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APPENDIX 7-4

SURVEY DATA AND FIGURES

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Glossary

- > Improved agricultural grassland (GA1)
- > Wet grassland (GS4)
- > Conifer plantation (WD4)
- > Recently felled woodlands (WS5)
- > Scrub (WS1)
- > Hedgerows (WL1)
- > Stonewalls (BL1)
- > Earth banks (BL2)
- > Treelines (WL2)
- > Drainage Ditches (FW4)
- > Eroding Upland Rivers/Streams (FW1)
- > Buildings and artificial surfaces (BL3)

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1.

GOLDEN PLOVER

Table 7-4-1- 1 Golden Plover Vantage Point Survey Data

Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH ¹ (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
GP001	VP1	16/04/2020	06:43	Golden Plover	70	325	0	125	200	0	improved agricultural grassland and hedgerows; flock of golden plovers flying over general area. lost behind treeline	PW
GP002	VP1	16/04/2020	06:52	Golden Plover	70	45	0	15	30	0	improved agricultural grassland and hedgerows; flock of golden plover flying over general area. lost behind treeline	PW
GP003	VP1	16/04/2020	06:57	Golden Plover	70	125	0	37	88	0	improved agricultural grassland and hedgerows; flock of golden plover flying over general area. lost behind treeline, flight line was not drawn. birds were in the same general area. it was the same flock of birds that kept disappearing below the treeline out of view intermittently	PW
GP004	VP1	16/04/2020	07:14	Golden Plover	18	95	0	15	80	0	improved agricultural grassland and conifer plantation; calling flew from behind VP1 now flock spilt up and was lost from view	PW
GP005	VP1	16/04/2020	07:47	Golden Plover	10	275	0	100	175	0	improved agricultural grassland and conifer plantation; flying lost from view behind trees	PW
GP007	VP1	09/10/2020	13:48	Golden Plover	1	-	-	-	-	-	improved agricultural grassland; calling, heard not seen., unknown number of birds.	PW
GP008	VP1	09/10/2020	14:14	Golden Plover	410	1080	0	0	840	240	conifer plantation, wet grassland and improved agricultural grassland; flying together in a loose flock over a wide area., lost above PCH when following closer flock of 7 birds.	PW

¹ Potential Collision Height

Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH ² (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
GP009	VP1	09/10/2020	14:30	Golden Plover	7	127	3	75	49	0	wet grassland, conifer plantation and hedgerows; flying and calling before landing in field with cattle	PW
GP010	VP1	09/10/2020	15:05	Golden Plover	70	82	0	0	82	0	improved agricultural grassland; flying, flock of 30 joining together with a flock of 40	PW
GP011	VP1	09/10/2020	15:12	Golden Plover	400	780	0	0	780	0	improved agricultural grassland, wet grassland and conifer plantation; flying, lost from view when following kestrel close by. flock possibly dropping below treeline to land out of view as they were descending	PW
GP012	VP1	09/10/2020	15:58	Golden Plover	350	1840	0	0	1840	0	improved agricultural grassland and conifer plantation; flying, came up from below treeline into view after presumably been roosting on GA1 ² near WD4	PW
GP013	VP1	09/10/2020	16:38	Golden Plover	3	28	11	17	0	0	improved agricultural grassland and hedgerows; calling and flying, calling and flying low before landing in newly sown GA1 grass field near vp1	PW
GP014	VP1	09/10/2020	16:48	Golden Plover	350	720	0	120	600	0	improved agricultural grassland, wet grassland and conifer plantation; flying before descending to land	PW
GP015	VP1	09/10/2020	17:43	Golden Plover	90	570	0	0	570	0	improved agricultural grassland; flying	PW
GP016	VP1	09/10/2020	17:50	Golden Plover	30	110	5	5	100	0	improved agricultural grassland; flying in to land	PW
GP017	VP1	09/10/2020	17:52	Golden Plover	115	900	0	0	900	0	improved agricultural grassland; flying, flock of 64 joining a flock of 51 birds the latter of which then landed while the others continued flying	PW
GP018	VP1	09/10/2020	18:00	Golden Plover	24	204	0	0	204	0	improved agricultural grassland; flying	PW
GP019	VP1	09/10/2020	18:06	Golden Plover	9	30	0	0	30	0	conifer plantation; flying	PW

² Fossitt (2000) habitat codes. See Glossary for further details and Biodiversity Chapter for full description of habitats.

Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH' (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
GP020	VP1	09/10/2020	18:08	Golden Plover	70	240	0	0	220	0	improved agricultural grassland; flying, 6 birds at first joining 24 and then joining a further 40 birds	PW
GP021	VP1	09/10/2020	18:18	Golden Plover	2	122	61	61	0	0	improved agricultural grassland and hedgerows; flying, calling and flying before coming in to land in newly planted GA1 beside GA1	PW
GP022	VP1	09/10/2020	18:32	Golden Plover	1	-	-	-	-	-	improved agricultural grassland; on ground, observed on ground after landing minutes ago.	PW
GP023	VP1	09/10/2020	18:38	Golden Plover	18	420	0	0	420	0	improved agricultural grassland; flying	PW
GP024	VP1	09/10/2020	19:01	Golden Plover	12	5	5	0	0	0	improved agricultural grassland; flying and calling, flew low <4m and fast looping around WL1 and back to same field where presumed to land.	PW
GP025	VP1	09/10/2020	19:42	Golden Plover	1	-	-	-	-	-	improved agricultural grassland; calling, unknown number heard calling in dark from adjacent field	PW
GP032	VP1	19/11/2020	08:11	Golden Plover	53	16	0	0	16	0	improved agricultural grassland; flying and calling, one bird heard calling near VP1 but not heard when this flock was spotted then moving off below horizon out of view	PW
GP034	VP1	19/11/2020	08:20	Golden Plover	150	120	0	0	120	0	conifer plantation; flying, third of three flocks observed at this time	PW
GP033	VP1	19/11/2020	08:20	Golden Plover	35	306	0	0	306	0	conifer plantation; flying, second of three flocks	PW
GP035	VP1	19/11/2020	08:22	Golden Plover	50	128	0	0	128	0	conifer plantation; flying, 1 of three flocks in the air at this time	PW
GP036	VP1	19/11/2020	08:32	Golden Plover	48	330	0	0	330	0	conifer plantation; flying, flew in to join other flock of 95 birds	PW
GP037	VP1	19/11/2020	08:32	Golden Plover	95	960	0	0	960	0	conifer plantation and improved agricultural grassland; flying, flying over wide area	PW
GP038	VP1	19/11/2020	08:52	Golden Plover	47	240	0	0	240	0	conifer plantation and improved agricultural grassland; flying, flew in to join	PW

Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH' (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
											larger flock. 14 broke away and joined the larger flock first then the others joined too.	
GP039	VP1	19/11/2020	08:56	Golden Plover	190	120	0	0	120	0	conifer plantation and improved agricultural grassland; flying, combined birds from three flocks, then lost from view.	PW
GP040	VP1	19/11/2020	09:06	Golden Plover	101	600	0	60	540	0	improved agricultural grassland and conifer plantation; flying, flew in over vp1 towards other flock which was out of view. some birds dropped below treeline out of view at times.	PW
GP041	VP1	19/11/2020	09:34	Golden Plover	38	37	0	12	25	0	improved agricultural grassland, wet grassland and conifer plantation; flying, dropped below treeline out of view	PW
GP042	VP1	19/11/2020	09:39	Golden Plover	16	32	0	32	0	0	improved agricultural grassland, hedgerows and conifer plantation; flying, came in over vp1 and flew out over WD4	PW
GP043	VP1	19/11/2020	09:40	Golden Plover	70	171	0	0	171	0	improved agricultural grassland and hedgerows; flying	PW
GP044	VP1	19/11/2020	09:42	Golden Plover	20	40	0	0	40	0	conifer plantation; flying	PW
GP045	VP1	19/11/2020	11:49	Golden Plover	58	730	0	0	480	250	improved agricultural grassland and hedgerows; flying	PW
GP046	VP1	19/11/2020	12:01	Golden Plover	36	447	5	110	312	0	improved agricultural grassland; flying and landed, flew into land in GA1	PW
GP047	VP1	19/11/2020	12:01	Golden Plover	80	337	0	0	337	0	improved agricultural grassland; flying, possibly came into land as some birds lost from view below treeline and rest of flock lost from sight when following closer kestrel.	PW
GP048	VP1	19/11/2020	12:12	Golden Plover	36	240	0	0	240	0	improved agricultural grassland; flying, up off ground and flying again.	PW
GP049	VP1	19/11/2020	12:24	Golden Plover	144	1380	0	0	1200	180	improved agricultural grassland, hedgerows and improved agricultural grassland; flying, heard calling from east. then came in over vp1 and flew to south. flock split up here	PW

Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH' (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
											into smaller flocks with about 60 continuing across the site and in the direction of the existing Gortahale Wind Farm.	
GP050	VP1	19/11/2020	12:30	Golden Plover	36	10	0	0	10	0	improved agricultural grassland; flying, picked up flying in background briefly when following closer golden plover flock in foreground.	PW
GP051	VP1	19/11/2020	13:28	Golden Plover	78	536	0	0	536	0	improved agricultural grassland, hedgerows and conifer plantation; flying	PW
GP052	VP1	19/11/2020	13:37	Golden Plover	26	221		35	186	0	improved agricultural grassland, hedgerows and treelines; flying, flew in near vp1, looked like going to land in reseeded GA1 but continued on over WD4 lost from view behind WL2.	PW
GP053	VP1	19/11/2020	13:50	Golden Plover	62	63	0	0	63	0	improved agricultural grassland; flying	PW
GP055	VP1	26/03/2021	06:42	Golden Plover	75	234	-	-	-	-	improved agricultural grassland; flying back and forth before dropping below horizon out of view.	PW
GP056	VP1	26/03/2021	06:48	Golden Plover	350	102	-	-	-	-	improved agricultural grassland, conifer plantation and wet grassland; flying. coming into land.	PW
GP057	VP1	26/03/2021	07:32	Golden Plover	12	118	-	-	-	-	improved agricultural grassland and hedgerows; flying into land.	PW
GP058	VP1	26/03/2021	08:04	Golden Plover	122	65	-	-	-	-	improved agricultural grassland; flying.	PW
GP059	VP1	26/03/2021	08:18	Golden Plover	32	437	-	-	-	-	improved agricultural grassland; flying into land.	PW
GP060	VP1	26/03/2021	09:31	Golden Plover	98	1664	0	0	244	0	improved agricultural grassland, conifer plantation and hedgerows; flying commuting, coming into land., came in over vp1 calling. presumed same flock as seen in area previously. flew towards Knocknabranagh/ Knockbaun where flock was earlier. was then joined by 51 birds	PW

Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH' (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
											over this area before all birds descended to land.	
GP061	VP1	26/03/2021	09:45	Golden Plover	51	835	-	-	-	-	improved agricultural grassland; flying overhead, dropping into land., flying overhead circling associating with area joining a larger flock of 98 before landing.	PW
GP062	VP1	07/04/2021	14:45	Golden Plover	120	230	-	-	-	-	improved agricultural grassland; flying.	PW
GP063	VP1	07/04/2021	15:39	Golden Plover	26	1225	4	19	690	0	conifer plantation, improved agricultural grassland and dry-humid acid grassland; flying commuting, circling, before flying on again., flew in from northeast across site. associated with area southeast of the site for a bit nearly coming into land in the fields here at the edge of the site. ascended again before moving off west off site out of view.	PW
GP064	VP1	07/04/2021	16:14	Golden Plover	6	115	40	45	20	0	improved agricultural grassland and hedgerows; calling and flying before coming into land., picked up on call flying low (<2m) over field by vp1, possibly flushed from deck by buzzards flying low overhead. looped around a couple of times before descending and landing a couple of fields away.	PW
GP065	VP1	07/04/2021	17:00	Golden Plover	14	53	-	-	-	-	improved agricultural grassland, hedgerows and conifer plantation; flying into land., dropped below treeline out of view over grassland farmland.	PW
GP066	VP1	07/04/2021	17:03	Golden Plover	84	133	-	-	-	-	conifer plantation, improved agricultural grassland and hedgerows; flying.	PW
GP067	VP1	07/04/2021	17:11	Golden Plover	84	164	0	0	140	0	improved agricultural grassland, dry-humid acid grassland and hedgerows; flying into land., presumed same flock approaching from the direction of the permitted Bilboa Wind Farm minutes ago. dropped below treeline as if coming into land.	PW

Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH' (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
GP068	VP1	07/04/2021	17:28	Golden Plover	6	167	40	40	0	0	improved agricultural grassland and hedgerows; flying and calling dropping into land., presumed same 6 birds as before. flew around low over field before dropping below horizon presumably into land.	PW
GP069	VP1	07/04/2021	20:15	Golden Plover	10	5	5	0	0	0	improved agricultural grassland and hedgerows; flying., flew low (<5m) and fast close by vp1. disappeared over hedgerow.	PW
GP071	VP1	21/10/2021	08:58	Golden Plover	50	120	0	0	120	0	mixed conifer woodland, improved agricultural grassland and wet grassland; flew in from northeast flew southwest over site	SP
GP072	VP1	21/10/2021	09:05	Golden Plover	500	300	0	0	300	0	mixed conifer woodland, improved agricultural grassland and wet grassland; flew in from northeast flew southwest over site, birds flew numerous circuits over the site	SP
GP073	VP1	21/10/2021	11:15	Golden Plover	450	900	0	0	900	0	mixed conifer woodland, improved agricultural grassland and wet grassland; moved across the site in northeast-southwest circuits, flew off northwest	SP
GP074	VP1	21/10/2021	11:20	Golden Plover	35	30	30	0	0	0	mixed conifer woodland, improved agricultural grassland and wet grassland; over fields northeast of VP1 landed briefly, flew off east	SP
GP075	VP1	21/10/2021	11:41	Golden Plover	400	300	0	0	300	0	mixed conifer woodland, improved agricultural grassland and wet grassland; over the townland of Seskinrea. many circuits, flew northeast	SP
GP076	VP1	21/10/2021	11:48	Golden Plover	15	15	15	0	0	0	improved agricultural grassland and wet grassland; flew in from s landed briefly flew off east	SP

Table 7-4-1- 2 Golden Plover Winter Walkover Survey Data

Winter Walkover Surveys						
Ref.	Date	Time	Species	Number	Habitat and activity	Surveyor
GP001	08/10/2020	11:55	Golden Plover	300	improved agricultural grassland, wet grassland and conifer plantation; flying, in view flying for 275s at PCH. (wintering)	PW
GP002	08/10/2020	11:58	Golden Plover	100	improved agricultural grassland, hedgerows and conifer plantation; flying, in view in flight for 108s at PCH. (wintering)	PW
GP003	08/10/2020	12:08	Golden Plover	700	improved agricultural grassland and conifer plantation; flying, in view flying at PCH for 253s. (wintering)	PW
GP004	08/10/2020	12:41	Golden Plover	1	conifer plantation; flying and calling, 10s. (wintering)	PW
GP005	08/10/2020	13:02	Golden Plover	310	improved agricultural grassland, wet grassland and conifer plantation; flying, in view flying for 1200s at PCH and 240s above PCH. flying in from south in small groups to total 310 birds. (wintering)	PW
GP006	22/03/2021	13:41	Golden Plover	12	improved agricultural grassland and hedgerows; flying., flying back and forth over this area for 4 mins. (wintering)	PW
GP007	22/03/2021	14:10	Golden Plover	36	improved agricultural grassland and hedgerows; flying., descended below treeline out of view, presumably landing, in view for 3 mins. (wintering)	PW
GP008	22/03/2021	14:19	Golden Plover	4	conifer plantation, improved agricultural grassland and hedgerows; flying and calling., flew towards area where other flock was flying previously. lost from view when dropped below treeline. (wintering)	PW

Table 7-4-1- 3 Golden Plover Waterbird Distribution Survey Data

Waterbird Distribution Surveys							
Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
GP001	Ullard	12/10/2020	15:00	Golden Plover	251	improved agricultural grassland; flying, flying about over this area low and appearing to land on a couple of occasions before lost from view in misty rain.	PW
GP002	Seskinrea	23/10/2020	17:02	Golden Plover	801	improved agricultural grassland and hedgerows; flying, flying over wide area.	PW
GP003	The Ridge	04/11/2020	11:04	Golden Plover	24	improved agricultural grassland; flying in to land in field with horses.	PW

Waterbird Distribution Surveys							
Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
GP004	Coan East, Dinin River	18/11/2020	14:05	Golden Plover	489	improved agricultural grassland; flying, 1 flock of 260 and another of 229 spread out over wide area flying at PCH over valley and smaller flock looking like going to land in GA1 at times, in view for 90 mins, first picked up from Coolcullen river Knocknabranagh direction.	PW
GP005	Seskinrea	18/11/2020	14:10	Golden Plover	200	improved agricultural grassland and conifer plantation; flying, at PCH	PW
GP006	Seskinrea	18/11/2020	14:12	Golden Plover	56	improved agricultural grassland and conifer plantation; flying low coming into land, separate from other flocks in area.	PW
GP007	Cloydagh	21/12/2020	14:42	Golden Plover	500	improved agricultural grassland; feeding, preening, loafing., flooded field river barrow	PW
GP008	Fenniscourt	06/01/2021	12:55	Golden Plover	90	arable crops, improved agricultural grassland and depositing/lowland rivers; flying, loose flock of golden plover associating with lapwing flock broke away into smaller groups with some birds flying se and others north	PW
GP009	Fenniscourt	06/01/2021	12:57	Golden Plover	35	improved agricultural grassland and arable crops; flying into land, a small flock of golden plover part of the larger flock observed moments ago flew into land in this area in either GA1 or BC1.	PW
GP010	Ballytarsna	06/01/2021	13:15	Golden Plover	14	arable crops, improved agricultural grassland and hedgerows; flying, came up off grazed winter crop with lapwing and flew south.	PW
GP011	Powewrstown	29/01/2021	11:10	Golden Plover	526	improved agricultural grassland, depositing/lowland rivers and drainage ditches; roosting and flying, roosting before flying up and landing and taking off again moving off. at least 526 birds. likely 700.	PW
GP012	Tomard	29/01/2021	11:25	Golden Plover	750	improved agricultural grassland; flying, flock strung out over wide area. presumed same flock as birds which left Powerstown moments earlier.	PW
GP013	Powesrtown	10/02/2021	12:21	Golden Plover	24	improved agricultural grassland and depositing/lowland rivers; feeding, flying, feeding with lapwing on receding floodwater.	PW
GP014	Rathornan	10/02/2021	12:28	Golden Plover	99	arable crops, improved agricultural grassland and depositing/lowland rivers; flying, landed., associating with lapwing on floodwater and field where farmer spreading slurry (GA1). in vicinity of BC1.	PW
GP015	Ballybar	10/02/2021	12:45	Golden Plover	150	arable crops and hedgerows; flying commuting south, approximately 150 birds.	PW
GP016	Bagenalstown	25/02/2021	16:08	Golden Plover	40	improved agricultural grassland and depositing/lowland rivers; flying	PW
GP017	Coan East	25/02/2021	17:45	Golden Plover	12	improved agricultural grassland, hedgerows and conifer plantation; flying, flew east.	PW

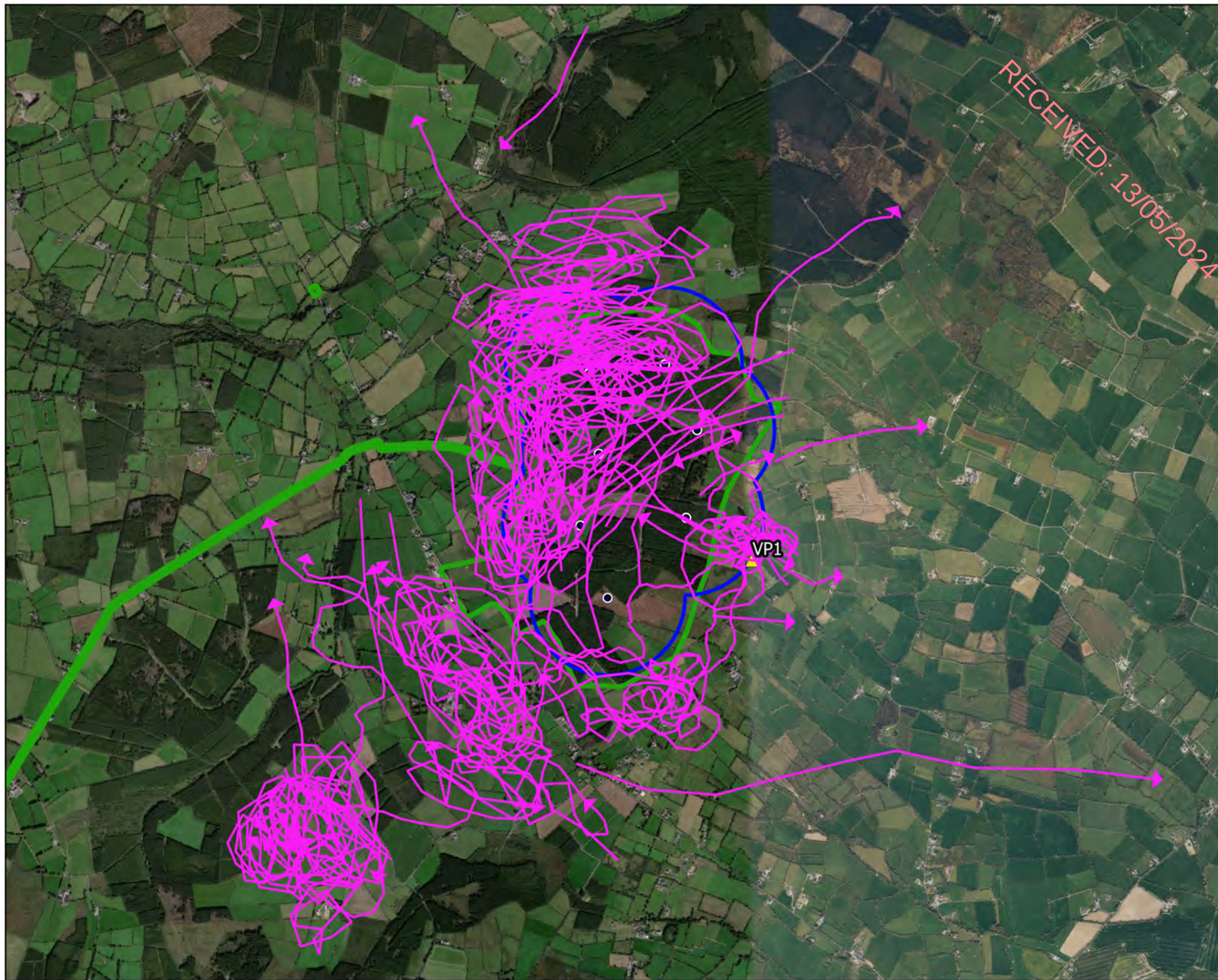
Waterbird Distribution Surveys							
Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
GP018	Boolyvannanan	25/02/2021	17:45	Golden Plover	12	improved agricultural grassland, hedgerows and conifer plantation; flying	PW
GP019	Agharue	25/02/2021	17:50	Golden Plover	1	improved agricultural grassland; calling, unknown number of golden plovers heard calling, possibly flying or landed in field out of view.	PW
GP020	Clogrenan/Rossmore	11/03/2021	17:31	Golden Plover	20	improved agricultural grassland, wet grassland and hedgerows; flying south.	PW
GP021	Gortahile	31/03/2021	16:06	Golden Plover	21	dry-humid acid grassland; flew into land, then roosted., semi natural grassland. at least 21 birds in view perched /roosting, crouched low among grass. conifers to west have been clearfelled.	PW
GP022	Bawnree	15/04/2021	09:44	Golden Plover	70	improved agricultural grassland; feeding., much of flock out of view, behind treeline.	PW
GP023	Bawnree	15/04/2021	09:50	Golden Plover	24	improved agricultural grassland; flying in to land. feeding., additional 24 birds flew into land in adjacent field.	PW
GP024	Bawnree	15/04/2021	10:30	Golden Plover	27	improved agricultural grassland; feeding.	PW
GP025	Bawnree	15/04/2021	10:40	Golden Plover	152	improved agricultural grassland; feeding., flock in full view now. then was joined by others from neighbouring field.	PW
GP026	Gortahile	15/04/2021	12:29	Golden Plover	42	dry-humid acid grassland; feeding, roosting., upland pasture. spread out feeding, then hunkered down roosting.	PW
GP027	Gortahile	27/04/2021	09:50	Golden Plover	21	dry-humid acid grassland; feeding.	PW
GP028	Gortahile	27/04/2021	09:57	Golden Plover	62	dry-humid acid grassland, improved agricultural grassland and conifer plantation; flying and calling., moved below horizon out of view. 9 of these birds flew in to join other flock on the ground.	PW
GP029	Gortahile	27/04/2021	10:00	Golden Plover	9	dry-humid acid grassland; flying into land, feeding., these birds broke away from the larger flock and flew in to join flock feeding on the ground.	PW
GP030	Knockbaun	27/04/2021	11:05	Golden Plover	125	improved agricultural grassland, hedgerows and conifer plantation; flying into land.	PW
GP031	Coolcullen	27/09/2021	18:28	Golden Plover	8	improved agricultural grassland; calling flying in to land and settle on field /roost.	PW
GP032	Fenniscourt	29/11/2021	10:25	Golden Plover	50	improved agricultural grassland and arable crops; travelling	JM

