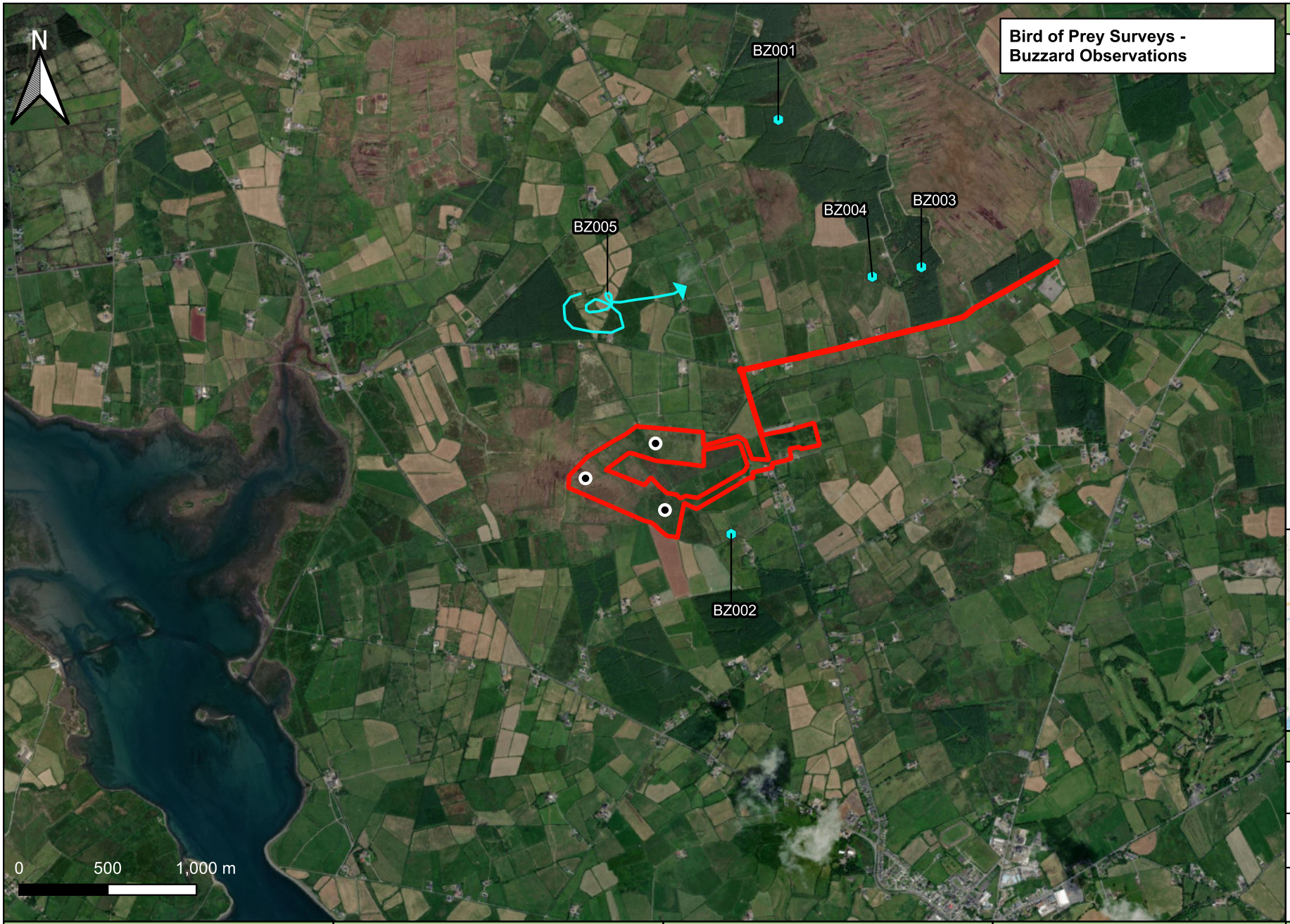
4 Bird of Prey Survey Data

Observations containing sensitive information relating to breeding sites have been omitted from this Appendix and are presented in a separate confidential appendix – Appendix 3 Confidential Data.

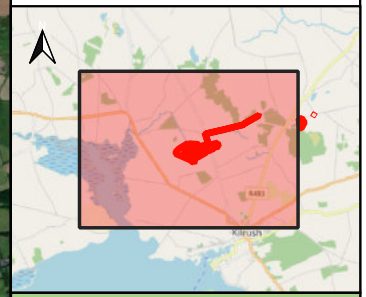
Table 4-1. Bird of Prey Survey Data.

Ref.	Date	Time	Transect	Species	Num.	Age	Sex	Actvity	Habitat	Notes
BZ001	09/07/2025	09:30	Moanmore	Buzzard	1			S		
BZ002	22/04/2025	07:10	Moanmore	Buzzard	1			S	1F	Soaring over plantation
BZ003	22/04/2025	10:00	Moanmore	Buzzard	1			S		South
BZ004	07/05/2025	11:08	Moanmore	Buzzard	1			F	1F	Flying east into plantation
BZ005	04/06/2025	10:17	Moanmore	Buzzard	1			H, F		Hunting, hovering then flew into plantation
HH001	22/04/2025	07:53	Moanmore	Hen Harrier	1	A	M	H		Hunting low 1-2m S/SE
HH002	22/04/2025	09:44	Moanmore	Hen Harrier	1	A	M	H		Hunting south
HH003	07/05/2025	08:57	Moanmore	Hen Harrier	1	A	M	H		Hunting across middle of site
HH004	07/05/2025	09:37	Moanmore	Hen Harrier	1	A	M	F		
HH006	07/05/2025	11:24	Moanmore	Hen Harrier	1	A	M	H		1m NW/W hunting
K.001	09/07/2025	09:15		Kestrel	1	A	M	F, H		
K.002	07/05/2025	10:00	Moyasta	Kestrel	1			F		
K.003	07/05/2025	11:24	Moanmore	Kestrel	1			H, S		
K.004	07/05/2025	10:49	Moanmore	Kestrel	1	A	M	H	B	Hovering 0-20m hunting bog
K.005	04/06/2025	07:56	Moanmore	Kestrel	1			A		
K.006	04/06/2025	08:32	Moanmore	Kestrel	1	A	M	H	B	Hunting low over bog
K.007	04/06/2025	10:46	Carrowncalla North	Kestrel	1	A	M	H		
PE001	04/06/2025	09:04	Einagh	Peregrine Falcon	1	A	M	F		
SH001	09/07/2025	13:50	Moanmore	Sparrowhawk	1	A	F	C, H	B	Circling, hunting over bog, harassed by swallows
SH002	07/01/2025	10:45	Moanmore	Sparrowhawk	1			H		North 15m height
SH003	07/05/2025	11:20	Moanmore	Sparrowhawk	1			S		Soaring 80m height
SH004	04/06/2025	11:12	Moanmore	Sparrowhawk	1	A	M	F		



Legend:

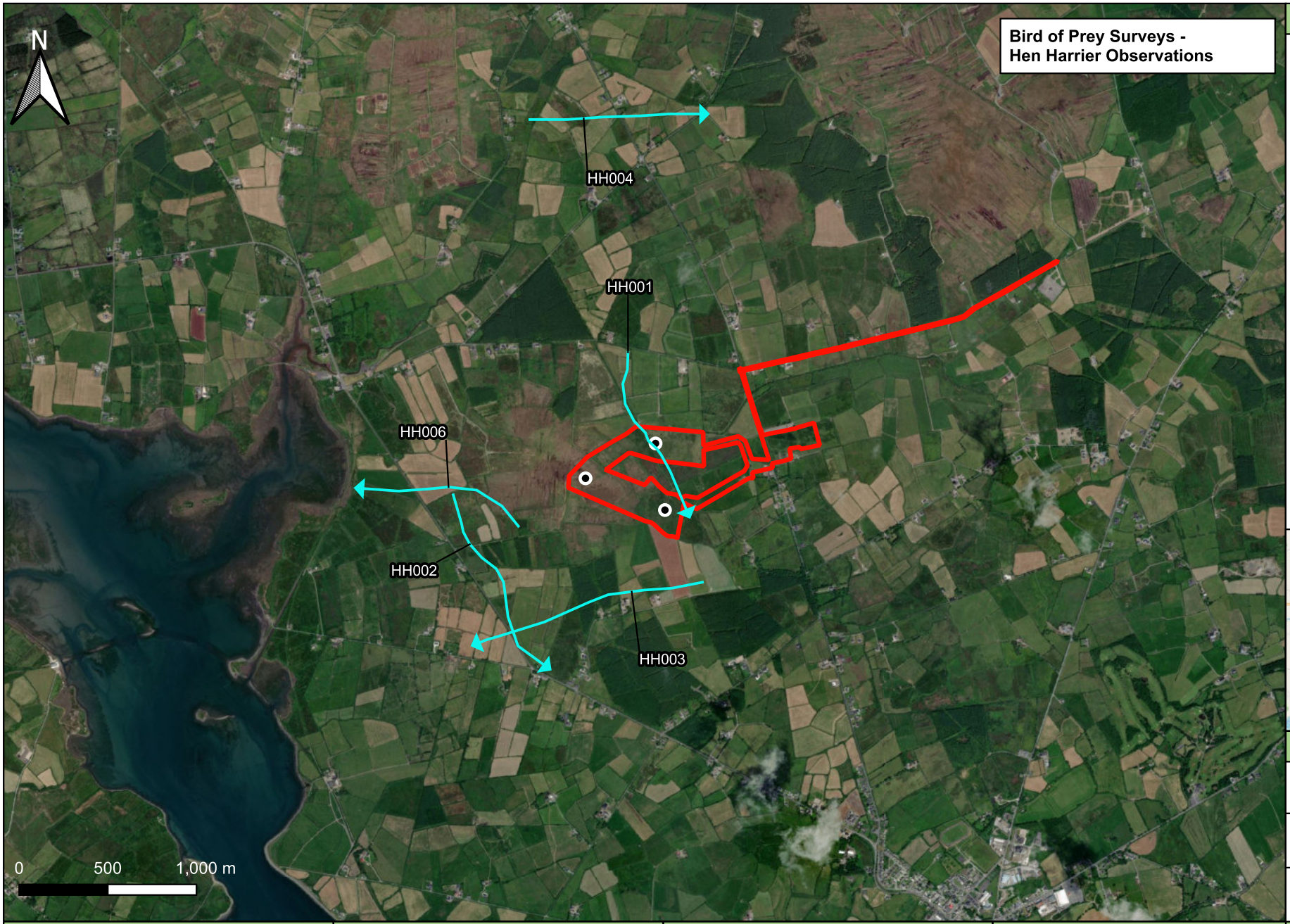
- Redline Boundary
- Turbine Locations
- Observation
- Observation



Details:

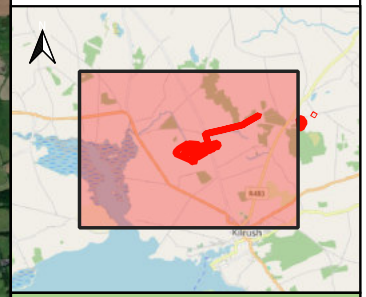
Drawn by: D. Woods	**Projection:** ITM
Checked by: J. Murphy	**Basemap:** Bing Aerial
Date: 11/11/2025	**Scale:** 1:15,000 @A4

Project Title:	Season:	Figure Title:	Produced By:	Notes:
Proposed Moanmore Wind Farm, Co. Clare Bird Activity Summary Report	Breeding Season 2025	**Appendix 2 - Survey Data** **Fig. 5-1. Bird of Prey Survey Buzzard Observations Map.**		Site boundaries are for demonstrative purposes and do not represent exact legal or planning boundaries.



Legend:

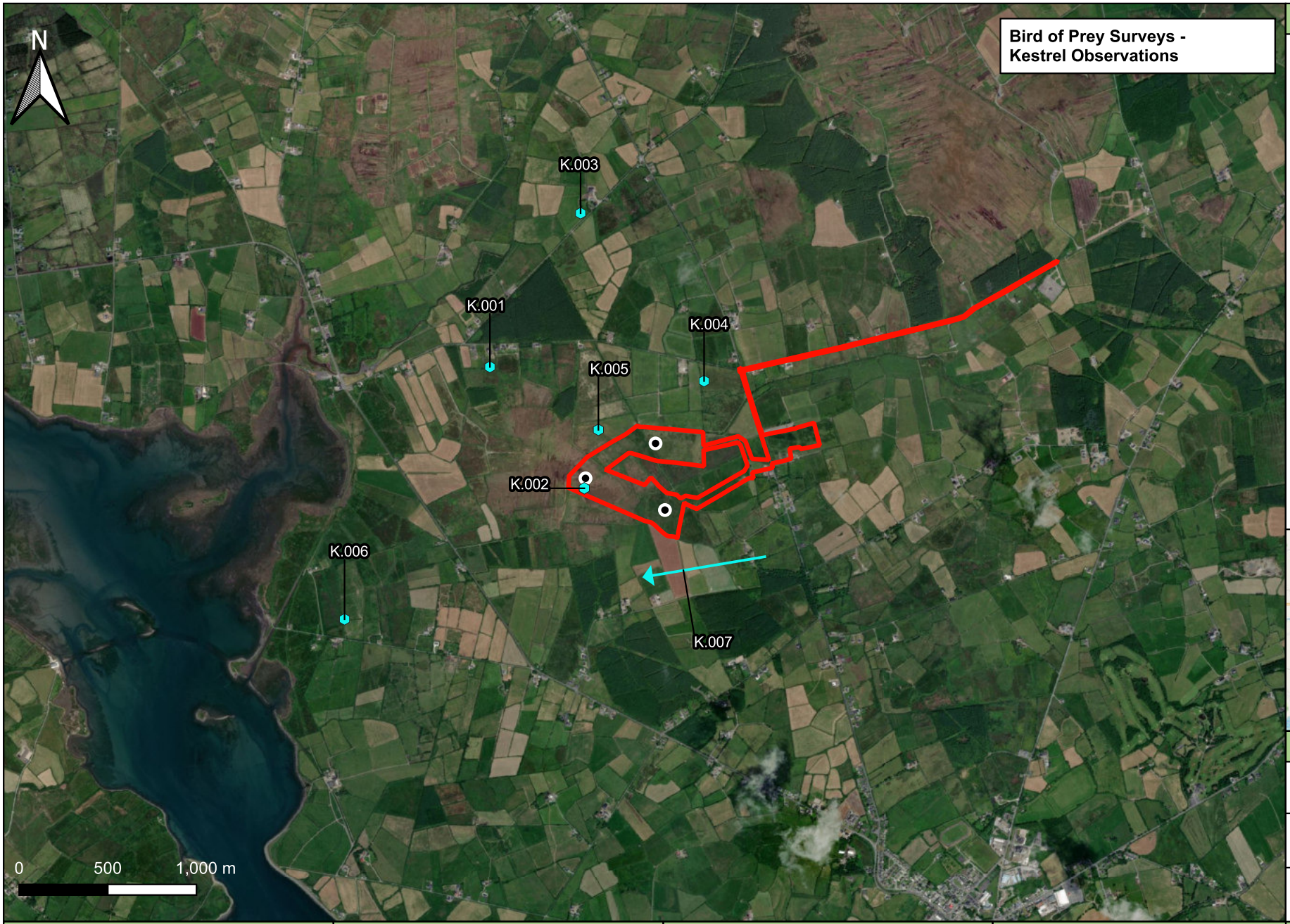
- Redline Boundary
- Turbine Locations
- Observation



Details:

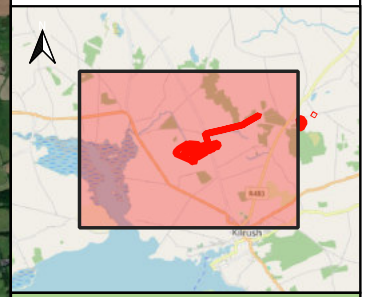
Drawn by: D. Woods	**Projection:** ITM
Checked by: J. Murphy	**Basemap:** Bing Aerial
Date: 11/11/2025	**Scale:** 1:15,000 @A4

Project Title:	Season:	Figure Title:	Produced By:	Notes:
Proposed Moanmore Wind Farm, Co. Clare Bird Activity Summary Report	Breeding Season 2025	**Appendix 2 - Survey Data** **Fig. 5-2. Bird of Prey Survey Hen Harrier Observations Map.**		Site boundaries are for demonstrative purposes and do not represent exact legal or planning boundaries.



