland and linear woodland/scrub, travelling, likely the individual at ~5mins previous	suitable nesting habitat; possible breeder	NM
BZ089	BR4	26/07/2024	13:16	Buzzard	1	improved agricultural grassland and linear woodland/scrub, travelling, gliding	suitable nesting habitat; possible breeder	NM
BZ090	BR2	26/07/2024	17:15	Buzzard	2	highly modified/non-native woodland and scrub/transitional woodland, calling, calling regularly throughout. at least 2 birds, possible juveniles	suitable nesting habitat; possible breeder	NM
BZ091	BR2	26/07/2024	18:22	Buzzard	1	scrub/transitional woodland and highly modified/non-native woodland, flying, swooping, landing, adult, gliding over woodland before dropping into treetops. greeted with flurry of begging calls	probable nest site; probable breeding	NM
BZ092	BR2	26/07/2024	18:43	Buzzard	2	highly modified/non-native woodland and scrub/transitional woodland, chasing, flying, swooping, adult + juvenile. swooping and chasing woodland edges	fledged young; confirmed breeding	NM
BZ093	BR2	26/07/2024	19:18	Buzzard	1	highly modified/non-native woodland and scrub/transitional woodland, gliding, calling, adult	suitable nesting habitat; possible breeder	NM
BZ094	BR2	26/07/2024	20:04	Buzzard	1	highly modified/non-native woodland, flushed, calling, adult flushed from perch in woodland, swooping and calling low over canopy. likely young nearby, juvenile calling within woodland during flight	agitated behaviour; probable breeding	NM

Ref.	BR	Date	Time	Species	Number	Habitat and activity	Breeding status	Surveyor
BZ095	BR2	26/07/2024	20:07	Buzzard	1	highly modified/non-native woodland, perched, calling, juvenile within woodland, possibly another juvenile as other calls were heard within same woodland	fledged young; confirmed breeding	NM
BZ096	BR2	26/07/2024	16:58	Buzzard	1	highly modified/non-native woodland, scrub and improved agricultural grassland, travelling, gliding	suitable nesting habitat; possible breeder	NM
BZ097	BR2	26/07/2024	17:42	Buzzard	1	improved agricultural grassland, scrub/transitional woodland and linear woodland/scrub, soaring, circling	suitable nesting habitat; possible breeder	NM
BZ098	BR2	26/07/2024	19:03	Buzzard	1	improved agricultural grassland and scrub/transitional woodland, travelling, calling	suitable nesting habitat; possible breeder	NM
BZ099	BR2	26/07/2024	18:13	Buzzard	2	improved agricultural grassland, soaring high, circling, knockastia	pair; probable breeding	NM
BZ100	BR3	11/07/2024	11:56	Buzzard	1	improved agricultural grassland and linear woodland/scrub, travelling, calling	suitable nesting habitat; possible breeder	NM
BZ101	BR3	11/07/2024	13:12	Buzzard	1	improved agricultural grassland, highly modified/non-native woodland and linear woodland/scrub, soaring, circling, ardborra area	suitable nesting habitat; possible breeder	NM
BZ102	Bleachlawn	11/07/2024	14:42	Buzzard	1	improved agricultural grassland, soaring, circling	suitable nesting habitat; possible breeder	NM
BZ103	BR5	11/07/2024	17:43	Buzzard	1	improved agricultural grassland and linear woodland/scrub, travelling, gliding, calling	suitable nesting habitat; possible breeder	NM
BZ104	BR5	11/07/2024	15:04	Buzzard	2	improved agricultural grassland, soaring, circling, over collierstown area	pair; probable breeding	NM
BZ105	BR5	11/07/2024	15:47	Buzzard	1	improved agricultural grassland and linear woodland/scrub, gliding, travelling, circling	suitable nesting habitat; possible breeder	NM
BZ106	BR5	11/07/2024	16:57	Buzzard	2	improved agricultural grassland, soaring, calling, adult with juvenile. snimnagorta area	fledged young; confirmed breeding	NM
BZ107	HHVP1 (Abbeyshrute bog)	11/07/2024	19:04	Buzzard	3	bogs, highly modified/non-native woodland and scrub, soaring, circling, calling, appeared to be juvenile present	fledged young; confirmed breeding	NM
BZ108	HHVP1 (Abbeyshrute bog)	11/07/2024	19:39	Buzzard	1	bogs and highly modified/non-native woodland, travelling, perching, quite low across bog, perching briefly in forestry fringe before continuing	suitable nesting habitat; possible breeder	NM
BZ109	HHVP1 (Abbeyshrute bog)	11/07/2024	21:19	Buzzard	1	bogs and highly modified/non-native woodland, gliding, fluttering, landing, gliding low over woodland	suitable nesting habitat; possible breeder	NM

Ref.	BR	Date	Time	Species	Number	Habitat and activity	Breeding status	Surveyor
						before vanishing, possible nest or juveniles but no evidence observed		
BZ110	BR1	25/07/2024	13:32	Buzzard	1	improved agricultural grassland and highly modified/non-native woodland, soaring, circling, travelling, moyvoughly area	suitable nesting habitat; possible breeder	NM
BZ111	BR1	25/07/2024	11:53	Buzzard	1	bogs, scrub and improved agricultural grassland, travelling, soaring	suitable nesting habitat; possible breeder	NM
BZ112	BR1	25/07/2024	13:59	Buzzard	1	bogs and scrub, travelling, calling	suitable nesting habitat; possible breeder	NM
BZ113	BR1	25/07/2024	14:31	Buzzard	3	improved agricultural grassland and bogs, soaring, calling, appeared to be 2 adults with a juvenile	fledged young; confirmed breeding	NM
BZ114	Ballinlig	25/07/2024	15:17	Buzzard	1	improved agricultural grassland and linear woodland/scrub, travelling	suitable nesting habitat; possible breeder	NM
BZ115	BR6	25/07/2024	16:00	Buzzard	2	improved agricultural grassland and linear woodland/scrub, calling, calls throughout survey - from area where juveniles were seen (n site boundary). never seen, numbers and location were rough	fledged young; confirmed breeding	NM
BZ116	BR6	25/07/2024	18:03	Buzzard	1	improved agricultural grassland, linear woodland/scrub and disturbed ground, soaring, circling	suitable nesting habitat; possible breeder	NM
BZ117	BR6	25/07/2024	16:22	Buzzard	1	improved agricultural grassland and linear woodland/scrub, travelling, vp3 area	suitable nesting habitat; possible breeder	NM
BZ118	Carricknagower / Ballymore	25/07/2024	19:12	Buzzard	2	improved agricultural grassland, soaring, circling, travelling	pair; probable breeding	NM
BZ119	Ballynegrenia & Ballinderry bog fringe	31/07/2024	09:47	Buzzard	1	improved agricultural grassland and linear woodland/scrub, travelling, calling	suitable nesting habitat; possible breeder	NM
BZ120	BR7	31/07/2024	12:41	Buzzard	1	bogs and scrub, travelling, low along bog fringes	suitable nesting habitat; possible breeder	NM
BZ121	BR7	31/07/2024	10:29	Buzzard	1	bogs, highly modified/non-native woodland and improved agricultural grassland, soaring, circling, high over ballinderry bog fringes, gradually descending	suitable nesting habitat; possible breeder	NM
BZ122	BR7	31/07/2024	11:47	Buzzard	3	bogs and scrub, swirling, calling, travelling, adult with two juveniles over bog and fringes, joined by another adult. descending into ballinderry bog / clonthead area	fledged young; confirmed breeding	NM

Ref.	BR	Date	Time	Species	Number	Habitat and activity	Breeding status	Surveyor
BZ123	BR7	31/07/2024	11:50	Buzzard	1	bogs and scrub, travelling, calling, swirling, adult, joining other adult and juveniles (+ swirling and descending together)	suitable nesting habitat; possible breeder	NM
BZ124	Clonthread / Ballinderry bog fringe	31/07/2024	14:14	Buzzard	2	highly modified/non-native woodland, perched, calling, juveniles perched and calling within woodland	fledged young; confirmed breeding	NM
BZ125	Clonthread / Ballinderry bog fringe	31/07/2024	14:12	Buzzard	1	improved agricultural grassland and highly modified/non-native woodland, perched, flying, fluttering, calling, adult flushed and agitated calls, probable juveniles nearby	agitated behaviour; probable breeding	NM
BZ126	VP3 area	31/07/2024	15:00	Buzzard	2	improved agricultural grassland and linear woodland/scrub, soaring, circling, calling, two adults and two juveniles circling and calling - area where previous juvenile sightings were made	fledged young; confirmed breeding	NM
BZ127	HHVP2a	31/07/2024	15:36	Buzzard	1	bogs, scrub/transitional woodland and highly modified/non-native woodland, flushed, calling, fluttering, adult showing agitation, probable juveniles nearby, dropping into woodland	agitated behaviour; probable breeding	NM
BZ128	HHVP2a	31/07/2024	17:06	Buzzard	1	highly modified/non-native woodland, scrub/transitional woodland and bogs, calling, fluttering, agitation due to presence of nearby juveniles	agitated behaviour; probable breeding	NM
BZ129	HHVP2a	31/07/2024	17:41	Buzzard	1	highly modified/non-native woodland, scrub/transitional woodland and bogs, flying, calling, agitation due to nearby juveniles	agitated behaviour; probable breeding	NM
BZ130	HHVP2a	31/07/2024	18:04	Buzzard	2	highly modified/non-native woodland, bogs and improved agricultural grassland, mobbing, flying, calling, mobbing grey crows, juveniles in area	pair; probable breeding	NM
BZ131	HHVP2a	31/07/2024	16:20	Buzzard	3	highly modified/non-native woodland and scrub/transitional woodland, calling, juveniles calling frequently during vp, at least two juve. birds. adult calling within woodland also on occasion	fledged young; confirmed breeding	NM
BZ132	HHVP2a	31/07/2024	17:39	Buzzard	1	highly modified/non-native woodland, bogs and scrub/transitional woodland, flying, perching, juvenile calling, moving from one area of woodland to another (both on bog fringes)	fledged young; confirmed breeding	NM