Table 7-4-1- 4 Golden Plover Incidental Data

Incidental Observations							
Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
GP001	Hen Harrier Roost Survey; HHVP2	23/10/2020	17:02	Golden Plover	801	improved agricultural grassland, hedgerows and conifer plantation; this flock of 801 golden plover was in view for most of the hhvp moving over a wide area on and near site. at PCH flying in view for 3,060s and above PCH for 2,040s. dropped below treeline out of view 2 mins. eventually lost from view at 18:30.	PW
GP002	Hen Harrier Roost Survey; HHVP2	23/10/2020	18:23	Golden Plover	1	improved agricultural grassland, wet grassland and conifer plantation; heard, not seen, unknown number of birds	PW
GP003	Hen Harrier Roost Survey; HHVP2	23/10/2020	18:25	Golden Plover	1	conifer plantation and scrub; heard calling overhead, not seen. unknown number of birds.	PW
GP004	Hen Harrier Roost Survey; HHVP2	23/10/2020	18:34	Golden Plover	1	conifer plantation, scrub and improved agricultural grassland;; heard calling overhead, not seen. unknown number.	PW
GP005	Hen Harrier Roost Survey; HHVP1	18/11/2020	14:50	Golden Plover	200	improved agricultural grassland; flying, PCH, spotted on way in to hhvp1.	PW
GP006	Hen Harrier Roost Survey; HHVP2	23/12/2020	16:27	Golden Plover	3	conifer plantation; flying, 3 birds picked up on call overhead flying west. 1 bird followed for 117s until lost from view. others visible for first 40s.	PW
GP007	Hen Harrier Roost Survey; HHVP1	24/03/2021	18:10	Golden Plover	241	improved agricultural grassland, conifer plantation and hedgerows; flying., flying in this area at PCH in view for 170s.	PW
GP008	Hen Harrier Roost Survey; HHVP1	24/03/2021	18:33	Golden Plover	575	improved agricultural grassland, wet grassland and hedgerows; flying., estimated 500-650 birds. flying back and forth over this area at and above PCH. visible between 18:33 and 18:52 (19 mins).	PW
GP009	Hen Harrier Roost Survey; HHVP1	24/03/2021	18:37	Golden Plover	12	improved agricultural grassland, wet grassland and hedgerows; flying in to join larger flock.	PW
GP010	Vantage Point Survey; VP1	26/03/2021	08:56	Golden Plover	98	improved agricultural grassland and hedgerows; flying., during lunchbreak	PW
GP011	Vantage Point Survey; VP1	26/03/2021	08:58	Golden Plover	98	improved agricultural grassland and hedgerows; flying., during lunchbreak	PW
GP012	Hen Harrier Roost Survey; HHVP4	31/03/2021	19:59	Golden Plover	20	improved agricultural grassland and conifer plantation; flying at height., came into view from south, looped around back south and out of view behind treeline.	PW
GP013	Hen Harrier Roost Survey; HHVP3 Raheen	24/01/2022	17:35	Golden Plover	2	wet grassland and marsh; calling/travelling, 2 or more birds calling. not seen as visibility too low.	JM

Table 7-4-1-5 Golden Plover Supplementary Vantage Point Observations

Supplementary Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
GP006	VP2	21/04/2020	07:09	Golden Plover	35	40	0		40	0	scrub and conifer plantation; flock flying west	PW
GP026	VP2	14/10/2020	18:38	Golden Plover	32	900	0	116	784	0	conifer plantation, improved agricultural grassland and wet grassland; flying, flying over wide area. 15 birds at first joined by 17 more and finishing up with 19 birds which flew low and dropped below treeline behind WD4 out of view.	PW
GP027	VP2	17/11/2020	06:58	Golden Plover	1	-	-	-	-	-	improved agricultural grassland, hedgerows and scrub; calling, heard calling, not seen. windy, presumed flying overhead.	PW
GP028	VP2	17/11/2020	07:06	Golden Plover	1	-	-	-	-	-	improved agricultural grassland; calling, heard calling, not seen. windy, presumed flying overhead	PW
GP029	VP2	17/11/2020	07:55	Golden Plover	200	165	0	0	165	0	improved agricultural grassland and hedgerows; flying	PW
GP030	VP2	17/11/2020	08:18	Golden Plover	150	61	0	0	61	0	improved agricultural grassland and conifer plantation; flying	PW
GP031	VP2	17/11/2020	08:20	Golden Plover	124	212	0	30	170	0	improved agricultural grassland; flying, flock of 44 birds and 80 birds joined together and flew south	PW
GP054	VP2	03/02/2021	16:20	Golden Plover	12	105	0	0	40	0	conifer plantation and improved agricultural grassland; flying travelling	PW
GP072	VP2	14/04/2021	20:17	Golden Plover	172	1644	0	0	0	0	improved agricultural grassland and hedgerows; flying in to land., came up into view from behind forestry in tight flock as if after rising off field near site. then began moving back and forth over hill in long strewn out flock. then came into land dropping below treeline after nearly 30 mins.	PW
GP079	VP2	30/10/2021	12:50	Golden Plover	50	30	0	30	0	0	improved agricultural grassland, wet grassland and mixed conifer woodland; flying north over Baunreagh	SP



Map Legend

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



Drawing Title

Vantage Point Survey
Golden Plover Observations

Project Title

Seskin Wind Farm, Co. Carlow

Drawn By

D. Woods

Checked By

P. Cregg

Project No.

220246

Drawing No.

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Map Legend

- EIA Site Boundary
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- 500m Survey Area
- Flight Observation



Drawing Title

Winter Walkover Survey
Golden Plover Observations

Project Title

Seskin Wind Farm, Co. Carlow

Drawn By

D. Woods

Checked By

P. Cregg

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Drawing No.

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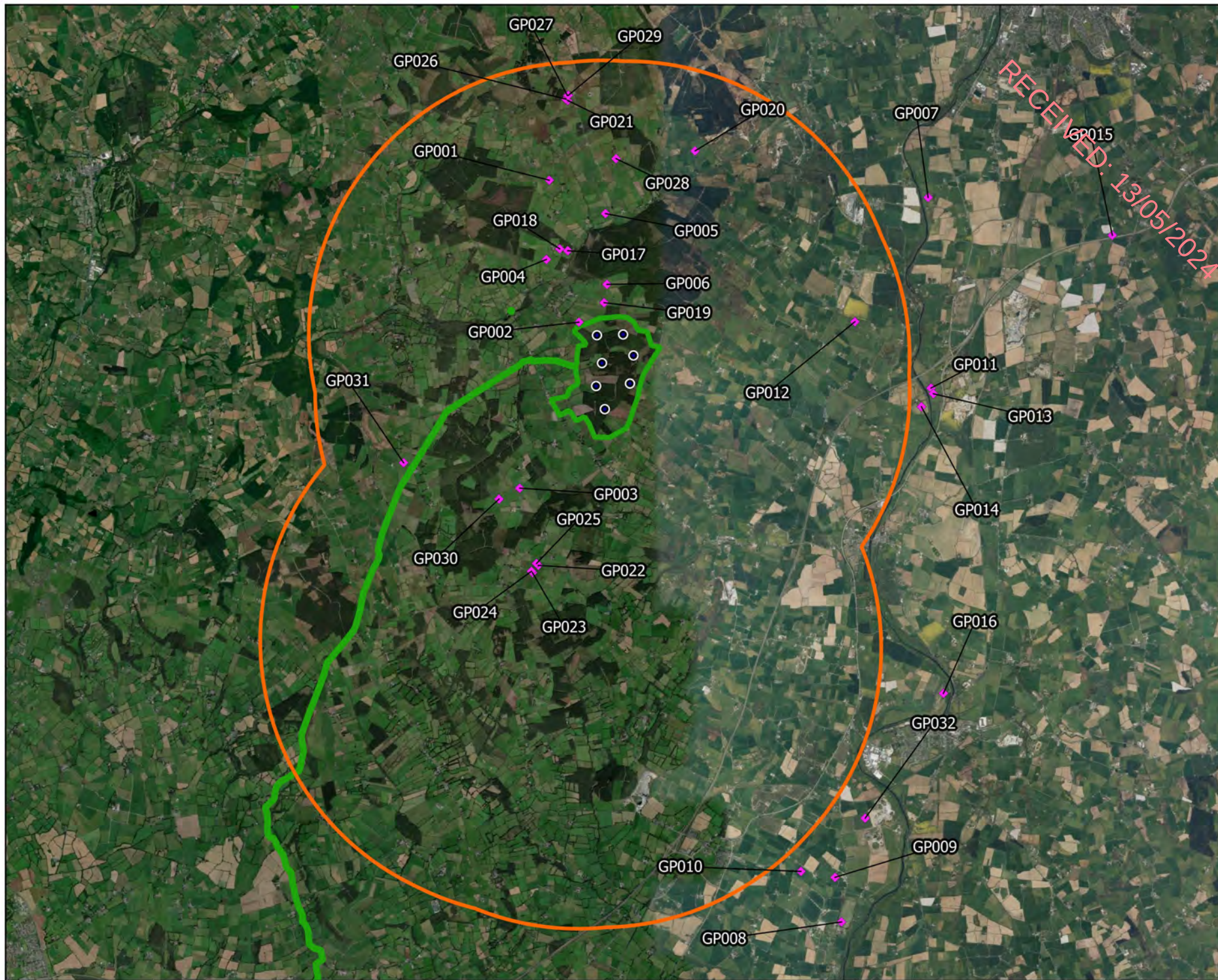
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- Map Legend**
- EIA Site Boundary
 - Turbine Layout
 - 5km Survey Radius
 - Observation



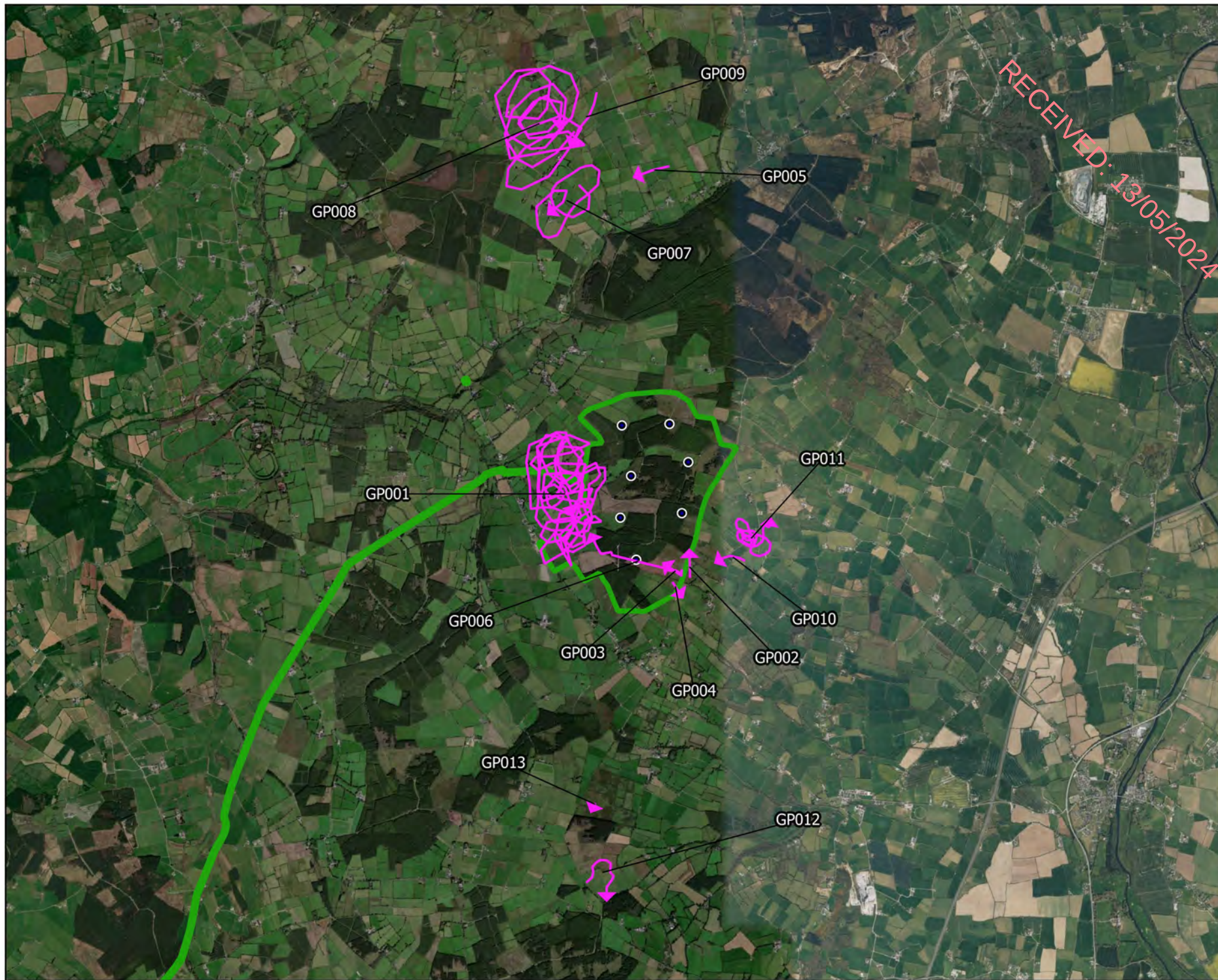
Drawing Title
Waterbird Distribution Survey
Golden Plover Observations

Project Title
Seskin Wind Farm, Co. Carlow

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- Turbine Layout
- Flight Observation



Drawing Title

**Incidental Golden Plover
Observations**

Project Title

Seskin Wind Farm, Co. Carlow

Drawn By

D. Woods

Checked By

P. Cregg

Project No.

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Drawing No.