Legend:

- Redline Boundary
- Turbine Locations
- Observation
- Observation



Details:

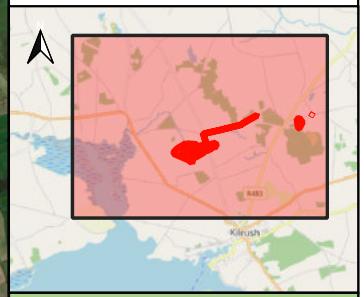
Drawn by: D. Woods	**Projection:** ITM
Checked by: J. Murphy	**Basemap:** Bing Aerial
Date: 11/11/2025	**Scale:** 1:15,000 @A4

Project Title:	Season:	Figure Title:	Produced By:	Notes:
Proposed Moanmore Wind Farm, Co. Clare Bird Activity Summary Report	Breeding Season 2025	**Appendix 2 - Survey Data** **Fig. 5-3. Bird of Prey Survey Kestrel Observations Map.**		Site boundaries are for demonstrative purposes and do not represent exact legal or planning boundaries.



Legend:

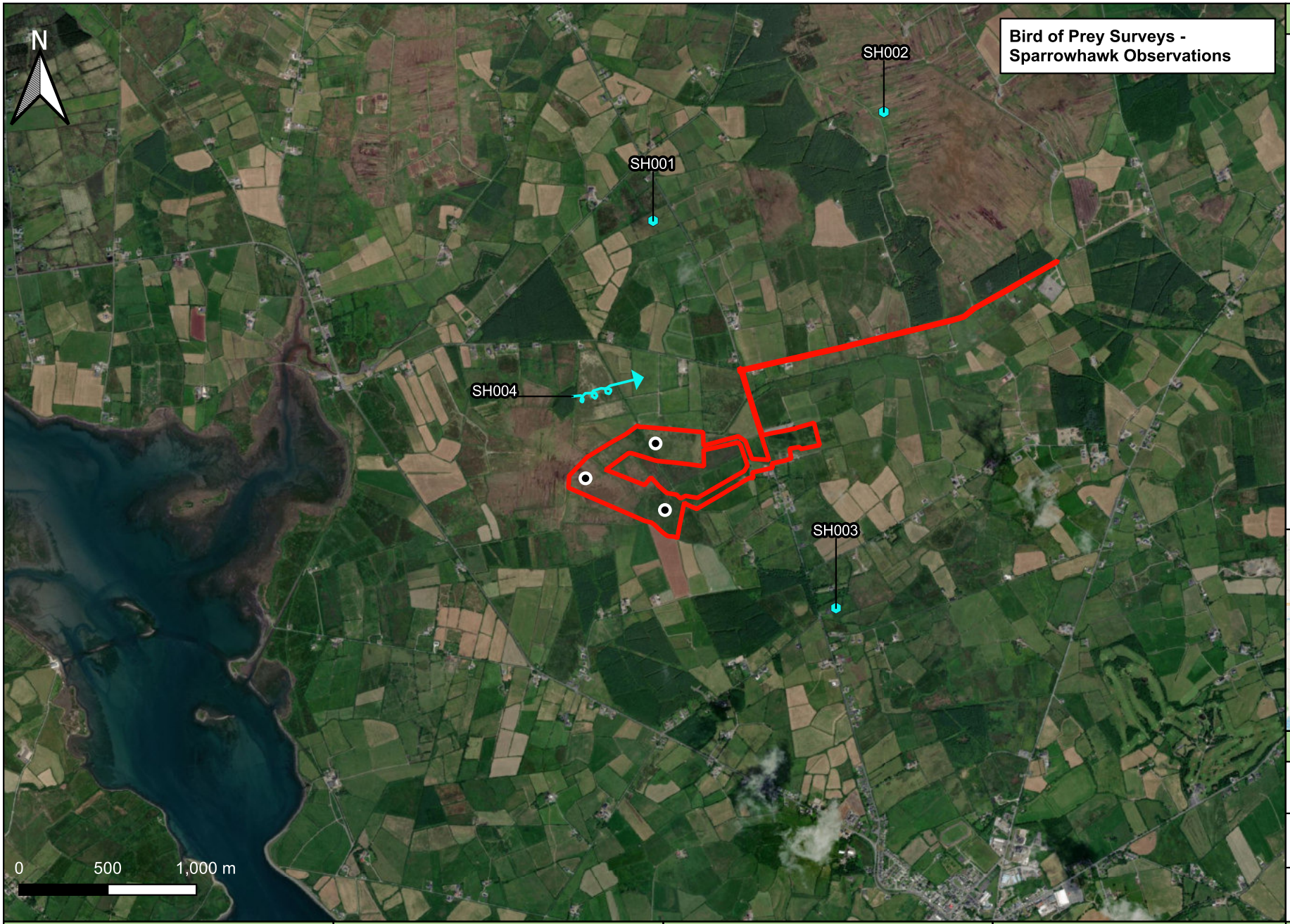
- Redline Boundary
- Turbine Locations
- Observation



Details:

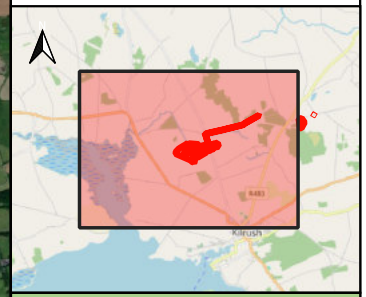
Drawn by: D. Woods	**Projection:** ITM
Checked by: J. Murphy	**Basemap:** Bing Aerial
Date: 11/11/2025	**Scale:** 1:15,000 @A4

Project Title:	Season:	Figure Title:	Produced By:	Notes:
Proposed Moanmore Wind Farm, Co. Clare Bird Activity Summary Report	Breeding Season 2025	**Appendix 2 - Survey Data** **Fig. 5-4. Bird of Prey Survey Peregrine Observations Map.**		Site boundaries are for demonstrative purposes and do not represent exact legal or planning boundaries.



Legend:

- Redline Boundary
- Turbine Locations
- Observation
- Observation



Details:

Drawn by: D. Woods	**Projection:** ITM
Checked by: J. Murphy	**Basemap:** Bing Aerial
Date: 11/11/2025	**Scale:** 1:15,000 @A4

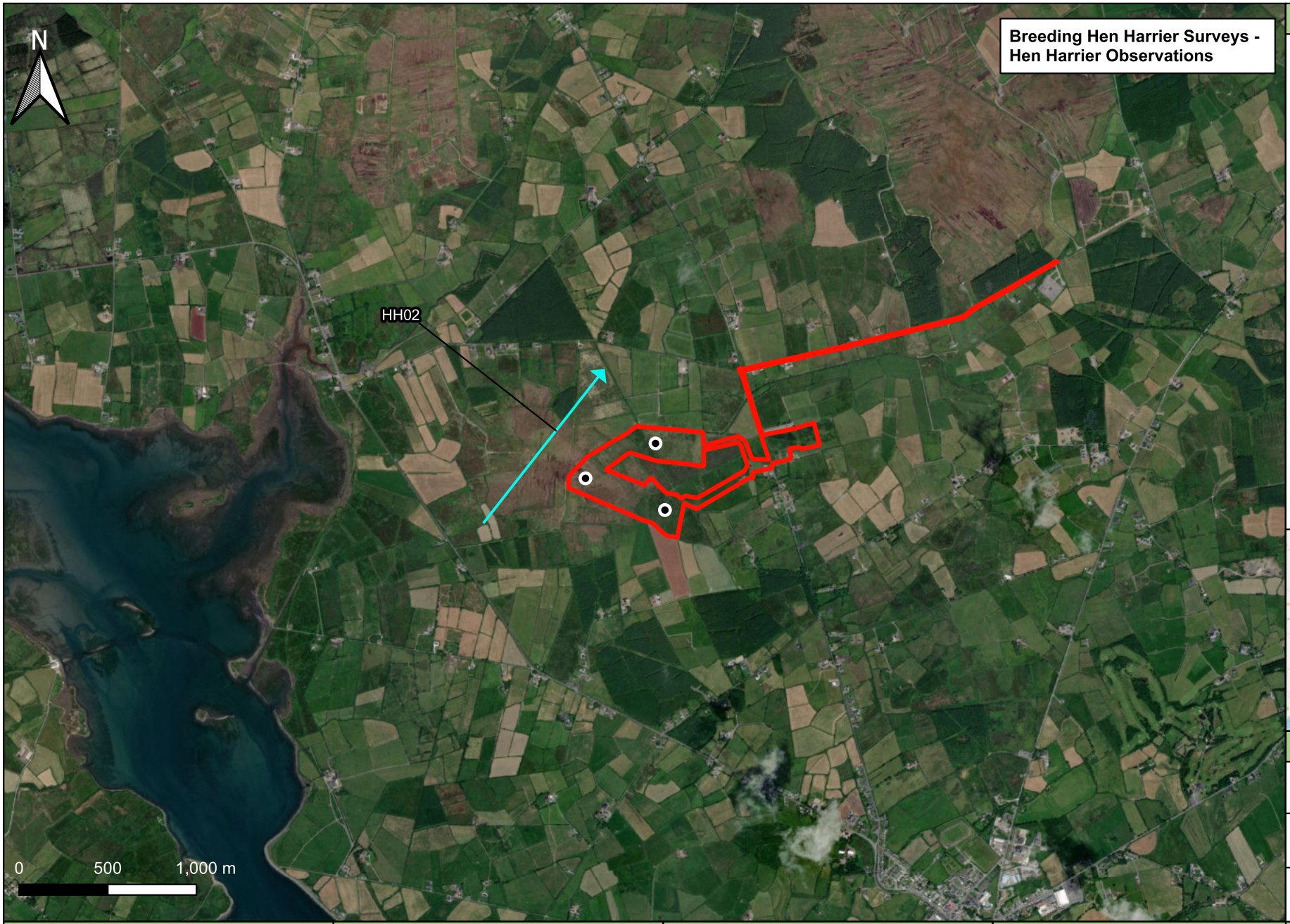
Project Title:	Season:	Figure Title:	Produced By:	Notes:
Proposed Moanmore Wind Farm, Co. Clare Bird Activity Summary Report	Breeding Season 2025	**Appendix 2 - Survey Data** **Fig. 5-5. Bird of Prey Survey Sparrowhawk Observations Map.**		Site boundaries are for demonstrative purposes and do not represent exact legal or planning boundaries.

5 BREEDING HEN HARRIER SURVEY DATA

Observations containing sensitive information relating to breeding sites have been omitted from this Appendix and are presented in a separate confidential appendix – Appendix 3 Confidential Data.

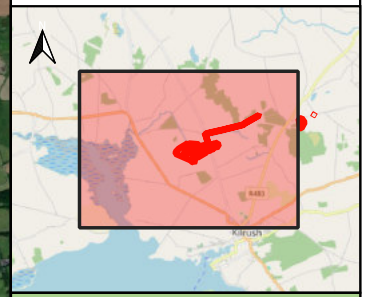
Table 5-1. Breeding Hen Harrier Survey Data.

Ref.	Date	Time	Location	Species	Number	Age	Sex	Activity	Habitat	Notes
HH001	18/06/2025	15:23	Moanmore	Hen Harrier	1	A	M	H, F	B	Hunting from S-N on the north side of the bog near the site of Moanmore. This male was hunting about 1-2m off the ground and eventually landed near a pile of soil mounds on the road that runs into the bog near Moanmore Lower. Not Mapped.
HH002	14/05/2025	10:10	Moanmore	Hen Harrier	1	A	M	F, H	B	Flew east over bog from Moyasta Rd heading into the site hunting low over the bog off to the NE of main site for 1-2 mins.



Legend:

- Redline Boundary
- Turbine Locations
- Observation



Details:

Drawn by: D. Woods	**Projection:** ITM
Checked by: J. Murphy	**Basemap:** Bing Aerial
Date: 11/11/2025	**Scale:** 1:15,000 @A4

Project Title:	Season:	Figure Title:	Produced By:	Notes:
Proposed Moanmore Wind Farm, Co. Clare Bird Activity Summary Report	Breeding Season 2025	**Appendix 2 - Survey Data** **Fig. 6-1. Breeding Hen Harrier Survey Observations Map.**		Site boundaries are for demonstrative purposes and do not represent exact legal or planning boundaries.

6 BREEDING PEREGRINE SURVEY DATA

Observations containing sensitive information relating to breeding sites have been omitted from this Appendix and are presented in a separate confidential appendix – Appendix 3 Confidential Data.

7 SHOREBIRD COUNT SURVEY DATA

Table 7-1. Shorebird Count Survey Data – Kilrush to Knock.

Species	02/04/2025				01/05/2025				13/05/2025				01/06/2025				08/08/2025				04/09/2025			
	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
Bar-tailed Godwit																						1		
Black-headed Gull	1							82									9	6	20	265	10	11	26	110
Black-tailed Godwit																38								
Brent Goose		2																						
Common Gull					4			2									5	7		4	14	5	11	
Cormorant	1		2				1	1	1		2		4		3	2	1	1		6	2			14
Curlew				4	1												34			75	6	7	8	22
Dunlin												64												
Great Black-backed Gull				3			1						1			1						2	3	2
Great-crested Grebe				2																12				6
Great Northern Diver		2			1	1																		
Greenshank																	4				1			
Grey Heron				1				3	1				2							7	4	1	1	2
Herring Gull	7			4	6		2	6				2	4	1		4	24		5	17	27	12	7	15
Lapwing																						3		
Lesser Black-backed Gull	1		2				1							1	1			4					4	
Little Egret					1		1		1	1	1				11				1	2			2	2
Mallard			8		4		4	4	10	2	6		14		9	28			5	57	4		17	
Mediterranean Gull																							5	2
Oystercatcher									2								8	2			12	2		
Redshank	1																20		35		8		5	51
Red-throated Diver	1																							
Ringed Plover														1										
Shag		1											1				1				2	1		
Shelduck					2		2	22	2		2	2				6				2				
Teal			30	60																	2			
Whimbrel					40	5	8	30	8	16	7	25												
Wigeon			5																					
American Golden Plover																						1		

Table 7-2. Shorebird Count Survey Data – Poulnasherry Bay.