Ref.	BR	Date	Time	Species	Number	Habitat and activity	Breeding status	Surveyor
BZ133	Lugacaha / L. Sewdy	31/07/2024	19:02	Buzzard	1	improved agricultural grassland and hedgerows, flying, gliding	suitable nesting habitat; possible breeder	NM
BZ134	BOVP1 (BRVP8)	31/07/2024	19:54	Buzzard	3	improved agricultural grassland and linear woodland/scrub, circling, calling, travelling, adult with two juveniles	fledged young; confirmed breeding	NM
BZ135	BOVP1 (BRVP8)	31/07/2024	20:32	Buzzard	1	improved agricultural grassland, highly modified/non-native woodland and linear woodland/scrub, soaring, circling	suitable nesting habitat; possible breeder	NM
BZ136	BOVP1 (BRVP8)	31/07/2024	20:04	Buzzard	1	improved agricultural grassland and linear woodland/scrub, travelling, calling, perching intermittently as it was low within farmland	suitable nesting habitat; possible breeder	NM
BZ137	BOVP1 (BRVP8)	31/07/2024	20:28	Buzzard	2	improved agricultural grassland, soaring, circling, vp3 area, possible juvenile but unconfirmed	pair; probable breeding	NM
BZ138	BOVP1 (BRVP8)	31/07/2024	19:37	Buzzard	3	improved agricultural grassland, scrub and bogs, soaring, circling, travelling, ballinlig area (br2), two adults with juvenile	fledged young; confirmed breeding	NM
BZ139	BOVP1 (BRVP8)	31/07/2024	21:38	Buzzard	1	improved agricultural grassland, highly modified/non-native woodland and linear woodland/scrub, travelling	suitable nesting habitat; possible breeder	NM

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Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
BZ001	Waterbird Distribution Survey; Newgrove	10/11/2022	14:03	Buzzard	1	improved agricultural grassland; low flight over road	MW
BZ002	Waterbird Distribution Survey; Streamstown	23/11/2022	12:24	Buzzard	2	improved agricultural grassland; foraging on grass, pair	MW
BZ003	Vantage Point Survey; Road leading to VP3	22/11/2022	13:45	Buzzard	1	improved agricultural grassland; flushed, flew south	MW
BZ004	Waterbird Distribution Survey; Dunolm	23/11/2022	12:53	Buzzard	1	improved agricultural grassland; hovering, mobbed by corvid	MW
BZ005	Waterbird Distribution Survey; Rosemount	07/12/2022	14:27	Buzzard	1	improved agricultural grassland and scattered tress and parkland; flight, calling	MW
	Waterbird Distribution Survey; lough sewdy/ ballymore	24/02/2023	12:30	Buzzard	1	improved agricultural grassland and lakes and ponds; travelling	FLM

Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
BZ007	Waterbird Distribution Survey; G1	14/03/2023	09:45	Buzzard	1	wet willow-alder-ash woodland and cutover bog; flying/searching, 10-20m	MS
BZ008	Waterbird Distribution Survey; G1	14/03/2023	14:10	Buzzard	1	eutrophic lakes, riparian woodland and dry meadows and grassy verges; hover hunting, 15-20m	MS
BZ009	Waterbird Distribution Survey; G1	14/03/2023	14:18	Buzzard	1	eutrophic lakes, riparian woodland and dry meadows and grassy verges; flight across area	MS
BZ010	Waterbird Distribution Survey; G1	14/03/2023	14:20	Buzzard	2	dry meadows and grassy verges and riparian woodland; pair hovering, feel only 2 birds in area	MS
BZ011	Waterbird Distribution Survey; G1	27/03/2023	10:45	Buzzard		treelines, cutover bog and dry-humid acid grassland; flying/searching	MS
BZ012	Waterbird Distribution Survey; D1/ Ballymore	18/05/2023	12:30	Buzzard	1	improved agricultural grassland; flying over	FLM
BZ013	Breeding Raptor Survey; rvp6	23/05/2023	07:45	Buzzard	1	improved agricultural grassland; flying over	FLM
BZ014	Breeding Raptor Survey; br5	23/05/2023	10:05	Buzzard	1	exposed sand, gravel or till and improved agricultural grassland; flying over	FLM
BZ015	Waterbird Distribution Survey; lough sewdy	01/08/2023	09:35	Buzzard	1	improved agricultural grassland; flying over	FLM
BZ016	Waterbird Distribution Survey; crush	01/08/2023	11:10	Buzzard	1	improved agricultural grassland and hedgerows; perched	FLM
BZ017	Waterbird Distribution Survey; umma more	23/08/2023	13:00	Buzzard	1	improved agricultural grassland; flying over	FLM
BZ018	Waterbird Distribution Survey; Lough Sewdy	26/09/2023	14:50	Buzzard	1	dystrophic lakes; flying over	FLM
BZ019	Waterbird Distribution Survey; S1-Lough Sewdy	06/04/2023	08:53	Buzzard	1	treelines and amenity grassland (improved); soaring	MS
BZ020	Waterbird Distribution Survey; S1-Lough Sewdy	06/04/2023	09:10	Buzzard	2	treelines and amenity grassland (improved); pair displays	MS
BZ021	Waterbird Distribution Survey; S1-Lough Sewdy	21/04/2023	10:10	Buzzard	1		MS
BZ022	Waterbird Distribution Survey; Lecade	05/12/2023	12:00	Buzzard	1	improved agricultural grassland; flying over	FLM
BZ023	Waterbird Distribution Survey; Umma More	05/12/2023	14:00	Buzzard	1	improved agricultural grassland; flying over	FLM
BZ024	Waterbird Distribution Survey; Ballinlig	31/10/2023	15:19	Buzzard	1	improved agricultural grassland; flying low within farmland	NM

Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
BZ025	Waterbird Distribution Survey; Ballynagrenia & Ballinderry Bog	10/10/2023	09:29	Buzzard	1	bogs, scrub/transitional woodland and improved agricultural grassland; soaring and circling high over bog margins and adjacent farmland	NM
BZ026	Waterbird Distribution Survey; Knockastia	10/10/2023	11:38	Buzzard	2	improved agricultural grassland; soaring and circling high above hill	NM
BZ027	Waterbird Distribution Survey; Ballymore	10/10/2023	13:28	Buzzard	1	improved agricultural grassland and linear woodland/scrub; flying across farmland	NM
BZ028	Waterbird Distribution Survey; Ardnacranny	09/11/2023	08:56	Buzzard	1	improved agricultural grassland and hedgerows; soaring and circling high over farmland	NM
BZ029	Waterbird Distribution Survey; Ballymore	09/11/2023	11:09	Buzzard	1	improved agricultural grassland; flying across farmland	NM
BZ030	Waterbird Distribution Survey; Knockastia	09/11/2023	12:20	Buzzard	2	improved agricultural grassland; soaring and circling high over farmland	NM
BZ031	Waterbird Distribution Survey; Ballynagrenia & Ballinderry Bog	09/11/2023	14:31	Buzzard	1	bogs and scrub; commuting high along bog fringes	NM
BZ032	Waterbird Distribution Survey; Umma More	09/11/2023	15:44	Buzzard	1	improved agricultural grassland; flying low across farmland	NM
BZ033	Waterbird Distribution Survey; VP1	29/11/2023	10:11	Buzzard	1	improved agricultural grassland; flying low within farmland	NM
BZ034	Waterbird Distribution Survey; Ardnacranny	29/11/2023	13:27	Buzzard	1	improved agricultural grassland and mixed conifer woodland; soaring over farmland and woodland	NM
BZ035	Waterbird Distribution Survey; Lough Sewdy	05/01/2024	11:12	Buzzard	1	improved agricultural grassland; flying	NM
BZ036	Waterbird Distribution Survey; VP3 area	05/01/2024	14:19	Buzzard	1	improved agricultural grassland and linear woodland/scrub; flying low	NM
BZ037	Waterbird Distribution Survey; Unmabeg	05/01/2024	14:39	Buzzard	1	improved agricultural grassland and linear woodland/scrub; flying low	NM
BZ038	Waterbird Distribution Survey; VP3 area	05/01/2024	14:50	Buzzard	1	improved agricultural grassland and linear woodland/scrub; flying low, perching	NM
BZ039	Vantage Point Survey; VP3 access	11/01/2024	13:51	Buzzard	1	improved agricultural grassland; flying	NM
BZ040	Waterbird Distribution Survey; Toorevagh	30/01/2024	09:03	Buzzard	1	improved agricultural grassland and highly modified/non-native woodland; flying	NM
BZ041	Waterbird Distribution Survey; Mahon Hill	30/01/2024	11:03	Buzzard	1	treelines and improved agricultural grassland; perched, flying	NM
BZ042	Waterbird Distribution Survey; Umma More	30/01/2024	11:45	Buzzard	1	improved agricultural grassland and treelines; perched, flying, calling	NM