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Map Legend

- EIAR Site Boundary
- Turbine Layout
- 500m Radius of Turbines
- Supplementary VP Location
- Flight Observation
- Non-flight Observation



Drawing Title
Supplementary Vantage Point Survey
Golden Plover Observations

Project Title
Seskin Wind Farm, Co. Carlow

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Project No. 220246	Drawing No. Fig. 7.4.1.5
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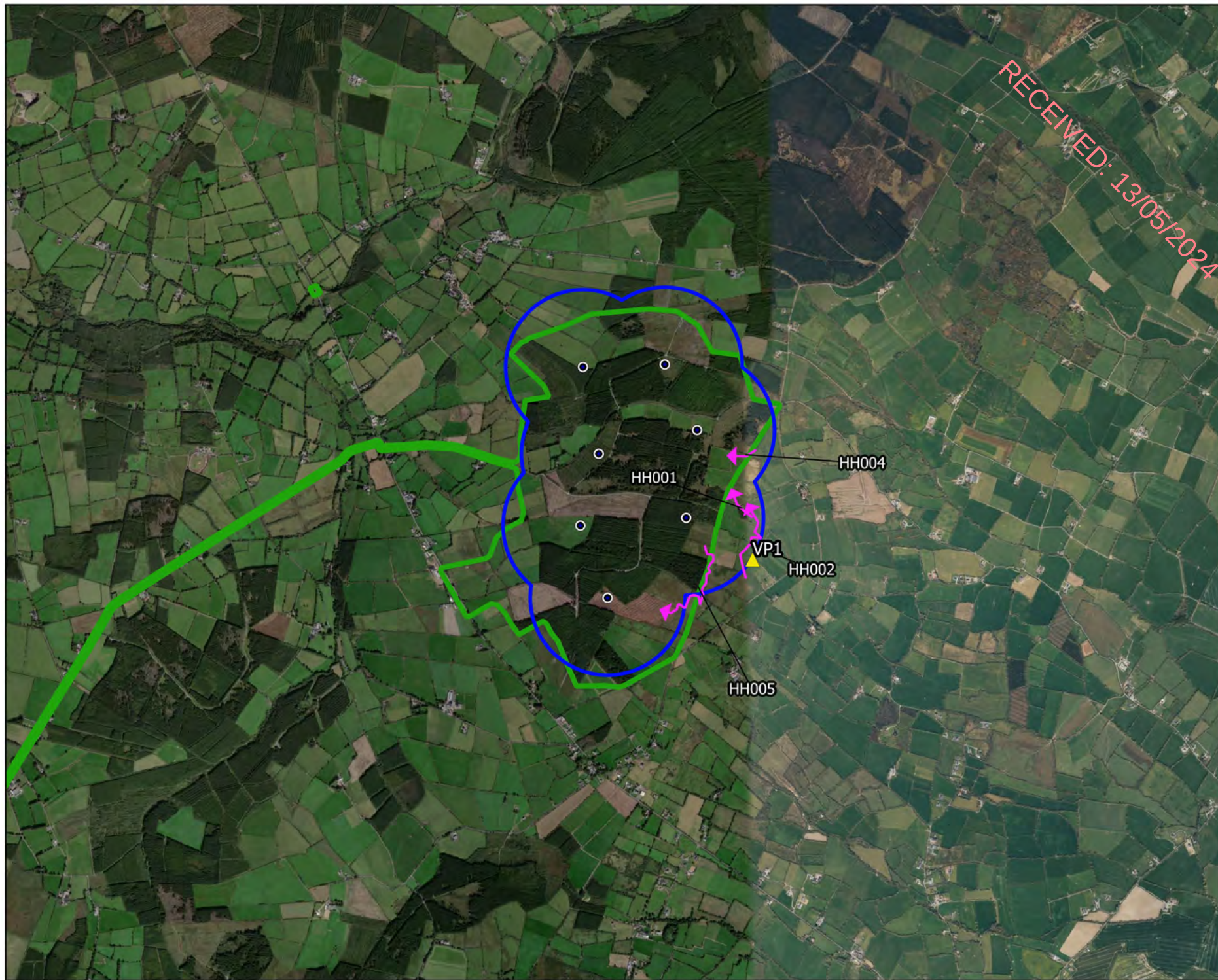
HEN HARRIER

Table 7-4-2- 1 Hen Harrier Vantage Point Survey Data

Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
HH001	VP1	09/10/2020	15:48	Hen Harrier	1	20	20	0	0	0	improved agricultural grassland and treelines; flying, being, mobbed by hooded crow. ringtail/female	PW
HH002	VP1	09/10/2020	16:16	Hen Harrier	1	38	38	0	0	0	wet grassland, improved agricultural grassland and hedgerows; flying low <2m, flying low, before being briefly mobbed by hooded crow as the bird disappeared below treeline as it continued flying low. ringtail/female	PW
HH004	VP1	11/12/2020	16:47	Hen Harrier	1	29	0	15	14	0	conifer plantation; flying low over treetops, ringtail/female type. lost from view behind treeline over forestry.	PW
HH005	VP1	12/08/2021	15:56	Hen Harrier	1	42	20	22	0	0	wet grassland, conifer plantation and scrub; hunting flying low quartering., female/ ringtail type. flew along edge of forestry hunting over rough grassland and scrub to newly planted 1st rotation WD4 and resown clear fell area out of view behind mature WD4 in foreground.	PW

Table 7-4-2- 2 Hen Harrier Supplementary Vantage Point Survey Data

Supplementary Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
HH003	VP2	17/11/2020	12:58	Hen Harrier	1	393	0	3	390	0	conifer plantation and improved agricultural grassland; hunting by flying, adult male. hunting over mature WD4 and clearfelled areas at 30-40m. briefly mobbed by hooded crow. Dropped below treeline over clearfelled areas below PCH and out of view.	PW
HH006	VP2	30/10/2021	12:31	Hen Harrier	1	180	0	180	0	0	improved agricultural grassland, wet grassland and mixed conifer woodland; flying slowly southwest over forestry, female	SP
HH007	VP2	30/10/2021	16:23	Hen Harrier	1	120	0	120	0	0	improved agricultural grassland, wet grassland and hedgerows; moving southeast over lacken, female	SP



Map Legend

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



Drawing Title

Vantage Point Survey
Hen Harrier Observations

Project Title

Seskin Wind Farm, Co. Carlow

Drawn By

D. Woods

Checked By

P. Cregg

Project No.

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Drawing No.

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- Turbine Layout
- 500m Radius of Turbines
- Supplementary VP Location
- Flight Observation



Drawing Title
Supplementary Vantage Point Survey
Hen Harrier Observations

Project Title
Seskin Wind Farm, Co. Carlow

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3.

PEREGRINE FALCON

Note: Sensitive data relating to breeding sites has been omitted from this appendix and is provided in Confidential Appendix 7-7.

Table 7-4-3- 1 Peregrine Falcon Vantage Point Vantage Point Survey Data

Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
PE001	VP1	21/09/2020	12:09	Peregrine Falcon	1	562	0	0	502	60	wet grassland, scrub and hedgerows; circling, calling, mobbing, flying, circling low down with buzzard, mobbing it and calling, then climbed higher soaring to above PCH before flying off into distance out of view.	PW

Table 7-4-3- 2 Peregrine Falcon Breeding Raptor Survey Data

Breeding Raptor Surveys								
Ref.	BR	Date	Time	Species	Number	Habitat and activity	Breeding status	Surveyor
PE001	BRVP1	01/06/2020	17:58	Peregrine Falcon	1	conifer plantation, improved agricultural grassland and hedgerows, one of two peregrine falcons gliding at PCH east	pair; probable breeding	PW
PE002	BRVP1	01/06/2020	17:58	Peregrine Falcon	1	conifer plantation, improved agricultural grassland and hedgerows, second peregrine falcon gliding east, viewed until 18:10. soared and circle over WD4, GA1 and WL1, joined by sparrowhawk 18:02. both birds above PCH and lost from view	pair; probable breeding	PW
PE003	BRVP3	27/04/2021	18:51	Peregrine Falcon	2	mixed broadleaved woodland, scrub and active quarries and mines, flying into land., male and female pair flew in from hill and circled over quarry. one flew to perch in oak tree closely followed by other bird which pulled out and done a few loops before landing briefly in ash tree. in view for 5 mins.	pair; probable breeding	PW
PE004	BRVP3	27/04/2021	18:56	Peregrine Falcon	2	active quarries and mines, mixed broadleaved woodland and improved agricultural grassland, flying., both birds came up out of trees and flew around overhead before flying off out into countryside. on way back birds split, and one bird was followed as it flew back to quarry moving back and forth over up high, then diving in to land in oak	pair; probable breeding	PW

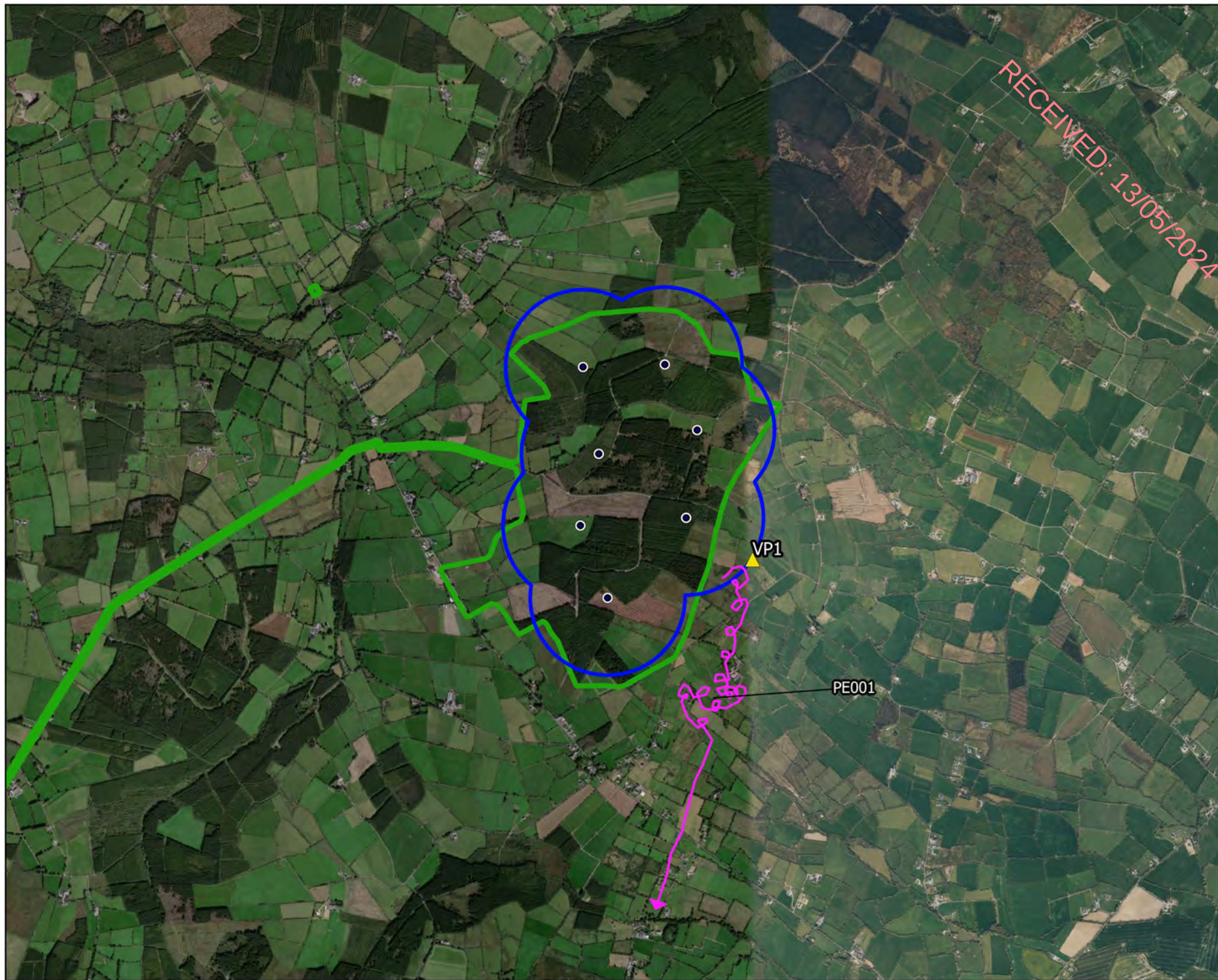
Breeding Raptor Surveys								
Ref.	BR	Date	Time	Species	Number	Habitat and activity	Breeding status	Surveyor
						tree.		
PE006	BRVP3	27/04/2021	19:17	Peregrine Falcon	2	active quarries and mines, scrub and mixed broadleaved woodland, flying., one bird in view flying over quarry then joined after 1 min by other bird in air. both birds flew off up over hill out of view. at least one bird was in view for all the time between 18:51 and 19:19.	pair; probable breeding	PW
PE010	BRVP3	02/06/2021	20:22	Peregrine Falcon	1	active quarries and mines, improved agricultural grassland and hedgerows, hunting, male. picked up flying along edge of hill again. flew fast gaining height before descending in fast flight among corvids near WL2 and WL1 in GA1. lost from view as dropped down and corvids all flew up.	permanent territory; probable breeding	PW

Table 7-4-3- 3 Peregrine Falcon Incidental Observations

Incidental Observations							
Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
PE001	Waterbird Distribution Survey; Clogrennane Lime	04/12/2020	15:00	Peregrine Falcon	1	active quarries and mines and buildings and artificial surfaces; perched and flying, perched on building in quarry before flying off out of view.	PW
PE002	Waterbird Distribution Survey; Seskinrea	04/12/2020	15:36	Peregrine Falcon	1	improved agricultural grassland and hedgerows; flying, flying southwest.	PW
PE003	Waterbird Distribution Survey; Powerstown	10/02/2021	12:29	Peregrine Falcon	1	improved agricultural grassland, hedgerows and depositing/lowland rivers; flying commuting, flying east over river towards Powerstown crossing main road and out of view over former landfill site.	PW
PE004	Waterbird Distribution Survey; Mountnugent upper	07/02/2022	15:32	Peregrine Falcon	2	improved agricultural grassland and conifer plantation; flying/dispute, 2 males, one chased off the other	JM

Table 7-4-3- 4 Peregrine Falcon Supplementary Vantage Point Survey Data

Supplementary Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
PE002	VP2	14/04/2021	15:39	Peregrine Falcon	1	144	0	12	0	0	improved agricultural grassland, treelines and recolonising bare ground; flying and gliding, male, flew low and slow gliding in breeze over and back and forth behind old quarry, moved off east downslope out of view.	PW
PE003	VP2	08/12/2021	11:50	Peregrine Falcon	1	57	0	17	40	0	improved agricultural grassland; travelling	JM
PE004	VP2	01/02/2022	12:33	Peregrine Falcon	1	64	0	64	0	0	improved agricultural grassland; travelling	JM



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Map Legend

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



Drawing Title

Vantage Point Survey
Peregrine Observations

Project Title

Seskin Wind Farm, Co. Carlow

Drawn By

D. Woods

Checked By

P. Cregg

Project No.