Species	24/04/2025			26/05/2025			25/08/2025			23/09/2025		
	PC1	PC2	PC3	PC1	PC2	PC3	PC1	PC2	PC3	PC1	PC2	PC3
Bar-tailed Godwit						5			9	1		
Black-headed Gull			15				18	34	62	16		92
Black-tailed Godwit							1					
Brent Goose	33	8	28			2						
Common Gull			10		1			5	26	15		5
Cormorant			1	1	1	3	1	1	3	2		8
Curlew	4	3	5	4		1	46	35	133	30		102
Dunlin									74			30
Great Black-backed Gull	1		1				1		2	2		1
Great-crested Grebe			2							5		1
Great Northern Diver		1	1									
Green Sandpiper							2		1			
Greenshank							8		4			4
Grey Heron	1	2	3		1	2		4	2	3		1
Herring Gull	3	6	12	4	9	20	2	8	8	5		32
Knot									6	18		2
Lapwing							12					
Lesser Black-backed Gull	1					1						
Little Egret	4	5	6	2	3	3	6	5	9	18		15
Mallard	8	2	5	9		4	32	2	57	2		4
Mediterranean Gull									1			
Oystercatcher		8	4		3	2	8	6	24	10		5
Red-breasted Merganser		1										
Redshank							22	22	93	32		25
Ringed Plover							2		137			22
Ruff							2					
Sandwich Tern									1			
Shelduck	2	3	19			4						
Snipe							1			2		
Teal							18		34			2
Turnstone						2						24
Whimbrel	2	22	61	4		4						
Wigeon							1					

Table 7-3. Shorebird Count Survey Data – Doonbeg Bay.

Species	03/04/2025	02/05/2025	11/05/2025	27/05/2025	07/08/2025	03/09/2025
Black-headed Gull					18	8
Black-tailed Godwit						17
Bar-tailed Godwit	1					4
Common Gull	4		6	2	12	12
Cormorant		1	1	1	6	6
Curlew	2			1	12	17
Dunlin		4	4			15
Great Black-Backed Gull			1	2	2	
Great Northern Diver	1	1	2			
Grey Heron			2	1	1	2
Greenshank	1				2	
Herring Gull	23	10	32	74	22	36
Knot						5
Lapwing					3	
Lesser Black-Backed Gull	2	2	4	7	2	4
Little Egret	1	3	3	2	2	1
Little Grebe						
Mallard	15	4	34	47	16	10
Mute Swan	2		2		3	3
Oystercatcher	14	10	14	26	8	5
Redshank	3				15	12
Ringed Plover	8	14	6			70
Sandwich Tern		2	5	2		5
Shag	2		2	1	2	
Snipe					3	3
Shelduck	2	4				
Teal	26					1
Arctic Tern						4
Turnstone						6
Whimbrel		62	80	3		5

8 INCIDENTAL RECORDS

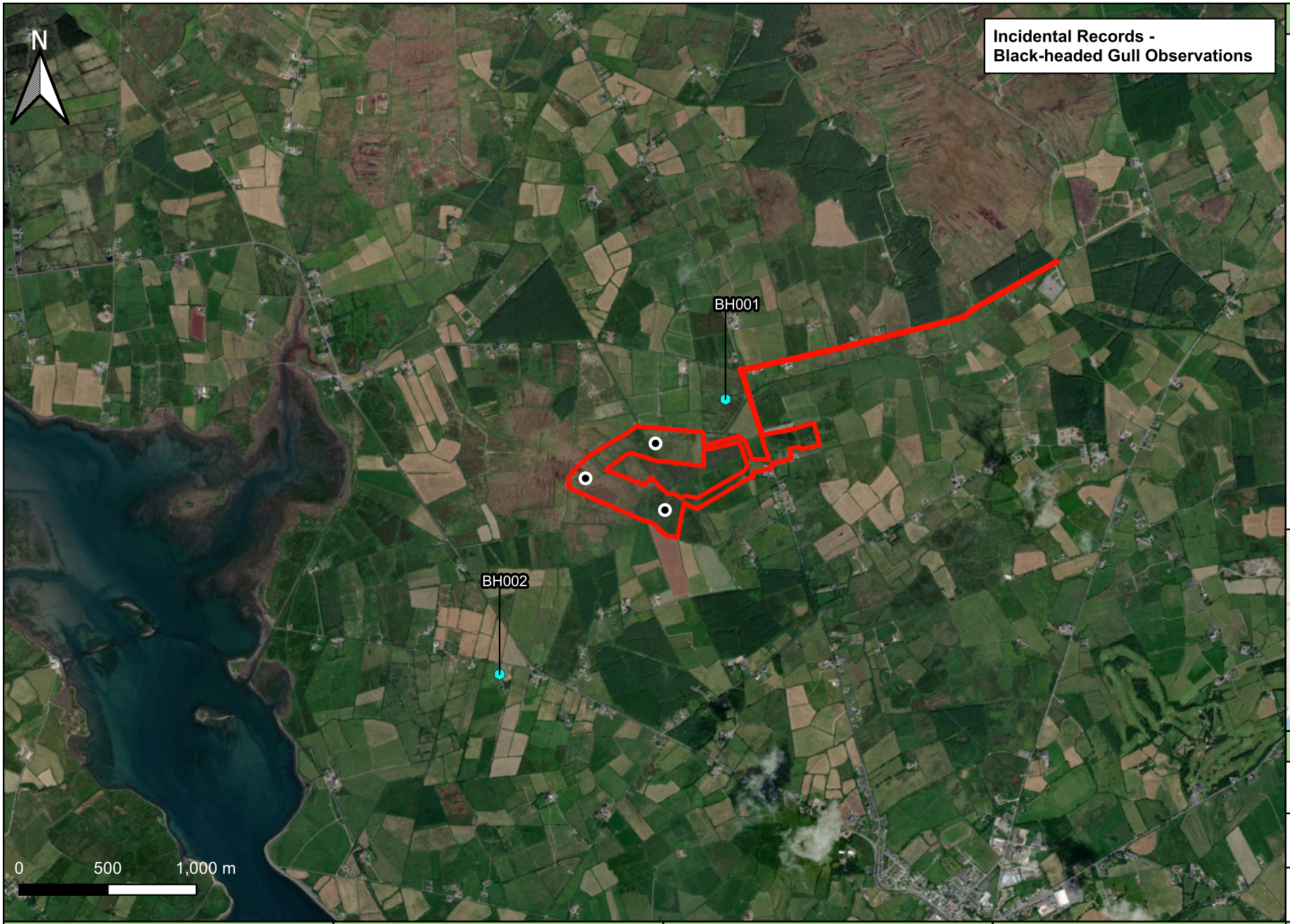
Observations containing sensitive information relating to breeding sites have been omitted from this Appendix and are presented in a separate confidential appendix – Appendix 3 Confidential Data.

Table 8-1. Incidental Record Data.

Ref.	Date	Time	Survey	Species	Num.	Age	Sex	Activity	Habitat	Notes
BH001	22/04/2025	07:31	Bird of Prey Survey	Black-headed Gull	2			F		Travelling south
BH002	04/06/2025	11:00	Bird of Prey Survey	Black-headed Gull	1			F		
BZ001	04/04/2025	11:00	Breeding Hen Harrier Survey	Buzzard	1			F	B	
BZ002	06/06/2025	08:10	Breeding Wader Survey	Buzzard	1	A		H		
BZ003	18/06/2025	12:46	Breeding Hen Harrier Survey	Buzzard	1			H		In a field near Moyasta chasing pheasant chicks on a freshly cut over field.
CM001	04/06/2025	10:32	Bird of Prey Survey	Common Gull	1			F		
CA001	22/04/2025	06:15	Bird of Prey Survey	Cormorant	1			-		
CA002	22/04/2025	07:21	Bird of Prey Survey	Cormorant	1			F		Travelling east
CA003	04/06/2025	09:16	Bird of Prey Survey	Cormorant	1			F		
H.001	22/04/2025	06:15	Bird of Prey Survey	Grey Heron	1			-		
H.002	22/04/2025	10:10	Bird of Prey Survey	Grey Heron	1	A		F		North-west
H.003	06/06/2025	08:46	Breeding Wader Survey	Grey Heron	1	A		F		
HH001	24/04/2025	08:30	Shore Bird Survey	Hen Harrier	1	A/J	M/F	F		Ringtail
HG001	22/04/2025	09:15	Bird of Prey Survey	Herring Gull	1			F		SW
HG002	07/05/2025	06:49	Bird of Prey Survey	Herring Gull	1			F		South-east
HG003	07/05/2025	10:10	Bird of Prey Survey	Herring Gull	1			F		
HG004	04/06/2025	06:36	Bird of Prey Survey	Herring Gull	1			F		
HG005	04/06/2025	07:49	Bird of Prey Survey	Herring Gull	1			F		
HG006	04/06/2025	09:04	Bird of Prey Survey	Herring Gull	4			F		
HG007	04/06/2025	09:33	Bird of Prey Survey	Herring Gull	1			F		
HG008	04/06/2025	11:24	Bird of Prey Survey	Herring Gull	1			F		
HG009	06/06/2025	08:07	Breeding Wader	Herring Gull	1	A		F		

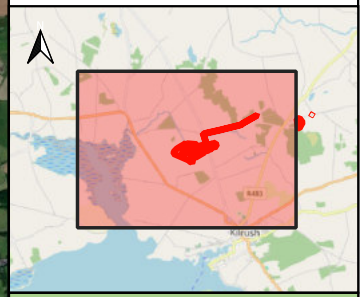
Ref.	Date	Time	Survey	Species	Num.	Age	Sex	Activity	Habitat	Notes
			Survey							
K.001	02/05/2025	20:18	Breeding Woodcock Survey	Kestrel	1	A	F	H	B	Hunting bog
K.002	02/05/2025	21:24	Breeding Woodcock Survey	Kestrel	1	A		F		Flying into plantation
K.003	06/06/2025	06:22	Breeding Wader Survey	Kestrel	1	A	M	H	B	
K.004	18/06/2025	12:52	Breeding Hen Harrier Survey	Kestrel	1			H		Hunting near Moyasta
K.005	18/06/2025	15:30	Breeding Hen Harrier Survey	Kestrel	1			H		Near Moanmore lake hunting
LB001	02/04/2025	20:20	Breeding Woodcock Survey	Lesser Black-backed Gull	2	A		F	B	
LB002	22/04/2025	07:53	Bird of Prey Survey	Lesser Black-backed Gull	1			F		Flying north
LB003	22/04/2025	08:09	Bird of Prey Survey	Lesser Black-backed Gull	3	A		F		South
LB004	22/04/2025	09:32	Bird of Prey Survey	Lesser Black-backed Gull	2			F		South
LB005	22/04/2025	09:37	Bird of Prey Survey	Lesser Black-backed Gull	3			F		South
LB006	07/05/2025	07:16	Bird of Prey Survey	Lesser Black-backed Gull	2			F		East
LB007	07/05/2025	09:21	Bird of Prey Survey	Lesser Black-backed Gull	1	A		F		
LB008	07/05/2025	11:32	Bird of Prey Survey	Lesser Black-backed Gull	1			F		
LB009	04/06/2025	07:02	Bird of Prey Survey	Lesser Black-backed Gull	1			F		
LB010	04/06/2025	07:25	Bird of Prey Survey	Lesser Black-backed Gull	1			F		
LB011	04/06/2025	10:10	Bird of Prey Survey	Lesser Black-backed Gull	1			F		
LB012	06/06/2025	07:42	Breeding Wader Survey	Lesser Black-backed Gull	1			F	B	
ET001	22/04/2025	09:01	Bird of Prey Survey	Little Egret	2			-		
ET002	04/06/2025	10:50	Bird of Prey Survey	Little Egret	1			F		
ET003	06/06/2025	08:40	Breeding Wader Survey	Little Egret	1	A		F		
MA001	22/04/2025	07:02	Bird of Prey Survey	Mallard	1	A	M	F		
MA002	22/04/2025	09:01	Bird of Prey Survey	Mallard	3			-		
MA003	07/05/2025	08:31	Bird of Prey Survey	Mallard	2			F		Flying north-west
ML001	02/04/2025	19:57	Breeding Woodcock Survey	Merlin	1	A	F	H		Flew across bog low
ML002	02/04/2025	20:18	Breeding Woodcock Survey	Merlin	1	A	F	H	B	Same bird flew west

Ref.	Date	Time	Survey	Species	Num.	Age	Sex	Activity	Habitat	Notes
SN001	02/04/2025	20:44	Breeding Woodcock Survey	Snipe	1			F	B	
SN002	04/06/2025	09:10	Bird of Prey Survey	Snipe	1			D		Chipping display, no visual
SH001	04/06/2025	20:51	Breeding Woodcock Survey	Sparrowhawk	1	A	F	F	B, 1F	Flew north with prey
SH002	02/04/2025	20:25	Breeding Woodcock Survey	Sparrowhawk	1	A	F	H		North-east into plantation
WM001	07/05/2025	08:17	Bird of Prey Survey	Whimbrel	8			G		Feeding in field
WM002	22/04/2025	09:01	Bird of Prey Survey	Whimbrel	1			-		
WM003	02/05/2025	21:12	Breeding Woodcock Survey	Whimbrel	24	A		F		
WM004	02/05/2025	21:51	Breeding Woodcock Survey	Whimbrel	2			F		
WM005	07/05/2025	10:22	Bird of Prey Survey	Whimbrel	2			F		



Legend:

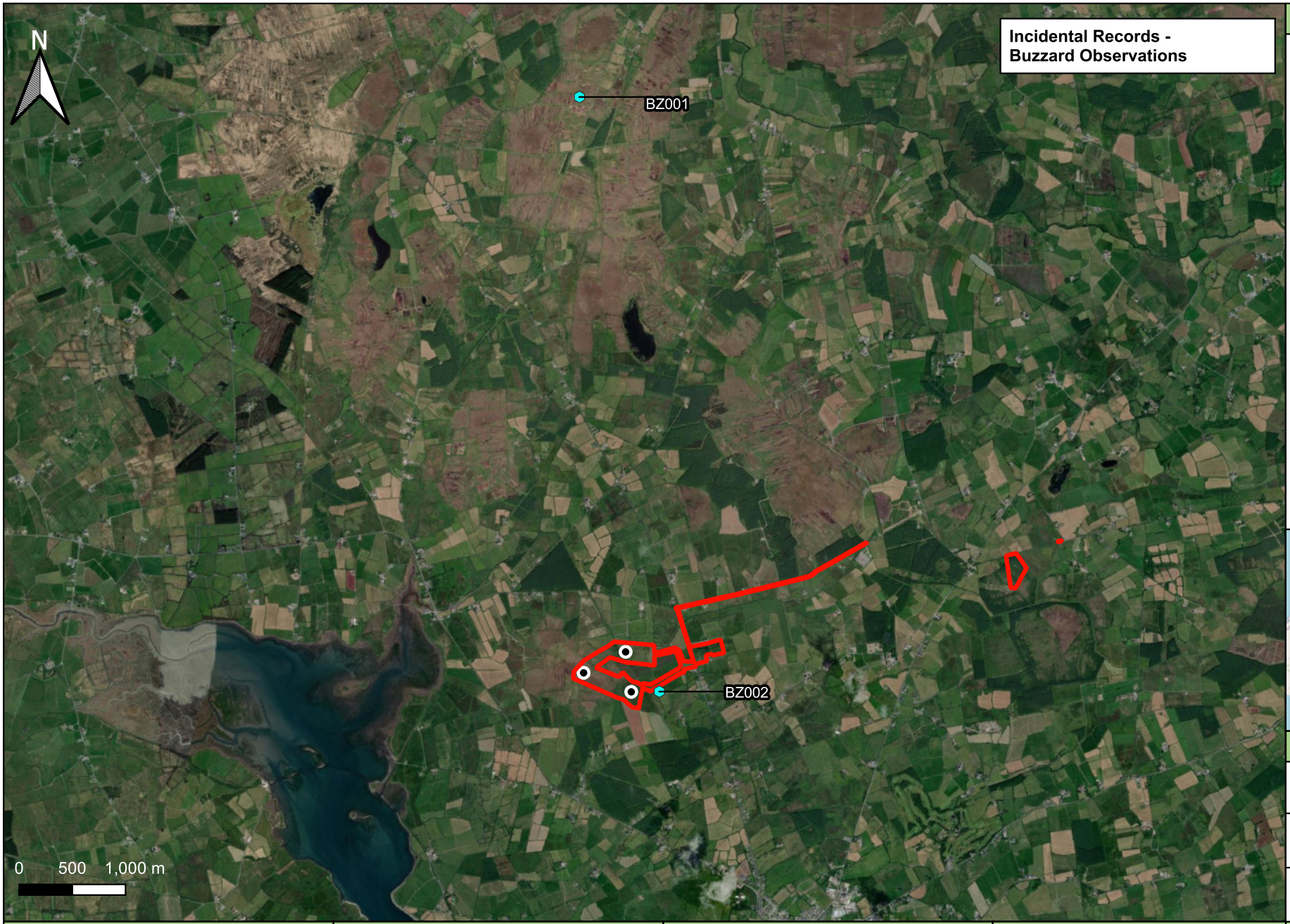
- Redline Boundary
- Turbine Locations
- Observation



Details:

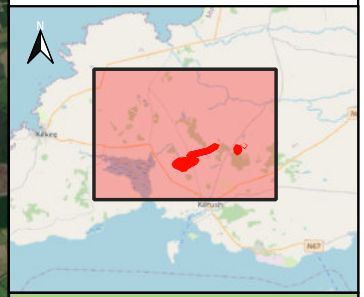
Drawn by: D. Woods	**Projection:** ITM
Checked by: J. Murphy	**Basemap:** Bing Aerial
Date: 11/11/2025	**Scale:** 1:15,000 @A4

Project Title:	Season:	Figure Title:	Produced By:	Notes:
Proposed Moanmore Wind Farm, Co. Clare Bird Activity Summary Report	Breeding Season 2025	**Appendix 2 - Survey Data** **Fig. 9-1. Incidental Records Black-headed Gull Observations Map.**		Site boundaries are for demonstrative purposes and do not represent exact legal or planning boundaries.



Legend:

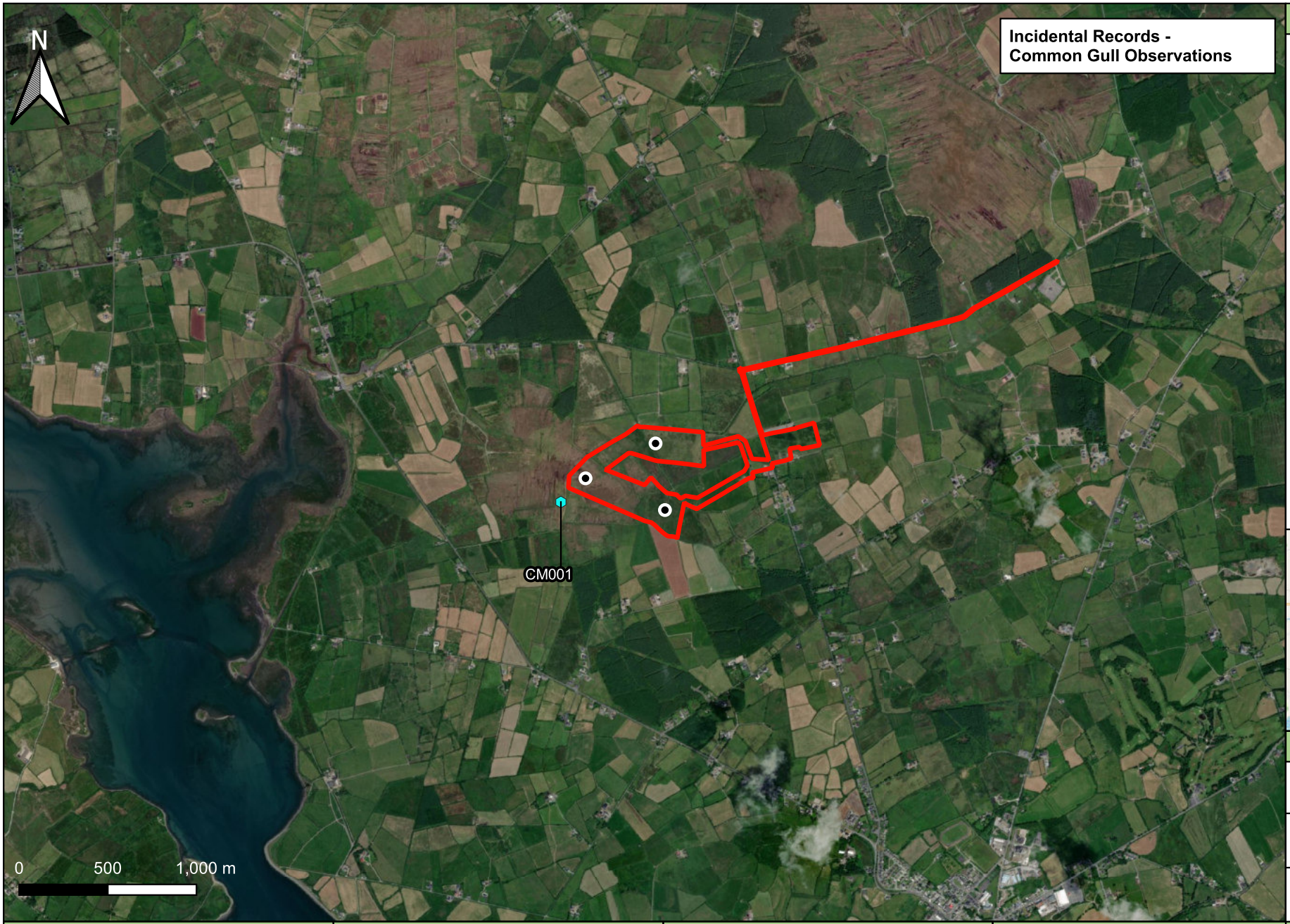
- Redline Boundary
- Turbine Locations
- Observation



Details:

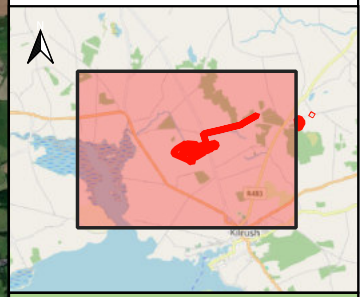
Drawn by: D. Woods	**Projection:** ITM
Checked by: J. Murphy	**Basemap:** Bing Aerial
Date: 11/11/2025	**Scale:** 1:15,000 @A4

Project Title:	Season:	Figure Title:	Produced By:	Notes:
Proposed Moanmore Wind Farm, Co. Clare Bird Activity Summary Report	Breeding Season 2025	**Appendix 2 - Survey Data** **Fig. 9-2. Incidental Records Buzzard Observations Map.**		Site boundaries are for demonstrative purposes and do not represent exact legal or planning boundaries.



Legend:

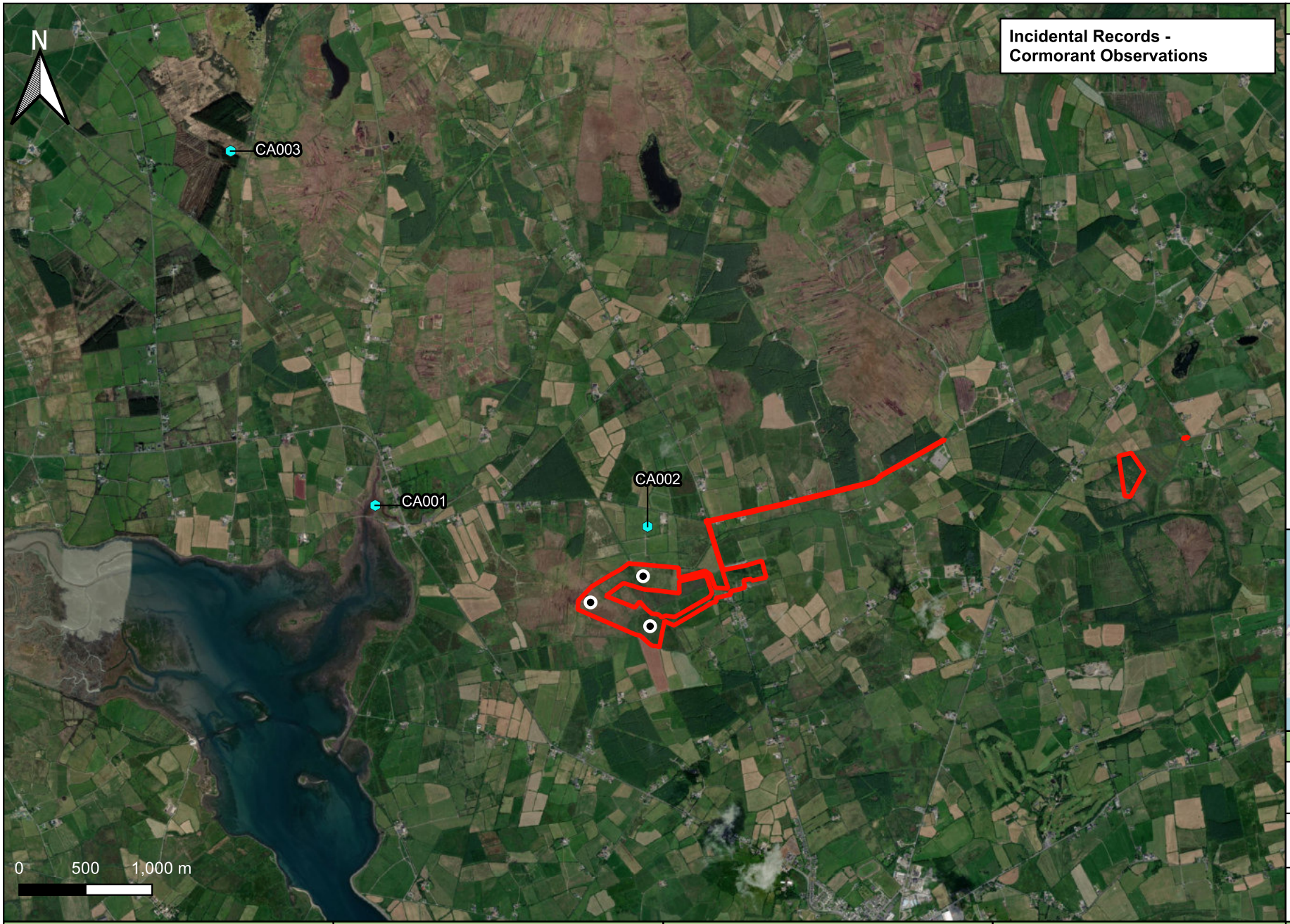
- Redline Boundary
- Turbine Locations
- Observation



Details:

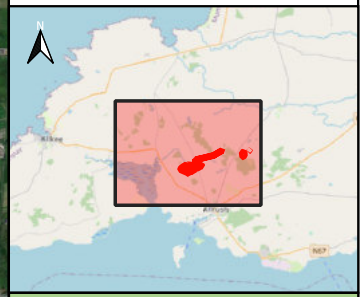
Drawn by: D. Woods	**Projection:** ITM
Checked by: J. Murphy	**Basemap:** Bing Aerial
Date: 11/11/2025	**Scale:** 1:15,000 @A4

Project Title:	Season:	Figure Title:	Produced By:	Notes:
Proposed Moanmore Wind Farm, Co. Clare Bird Activity Summary Report	Breeding Season 2025	**Appendix 2 - Survey Data** **Fig. 9-3. Incidental Records Common Gull Observations Map.**		Site boundaries are for demonstrative purposes and do not represent exact legal or planning boundaries.