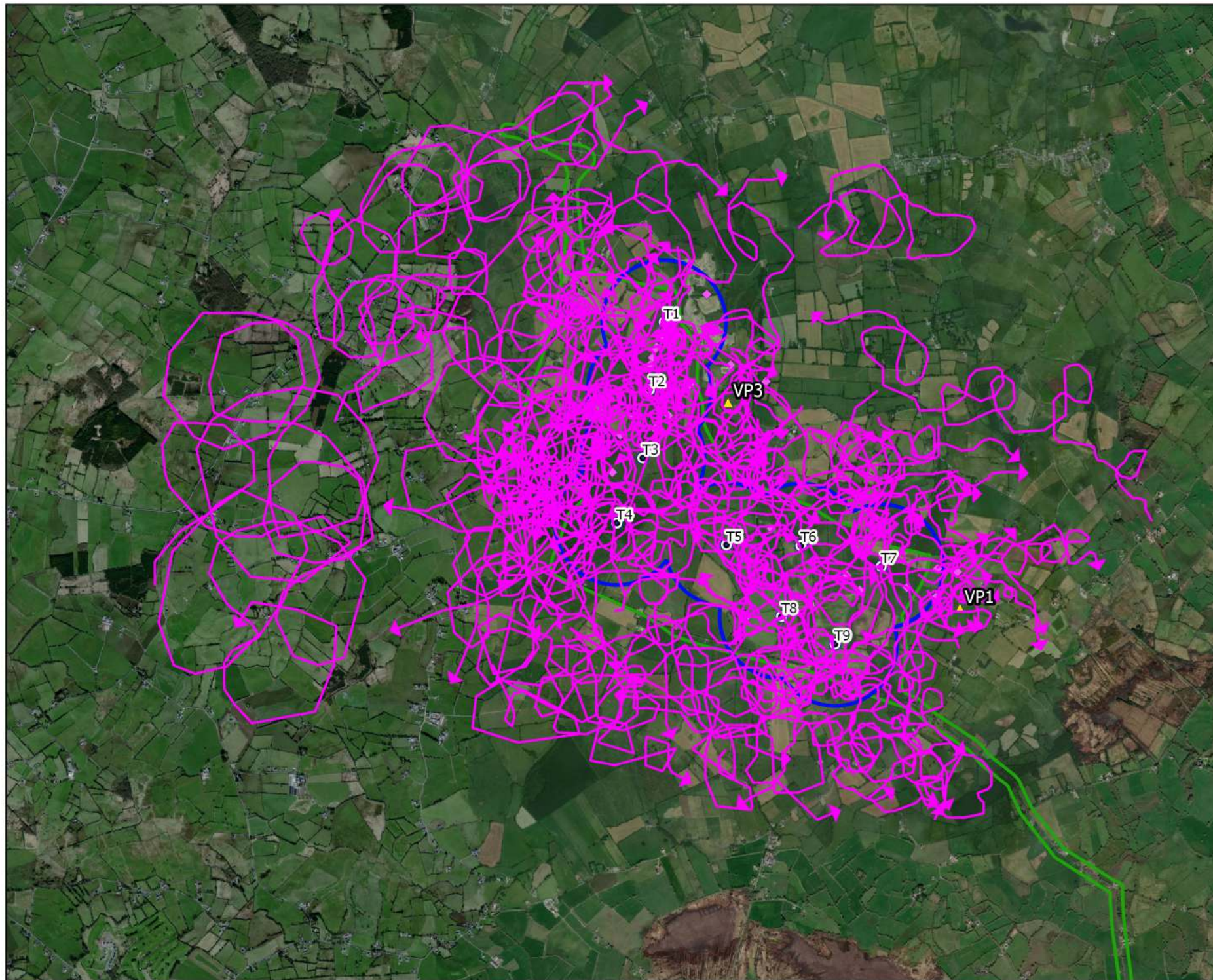
Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
BZ043	Waterbird Distribution Survey; Ballinlig	30/01/2024	12:46	Buzzard	1	bogs and scrub; travelling, calling	NM
BZ044	Waterbird Distribution Survey; Knockastia	30/01/2024	13:21	Buzzard	2	improved agricultural grassland, highly modified/non-native woodland and linear woodland/scrub; soaring	NM
BZ045	Waterbird Distribution Survey; Umma More	30/01/2024	13:57	Buzzard	1	improved agricultural grassland; travelling low	NM
BZ046	Waterbird Distribution Survey; Ballymore	07/02/2024	09:43	Buzzard	1	improved agricultural grassland and scrub; travelling	NM
BZ047	Waterbird Distribution Survey; Ballinlig	07/02/2024	13:10	Buzzard	1	improved agricultural grassland and bogs; travelling, calling	NM
BZ048	Waterbird Distribution Survey; Moyvoughly	07/02/2024	14:25	Buzzard	1	improved agricultural grassland; travelling	NM
BZ049	Waterbird Distribution Survey; Gortmore	21/02/2024	08:54	Buzzard	1	improved agricultural grassland and highly modified/non-native woodland; soaring	NM
BZ050	Waterbird Distribution Survey; Ballynacorra	21/02/2024	09:49	Buzzard	1	improved agricultural grassland, treelines and disturbed ground; departing, travelling, disturbed from perch	NM
BZ051	Waterbird Distribution Survey; Umma More	21/02/2024	10:08	Buzzard	1	improved agricultural grassland and mixed conifer woodland; travelling	NM
BZ052	Waterbird Distribution Survey; Knockastia	21/02/2024	12:07	Buzzard	7	improved agricultural grassland and highly modified/non-native woodland; soaring, circling	NM
BZ053	Waterbird Distribution Survey; Ballinlig	21/02/2024	13:18	Buzzard	1	improved agricultural grassland and linear woodland/scrub; travelling, perching	NM
BZ054	Waterbird Distribution Survey; Ballynagrenia	21/02/2024	15:32	Buzzard	2	improved agricultural grassland, bogs and scrub; soaring	NM
BZ055	Waterbird Distribution Survey; Lecade	12/03/2024	15:34	Buzzard	1	treelines and improved agricultural grassland; perched	NM
BZ056	Waterbird Distribution Survey; Mullaghcloe	27/03/2024	08:03	Buzzard	2	improved agricultural grassland and scrub; soaring, courting	NM
BZ057	Waterbird Distribution Survey; Clare hill	27/03/2024	10:00	Buzzard	3	improved agricultural grassland and scrub; soaring, circling	NM
BZ058	Waterbird Distribution Survey; Knockastia	27/03/2024	11:13	Buzzard	6	improved agricultural grassland; soaring, circling, courting	NM
BZ059	Waterbird Distribution Survey; Moyvoughly	27/03/2024	12:16	Buzzard	1	improved agricultural grassland and linear woodland/scrub; travelling low	NM
BZ060	Waterbird Distribution Survey; Ballynagrenia & Ballinderry bogs	27/03/2024	14:34	Buzzard	2	bogs and scrub; travelling low, perching	NM

Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
BZ061	Vantage Point Survey; lisanode	19/06/2024	17:51	Buzzard	1	improved agricultural grassland and cultivated land; soaring, circling	EOB
BZ062	Waterbird Distribution Survey; Moyvoughly	08/04/2024	12:00	Buzzard	1	raised bog and improved agricultural grassland; travelling	FLM
BZ063	Waterbird Distribution Survey; Ballinlig	22/04/2024	14:00	Buzzard	1	cutover bog; flying	FLM
BZ064	Waterbird Distribution and Abundance Survey; G1	04/04/2024	10:30	Buzzard	1	scrub, wet willow-alder-ash woodland and scattered tress and parkland; flying	MS
BZ065	Waterbird Distribution and Abundance Survey; D7	18/04/2024	11:45	Buzzard	1	raised bog, cutover bog and treelines; flying, 15-30m	MS
BZ066	Waterbird Distribution and Abundance Survey; D7	18/04/2024	11:53	Buzzard	1	raised bog, cutover bog and treelines; flying, 20-40m separate bird	MS
BZ067	Waterbird Distribution and Abundance Survey; B2	18/04/2024	12:45	Buzzard	1	raised bog and treelines; soaring, 30m	MS
BZ068	Waterbird Distribution Survey; Dungolman	28/05/2024	09:47	Buzzard	1	improved agricultural grassland and linear woodland/scrub; flushed, travelling low, calling	NM
BZ069	Waterbird Distribution Survey; Umma More	28/05/2024	10:09	Buzzard	2	linear woodland/scrub and improved agricultural grassland; perched, departing, calling	NM
BZ070	Waterbird Distribution Survey; Baskin	28/05/2024	10:22	Buzzard	1	improved agricultural grassland and linear woodland/scrub; soaring, circling	NM
BZ071	Waterbird Distribution Survey; Derrylea	28/05/2024	11:14	Buzzard	1	improved agricultural grassland; travelling	NM
BZ072	Waterbird Distribution Survey; Ballinlig bog	28/05/2024	15:36	Buzzard	1	bogs, scrub and highly modified/non-native woodland; travelling, soaring	NM
BZ073	Waterbird Distribution Survey; Ballynagrenia & Ballinderry bogs	28/05/2024	16:15	Buzzard	2	improved agricultural grassland and highly modified/non-native woodland; soaring	NM
BZ074	Waterbird Distribution Survey; L. Sewdy	03/05/2024	14:47	Buzzard	1	improved agricultural grassland, reed and large sedge swamps and scrub; travelling, calling	NM
BZ075	Waterbird Distribution Survey; Ballinlig	03/05/2024	17:02	Buzzard	1	bogs, scrub and improved agricultural grassland; travelling, calling	NM
BZ076	Waterbird Distribution Survey; Knockastia	03/05/2024	16:49	Buzzard	2	improved agricultural grassland and linear woodland/scrub; soaring, circling	NM
BZ077	Vantage Point Survey; Ballynacorra (VP3 retreat)	20/08/2024	16:44	Buzzard	1	linear woodland/scrub and improved agricultural grassland; flushed, flying, flying along roadway before disappearing into adjacent farmland	NM
BZ078	Waterbird Distribution Survey; Mullenmeehan	13/08/2024	10:03	Buzzard	1	improved agricultural grassland and linear woodland/scrub; travelling	NM

Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
BZ079	Waterbird Distribution Survey; Unma Beg	13/08/2024	11:16	Buzzard	1	improved agricultural grassland and hedgerows; travelling, gliding, perching, low across site	NM
BZ080	Waterbird Distribution Survey; Ballynagrenia & Ballinderry bogs	13/08/2024	12:21	Buzzard	3	bogs, scrub and improved agricultural grassland; soaring high, circling, adults with juvenile	NM
BZ081	Waterbird Distribution Survey; Toorbeg	13/08/2024	12:46	Buzzard	1	improved agricultural grassland, linear woodland/scrub and highly modified/non-native woodland; soaring, circling	NM
BZ082	Waterbird Distribution Survey; Ballynagrenia & Ballinderry bogs	13/08/2024	13:56	Buzzard	1	highly modified/non-native woodland, scrub/transitional woodland and bogs; swooping, calling, adult	NM
BZ083	Waterbird Distribution Survey; Lugacaha	29/08/2024	11:54	Buzzard	2	improved agricultural grassland and scrub; soaring high, circling	NM
BZ084	Waterbird Distribution Survey; Killeenboy	29/08/2024	12:22	Buzzard	1	improved agricultural grassland and linear woodland/scrub; travelling low, calling	NM
BZ085	Waterbird Distribution Survey; Ballinlig	29/08/2024	13:47	Buzzard	1	improved agricultural grassland, scrub and highly modified/non-native woodland; gliding, circling	NM
BZ086	Waterbird Distribution Survey; Ballinacorra (N site)	29/08/2024	15:10	Buzzard	6	improved agricultural grassland, highly modified/non-native woodland and linear woodland/scrub; soaring, circling, calling, high. possible juveniles - not confirmed due to distance	NM
BZ087	Waterbird Distribution Survey; VP3 area	29/08/2024	15:39	Buzzard	2	improved agricultural grassland and linear woodland/scrub; soaring, circling	NM
BZ088	Waterbird Distribution Survey; Ballynagrenia & Ballinderry bogs	29/08/2024	16:54	Buzzard	1	bogs and scrub/transitional woodland; gliding, travelling	NM
BZ089	Breeding Barn Owl Survey; On site (Unma More)	17/05/2024	20:56	Buzzard	1	improved agricultural grassland and linear woodland/scrub; gliding, travelling low	NM
BZ090	Breeding Barn Owl Survey; BOVP2	24/05/2024	20:56	Buzzard	1	improved agricultural grassland and linear woodland/scrub; travelling, calling	NM
BZ091	Breeding Barn Owl Survey; BOVP2	24/05/2024	21:55	Buzzard	1	improved agricultural grassland, highly modified/non-native woodland and linear woodland/scrub; travelling, calling, roosting, appeared to roost in tree cluster - not a sound after disappearing into trees	NM
BZ092	Breeding Barn Owl Survey; Unma More	07/06/2024	21:17	Buzzard	2	improved agricultural grassland and linear woodland/scrub; soaring, circling	NM
BZ093	Breeding Barn Owl Survey; BOVP2	11/06/2024	21:55	Buzzard	2	improved agricultural grassland and treelines; travelling, calling, perching in treelines, but continuing across site at dusk	NM
BZ094	Breeding Barn Owl Survey; BOVP2	11/06/2024	21:06	Buzzard	1	improved agricultural grassland and linear woodland/scrub; travelling, calling	NM
BZ095	Breeding Barn Owl Survey; BOVP2	11/06/2024	21:29	Buzzard	1	improved agricultural grassland and highly modified/non-native woodland; soaring, travelling	NM

Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
BZ096	Breeding Barn Owl Survey; BOVP2	26/07/2024	20:41	Buzzard	1	improved agricultural grassland; soaring, circling, soaring for a period (~ 20 mins) - rvp8 area	NM
BZ097	Breeding Barn Owl Survey; BOVP2	26/07/2024	21:26	Buzzard	1	improved agricultural grassland, highly modified/non-native woodland and linear woodland/scrub; travelling low, calling, on site	NM
BZ098	Vantage Point Survey; South of walkover transect	19/10/2022	14:52	Buzzard	1	#N/A	MW
BZ099	Vantage Point Survey; Sninnagorta	12/09/2024	12:45	Buzzard	1	linear woodland/scrub and improved agricultural grassland; perched	NM
BZ100	Waterbird Distribution Survey; s1	08/10/2024	12:41	Buzzard	1	lakes and ponds and improved agricultural grassland; being mobbed by hooded crows	FOD
BZ101	Waterbird Distribution Survey; D7	29/10/2024	12:16	Buzzard	1	improved agricultural grassland; perched	FOD
BZ102	Waterbird Distribution Survey; D3	11/11/2024	13:15	Buzzard	1	improved agricultural grassland and mixed broadleaved/conifer woodland; travelling	DM
BZ103	Waterbird Distribution Survey; Lough Sewdy	11/11/2024	14:30	Buzzard	1	improved agricultural grassland; perched	DM
BZ104	Waterbird Distribution Survey; D3	25/11/2024	13:00	Buzzard	1	improved agricultural grassland; perched	DM
BZ105	Waterbird Distribution Survey; B2	27/03/2023	14:05	Buzzard	1	immature woodland; territory flight, 20m	MS
BZ106	Waterbird Distribution Survey; B2	27/03/2023	14:20	Buzzard	2	treelines; courtship flight and displays, 20-40m	MS
BZ107	Waterbird Distribution Survey; D1	04/12/2024	14:00	Buzzard	1	improved agricultural grassland and mixed broadleaved/conifer woodland; hunting	DM
BZ108	Waterbird Distribution Survey; D3	11/01/2025	12:15	Buzzard	1	improved agricultural grassland and mixed broadleaved/conifer woodland; travelling	DM
BZ109	Waterbird Distribution Survey; D1	11/01/2025	13:00	Buzzard	1	improved agricultural grassland and mixed broadleaved/conifer woodland; perched, in tree	DM
BZ110	Waterbird Distribution Survey; Lough Sewdy S1	11/01/2025	14:00	Buzzard	1	lakes and ponds and improved agricultural grassland; travelling	DM
BZ111	Waterbird Distribution Survey; D3	30/01/2025	13:00	Buzzard	1	depositing/lowland rivers and improved agricultural grassland; hunting	DM
BZ112	Waterbird Distribution Survey; D2	30/01/2025	13:30	Buzzard	1	improved agricultural grassland and mixed broadleaved/conifer woodland; travelling	DM
BZ113	Waterbird Distribution Survey; Lough Sewdy S1	30/01/2025	15:00	Buzzard	1	lakes and ponds and improved agricultural grassland; perched, in tree	DM

Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
BZ114	Waterbird Distribution Survey; G1	05/02/2025	12:45	Buzzard	1	cutover bog and hedgerows; travelling	SD
BZ115	Waterbird Distribution Survey; G1	19/02/2025	11:39	Buzzard	2	improved agricultural grassland and cutover bog; soaring, travelling, perched	SD
BZ116	Waterbird Distribution Survey; Lough Sewdy	19/02/2025	12:31	Buzzard	1	improved agricultural grassland; perched	SD
BZ117	Waterbird Distribution Survey; D1	19/02/2025	14:13	Buzzard	1	conifer plantation; soaring	SD
BZ118	Waterbird Distribution and Abundance Survey; B3	06/03/2025	11:30	Buzzard	1	cutover bog and mixed broadleaved/conifer woodland; perched, in tree	DM
BZ119	Waterbird Distribution and Abundance Survey; D1	06/03/2025	13:30	Buzzard	1	improved agricultural grassland and mixed broadleaved/conifer woodland; calling	DM



Map Legend

- EIAR Site Boundary
- Proposed Turbine Layout
- 500m Radius of Turbines
- ▲ VP Locations
- Flight Observation
- ◆ Non-flight Observation