Legend:

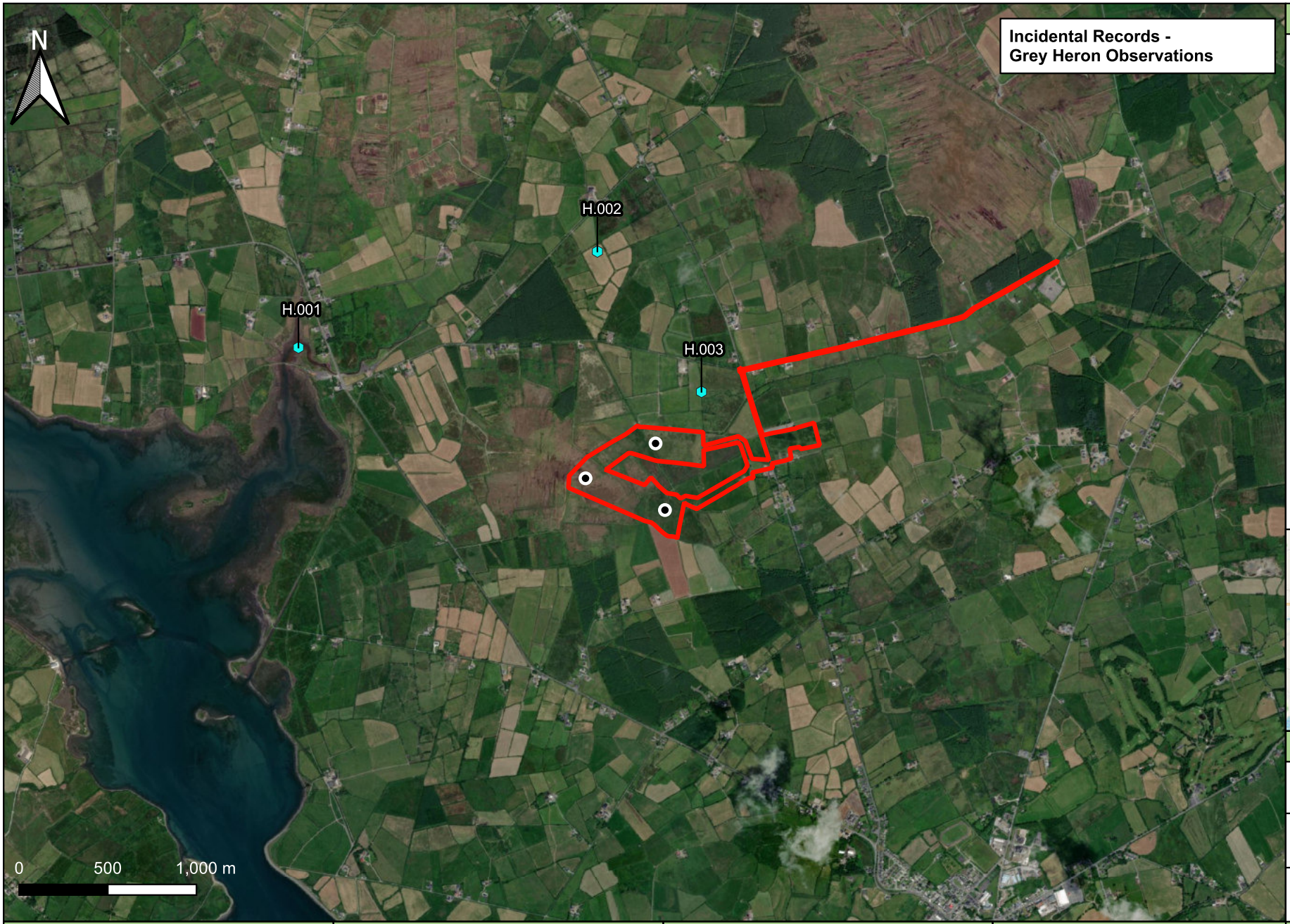
- Redline Boundary
- Turbine Locations
- Observation



Details:

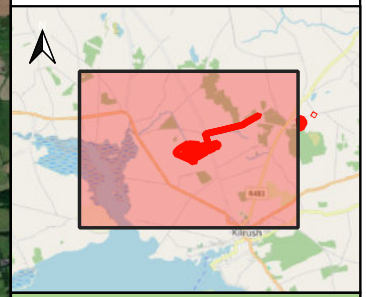
Drawn by: D. Woods	**Projection:** ITM
Checked by: J. Murphy	**Basemap:** Bing Aerial
Date: 11/11/2025	**Scale:** 1:15,000 @A4

Project Title:	Season:	Figure Title:	Produced By:	Notes:
Proposed Moanmore Wind Farm, Co. Clare Bird Activity Summary Report	Breeding Season 2025	**Appendix 2 - Survey Data** **Fig. 9-4. Incidental Records Cormorant Observations Map.**		Site boundaries are for demonstrative purposes and do not represent exact legal or planning boundaries.



Legend:

- Redline Boundary
- Turbine Locations
- Observation



Details:

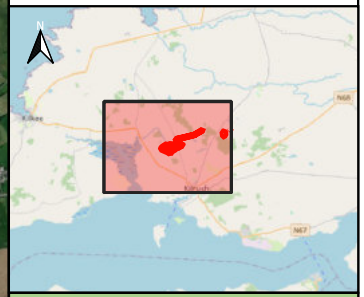
Drawn by: D. Woods	**Projection:** ITM
Checked by: J. Murphy	**Basemap:** Bing Aerial
Date: 11/11/2025	**Scale:** 1:15,000 @A4

Project Title:	Season:	Figure Title:	Produced By:	Notes:
Proposed Moanmore Wind Farm, Co. Clare Bird Activity Summary Report	Breeding Season 2025	**Appendix 2 - Survey Data** **Fig. 9-5. Incidental Records Grey Heron Observations Map.**		Site boundaries are for demonstrative purposes and do not represent exact legal or planning boundaries.



Legend:

- Redline Boundary
- Turbine Locations
- Observation



Details:

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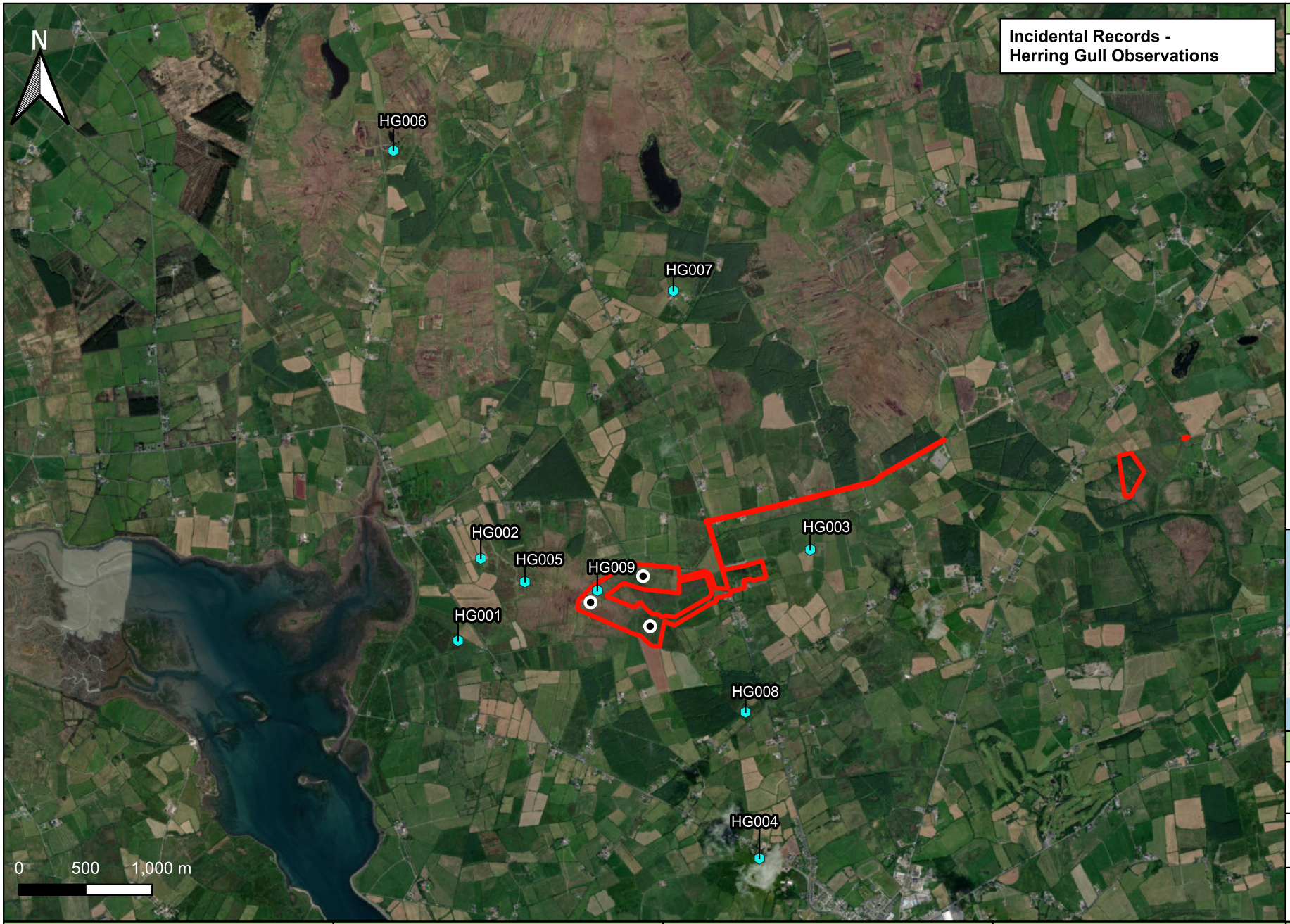
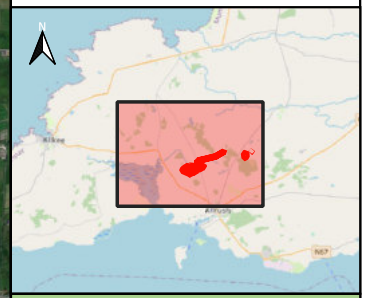
Checked by: J. Murphy	**Basemap:** Bing Aerial
Date: 11/11/2025	**Scale:** 1:15,000 @A4

Project Title:	Season:	Figure Title:	Produced By:	Notes:
Proposed Moanmore Wind Farm, Co. Clare Bird Activity Summary Report	Breeding Season 2025	**Appendix 2 - Survey Data** **Fig. 9-6. Incidental Records Hen Harrier Observations Map.**		Site boundaries are for demonstrative purposes and do not represent exact legal or planning boundaries.



Legend:

- Redline Boundary
- Turbine Locations
- Observation



Details:

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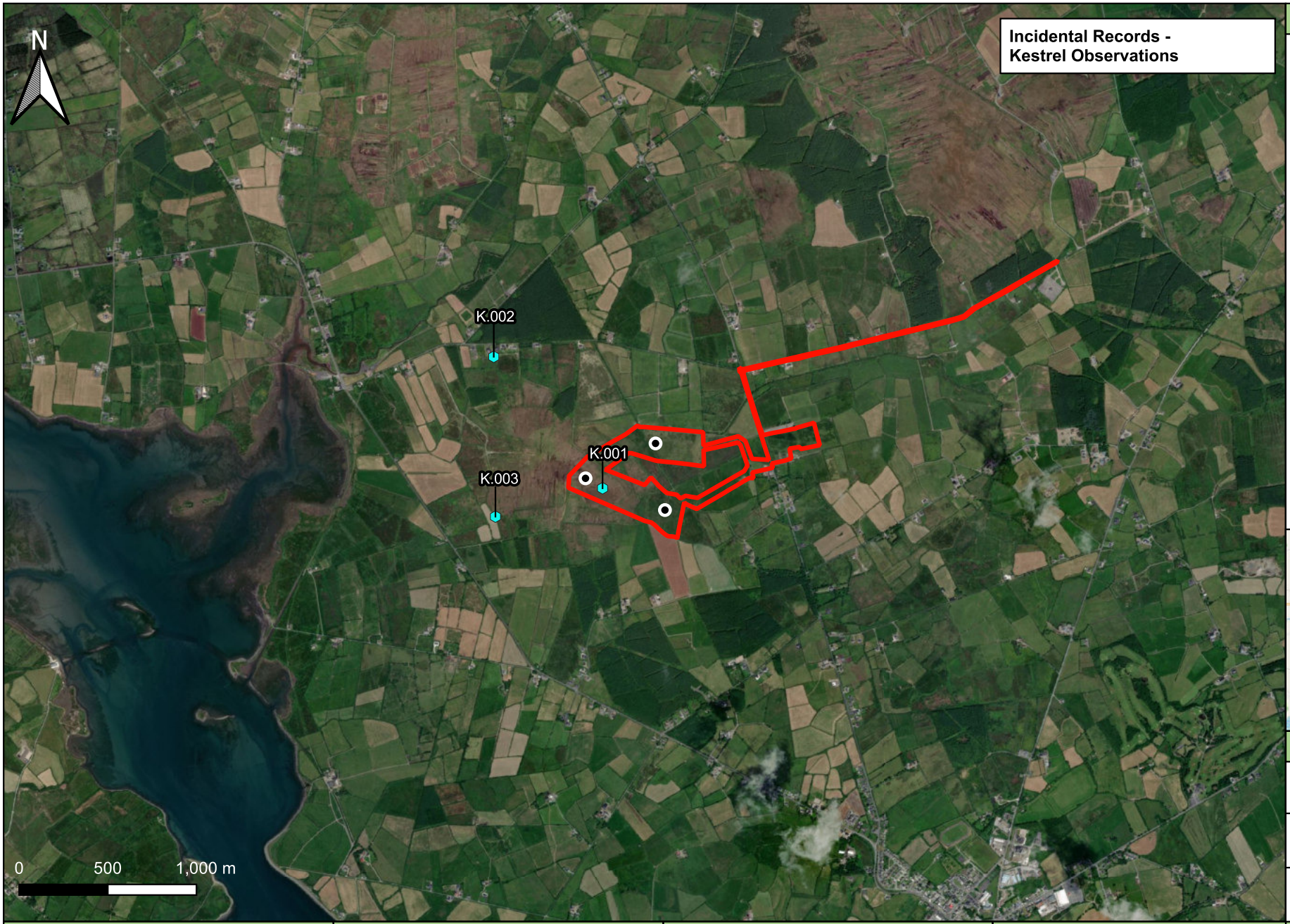
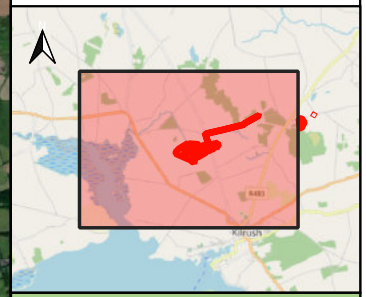
Checked by: J. Murphy	**Basemap:** Bing Aerial
Date: 11/11/2025	**Scale:** 1:15,000 @A4

Project Title:	Season:	Figure Title:	Produced By:	Notes:
Proposed Moanmore Wind Farm, Co. Clare Bird Activity Summary Report	Breeding Season 2025	**Appendix 2 - Survey Data** **Fig. 9-7. Incidental Records Herring Gull Observations Map.**		Site boundaries are for demonstrative purposes and do not represent exact legal or planning boundaries.



Legend:

- Redline Boundary
- Turbine Locations
- Observation



Details:

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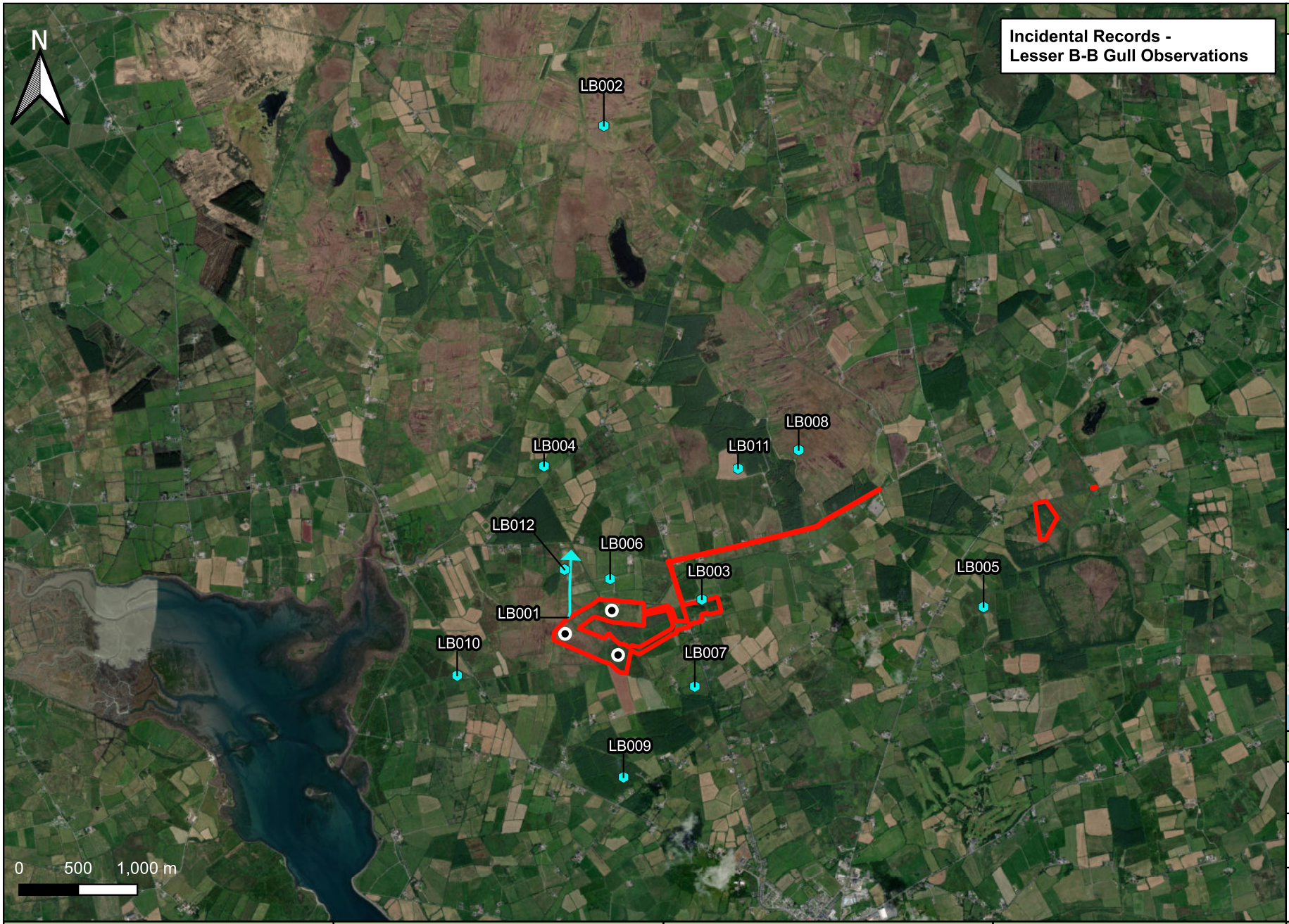
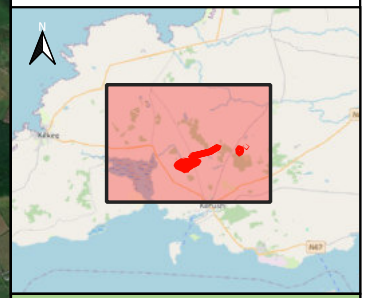
Checked by: J. Murphy	**Basemap:** Bing Aerial
Date: 11/11/2025	**Scale:** 1:15,000 @A4

Project Title:	Season:	Figure Title:	Produced By:	Notes:
Proposed Moanmore Wind Farm, Co. Clare Bird Activity Summary Report	Breeding Season 2025	**Appendix 2 - Survey Data** **Fig. 9-8. Incidental Records Kestrel bservations Map.**		Site boundaries are for demonstrative purposes and do not represent exact legal or planning boundaries.



Legend:

- Redline Boundary
- Turbine Locations
- Observation
- Observation



Details:

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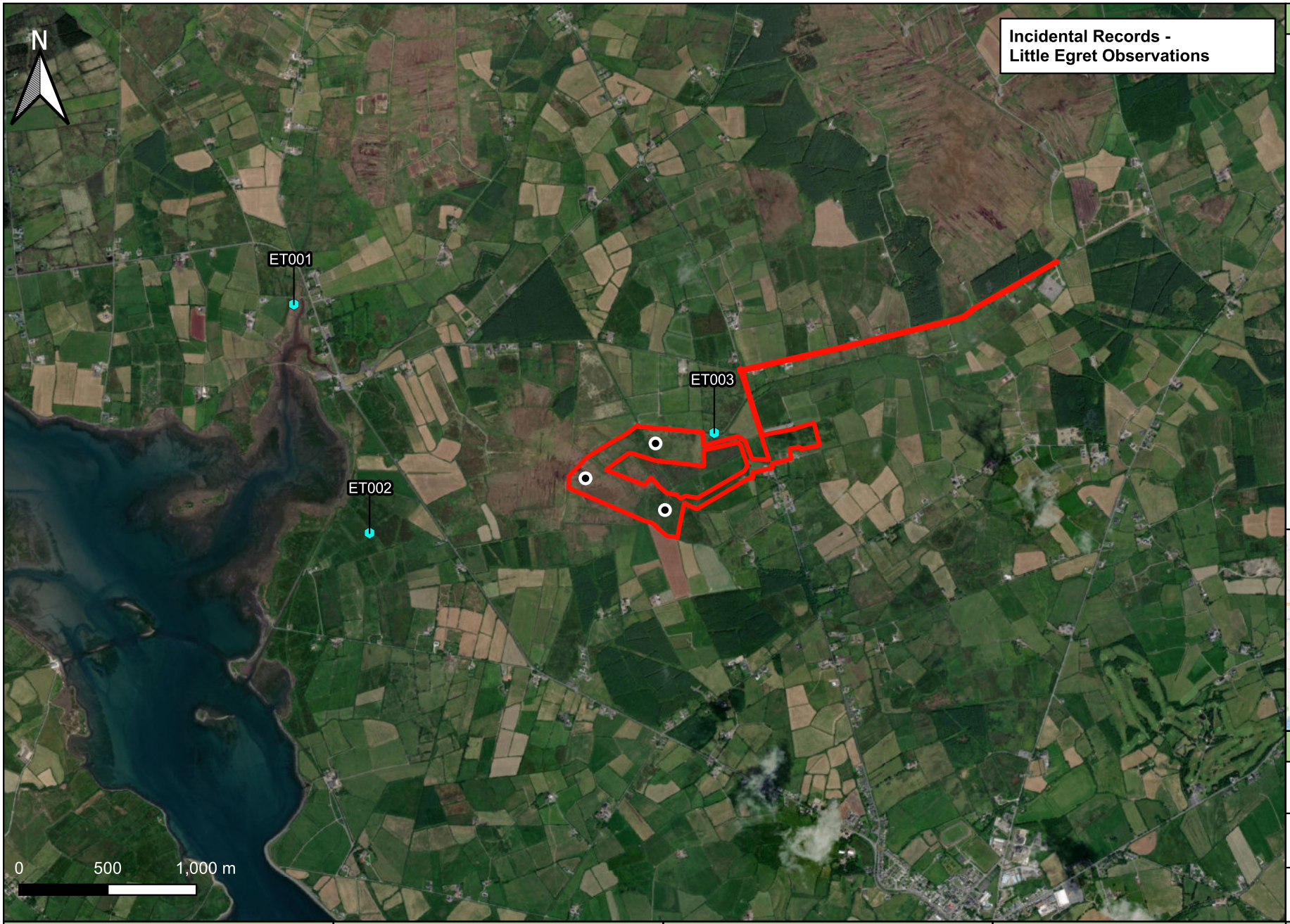
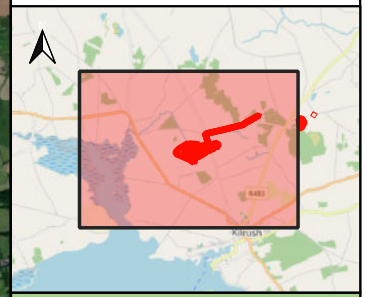
Date: 11/11/2025	**Scale:** 1:15,000 @A4

Project Title:	Season:	Figure Title:	Produced By:	Notes:
Proposed Moanmore Wind Farm, Co. Clare Bird Activity Summary Report	Breeding Season 2025	**Appendix 2 - Survey Data** **Fig. 9-9. Incidental Records Lesser Black-backed Gull Observations Map.**		Site boundaries are for demonstrative purposes and do not represent exact legal or planning boundaries.



Legend:

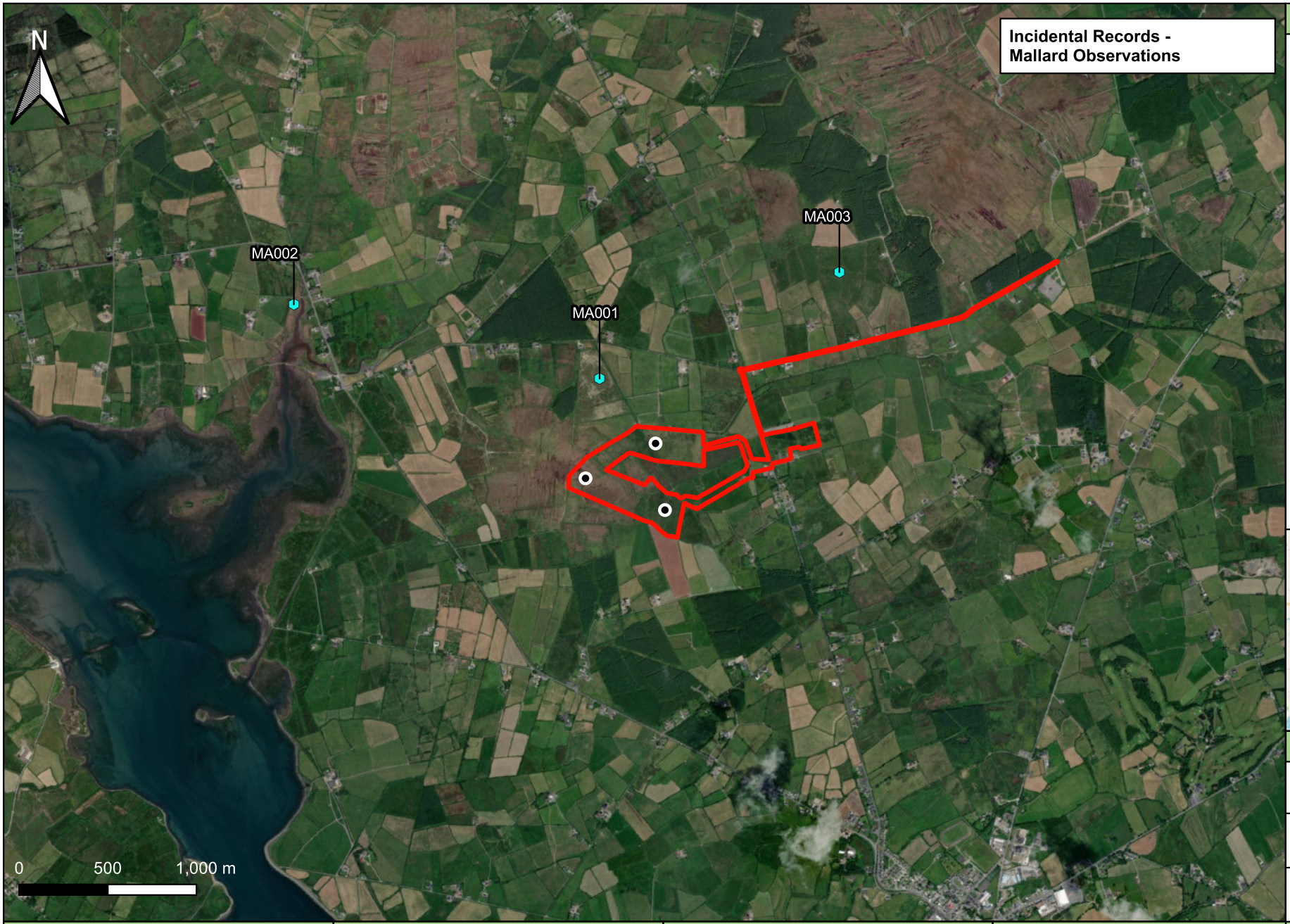
- Redline Boundary
- Turbine Locations
- Observation



Details:

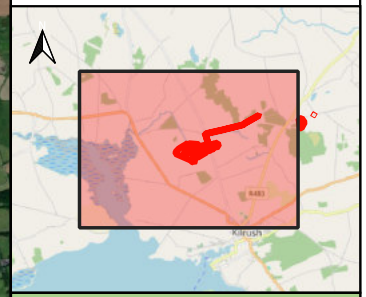
Drawn by: D. Woods	**Projection:** ITM
Checked by: J. Murphy	**Basemap:** Bing Aerial
Date: 11/11/2025	**Scale:** 1:15,000 @A4

Project Title:	Season:	Figure Title:	Produced By:	Notes:
Proposed Moanmore Wind Farm, Co. Clare Bird Activity Summary Report	Breeding Season 2025	**Appendix 2 - Survey Data** **Fig. 9-10. Incidental Records Little Egret Observations Map.**		Site boundaries are for demonstrative purposes and do not represent exact legal or planning boundaries.