Drawing Title
Buzzard Vantage Point Survey Observations

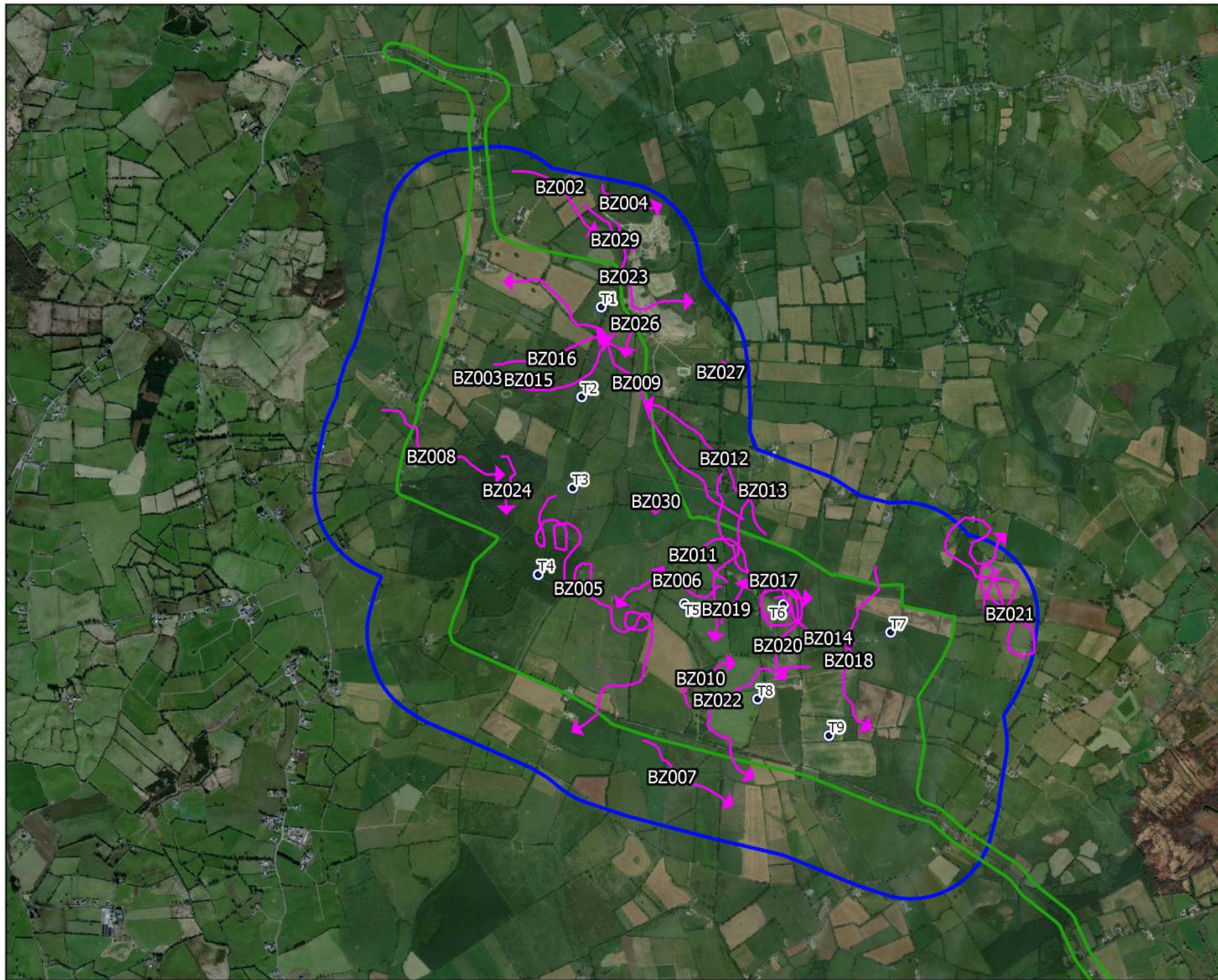
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Umma More Renewable Energy Development

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Project No. 201050	Drawing No. Fig. 7-4a-47
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Scale 1:40,000	Date 13.06.2025
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Map Legend

- EIA Site Boundary
- Proposed Turbine Layout
- 500m Radius of Turbines
- Flight Observation



Drawing Title
Buzzard Winter Walkover Survey Observations

Project Title
Umma More Renewable Energy Development

Drawn By
KS

Checked By
PC

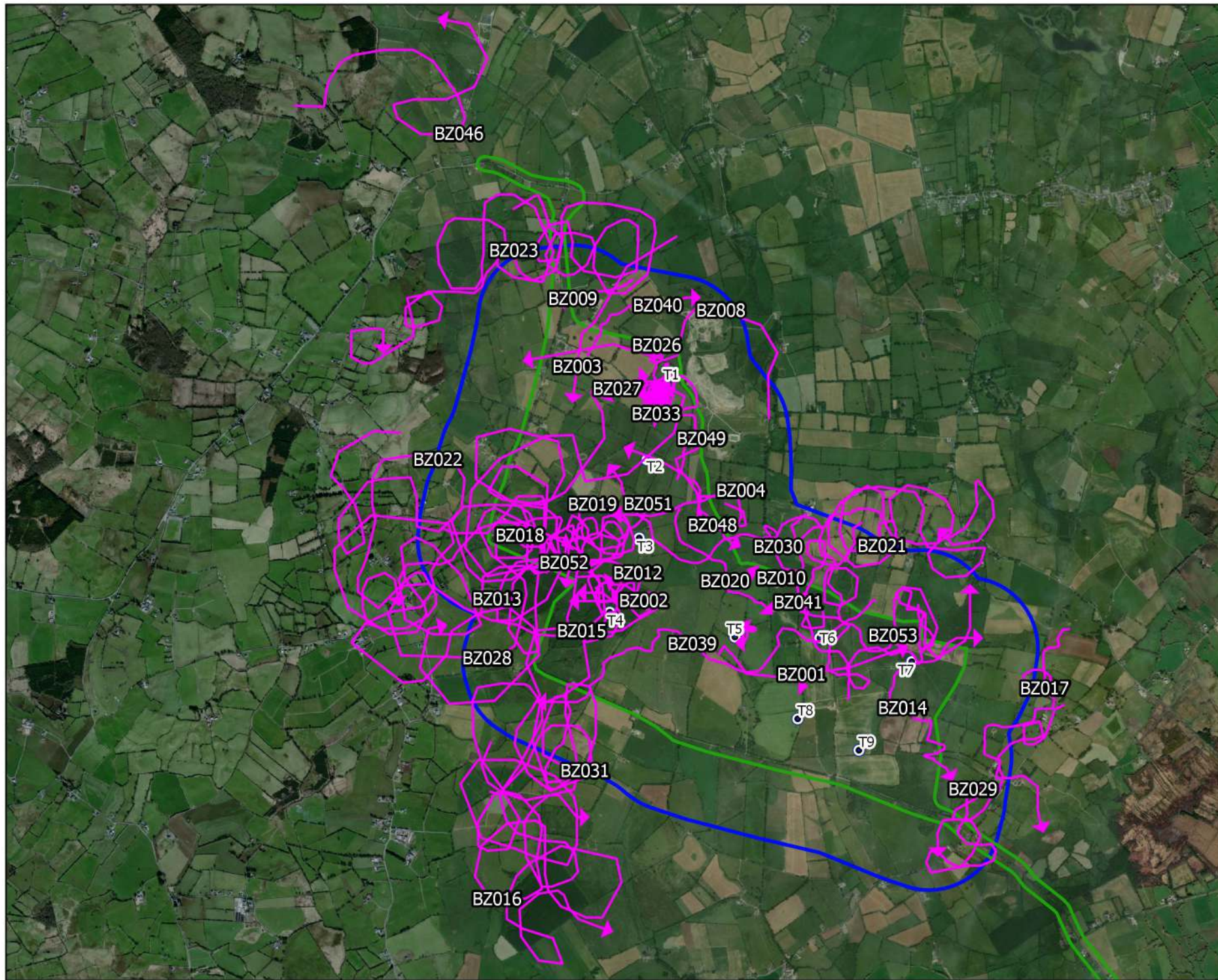
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201050

Drawing No.
Fig. 7-4a-48

Scale
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13.06.2025

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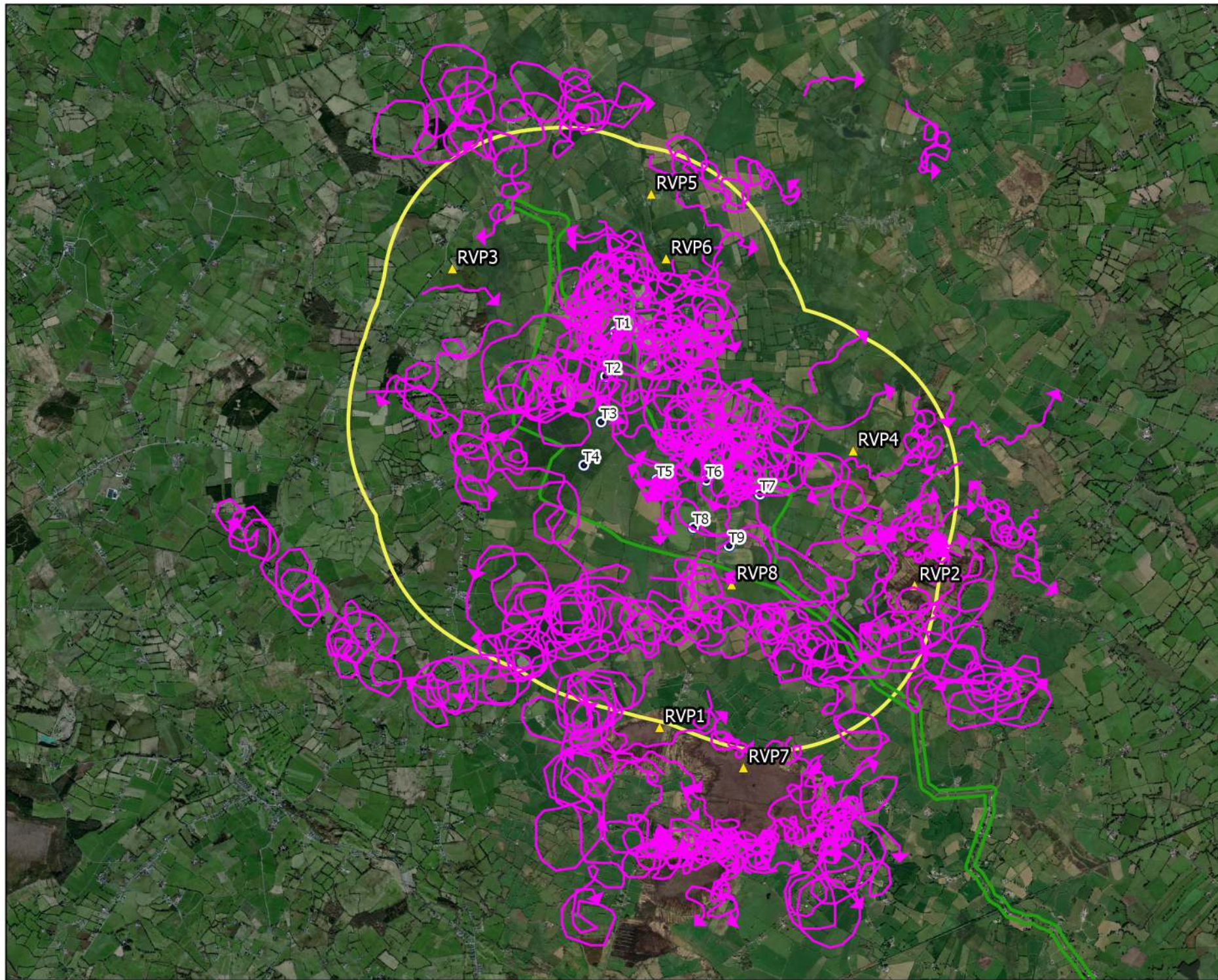