Legend:

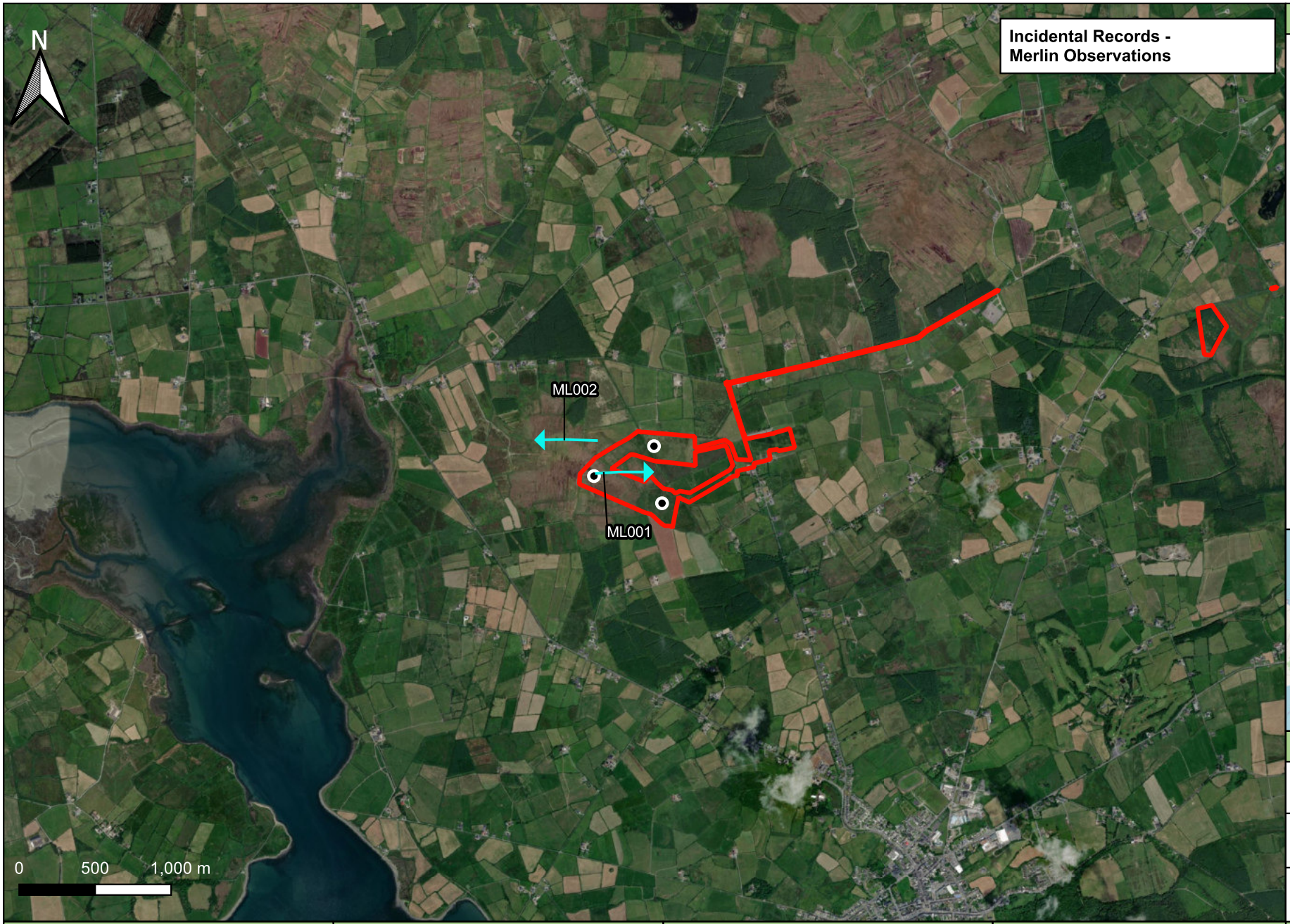
- Redline Boundary
- Turbine Locations
- Observation



Details:

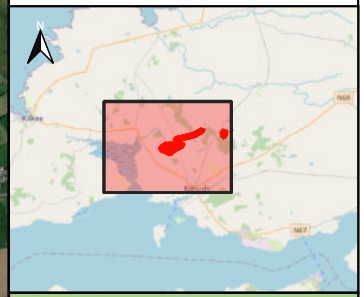
Drawn by: D. Woods	**Projection:** ITM
Checked by: J. Murphy	**Basemap:** Bing Aerial
Date: 11/11/2025	**Scale:** 1:15,000 @A4

Project Title:	Season:	Figure Title:	Produced By:	Notes:
Proposed Moanmore Wind Farm, Co. Clare Bird Activity Summary Report	Breeding Season 2025	**Appendix 2 - Survey Data** **Fig. 9-11. Incidental Records Mallard Observations Map.**		Site boundaries are for demonstrative purposes and do not represent exact legal or planning boundaries.



Legend:

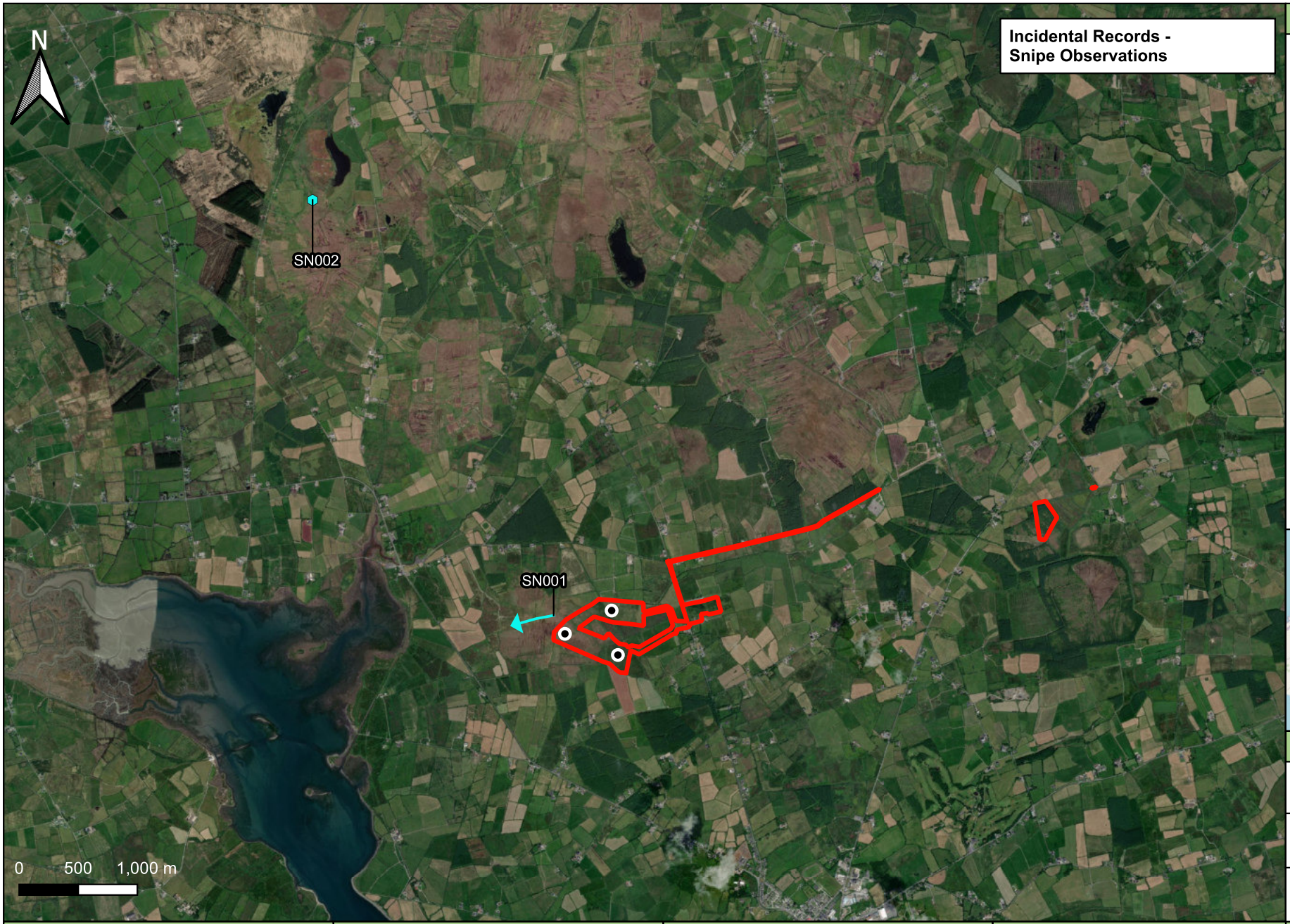
- Redline Boundary
- Turbine Locations
- Observation



Details:

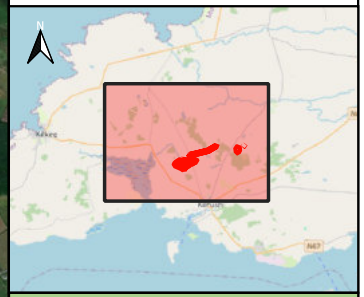
Drawn by: D. Woods	**Projection:** ITM
Checked by: J. Murphy	**Basemap:** Bing Aerial
Date: 11/11/2025	**Scale:** 1:15,000 @A4

Project Title:	Season:	Figure Title:	Produced By:	Notes:
Proposed Moanmore Wind Farm, Co. Clare Bird Activity Summary Report	Breeding Season 2025	**Appendix 2 - Survey Data** **Fig. 9-12. Incidental Records Merlin Observations Map.**		Site boundaries are for demonstrative purposes and do not represent exact legal or planning boundaries.



Legend:

- Redline Boundary
- Turbine Locations
- Observation
- Observation



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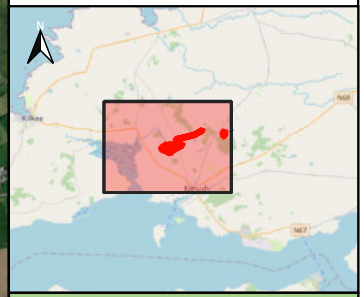
Project Title:	Season:	Figure Title:	Produced By:	Notes:
Proposed Moanmore Wind Farm, Co. Clare Bird Activity Summary Report	Breeding Season 2025	**Appendix 2 - Survey Data** **Fig. 9-13. Incidental Records Snipe Observations Map.**		Site boundaries are for demonstrative purposes and do not represent exact legal or planning boundaries.



Legend:

- Redline Boundary
- Turbine Locations
- Observation



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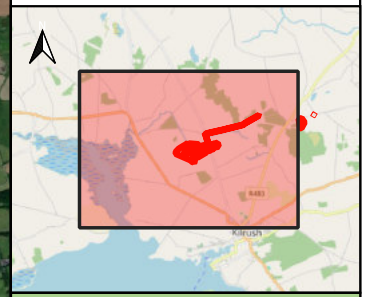
Project Title:	Season:	Figure Title:	Produced By:	Notes:
Proposed Moanmore Wind Farm, Co. Clare Bird Activity Summary Report	Breeding Season 2025	**Appendix 2 - Survey Data** **Fig. 9-14. Incidental Records Sparrowhawk Observations Map.**		Site boundaries are for demonstrative purposes and do not represent exact legal or planning boundaries.



Legend:

- Redline Boundary
- Turbine Locations
- Observation



Details:

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Project Title:	Season:	Figure Title:	Produced By:	Notes:
Proposed Moanmore Wind Farm, Co. Clare Bird Activity Summary Report	Breeding Season 2025	**Appendix 2 - Survey Data** **Fig. 9-15. Incidental Records Whimbrel Observations Map.**		Site boundaries are for demonstrative purposes and do not represent exact legal or planning boundaries.

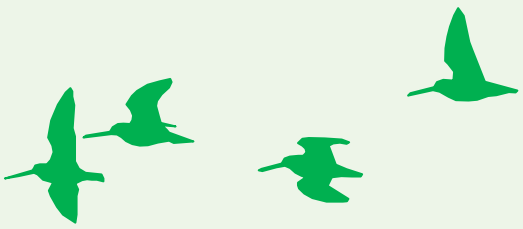
Appendix 3 – Confidential Data

Bird Activity Summary Report
Breeding Season 2025

Proposed Moanmore Wind Farm,
Co. Clare

Note: This Appendix contains sensitive information relating to the roosting locations of protected species. These species could potentially be at increased risk of disturbance and/or persecution should this information be made publicly available. It is therefore recommended that this Appendix is only made available to statutory bodies, and interested parties upon request, and is not made publicly available.

CONFIDENTIAL – NOT FOR WIDESPREAD DISTRIBUTION



Irish Ornithological Survey Group

Providing Ornithological Services

irishornithologicalsurveygroup@gmail.com

Barn Owl Buildings Survey, 1st visit
Site: MOANMORE, Co. Clare

Barn Owl Buildings Survey, 27th April 2025

The Buildings Survey purpose was to examine all buildings within 1km of the proposed site of the wind farm for signs of the presence of Barn Owls.

The buildings Survey was conducted on 27th April 2025 from 11:10 to 15:15. Weather was mainly sunny with 3/8 cloud cover, light southerly winds S–F2, dry throughout, 14°C and visibility very good.

Searches were made where possible in all suitable and accessible buildings, for signs of the presence of Barn Owls ie, moulted feathers, pellets, or whitewash, in accordance with survey guidelines issued by T.I.I. and BirdWatch Ireland (BirdWatch Ireland, 2021).

The habitat within the 1km radius study area was dominated largely by improved grassland (cattle and sheep), with extensive low hedgerow and scattered mature trees. There was also an extensive area of cutover bog to the NW of the study area, and several large conifer plantations, of varying ages, particularily on the northern edge of the study area.

There were no waterways of note, with just some small drainage ditches.

Results
The results of the Buildings Survey is shown in Map 1.

Site 1
An active Barn Owl site was found at Site 1, in the centre of the study area at Carnaun, Grid Ref. IQ 98322 57475



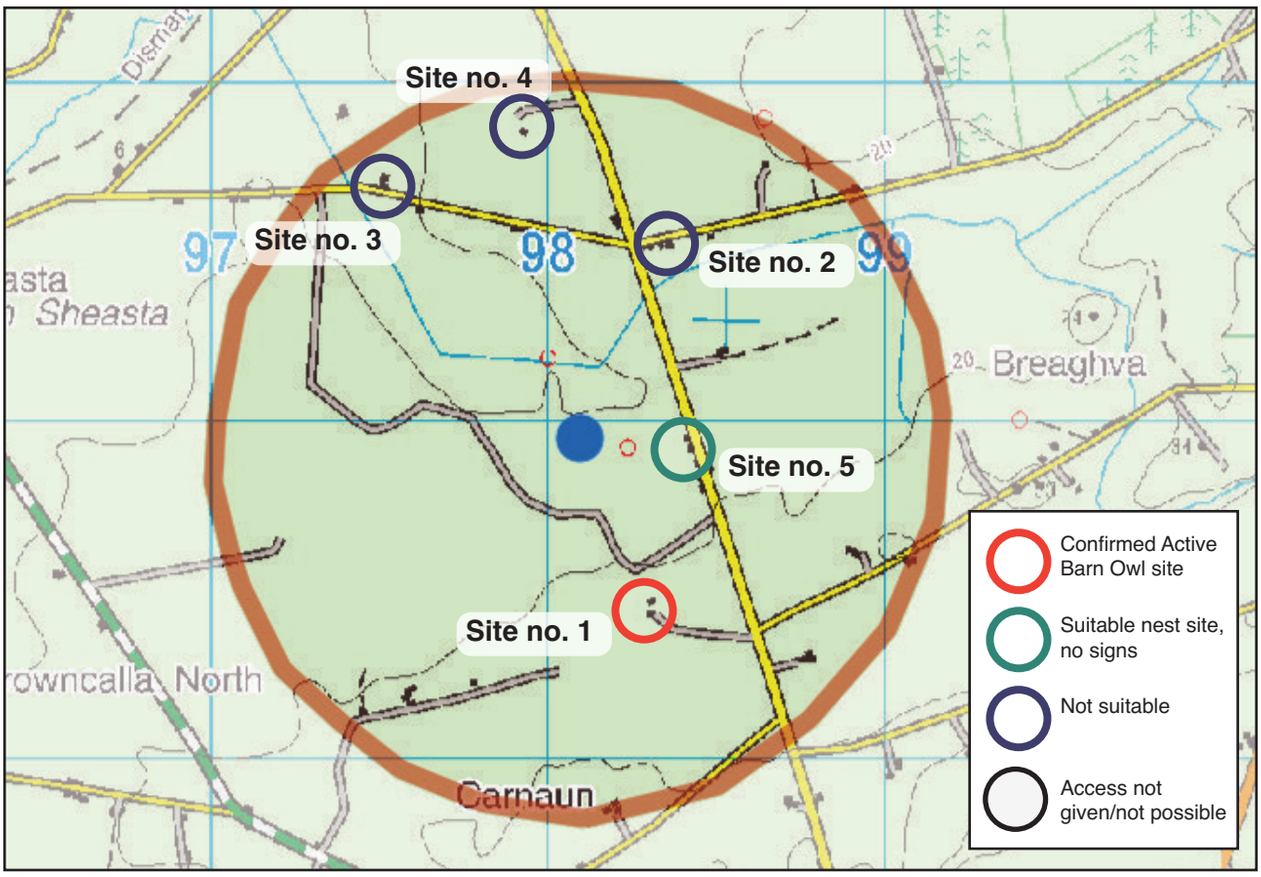
Site 1. *The ruined stone barn and adjacent derelict cottage, where Barn Owl pellets were found.*



Site 1. *The Barn Owl pellets (circled) on a partially collapsed floor of the stone barn.*



Site 1. *The ruined stone barn, where old (>4 months) Barn Owl pellets were found, under the remaining area of intact roof, left of centre (arrowed).*



Map 1. *Location of the active Barn Owl Site 1. Sites 2 and 4 (metal-roofed sheds) and Site 3 (a derelict cottage) were considered unsuitable for potentially nesting Barn Owls, and there were no signs of their presence. Site 5 was a derelict cottage with missing roof tiles, and was considered potentially suitable as a Barn Owl nest site.*

(Lat:52.659200, Long: -9.5035842). Here there was a large stone barn with a partially collapsed roof, and an adjacent derelict cottage. Approximately 12 Barn Owl pellets were found below beams in the central part of the shed, and some 'whitewash' was found below this area, indicating a frequent perch, or roost, for a Barn Owl. The pellets were under the only remaining section of slate roof, on a semi-collapsed part of the ceiling of the ground floor, so were not accessible, and could not be retrieved. However, close-examination of the pellets *in situ* showed them to be of varying ages, but rather old, perhaps 4–8 months old (see photo), and it looked like several other much disintegrated and even older pellets were also present in the debris.

The shed had no suitable nesting cavities, though the adjacent derelict cottage had two chimneys, one of which, examined by drone, looked possibly suitable as a potential nest site (the other overgrown with vegetation). There were no signs of 'whitewash' on or below the chimneys, and no pellets on the ground beneath (although this in itself does not rule out the use of the chimney as a potential nest site). The cottage was boarded up, so no internal inspection was possible.

Site 2 was a metal-roofed barn which had completely collapsed due to recent storms and was regarded as unsuitable for potentially nesting Barn Owls.



Site 2. *Collapsed metal-roofed shed with adjacent derelict cottage, considered unsuitable as a potential nest site.*

Site 3 was a recently demolished and now partially built new build and was also considered unsuitable, as was Site 4, a metal-roofed barn with part of the roof blown off by recent storms. No signs of Barn Owls were found at any of these sites.

Site 5 was a derelict cottage which had previously been assessed as unsuitable for potentially nesting Barn Owls, but had recently lost some roof tiles, thus allowing access into the roof space and 'upgrading' its

status to a possible nest site. Further inspection was not possible though, as the building was boarded up, but no signs of the presence of Barn Owls was detected on the outside of the structure.

Other species
A hunting Kestrel was recorded on the W side of the study area, though there was no Kestrel pellets or feathers found at any of the surveyed sites, and no indication of Kestrels nesting nearby. A female Sparrowhawk was also flushed from woodland at Site 1, but there was no indication of breeding at that location.

Recommendations
Site 1 and Site 5 would both require a dusk or night time visit to confirm or otherwise the presence of nesting or roosting Barn Owls. This should be undertaken during a second visit in late May/June when any potential nesting activity should be at its highest.

Michael O'Clery, 5th May 2025

Reference
BirdWatch Ireland, 2021. *Survey and Mitigation Standards for Barn Owls to inform the Planning, Construction and Operation of National Road Projects.* PE-ENV-07005. TII Publications, April 2021. https://www.tiipublications.ie/library/PE-ENV-07005-01.pdf



Site 4. *Partially collapsed metal-roofed farm shed, considered unsuitable as a potential Barn Owl nest site.*



Site 5. *Derelict cottage with recent loss of roof tiles, allowing potentially nesting Barn Owls access to the roof space.*



Site 5. *Boarded-up derelict cottage, with missing roof tiles, requiring a nocturnal visit to detect the presence or otherwise of nesting Barn Owls.*

Barn Owl Buildings Survey - 2nd visit
Site: MOANMORE, Co. Clare

Barn Owl Buildings Survey, 14th June 2025

A second visit was made to confirm the presence or otherwise of nesting Barn Owls at Site no. 1, a derelict stone barn and adjacent cottage, which had been identified as both a potentially suitable nest site and an active Barn Owl site during the first daytime survey visit on 27th April 2025. On that visit, several old Barn Owl pellets and 'whitewash' were found in the stone barn (see First Visit, above). The only other suitable site was Site no. 5, a derelict cottage which had missing roof slates, potentially allowing access to nesting Barn Owls.

As some Barn Owl nest sites can be deep within wall cavities or in disused chimney systems, their presence may not always be detected by daytime visits. Second visits, made at dusk or night time, can reveal the presence of birds as they emerge and begin to hunt, or engage in display, courtship or other behaviour, often in the immediate vicinity of any potential nest.

Observing the behaviour of adult Barn Owls and their vocalisations at night can establish the breeding status of any adults present, and if chicks are also present, their vocalisations (generally only made at dusk or night) can also be detected and interpreted to establish an approximate stage of development. From that information, approximate egg-laying and fledging dates can also be inferred, and further action and recommendations undertaken, if necessary.

The Buildings Survey second visit was conducted on the night of 14th/15th June 2025. Sunset was at 22:02, and the survey was carried out from 22:00 to 02:35. A full moon rose at 00:28, providing considerable ambient light. Weather was calm and clear, wind W–2 to 3, visibility very good, and the temperature was 12 to 14 degrees celsius.

The survey visit was made in accordance with survey guidelines issued by T.I.I. and BirdWatch Ireland (BirdWatch Ireland, 2021). The site was approached carefully and quietly on foot before sunset, and an initial search was made of the stone barn to check whether there were any fresh signs of Barn Owl pellets or 'whitewash' . Observation of Site no.1 then continued from 22:00 to 23:30. Observation of Site no. 5 was then carried out from 23:40 to 00:50. A further scan of the surrounding area with the thermal imager camera was carried out until 02:55.

A thermal imaging camera – a Hikmicro Thermal Monocular FALCON series thermal camera – was used during the survey work, and 8x40 Swarovski binoculars.



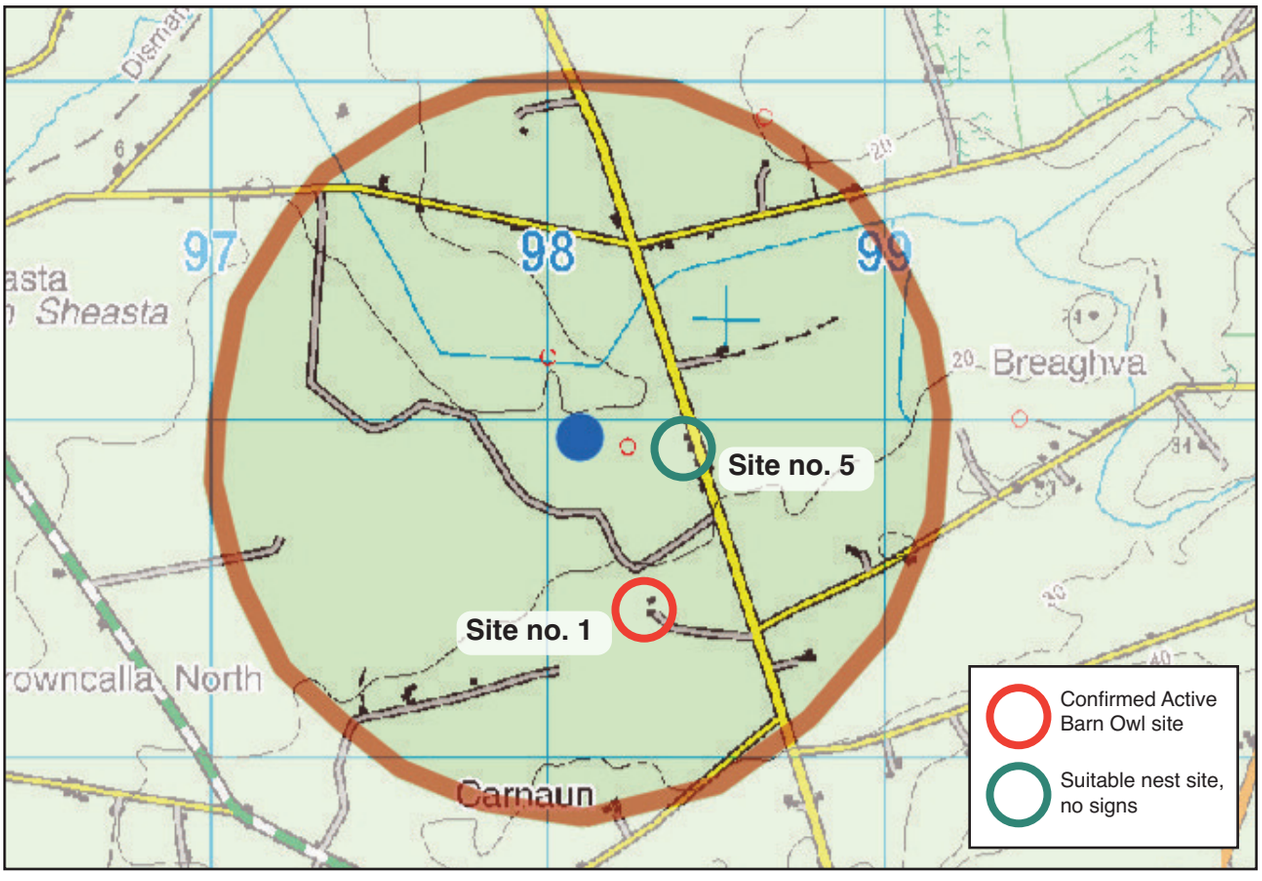
Site 1. *No fresh pellets or whitewash were found on the upper floor of the stone shed during the second visit.*

Results

See Map 2 below, for the location of the two sites surveyed.

No fresh pellets or 'whitewash' was detected in the stone barn prior to the observation period, and none were present in or around the adjacent cottage. There were no fresh signs of 'whitewash' on the cottage chimneys, or elsewhere at the site.

No Barn Owl activity or vocalisation was detected throughout the period of the second survey visit either at Site no. 1 or Site no. 5.



Map 2. Location of the active Barn Owl Site no.1 which was revisited at night on 14th June 2025, and the only other suitable Site no. 5. No sightings or vocalisations of Barn Owls were detected at either site, or nearby.

The pellets examined from the site from the first visit were not directly accessible and could not be retrieved but close examination of the pellets *in situ* showed them to be of varying ages, but rather old, perhaps 4–8 months (see photo from first visit), judging by the colour and texture (see Barn Owl Trust, 2012), and others were much disintegrated and therefore much older, perhaps 6 months or more. This would imply the presence of Barn Owl(s) at the most recent as some time from October 2024 to January 2025.

The small number of pellets involved (c.12) would also imply that the site was only occasionally used within that timeframe as a roost site. These dates would be considered as well outside the nesting period (April to August) (Lusby & O'Clery, 2014), therefore it would be appropriate to classify this site as an active winter roost.

Recommendations

Barn Owls were not detected roosting or nesting at either of the two potentially suitable sites at Moanmore, though Site no. 1 should be considered as an active winter roost site, and a possible future nest site.

Although no further survey visits would be necessary in summer 2025, it would be recommended to further survey the site before and during any future construction, renovation or other disturbance in the immediate vicinity of the stone shed and adjacent cottage.

Provision of a Barn Owl nest box in the stone shed should also be considered.

Michael O'Clery, 20th July 2025

References

Barn Owl Trust, 2012. *Barn Owl Conservation Handbook: A Comprehensive Guide for Ecologists, Surveyors, Land Managers and Ornithologists* (Conservation Handbooks). Pelagic Publishing.

BirdWatch Ireland, 2021. *Survey and Mitigation Standards for Barn Owls to inform the Planning, Construction and Operation of National Road Projects.* PE-ENV-07005. TII Publications, April 2021. https://www.tiipublications.ie/library/PE-ENV-07005-01.pdf

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Appendix II:

Wind Farms within 20 km of the Proposed Turbines

Wind Farms within 20 km of the Proposed Turbines

No.	Planning Reference	Name	District	No. WTG	Height Blade Tip (m)	Easting	Northing	Distance to the Development (km)	Planning Status	Working Status
1	23/60219	Ballykett	Co. Clare	4	150	469386	5835266	c. 3.7km	Conditional	Consented
2	00/952	Moanmore	Co. Clare	7	120	499781	658938	c. 1.7km	Conditional	Operational
3	10/64	Tullabrack	Co. Clare	6	120	499920	659841	c. 2.75km	Conditional	Operational
4	04/1065	Beale Hill	Co. Kerry	6	81	489478	647306	c. 12.97km	Conditional	Operational
5	14/551	Cahermurphy	Co. Clare	4	150	511570	667266	c. 15.64km	Conditional	Operational
6	00/2417	Carrownaweelaun	Co. Clare	2	95	483360	654873	c. 14.12km	Conditional	Operational
7	09/123	Crossmore	Co. Clare	7	125	513364	660808	c. 15.19km	Conditional	Consented
8	06/93997	Curraghgerrig	Co. Kerry	2	99.5	492084	646053	c. 12.74m	Conditional	Operational
9	14/575	Glenmore	Co. Clare	12	136.5	513812	668172	c. 18.31km	Conditional	Operational
10	09/358	Kiltumper	Co. Clare	2	120.5	511570	667266	c. 15.96km	Conditional	Operational
11	219360	Lahra	Co. Kerry	2	120	494188	643396	c. 14.22km	Conditional	Operational
12	11/299	Leanamore	Co. Kerry	9	125	503474	646226	c. 12.71km	Conditional	Operational
13	01/1538	Moneypoint	Co. Clare	5	152	502862	652278	c. 7.36km	Conditional	Operational
14	309156-21	Shronowen	Co. Kerry	12	150	501505	641448	c. 16.46km	Conditional	Proposed
15	09/1175	Tullahennel South	Co. Kerry	9	110	497161	643578	c. 14.08km	Conditional	Operational
16	68150	Tullahennel North	Co. Kerry	2	120.5	494355	643779	c. 14.28km	Conditional	Operational
17	ACP-319676	Cahermurphy West	Co. Clare	8	180-185	508887	669573	14.88km	Proposed	Proposed