- Map Legend
- EIAR Site Boundary
 - Proposed Turbine Layout
 - 500m Radius of Turbines
 - Flight Observation



Drawing Title	
Buzzard Breeding Walkover Survey Observations	
Project Title	
Umma More Renewable Energy Development	
Drawn By	Checked By
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201050	Fig. 7-4a-49
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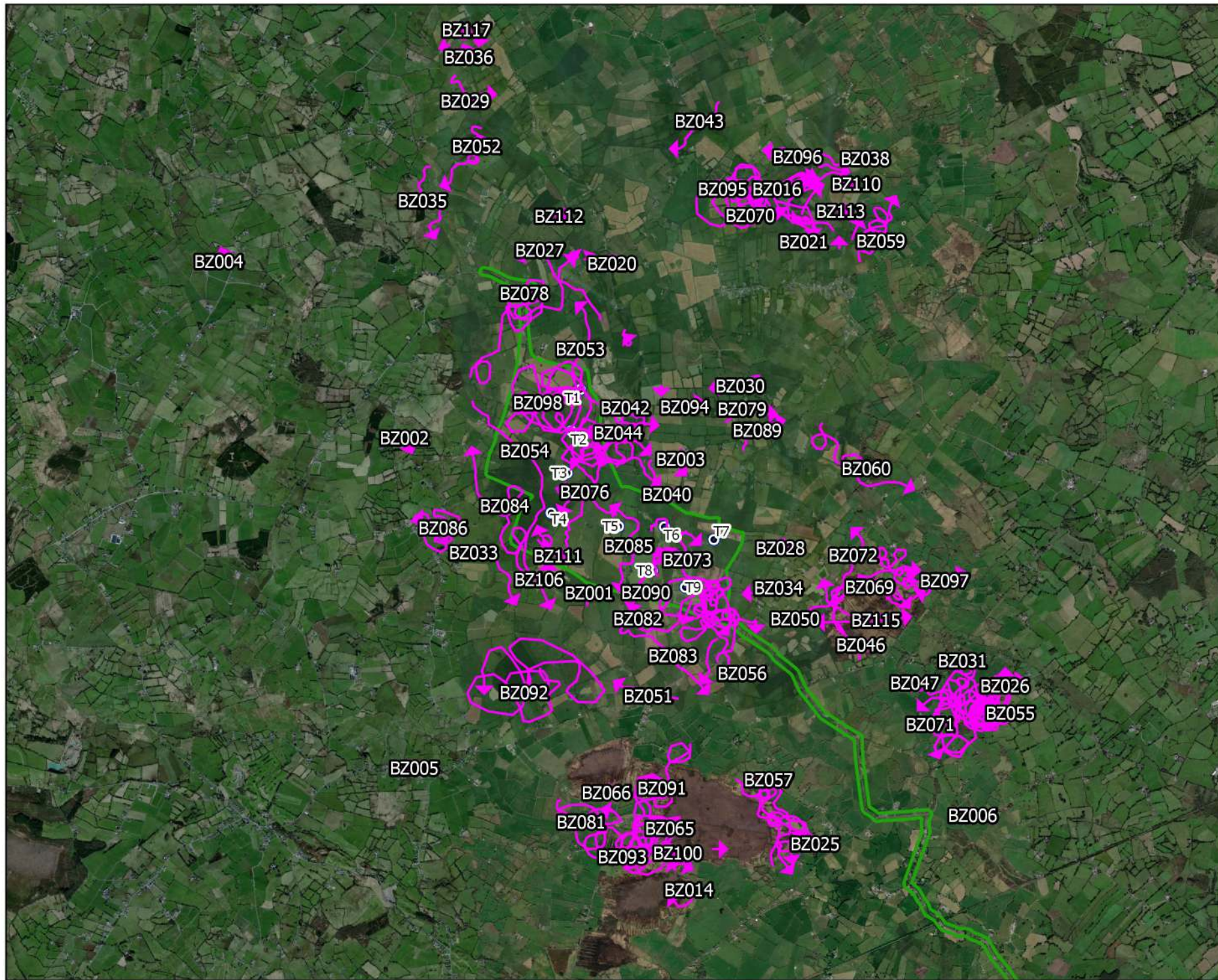





- Map Legend
- EIAR Site Boundary
 - Proposed Turbine Layout
 - 2km Survey Radius
 - ▲ RVP Location
 - ➔ Flight Observation



Drawing Title	
Buzzard Breeding Raptor Survey Observations	
Project Title	
Umma More Renewable Energy Development	
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KS	PC
Project No.	Drawing No.
201050	Fig. 7-4a-50
Scale	Date
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- Map Legend
-  EIAR Site Boundary
 -  Proposed Turbine Layout
 -  Flight Observation



Drawing Title

Buzzard Incidental Records

Project Title

Umma More Renewable Energy Development

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201050	Fig. 7-4a-51
Scale	Date
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14.

SPARROWHAWK

Table 7 - 4a - 52 Sparrowhawk Vantage Point Survey

Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0 -15m)	Band 2 (15-25m)	Band 3 (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
SH001	VP1	25/11/2022	09:12	Sparrowhawk	1	20	20	0	0	0	improved agricultural grassland and scrub; mobbed by corvids	MW
SH002	VP3	10/02/2023	09:33	Sparrowhawk	1	28	0	0	28	0	riparian woodland, amenity grassland (improved) and hedgerows; soaring, 50m	MS
SH003	VP3	10/02/2023	12:04	Sparrowhawk	1	38	18	20	0	0	hedgerows and amenity grassland (improved); flight, 10-20m	MS
SH004	VP3	18/03/2023	17:05	Sparrowhawk	1	24	0	24	0	0	amenity grassland (improved) and treelines; flight, 20m	MS
SH005	VP3	19/07/2023	08:45	Sparrowhawk	1	250	0	0	50	200	mixed conifer woodland and mixed broadleaved/conifer woodland; high soaring, 50-220m	MS
SH006	VP3	19/07/2023	11:03	Sparrowhawk	1	45	0	0	45	0	mixed conifer woodland and mixed broadleaved/conifer woodland; soaring, 100m	MS
SH007	VP3	19/07/2023	12:44	Sparrowhawk	1	330	0	120	210	0	improved agricultural grassland and treelines; soar/dive, 20-100m	MS
SH008	VP1	02/08/2023	10:20	Sparrowhawk	1	12	12	0	0	0	improved agricultural grassland and hedgerows; hunting, chasing mistle thrushes	FLM
SH009	VP1	02/08/2023	10:50	Sparrowhawk	1	72	72	0	0	0	improved agricultural grassland and hedgerows; hunting	FLM
SH010	VP3	03/08/2023	03:45	Sparrowhawk	1	23	5	18	0	0	improved agricultural grassland and hedgerows; hunting	FLM
SH011	VP1	18/09/2023	08:30	Sparrowhawk	1	66	66	0	0	0	improved agricultural grassland and hedgerows; travelling/ perched briefly	FLM
SH012	VP1	18/09/2023	11:30	Sparrowhawk	1	25	25	0	0	0	improved agricultural grassland; female travelling	FLM
SH013	VP1	14/03/2024	10:32	Sparrowhawk	1	540	450	90	0	0	improved agricultural grassland and linear woodland/scrub; travelling, perching intermittently	NM

Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0 -15m)	Band 2 (15-25m)	Band 3 (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
SH014	VP3	26/03/2024	07:47	Sparrowhawk	1	470	390	80	0	0	improved agricultural grassland and hedgerows; hunting, perched, chasing passerines	NM
SH015	VP3	26/03/2024	10:39	Sparrowhawk	1	125	40	85	0	0	improved agricultural grassland and hedgerows; travelling, perched, travelling within farmland, perching briefly	NM
SH016	VP1	09/04/2024	18:40	Sparrowhawk	1	68	5	30	33	0	treelines and improved agricultural grassland; flying, hovering	MS
SH017	VP3	12/04/2024	17:40	Sparrowhawk	1	35	35	0	0	0	hedgerows and improved agricultural grassland; hunting, flying	MS
SH018	VP3	12/09/2024	08:29	Sparrowhawk	1	65	25	40	0	0	improved agricultural grassland and linear woodland/scrub; hunting, travelling, chasing passerines within farmland	NM
SH019	VP1	01/10/2024	16:31	Sparrowhawk	1	42	42	0	0	0	improved agricultural grassland; hunting	FOD
SH020	VP3	02/10/2024	17:15	Sparrowhawk	1	72	2	10	60	0	improved agricultural grassland; being mobbed, mobbed until dropped into trees	FOD
SH021	VP3	18/11/2024	15:23	Sparrowhawk	1	35	20	15	0	0	improved agricultural grassland; travelling, male	DM
SH022	VP3	26/11/2024	12:25	Sparrowhawk	1	60	60	0	0	0	improved agricultural grassland; hunting, female	DM
SH023	VP1	11/02/2025	15:49	Sparrowhawk	1	7	7	0	0	0	improved agricultural grassland and hedgerows; travelling	CC
SH024	vp3	20/03/2025	11:57	Sparrowhawk	1	90	30	60	0	0	improved agricultural grassland; hunting, female	DM

Table 7 - 4a - 53 Sparrowhawk Winter Walkover Survey

Ref.	Date	Time	Transect	Species	Number	Habitat and activity	Surveyor
SH001	13/12/2022	13:30	T4	Sparrowhawk	1		MW
SH002	13/12/2022	13:45	-	Sparrowhawk	1	improved agricultural grassland and recently-felled woodland; flight (wintering)	MW

Ref.	Date	Time	Transect	Species	Number	Habitat and activity	Surveyor
SH003	16/03/2023	10:36	-	Sparrowhawk	1	riparian woodland and amenity grassland (improved); flush/land, 2m (wintering)	MS
SH004	17/10/2023	08:35	-	Sparrowhawk	1	linear woodland/scrub and improved agricultural grassland; disturbed from perch, flying low along hedgerow (wintering)	NM
SH005	21/11/2023	11:27	-	Sparrowhawk	1	improved agricultural grassland and scrub/transitional woodland; flying low across farmland and disappearing into scrubby woodland (wintering)	NM
SH006	17/01/2024	13:32	-	Sparrowhawk	1	improved agricultural grassland and linear woodland/scrub; hunting, perched, female (wintering)	NM
SH007	29/11/2024	13:32	T2	Sparrowhawk	1	improved agricultural grassland and highly modified/non-native woodland; hunting, chasing small passerines, lost within tree cluster (wintering)	NM

Table 7 – 4a - 54 Sparrowhawk Breeding Walkover Survey

Ref.	Date	Time	Transect	Species	Number	Habitat and activity	Surveyor
SH001	11/07/2023	08:48	-	Sparrowhawk	1	improved agricultural grassland, treelines and hedgerows; soaring (suitable nesting habitat; possible breeder)	MS
SH002	20/06/2024	13:55	T4	Sparrowhawk	1	improved agricultural grassland, active quarries and mines and spoil and bare ground; hunting (suitable nesting habitat; possible breeder)	EOB

Table 7 – 4a - 55 Sparrowhawk Breeding Raptor Survey

Ref.	BR	Date	Time	Species	Number	Habitat and activity	Breeding status	Surveyor
SH001	VP8	07/04/2023	13:10	Sparrowhawk	1	amenity grassland (improved) and treelines, soaring high, 50-70m	suitable nesting habitat; possible breeder	MS
SH002	BOVP2	11/04/2024	19:53	Sparrowhawk	1	improved agricultural grassland and treelines, travelling, bovp2	suitable nesting habitat; possible breeder	NM
SH003	BR7 / Ballinderry bog	12/04/2024	13:16	Sparrowhawk	1	scrub and bogs, soaring, descending, mobbed, carrying prey, harassed by passerines. carrying prey - but too early to be for young	suitable nesting habitat; possible breeder	NM
SH004	HHVP2a	30/04/2024	17:35	Sparrowhawk	1	bogs and scrub/transitional woodland, hunting, travelling, hhvp2a	suitable nesting habitat; possible breeder	NM
SH005	BR6	16/05/2024	13:15	Sparrowhawk	1	improved agricultural grassland and linear woodland/scrub, perched, flushed, departing low and rapidly, male	suitable nesting habitat; possible breeder	NM
SH006	BR2	24/05/2024	15:42	Sparrowhawk	1	bogs, scrub/transitional woodland and highly modified/non-native woodland, travelling	suitable nesting habitat; possible breeder	NM

Ref.	BR	Date	Time	Species	Number	Habitat and activity	Breeding status	Surveyor
SH007	BR2	21/06/2024	13:13	Sparrowhawk	1	bogs, scrub and highly modified/non-native woodland, perched, flying, flushed from perch, disappearing into woodland	suitable nesting habitat; possible breeder	NM
SH008	Shinglis	31/07/2024	18:57	Sparrowhawk	1	linear woodland/scrub and improved agricultural grassland, flushed, flying, departing low along woodland edge	suitable nesting habitat; possible breeder	NM

Table 7 - 4a - 56 Sparrowhawk Incidental Records

Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
SH001	Waterbird Distribution Survey; g1	28/02/2023	12:20	Sparrowhawk	1	cutover bog and wet willow-alder-ash woodland; soaring	MS
SH002	Waterbird Distribution Survey; S1 Ballymore	18/05/2023	10:10	Sparrowhawk	1	improved agricultural grassland, dystrophic lakes and marsh; flying over/ chased by swallows	FLM
SH003	Waterbird Distribution Survey; b1/ moyvoughly	30/05/2023	10:20	Sparrowhawk	1	bog woodland and raised bog; young calling	FLM
SH004	Waterbird Distribution Survey; g1/ ballymore south	30/05/2023	11:00	Sparrowhawk	1	conifer plantation and raised bog; flying from wood to bog, male	FLM
SH005	Waterbird Distribution Survey; lough sewdy	01/08/2023	10:15	Sparrowhawk	4	improved agricultural grassland and hedgerows; flying over, family, flying in and out of roost	FLM
SH006	Waterbird Distribution Survey; ballinderry	23/08/2023	13:30	Sparrowhawk	1	raised bog and hedgerows; travelling	FLM
SH007	Waterbird Distribution Survey; lough sewdy	23/08/2023	14:15	Sparrowhawk	1	marsh and improved agricultural grassland; flying over, interacting with kestrel	FLM
SH008	Waterbird Distribution Survey; S1-Lough Sewdy	06/04/2023	08:32	Sparrowhawk	1	reed and large sedge swamps and wet willow-alder-ash woodland; flight over cattails	MS
SH009	Waterbird Distribution Survey; S1-Lough Sewdy	06/04/2023	09:00	Sparrowhawk	2	treelines and amenity grassland (improved); pair displays	MS
SH010	Waterbird Distribution Survey; Ardnacranny	05/01/2024	11:57	Sparrowhawk	1	improved agricultural grassland and mixed conifer woodland; flying low , within farmland and adjacent forestry	NM
SH011	Waterbird Distribution Survey; VP3 area	05/01/2024	14:15	Sparrowhawk	1	improved agricultural grassland and linear woodland/scrub; flushed	NM
SH012	Waterbird Distribution Survey; Unma More	30/01/2024	10:50	Sparrowhawk	1	treelines and improved agricultural grassland; flushed, flying	NM
SH013	Waterbird Distribution Survey; Ballynagrenia & Ballinderry bogs	21/02/2024	14:55	Sparrowhawk	1	improved agricultural grassland; travelling low	NM

Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
SH014	Vantage Point Survey; Ballynacorra	13/02/2024	12:24	Sparrowhawk	1	linear woodland/scrub and improved agricultural grassland; flushed, travelling low	NM
SH015	Waterbird Distribution Survey; Umma More	27/03/2024	11:42	Sparrowhawk	2	improved agricultural grassland and linear woodland/scrub; displaying, chasing	NM
SH016	Waterbird Distribution Survey; Lough Sewdy	22/04/2024	11:02	Sparrowhawk	1	dystrophic lakes and reed and large sedge swamps; hunting	FLM
SH017	Waterbird Distribution and Abundance Survey; G1	04/04/2024	10:42	Sparrowhawk	1	scrub, wet willow-alder-ash woodland and scattered tress and parkland; flying	MS
SH018	Waterbird Distribution Survey; Dungolman	28/05/2024	09:19	Sparrowhawk	1	improved agricultural grassland, highly modified/non-native woodland and linear woodland/scrub; flying, hunting	NM
SH019	Waterbird Distribution Survey; Ballynagrenia & Ballinderry bogs	28/05/2024	16:49	Sparrowhawk	1	bogs and scrub; hunting, flying low, chasing passerines	NM
SH020	Breeding Barn Owl Survey; Umma More (south RLB)	11/06/2024	20:56	Sparrowhawk	1	improved agricultural grassland and linear woodland/scrub; flushed, travelling low and rapidly	NM
SH021	Vantage Point Survey; South of walkover transect	19/10/2022	14:55	Sparrowhawk	1	#N/A	MW
SH022	Waterbird Distribution Survey; Umma Beg	25/09/2024	13:23	Sparrowhawk	1	improved agricultural grassland; flying, female	FLM
SH023	Vantage Point Survey; Sninnagorta	12/09/2024	12:57	Sparrowhawk	1	improved agricultural grassland and linear woodland/scrub; travelling	NM
SH024	Waterbird Distribution Survey; s1	08/10/2024	12:40	Sparrowhawk	1	lakes and ponds; travelling	FOD
SH025	Waterbird Distribution Survey; D1	25/11/2024	13:40	Sparrowhawk	1	improved agricultural grassland and depositing/lowland rivers; hunting	DM
SH026	Waterbird Distribution Survey; B4	27/03/2023	13:18	Sparrowhawk	1	treelines; flight, 10m	MS
SH027	Waterbird Distribution Survey; B3	21/12/2024	12:30	Sparrowhawk	1	cutover bog and mixed broadleaved/conifer woodland; hunting	DM
SH028	Waterbird Distribution Survey; D3	21/12/2024	13:00	Sparrowhawk	1	improved agricultural grassland and mixed broadleaved/conifer woodland; hunting, female	DM
SH029	Waterbird Distribution Survey; G1	11/01/2025	10:00	Sparrowhawk	1	cutover bog and mixed broadleaved/conifer woodland; hunting, female	DM
SH030	Waterbird Distribution Survey; G1	30/01/2025	10:00	Sparrowhawk	1	cutover bog and mixed broadleaved/conifer woodland; displaying, female	DM
SH031	Waterbird Distribution Survey; Ballinderry Bog	05/02/2025	12:20	Sparrowhawk	1	hedgerows and cutover bog; flushed	SD

Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
SH032	Waterbird Distribution Survey; G1	19/02/2025	11:40	Sparrowhawk	1	improved agricultural grassland; displaying	SD



- Map Legend
- EIAR Site Boundary
 - Proposed Turbine Layout
 - 500m Radius of Turbines
 - Flight Observation



Drawing Title	
Sparrowhawk Winter Walkover Survey Observations	
Project Title	
Umma More Renewable Energy Development	
Drawn By	Checked By
KS	PC
Project No.	Drawing No.
201050	Fig. 7-4a-53
Scale	Date
1:30,000	13.06.2025
<div>  <div> MKO Planning and Environmental Consultants Tuam Road, Galway Ireland, H91 VV84 +353 (0) 91 236111 email: info@mkofireland.ie Website: www.mkofireland.ie </div> </div>	

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- Map Legend
- EIA Site Boundary
 - Proposed Turbine Layout
 - 500m Radius of Turbines
 - Flight Observation



Drawing Title Sparrowhawk Breeding Walkover Survey Observations	
Project Title Umma More Renewable Energy Development	
Drawn By KS	Checked By PC
Project No. 201050	Drawing No. Fig. 7-4a-54
Scale 1:30,000	Date 13.06.2025
MKO Planning and Environmental Consultants Tuam Road, Galway Ireland, E91 VW84 +353 (0) 91 235611 email: info@mkoland.ie Website: www.mkoland.ie	

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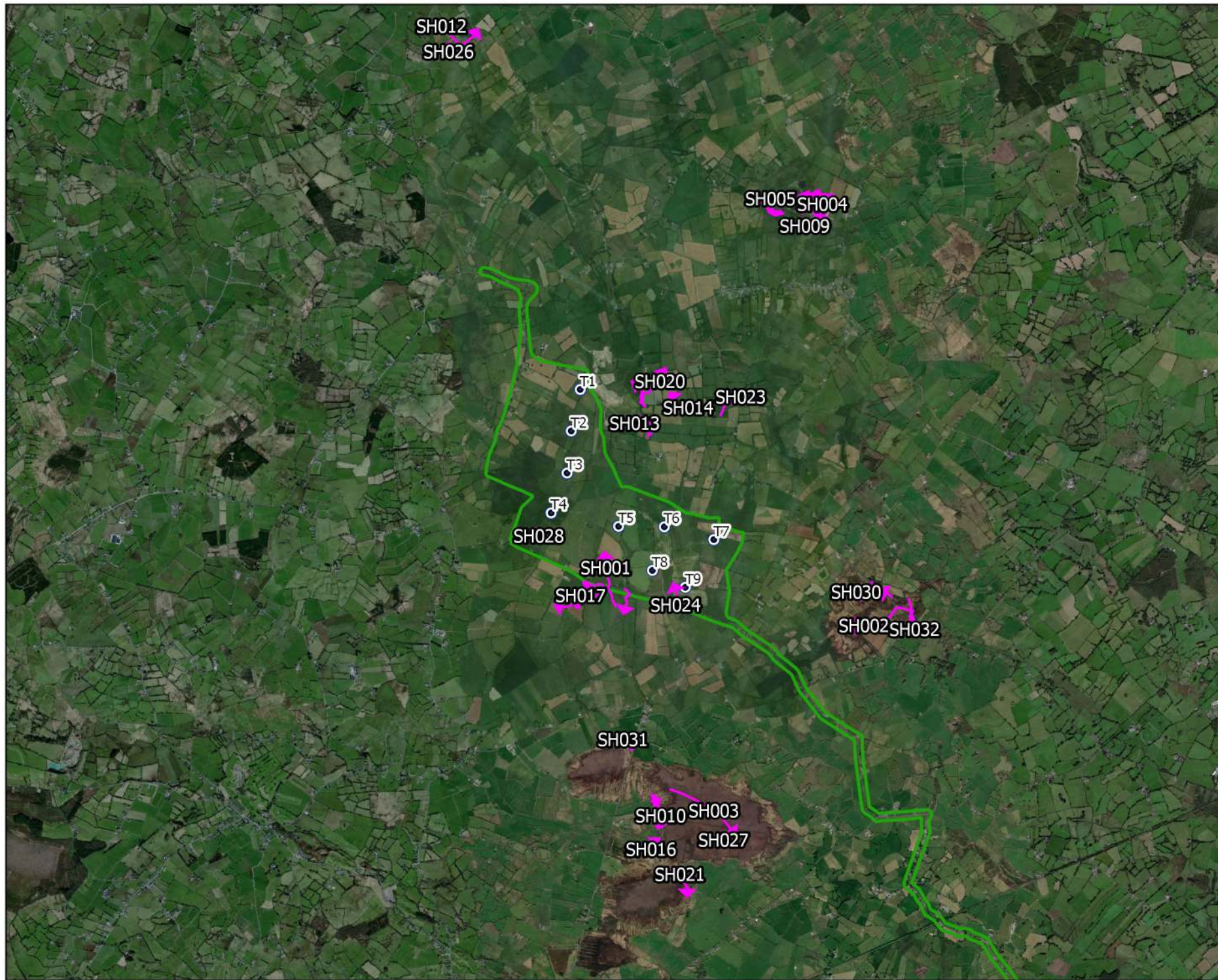


- Map Legend
- EIA Site Boundary
 - Proposed Turbine Layout
 - 2km Survey Radius
 - ▲ RVP Location
 - Flight Observation



Drawing Title	
Sparrowhawk Breeding Raptor Survey Observations	
Project Title	
Umma More Renewable Energy Development	
Drawn By	Checked By
KS	PC
Project No.	Drawing No.
201050	Fig. 7-4a-55
Scale	Date
1:50,000	13.06.2025
<div style="display: flex; align-items: center;"> <div> <p>MKO Planning and Environmental Consultants</p> <p>Tuam Road, Galway Ireland, H91 VWS4 +353 (0) 91 235111 email: info@mkofireland.ie Website: www.mkofireland.ie</p> </div> </div>	

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Map Legend

- EIAR Site Boundary
- Proposed Turbine Layout
- Flight Observation



Drawing Title

Sparrowhawk Incidental Records

Project Title

Umma More Renewable Energy Development

Drawn By

KS

Checked By

PC

Project No.

201050

Drawing No.

Fig. 7-4a-56

Scale

1:65,000

Date

13.06.2025



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15.

HEN HARRIER

Table 7 - 4a - 57 Hen Harrier Vantage Point Survey

Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0 -15m)	Band 2 (15-25m)	Band 3 (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
HH001	VP1	20/10/2022	13:42	Hen Harrier	1	440	15	45	320	60	improved agricultural grassland; soaring, circling. low first, then progressively higher, majority of estimated flight time behind viewshed, however start of observed flight coming from a position well within the viewshed.	MW



- Map Legend
- EIA Site Boundary
 - Proposed Turbine Layout
 - 500m Radius of Turbines
 - VP Locations
 - Flight Observation



Drawing Title
Hen Harrier Vantage Point Survey Observations

Project Title
Umma More Renewable Energy Development

Drawn By KS	Checked By PC
Project No. 201050	Drawing No. Fig. 7-4a-57
Scale 1:25,000	Date 13.06.2025

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16.

BARN OWL

Table 7 - 4a - 58 Barn Owl Incidental Records

Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
BO001	Vantage Point Survey; Toorevagh	11/01/2024	14:40	Barn Owl	1	improved agricultural grassland; flying	NM



- Map Legend
- EIAR Site Boundary
 - Proposed Turbine Layout
 - Flight Observation



Drawing Title	
Barn Owl Incidental Records	
Project Title	
Umma More Renewable Energy Development	
Drawn By	Checked By
KS	PC
Project No.	Drawing No.
201050	Fig. 7-4a-58
Scale	Date
1:65,000	13.06.2025
MKO Planning and Environmental Consultants Tuam Road, Galway Ireland, E91 VW84 +353 (0) 91 235111 email: info@mkofireland.ie Website: www.mkofireland.ie	

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Date	Survey	Location	Duration (h)	Weather Conditions	Comments	Surveyor
26/07/2024	Breeding Barn Owl Survey	BOVP2	2:00 starting at 20:35	Visibility: good; Wind speed and direction: light breeze WSW; Cloud cover and height: 66-100% >500m; Rain: none; Frost: none; Snow: none	Overcast and mild. Wind dropped. Dusk survey. Sunset - 21:36	NM
31/07/2024	Breeding Barn Owl Survey	BOVP1 (BR8)	3:15 starting at 19:30	Visibility: good; Wind speed and direction: light breeze WSW; Cloud cover and height: 0-33% >500m; Rain: none; Frost: none; Snow: none	Clear and bright in evening. Dusk survey. Sunset - 21:30	NM