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Drawing No.

Fig. 7.4.3.1

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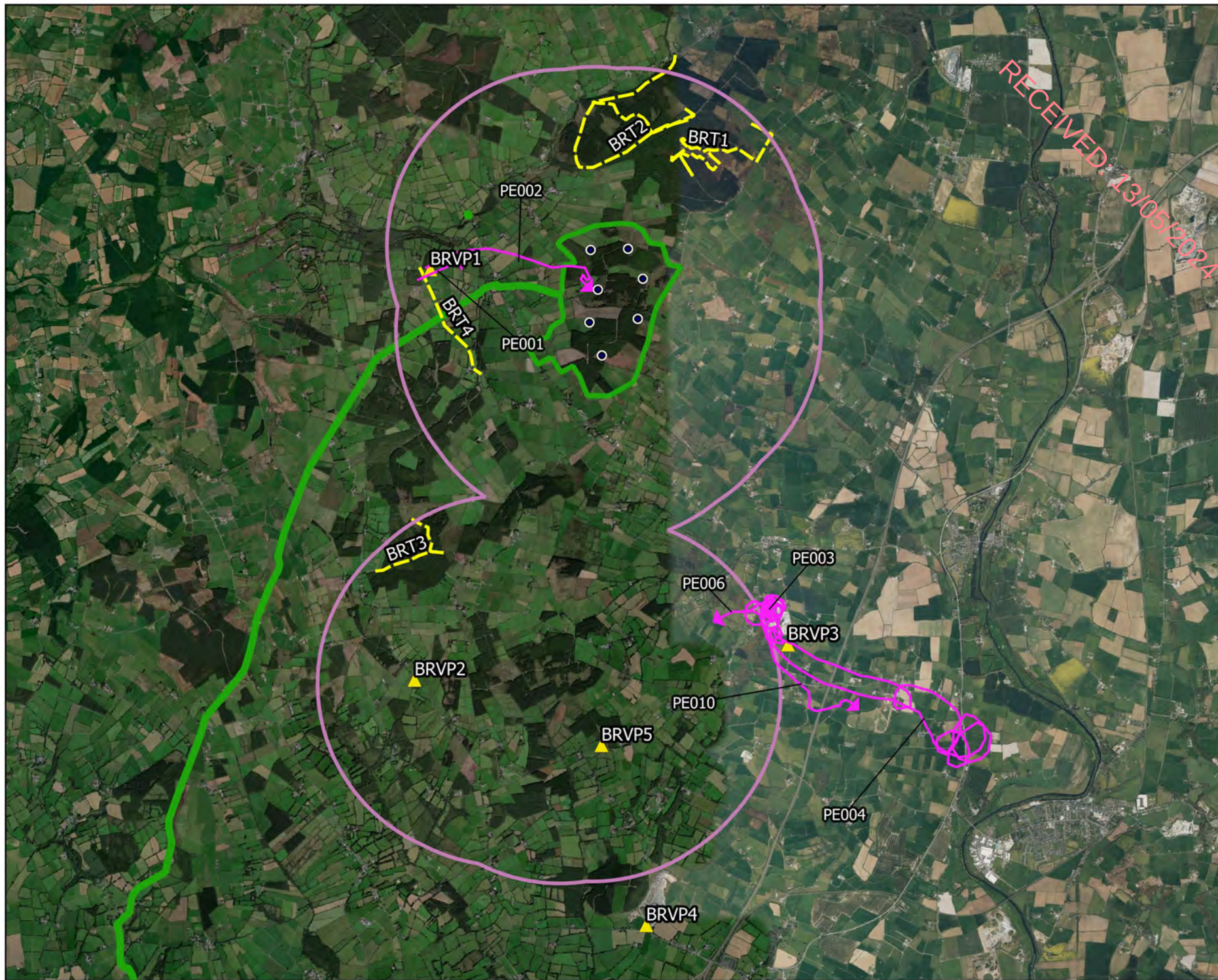
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Map Legend

- EIAR Site Boundary
- Turbine Layout
- BRVP Locations
- BR Transect Locations
- 2km Buffer of Site Boundary
- Flight Observation



Drawing Title

**Breeding Raptor Survey
Peregrine Observations**

Project Title

Seskin Wind Farm, Co. Carlow

Drawn By

D. Woods

Checked By

P. Cregg

Project No.

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Drawing No.

Fig. 7.4.3.2

Scale

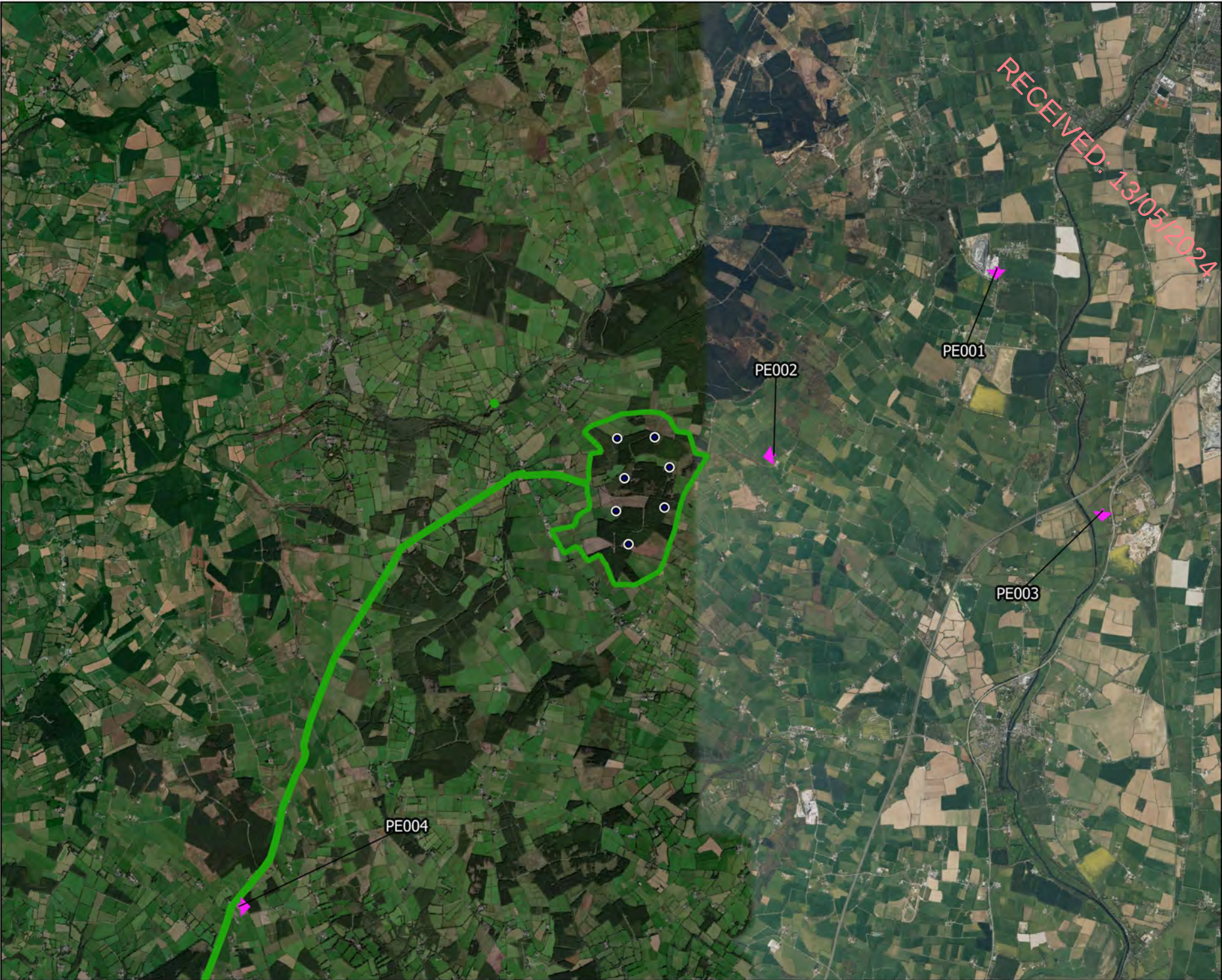
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Map Legend

- EIA Site Boundary
- Turbine Layout
- Flight Observation



Drawing Title

Incidental Peregrine Observations

Project Title

Seskin Wind Farm, Co. Carlow

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Map Legend

- EIAR Site Boundary
- Turbine Layout
- 500m Radius of Turbines
- Supplementary VP Location
- Flight Observation



Drawing Title
Supplementary Vantage Point Survey
Peregrine Observations

Project Title
Seskin Wind Farm, Co. Carlow

Drawn By D. Woods	Checked By P. Cregg
Project No. 220246	Drawing No. Fig. 7.4.3.4
Scale 1:25000	Date 03.11.23

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4.

KESTREL

Note: Sensitive data relating to breeding sites has been omitted from this appendix and is provided in Confidential Appendix 7-7.

Table 7-4-4- 1 Kestrel Vantage Point Survey Data

Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
K.001	VP1	16/04/2020	06:25	Kestrel	1	15	0	15	0	0	hedgerows and improved agricultural grassland; flying lost from view behind trees and hedgerow	PW
K.002	VP1	16/04/2020	10:43	Kestrel	1	20	0	20	0	0	improved agricultural grassland, hedgerows and semi-natural grassland; flew across farmland to tree and landed perched until 10:53, preening on tree	PW
K.003	VP1	16/04/2020	10:53	Kestrel	1	60	0	55	5	0	improved agricultural grassland, conifer plantation and hedgerows; flew from tree and began hovering, then made its way to forestry and hunted by flying low over tops of trees before perching in conifers	PW
K.004	VP1	16/04/2020	10:55	Kestrel	1	-	-	-	-	-	conifer plantation; dropped down off perch in conifers and flew north.	PW
K.018	VP1	12/05/2020	17:51	Kestrel	1	240	0	145	95	0	conifer plantation, improved agricultural grassland and hedgerows; picked up over d4 at PCH flew to GA1 and hovered below PCH rose up again to PCH before descending again, hovering flying past WL1 and hovering, lost from view behind trees	PW
K.086	VP1	03/07/2020	10:59	Kestrel	1	125	0	60	65	0	hedgerows and improved agricultural grassland; hovering hunting over GA1 before circling and gaining height in breeze and moving off out of view north	PW
K.087	VP1	03/07/2020	13:55	Kestrel	1	315	113	200	2	0	treelines and improved agricultural grassland; hovering hunting and then flying to WD4 where briefly lost from view before circling into open area behind GS4. dropped lower and flew out of view	PW

Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
K.088	VP1	22/07/2020	12:55	Kestrel	1	20	0	20	0	0	conifer plantation; flying low over WD4. dropped below treeline out of view	PW
K.089	VP1	22/07/2020	13:39	Kestrel	1	69	0	0	69	0	conifer plantation; hunting and hovering	PW
K.090	VP1	22/07/2020	13:45	Kestrel	1	135	0	0	135	0	conifer plantation; flying and hunting by hovering	PW
K.091	VP1	22/07/2020	15:12	Kestrel	1	24	0	24	0	0	improved agricultural grassland and stone walls and other stonework; flying and hovering over BL1 and GA1 before dropping down over hill in field out of view	PW
K.094	VP1	22/08/2020	15:03	Kestrel	1	220	112	108	0	0	wet grassland, scrub and improved agricultural grassland; flying and hovering, flying, hunting by hovering low down near another kestrel dropped below WL1 out of view.	PW
K.095	VP1	22/08/2020	15:03	Kestrel	1	130	103	27	0	0	wet grassland, scrub and improved agricultural grassland; flying and hovering, flying, hunting by hovering over rough grassland and scrub near WL1 before dropping out of view.	PW
K.096	VP1	22/08/2020	15:06	Kestrel	1	2	2	0	0	0	wet grassland, scrub and improved agricultural grassland; flying, came back into view briefly before dropping out of sight again.	PW
K.097	VP1	22/08/2020	16:54	Kestrel	1	50	38	9	3	0	improved agricultural grassland and hedgerows; flying and hovering, flying low in breeze, hovering briefly before flying again and dropping below ridge out of view.	PW
K.098	VP1	22/08/2020	17:02	Kestrel	1	3	0	3	0	0	conifer plantation, wet grassland and scrub; flying and perched, flew to perch	PW
K.099	VP1	22/08/2020	17:04	Kestrel	1	5	0	5	0	0	conifer plantation; flying, flew off low over forestry out of view.	PW
K.100	VP1	22/08/2020	17:29	Kestrel	1	488	289	199	0	0	improved agricultural grassland, wet grassland and scrub; flying and hovering, hunting by flying and hovering, before flying to perch on telegraph pole. perched for 357s after	PW

Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
											landing.	
K.101	VP1	22/08/2020	17:43	Kestrel	1	17	17	0	0	0	improved agricultural grassland, wet grassland and hedgerows; flying and perched, flew from one telegraph pole to the next one along the road.	PW
K.102	VP1	22/08/2020	17:45	Kestrel	1	2	2	0	0	0	hedgerows and wet grassland; flying, dropped out of view off perch after being on pole for 119s.	PW
K.103	VP1	22/08/2020	19:29	Kestrel	2	10	10	0	0	0	wet grassland, improved agricultural grassland and scrub; flying.	PW
K.104	VP1	22/08/2020	19:30	Kestrel	1	8	8	0	0	0	wet grassland, improved agricultural grassland and scrub; flying.	PW
K.105	VP1	22/08/2020	19:55	Kestrel	1	74	0	5	69	0	wet grassland, conifer plantation and improved agricultural grassland; flying, flying at PCH before descending near other kestrel and dropping out of view.	PW
K.106	VP1	22/08/2020	19:55	Kestrel	1	12	0	12	0	0	wet grassland; flying, flying near other kestrel	PW
K.107	VP1	22/08/2020	20:35	Kestrel	1	307	159	143	5	0	wet grassland, hedgerows and improved agricultural grassland; flying and hovering, flying hunting and hovering hunting.	PW
K.121	VP1	21/09/2020	10:30	Kestrel	1	33	8	25	0	0	improved agricultural grassland, scrub and hedgerows; circling and flying, circling low and then flying low. GS4 and WL2 also.	PW
K.122	VP1	21/09/2020	10:40	Kestrel	1	8	0	8	0	0	conifer plantation and wet grassland; hovering and flying, hunting by hovering before dropping below treeline out of view.	PW
K.123	VP1	21/09/2020	12:02	Kestrel	1	25	0	25	0	0	wet grassland, scrub and hedgerows; flying and calling	PW
K.124	VP1	21/09/2020	12:28	Kestrel	1	497	0	19	0	0	conifer plantation and wet grassland; perch hunting from edge of WD4 with GS4. perched for 461s and out of view for 17s when went to ground out of view before perching again. dropped down off perch out of view at end of VP., male	PW

Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
K.125	VP1	21/09/2020	12:47	Kestrel	1	47		7	40		conifer plantation, wet grassland and scrub; flying	PW
K.126	VP1	09/10/2020	13:28	Kestrel	1	420	0	180	240	0	wet grassland and hedgerows; perched in ash tree calling at first before beginning to hunt by hovering and then flying off.	PW
K.127	VP1	09/10/2020	14:30	Kestrel	1	30	0	30	0	0	improved agricultural grassland and hedgerows; hunting hovering	PW
K.128	VP1	09/10/2020	15:10	Kestrel	1	25	0	25	0	0	conifer plantation; flying being mobbed by hooded crow	PW
K.129	VP1	09/10/2020	15:24	Kestrel	1	19	0	19	0	0	wet grassland, improved agricultural grassland and hedgerows; flying to perch in WL2	PW
K.130	VP1	09/10/2020	15:38	Kestrel	1	36	0	34	2	0	wet grassland and improved agricultural grassland; hunting by hovering	PW
K.131	VP1	09/10/2020	15:40	Kestrel	1	3	3	0	0	0	hedgerows; flying, same kestrel as was perched on conifers.	PW
K.132	VP1	09/10/2020	15:50	Kestrel	1	94	27	67	0	0	wet grassland; hunting by hovering	PW
K.133	VP1	09/10/2020	15:59	Kestrel	1	4	2	1	1	0	wet grassland; diving down from flying	PW
K.134	VP1	09/10/2020	16:16	Kestrel	1	180	90	90	0	0	improved agricultural grassland and wet grassland; hunting by hovering, male	PW
K.135	VP1	09/10/2020	16:33	Kestrel	1	24	2	22	0	0	improved agricultural grassland and hedgerows; hunting by hovering, male	PW
K.136	VP1	09/10/2020	16:48	Kestrel	1	12	2	10	0	0	improved agricultural grassland; hunting by hovering	PW
K.165	VP1	19/11/2020	10:53	Kestrel	1	161	49	10	102	0	wet grassland and hedgerows; hunting by hovering, dropped down out of view after hovering very low for 49s.	PW
K.166	VP1	19/11/2020	11:03	Kestrel	1	7	7	0	0	0	wet grassland and hedgerows; flew to perch, then flew again., perched for 75s before dropping off tree and flying low out of view.	PW
K.167	VP1	19/11/2020	11:08	Kestrel	1	545	0	255	290	0	conifer plantation, wet grassland and hedgerows; hunting by hovering, flying	PW

Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
K.168	VP1	19/11/2020	11:52	Kestrel	1	143	0	0	143	0	wet grassland, improved agricultural grassland and hedgerows; flying	PW
K.169	VP1	19/11/2020	12:35	Kestrel	1	10	0	10	0	0	conifer plantation and wet grassland; hunting by hovering, picked up briefly when following golden plover	PW
K.170	VP1	19/11/2020	13:05	Kestrel	1	117	0	0	117	0	conifer plantation and wet grassland; hunting by hovering	PW
K.171	VP1	19/11/2020	13:37	Kestrel	1	120	0	0	120	0	conifer plantation; flying, hunting by hovering	PW
K.174	VP1	11/12/2020	11:12	Kestrel	1	221	0	2	219	0	conifer plantation; hunting by hovering, dropped below treeline out of view.	PW
K.175	VP1	11/12/2020	11:24	Kestrel	1	3	0	0	3	0	conifer plantation; hunting by hovering	PW
K.176	VP1	11/12/2020	11:44	Kestrel	1	-	-	-	-	-	conifer plantation and wet grassland; perched, female. perched for 57s at edge of forestry with GS4	PW
K.177	VP1	11/12/2020	11:44	Kestrel	1	46	6	30	10	0	wet grassland and conifer plantation; hunting by hovering, female. flew from perch to hunt. dropped below out of view.	PW
K.178	VP1	11/12/2020	11:47	Kestrel	1	-	-	-	-	-	conifer plantation; perched, female. perched in view for 40s	PW
K.179	VP1	11/12/2020	11:47	Kestrel	1	3	0	3	0	0	conifer plantation; flying to perch, female	PW
K.180	VP1	11/12/2020	12:07	Kestrel	1	4	0	4	0	0	wet grassland and improved agricultural grassland; flying, dropped out of view.	PW
K.181	VP1	11/12/2020	12:11	Kestrel	1	14	14	0	0	0	conifer plantation, scrub and improved agricultural grassland; flying, being mobbed by rook.	PW
K.182	VP1	11/12/2020	12:14	Kestrel	1	155	0	35	120	0	conifer plantation; hunting by hovering	PW
K.183	VP1	11/12/2020	12:21	Kestrel	1	35	0	35	0	0	conifer plantation; hunting flying to perch, flying among treetops and perched out of view	PW

Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
K.184	VP1	11/12/2020	12:31	Kestrel	1	72	0	7	65	0	conifer plantation; hunting by hovering, then flew to perch	PW
K.185	VP1	11/12/2020	12:33	Kestrel	1	-	-	-	-	-	conifer plantation; perched	PW
K.186	VP1	11/12/2020	12:42	Kestrel	1	39	0	0	39	0	conifer plantation; hunting by hovering	PW
K.187	VP1	11/12/2020	13:00	Kestrel	1	9	0	9	0	0	conifer plantation; flying among treetops	PW
K.188	VP1	11/12/2020	13:08	Kestrel	1	-	-	-	-	-	conifer plantation; perched, 15s	PW
K.189	VP1	11/12/2020	13:08	Kestrel	1	1	0	0	1	0	conifer plantation; dropped off perch out of view	PW
K.190	VP1	11/12/2020	13:14	Kestrel	1	48	39	9	0	0	conifer plantation, improved agricultural grassland and wet grassland; flying and hunting by hovering, perched, female	PW
K.191	VP1	11/12/2020	13:15	Kestrel	1	-	-	-	-	-	conifer plantation and wet grassland; perched, female. perched at edge of forestry overlooking GS4.	PW
K.192	VP1	11/12/2020	13:17	Kestrel	1	99	0	60	39	0	conifer plantation and wet grassland; flying, hunting by hovering, female	PW
K.193	VP1	11/12/2020	13:18	Kestrel	1	-	-	-	-	-	conifer plantation; perched, female	PW
K.194	VP1	11/12/2020	13:21	Kestrel	1	9	5	4	0	0	conifer plantation, wet grassland and improved agricultural grassland; flying, female, flew from perch low out of view.	PW
K.195	VP1	11/12/2020	14:39	Kestrel	1	166	65	101	0	0	conifer plantation and wet grassland; hunting by hovering, male. finished by perching.	PW
K.196	VP1	11/12/2020	14:42	Kestrel	1	-	-	-	-	-	conifer plantation; perched, preening, perched for 499s	PW
K.197	VP1	11/12/2020	14:50	Kestrel	1	168	20	85	63	0	conifer plantation; hunting by hovering, male	PW
K.198	VP1	11/12/2020	14:53	Kestrel	1	-	-	-	-	-	conifer plantation; perched, for 350s	PW

Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
K.199	VP1	11/12/2020	14:59	Kestrel	1	213	0	0	213	0	conifer plantation; flying and hunting by hovering high over forestry., male	PW
K.200	VP1	11/12/2020	15:30	Kestrel	1	142	0	35	107	0	improved agricultural grassland and hedgerows; hunting by hovering, dropped below out of view.	PW
K.201	VP1	11/12/2020	15:47	Kestrel	1	6	0	0	6	0	conifer plantation and scrub; flying, over clearfelled areas	PW
K.202	VP1	11/12/2020	16:21	Kestrel	1	131	0	39	92	0	improved agricultural grassland and hedgerows; hunting by hovering	PW
K.203	VP1	12/12/2020	14:36	Kestrel	1	15	0	15	0	0	conifer plantation and wet grassland; flying, male	PW
K.212	VP1	15/01/2021	08:53	Kestrel	1	-	-	-	-	-	conifer plantation and wet grassland; perched, in view for 360s before dropping out of view.	PW
K.213	VP1	15/01/2021	08:53	Kestrel	1	6	0	0	6	0	conifer plantation and wet grassland; flying to perch	PW
K.214	VP1	15/01/2021	09:04	Kestrel	1	23	0	23	0	0	wet grassland, scrub and conifer plantation; calling, flying, perched., flew from perch in ash tree calling to perch in edge of forestry.	PW
K.215	VP1	15/01/2021	09:08	Kestrel	1	-	-	-	-	-	conifer plantation, scrub and wet grassland; perched, perched in spruce at edge of woods for 240s.	PW
K.216	VP1	15/01/2021	09:08	Kestrel	1	11	0	11	0	0	conifer plantation and scrub; flying, flew from perch in edge of WD4 further down to perch again.	PW
K.217	VP1	15/01/2021	09:09	Kestrel	1	-	-	-	-	-	conifer plantation and scrub; perched, in view perched for 69s before fog closed in again.	PW
K.218	VP1	15/01/2021	09:21	Kestrel	1	-	-	-	-	-	conifer plantation; perched, perched for in view for 33s before flying to another perch.	PW
K.219	VP1	15/01/2021	09:22	Kestrel	1	16	0	0	16	0	conifer plantation; flying, flew from perch to perch over trees landing in spruce.	PW
K.220	VP1	15/01/2021	09:23	Kestrel	1	-	-	-	-	-	conifer plantation; perched, perched for 66s before flying on again.	PW

Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
K.221	VP1	15/01/2021	09:24	Kestrel	1	11	0	10	1	0	conifer plantation; flying, dropped off perch out of view over forestry.	PW
K.222	VP1	15/01/2021	09:34	Kestrel	1	191	0	2	189	0	conifer plantation; hunting by hovering, dropped below treeline out of view then.	PW
K.223	VP1	15/01/2021	09:35	Kestrel	1	-	-	-	-	-	wet grassland and scrub; perched, female. perched on ash tree for 39s before dropping out of view.	PW
K.224	VP1	15/01/2021	09:43	Kestrel	1	29	0	0	29	0	conifer plantation; flying	PW
K.225	VP1	15/01/2021	09:54	Kestrel	1	3	3	0	0	0	wet grassland and scrub; flying, female. dropped off perch out of view.	PW
K.226	VP1	15/01/2021	10:11	Kestrel	1	-	-	-	-	-	conifer plantation and wet grassland; perched, female. perched in view for 103s before dropping off perch to commence hunting by hovering.	PW
K.227	VP1	15/01/2021	10:16	Kestrel	1	179	0	21	158	0	conifer plantation and wet grassland; hunting by hovering, flying, female. flew off low through conifers out of view.	PW
K.228	VP1	15/01/2021	13:26	Kestrel	1	21	0	21	0	0	wet grassland and improved agricultural grassland; flying, lost from view behind treeline.	PW
K.229	VP1	15/01/2021	13:26	Kestrel	1	34	0	34	0	0	wet grassland and conifer plantation; flying to perch.	PW
K.230	VP1	15/01/2021	13:27	Kestrel	1	-	-	-	-	-	conifer plantation and wet grassland; perched, perched for 37s. using same perch as earlier at edge of WD4 with GS4.	PW
K.231	VP1	15/01/2021	13:28	Kestrel	1	1200	302	620	278	0	improved agricultural grassland, conifer plantation and wet grassland; hunting by hovering, male. hunting over area near VP over rushy fields and rank wet grassland, low hedges and improved grassland.	PW
K.232	VP1	15/01/2021	14:02	Kestrel	1	15	0	15	0	0	wet grassland; hunting by hovering	PW
K.243	VP1	15/02/2021	12:47	Kestrel	1	57	0	0	57	0	conifer plantation; flying	PW

Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
K.244	VP1	15/02/2021	12:55	Kestrel	1	528	0	58	283	100	conifer plantation, wet grassland and hedgerows; hunting by hovering., female, hunting near VP2 over rough grassland and scrub. ascended to above PCH off site in wind before stooping down into forestry below treeline out of view. above PCH for 200s, on site for 100 of those.	PW
K.245	VP1	15/02/2021	13:45	Kestrel	1	26	0	26	0	0	conifer plantation; flying, 1 of 2 birds in the area.	PW
K.246	VP1	15/02/2021	13:46	Kestrel	1	-	-	-	-	-	conifer plantation and wet grassland; perched, second of two birds in area. perched at edge of plantation. dropped off out of view when following other kestrel	PW
K.247	VP1	15/02/2021	13:50	Kestrel	1	33	0	29	4	0	conifer plantation and wet grassland; flying into perch., flew in to land at edge of forestry where perched for 102s before continuing off flying behind forestry out of view.	PW
K.248	VP1	15/02/2021	14:00	Kestrel	1	9	7	2	0	0	conifer plantation, wet grassland and scrub; perched and hunting flying., perched at edge of forestry for 10s before dropping down and flying low into rough pasture and scrub.	PW
K.249	VP1	15/02/2021	14:43	Kestrel	1	32	0	3	29	0	conifer plantation; hunting by hovering., hunting over clearfelled areas. briefly dropped below treeline before continuing to hover. then dropped out of sight.	PW
K.250	VP1	15/02/2021	14:54	Kestrel	1	338	0	0	338	0	conifer plantation; flying and hunting by hovering., over forest roads and clearfelled areas.	PW
K.251	VP1	26/03/2021	09:58	Kestrel	1	15	0	0	15	0	wet grassland, conifer plantation and scrub; hunting by hovering., female.	PW
K.252	VP1	26/03/2021	11:18	Kestrel	1	26	4	22	0	0	scrub, wet grassland and hedgerows; flying, hunting.	PW
K.253	VP1	26/03/2021	11:37	Kestrel	1	685	310	328	47	0	improved agricultural grassland, scrub and hedgerows; hunting by hovering.	PW
K.266	VP1	07/04/2021	14:55	Kestrel	1	345	0	90	102	0	wet grassland, improved agricultural grassland and hedgerows; hunting by hovering., female	PW

Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
K.267	VP1	07/04/2021	16:45	Kestrel	1	60	0	0	30	0	conifer plantation, treelines and improved agricultural grassland; hunting by hovering, perched., hunted for 30s before perching on spruce for 159s. then hunted by hovering again before diving down below treeline out of view after 30s.	PW
K.268	VP1	07/04/2021	17:37	Kestrel	1	205	0	0	205	0	conifer plantation; hunting by hovering., dived down out of hover to below treeline out of view.	PW
K.280	VP1	17/05/2021	05:28	Kestrel	1	40	0	0	40	0	conifer plantation; hunting by hovering.	PW
K.281	VP1	17/05/2021	06:08	Kestrel	1	41	0	0	41	0	conifer plantation; hunting by hovering.	PW
K.282	VP1	17/05/2021	06:12	Kestrel	1	234	0	0	234	0	conifer plantation; hunting by hovering., over clearfelled areas	PW
K.283	VP1	17/05/2021	09:41	Kestrel	1	90	56	34	0	0	improved agricultural grassland and hedgerows; flying, hunting by hovering., male.	PW
K.284	VP1	17/05/2021	09:44	Kestrel	1	21	0	21	0	0	wet grassland and conifer plantation; hunting by hovering., female. dropped down out of view.	PW
K.285	VP1	17/05/2021	09:45	Kestrel	1	60	0	2	56	0	conifer plantation, improved agricultural grassland and hedgerows; hunting, circling, flying, diving., female. dove down behind hedge out of view.	PW
K.286	VP1	17/05/2021	10:05	Kestrel	1	30	18	7	0	0	improved agricultural grassland and hedgerows; flying, female. flew in low from behind VP1 and dropped down behind treeline as it moved off out of view.	PW
K.287	VP1	17/05/2021	10:14	Kestrel	1	101	2	3	96	0	wet grassland, conifer plantation and hedgerows; hunting by hovering., female. dropped down from hover in dive out of view.	PW
K.288	VP1	17/05/2021	11:09	Kestrel	1	220	10	3	207	0	conifer plantation, improved agricultural grassland and wet grassland; hunting by hovering., female.	PW

Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
K.295	VP1	03/06/2021	13:18	Kestrel	1	71	0	0	71	0	conifer plantation; hunting by hovering., hunting over forest edge with rank grassland sown with young conifers.	PW
K.296	VP1	03/06/2021	13:35	Kestrel	1	207	89	30	83	0	conifer plantation, hedgerows and improved agricultural grassland; hunting by hovering. WL2	PW
K.297	VP1	03/06/2021	14:56	Kestrel	1	61	0	2	59	0	conifer plantation and wet grassland; hunting by hovering., hunting over mature forestry edge with rank grassland sown with conifers. dropped below treeline out of view.	PW
K.298	VP1	04/06/2021	13:08	Kestrel	1	71	0	0	71	0	conifer plantation; hunting by hovering.	PW
K.299	VP1	04/06/2021	13:27	Kestrel	1	57	0	0	57	0	conifer plantation; hunting by hovering.	PW
K.300	VP1	04/06/2021	13:37	Kestrel	1	54	0	4	50	0	conifer plantation, wet grassland and hedgerows; flying, dropped down out of view.	PW
K.301	VP1	04/06/2021	13:57	Kestrel	1	84	0	21	63	0	conifer plantation, scrub and wet grassland; hunting by hovering.	PW
K.302	VP1	04/06/2021	15:00	Kestrel	1	67	0	51	16	0	improved agricultural grassland, wet grassland and scrub; hunting by hovering.	PW
K.303	VP1	04/06/2021	15:15	Kestrel	1	171	136	35	0	0	improved agricultural grassland and hedgerows; hunting by hovering., male. hunting over pasture and scrubby hedge. hovering low 10m. dropped down as flew off north out of view.	PW
K.331	VP1	13/07/2021	13:14	Kestrel	1	21	5	2	14	0	improved agricultural grassland, hedgerows and scrub; hunting by hovering.	PW
K.332	VP1	13/07/2021	13:45	Kestrel	1	39	0	0	39	0	conifer plantation; hunting by hovering and circling flying., male. hunting over clearfelled areas.	PW
K.335	VP1	13/07/2021	16:01	Kestrel	1	105	5	47	53	0	scrub, wet grassland and improved agricultural grassland; hunting by hovering before diving down from hover to ground out of view., 1 of two birds hunting in this area together.	PW

Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
K.336	VP1	13/07/2021	16:01	Kestrel	1	170	0	47	123	0	scrub, hedgerows and wet grassland; hunting by hovering, male. WL1.	PW
K.337	VP1	19/07/2021	19:20	Kestrel	1	-	-	-	-	-	conifer plantation; calling from woods., heard, not seen.	PW
K.353	VP1	12/08/2021	14:10	Kestrel	1	116	2	3	111	0	wet grassland, dry meadows and grassy verges and drainage ditches; hunting by hovering., WL1	PW
K.354	VP1	12/08/2021	14:25	Kestrel	1	248	40	75	133	0	dry meadows and grassy verges, improved agricultural grassland and hedgerows; hunting by hovering. perched, preening., male. flew hunting then perched for 712s, preened and perch hunted from ash tree. then hunted again by hovering before perching in a different tree for 535s before hunting again.	PW
K.355	VP1	12/08/2021	15:05	Kestrel	1	93	0	2	91	0	wet grassland, conifer plantation and drainage ditches; hunting by hovering., dropped down from hover out of view.	PW
K.356	VP1	12/08/2021	15:15	Kestrel	1	133	0	23	110	0	wet grassland, conifer plantation and hedgerows; hunting by hovering., WL2	PW
K.357	VP1	12/08/2021	15:23	Kestrel	1	162	0	0	162	0	conifer plantation and improved agricultural grassland; hunting by hovering. flying on., second of 2 birds in the area. dropped below treeline out of view.	PW
K.358	VP1	12/08/2021	15:24	Kestrel	1	122	0	61	61	0	wet grassland, conifer plantation and improved agricultural grassland; hunting by hovering., 1 of 2 birds in the area at the time.	PW
K.359	VP1	12/08/2021	15:36	Kestrel	1	74	0	0	74	0	conifer plantation; hunting by hovering., 1 of 2 birds in the area at the time. hunting near clearfelled areas. dropped down below treeline out of view.	PW
K.360	VP1	12/08/2021	15:39	Kestrel	1	251	3	22	226	0	conifer plantation and wet grassland; hunting by hovering., second of 2 birds in the area.	PW
K.361	VP1	12/08/2021	15:54	Kestrel	2	96	0	0	96	0	wet grassland, conifer plantation and treelines; mobbing buzzard, circling, and hunting by hovering., lost from view when following hen harrier	PW

Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
K.362	VP1	12/08/2021	15:59	Kestrel	1	-	-	-	-	-	conifer plantation and wet grassland; calling., heard calling in this area when watching buzzard but not seen.	PW
K.363	VP1	12/08/2021	16:00	Kestrel	1	28	0	28	0	0	treelines, wet grassland and improved agricultural grassland; hunting by hovering male.	PW
K.364	VP1	12/08/2021	17:00	Kestrel	1	17	0	17	0	0	wet grassland, scrub and conifer plantation; flying.	PW
K.365	VP1	12/08/2021	17:35	Kestrel	1	12	0	12	0	0	scrub, wet grassland and dry meadows and grassy verges; hunting by hovering., WL1	PW
K.366	VP1	12/08/2021	18:02	Kestrel	1	37	0	20	17	0	conifer plantation; flying over windthrow forestry.	PW
K.367	VP1	12/08/2021	18:05	Kestrel	1	43	-	-	-	-	conifer plantation and improved agricultural grassland; hunting by hovering., 1 of 2 birds in view at the time.	PW
K.368	VP1	12/08/2021	18:06	Kestrel	1	51	0	0	51	0	improved agricultural grassland and conifer plantation; hunting by hovering., second bird in view at the time.	PW
K.369	VP1	12/08/2021	19:11	Kestrel	1	168	0	0	168	0	conifer plantation; hunting by hovering.	PW
K.370	VP1	12/08/2021	19:27	Kestrel	1	284	0	0	284	0	conifer plantation, wet grassland and improved agricultural grassland; hunting by hovering, perched. hunting again., 1 of 2 birds in view at the time. hunting before perching for an additional 369s then continuing to hunt flying over forestry to rough wet grass area. in view for 653s total.	PW
K.371	VP1	12/08/2021	19:34	Kestrel	1	54	22	32	0	0	improved agricultural grassland and hedgerows; flying hunting, perched., female. second bird in view at the time. flew to perch in far side of hawthorn near vp1 out of view.	PW
K.372	VP1	12/08/2021	20:17	Kestrel	1	34	0	0	34	0	wet grassland, conifer plantation and hedgerows; hunting by hovering.	PW
K.384	VP1	14/09/2021	14:14	Kestrel	1	5	0	0	5	0	conifer plantation and improved agricultural grassland; hunting by hovering., dropped down out of view.	PW

Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
K.385	VP1	14/09/2021	14:54	Kestrel	1	118	0	0	24	0	improved agricultural grassland, conifer plantation and hedgerows; flying being mobbed by 2 ravens., moved behind treeline in foreground off out of view.	PW
K.386	VP1	14/09/2021	18:39	Kestrel	1	-	-	-	-	-	conifer plantation and wet grassland; perch hunting at edge of forestry., perched in view for 71s before dropping off out of view.	PW
K.387	VP1	14/09/2021	18:52	Kestrel	1	2	0	2	0	0	conifer plantation and wet grassland; dropped off perch out of view., perched in view for 71s before dropping off out of view.	PW
K.388	VP1	14/09/2021	19:13	Kestrel	1	39	0	13	0	0	wet grassland, improved agricultural grassland and treelines; flying commuting.	PW
K.389	VP1	21/10/2021	08:19	Kestrel	1	120	120	0	0	0	improved agricultural grassland and wet grassland; male hunting over fields north of VP1	SP
K.390	VP1	21/10/2021	10:45	Kestrel	1	300	300	0	0	0	improved agricultural grassland, wet grassland and mixed conifer woodland; hunting fields/forestry southwest of VP1, female	SP
K.391	VP1	21/10/2021	11:07	Kestrel	1	20	20	0	0	0	improved agricultural grassland and wet grassland; seen briefly hunting, female	SP
K.392	VP1	21/10/2021	11:50	Kestrel	1	2	2	0	0	0	improved agricultural grassland and wet grassland; seen briefly hunting north of VP1, female	SP
K.393	VP1	21/10/2021	12:02	Kestrel	1	420	420	0	0	0	improved agricultural grassland, wet grassland and mixed conifer woodland; hunting fields/forestry southwest of VP1, female	SP
K.394	VP1	21/10/2021	12:15	Kestrel	1	60	60	0	0	0	improved agricultural grassland and wet grassland; hunting fields north of VP1, female	SP
K.395	VP1	21/10/2021	12:20	Kestrel	1	5	5	0	0	0	improved agricultural grassland and wet grassland; seen briefly fields north of VP1, female	SP
K.396	VP1	21/10/2021	12:32	Kestrel	1	60	60	0	0	0	improved agricultural grassland and wet grassland; hunting fields southwest of VP1	SP
K.397	VP1	21/10/2021	12:38	Kestrel	1	10	10	0	0	0	improved agricultural grassland and wet grassland; hunting fields north of VP1, female	SP

Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
K.398	VP1	21/10/2021	12:40	Kestrel	1	600	600	0	0	0	improved agricultural grassland, wet grassland and mixed conifer woodland; hunting fields/forestry southwest of VPI, female	SP
K.409	VP1	10/12/2021	13:21	Kestrel	1	15	2	13	0	0	conifer plantation and improved agricultural grassland; hovering/travelling	JM
K.412	VP1	25/01/2022	12:14	Kestrel	1	17	17	0	0	0	conifer plantation; perched/flying/perched	JM
K.413	VP1	25/01/2022	14:04	Kestrel	1	50	10	40	0	0	improved agricultural grassland and conifer plantation; travelling/perched, male	JM
K.414	VP1	25/01/2022	16:57	Kestrel	1	27	27	0	0	0	improved agricultural grassland and conifer plantation; travelling	JM
K.415	VP1	25/01/2022	17:16	Kestrel	1	90	0	70	20	0	improved agricultural grassland and conifer plantation; travelling/hovering	JM
K.416	VP1	08/02/2022	12:07	Kestrel	1	47	2	45	0	0	improved agricultural grassland and conifer plantation; travelling, flew in and landed in plantation	JM
K.420	VP1	16/03/2022	14:08	Kestrel	1	-	-	-	-	-	improved agricultural grassland and conifer plantation; perched, male kestrel	JM
K.421	VP1	16/03/2022	14:22	Kestrel	1	71	60	11	0	0	improved agricultural grassland and conifer plantation; travelling, female kestrel	JM
K.422	VP1	16/03/2022	15:09	Kestrel	1	6	6	0	0	0	improved agricultural grassland; hovering/fly	JM
K.423	VP1	16/03/2022	17:03	Kestrel	1	40	0	0	40	0	conifer plantation; travelling	JM
K.424	VP1	16/03/2022	17:20	Kestrel	1	40	40	0	0	0	improved agricultural grassland and conifer plantation; travelling-fly/perch	JM

Table 7-4-4- 2 Kestrel Breeding Walkover Survey Data

Breeding Walkover Surveys						
Ref.	Date	Time	Species	Number	Habitat and activity	Surveyor
K.001	19/05/2020	10:11	Kestrel	1	conifer plantation; hovering and hunting below PCH then flying west (suitable nesting habitat; possible breeder)	PW

Breeding Walkover Surveys						
Ref.	Date	Time	Species	Number	Habitat and activity	Surveyor
K.002	22/07/2020	11:43	Kestrel	2	conifer plantation and wet grassland; hunting by hovering (pair; probable breeding)	PW
K.003	22/07/2020	11:47	Kestrel	1	wet grassland and hedgerows; hunting by hovering. dropped out of view behind treeline (flyover; non-breeding)	PW
K.004	21/04/2021	10:35	Kestrel	1	conifer plantation; perched and flying., male. perched at clearfelled areas before flying to forest edge and perching again. (suitable nesting habitat; possible breeder)	PW
K.005	21/04/2021	13:48	Kestrel	1	improved agricultural grassland and hedgerows; hunting by hovering. (flyover; non-breeding)	PW
K.007	11/05/2021		Kestrel	1		TREA
K.008	18/05/2021	10:45	Kestrel	1	conifer plantation, improved agricultural grassland and scrub; perched (suitable nesting habitat; possible breeder)	PW
K.009	21/05/2021		Kestrel	1		TREA
K.010	23/06/2021	11:19	Kestrel	1	conifer plantation; flying to perch., female. flew out over clearfelled areas from edge with mature conifers and appeared to fly in to land at edge of woods. (suitable nesting habitat; possible breeder)	PW
K.011	23/06/2021	12:47	Kestrel	1	conifer plantation; flying to perch before flying on., mobbed by 5 meadow pipits (suitable nesting habitat; possible breeder)	PW
K.013	26/07/2021	12:06	Kestrel	1	conifer plantation; flying in to land on lone tree left in clearfelled areas., female. (permanent territory; probable breeding)	PW
K.014	26/07/2021	12:44	Kestrel	1	wet grassland, treelines and conifer plantation; hunting by hovering and perch hunting., in view for 9 min 45s hunting. perched on WL2 for 2 mins. (permanent territory; probable breeding)	PW

Table 7-4-4-3 Kestrel Breeding Raptor Survey Data

Breeding Raptor Surveys								
Ref.	BR	Date	Time	Species	Number	Habitat and activity	Breeding status	Surveyor
K.003	BRVP1	24/05/2020	08:27	Kestrel	1	conifer plantation, another kestrel appeared briefly into view	suitable nesting habitat; possible breeder	PW
K.004	BRVP1	24/05/2020	10:31	Kestrel	1	conifer plantation, perched on tall spruce overlooking small young plantation. moved off then near forest	suitable nesting habitat; possible breeder	PW
K.005	BRVP1	24/05/2020	10:34	Kestrel	1	conifer plantation, hunting by hovering over young forestry spruce mostly at PCH descending briefly at times and lost from view	suitable nesting habitat; possible breeder	PW
K.006	BRVP1	24/05/2020	10:49	Kestrel	1	conifer plantation, picked up hunting again over WD4 same place, when buzzard appeared it began to mob it and both birds climb higher. kestrel was lost from view as buzzard glided away	suitable nesting habitat; possible breeder	PW
K.007	BRT3	02/06/2020	09:02	Kestrel	1	improved agricultural grassland, on lone spruce tree adjacent to abandoned quarry perched. female	permanent territory; probable breeding	PW
K.008	BRT3	02/06/2020	09:05	Kestrel	1	improved agricultural grassland, flew to bramble bank by road at VP2 diving into brambles. female	suitable nesting habitat; possible breeder	PW
K.012	BRT3	02/06/2020	09:21	Kestrel	1	improved agricultural grassland, female dropped off telegraph pole out of view	permanent territory; probable breeding	PW
K.014	BRVP2	02/06/2020	16:33	Kestrel	1	improved agricultural grassland, gliding in breeze began hovering before dropping height and flying over GA1 among WL1 eventually lost from view to the northwest	suitable nesting habitat; possible breeder	PW
K.015	BRVP2	02/06/2020	17:16	Kestrel	1	improved agricultural grassland and hedgerows, male hovering hunting at 15-20m over GA1 in WL1. dropped out of view after 16 secs before reappearing, hovering again when lost from view	suitable nesting habitat; possible breeder	PW
K.016	BRVP2	02/06/2020	17:20	Kestrel	1	improved agricultural grassland, male mobbed by rook. both flying low 20m, dropped out of view blow treeline	suitable nesting habitat; possible breeder	PW
K.017	BRVP4 & BRVP5	02/07/2020	11:40	Kestrel	1	improved agricultural grassland and hedgerows, flying among GA1, WL1 and farmland low briefly lost from view before finally dropped fully out of view	suitable nesting habitat; possible breeder	PW
K.018	BRVP1 & BRT4	15/07/2020	11:33	Kestrel	1	improved agricultural grassland and hedgerows, hovering over WD4 dropped down into trees out of view	suitable nesting habitat; possible breeder	PW
K.020	BRVP2 & BRT3	20/07/2020	11:17	Kestrel	1	improved agricultural grassland and hedgerows, flew from perch in spruce by forest track along track around bend and out of view	suitable nesting habitat; possible breeder	PW

Breeding Raptor Surveys								
Ref.	BR	Date	Time	Species	Number	Habitat and activity	Breeding status	Surveyor
K.021	BRVP2 & BRT3	20/07/2020	11:58	Kestrel	1	improved agricultural grassland and hedgerows, flying over clearfelled areas and mature WD4	suitable nesting habitat; possible breeder	PW
K.022	BRVP2 & BRT3	20/07/2020	12:13	Kestrel	1	improved agricultural grassland and hedgerows, perched on spruce tree	suitable nesting habitat; possible breeder	PW
K.023	BRVP2 & BRT3	20/07/2020	12:21	Kestrel	1	improved agricultural grassland and hedgerows, incidental when leaving the site. flew along this route (see northern map)	suitable nesting habitat; possible breeder	PW
K.024	BRT2	20/07/2020	17:56	Kestrel	1	improved agricultural grassland and hedgerows, flying over clearfelled areas	suitable nesting habitat; possible breeder	PW
K.025	BRT1	15/04/2021	13:35	Kestrel	2	conifer plantation, raised bog and wet heath, flying, circling, hunting by hovering., male and female.	pair; probable breeding	PW
K.026	BRT1	15/04/2021	14:04	Kestrel	1	conifer plantation, raised bog and wet heath, hunting by hovering., dropped down in dive before rising again to hunt by hovering before diving again into heather.	suitable nesting habitat; possible breeder	PW
K.027	BRT1	15/04/2021	15:49	Kestrel	1	improved agricultural grassland, conifer plantation and wet grassland, hunting by hovering, circling.	suitable nesting habitat; possible breeder	PW
K.028	BRVP1	13/05/2021	13:05	Kestrel	1	hedgerows and improved agricultural grassland, flying from perch to perch.	suitable nesting habitat; possible breeder	PW
K.029	BRVP4	19/05/2021	18:24	Kestrel	1	active quarries and mines, recolonising bare ground and hedgerows, hunting by circling and hovering., in view for 2 mins before diving down in fast flight among trees/ hedges.	suitable nesting habitat; possible breeder	PW
K.030	BRVP3	02/06/2021	19:21	Kestrel	1	active quarries and mines, mixed broadleaved woodland and recolonising bare ground, flying in to quarry., dropped into quarry out of view.	suitable nesting habitat; possible breeder	PW
K.032	BRVP3	02/06/2021	19:25	Kestrel	1	active quarries and mines, flying, male. flew from perch on stone spoil heap to near where female flew in.	pair; probable breeding	PW
K.034	BRVP3	02/06/2021	19:54	Kestrel	1	active quarries and mines, conifer plantation and scrub, hunting by hovering and perch hunting., female. hunting over young forestry plantation and scrub using ash trees for perches. in view for 6 mins.	permanent territory; probable breeding	PW
K.036	BRVP5b	20/06/2021	20:25	Kestrel	1	recolonising bare ground, scrub and improved agricultural grassland, flying, flew in around old quarry.	suitable nesting habitat; possible breeder	PW
K.037	BRVP5b	20/06/2021	20:30	Kestrel	1	recolonising bare ground and scrub, flew to perch on edge of quarry wall on hawthorn., male.	suitable nesting habitat; possible breeder	PW

Breeding Raptor Surveys								
Ref.	BR	Date	Time	Species	Number	Habitat and activity	Breeding status	Surveyor
K.039	BRVP5b	20/06/2021	20:41	Kestrel	1	recolonising bare ground, flying to perch., flew to perch on quarry wall out of view behind vegetation.	permanent territory; probable breeding	PW
K.040	BRVP4	20/06/2021	21:46	Kestrel	1	recolonising bare ground and active quarries and mines, hunting by perch hunting and hovering., perched before flying and hunting by hovering over vegetated areas in quarry. then flew to perch near buzzard on mound. in view for 14 minutes until survey ended.	suitable nesting habitat; possible breeder	PW
K.041	BRVP1	06/07/2021	12:02	Kestrel	1	improved agricultural grassland, hedgerows and treelines, flying	flyover; non-breeding	PW
K.042	BRVP3	08/07/2021	09:57	Kestrel	1	improved agricultural grassland and hedgerows, flying and hunting by hovering., in view for 67s. dropped below treeline behind hedgerow out of view.	suitable nesting habitat; possible breeder	PW
K.046	BRVP5	20/07/2021	19:09	Kestrel	1	recolonising bare ground, hedgerows and improved agricultural grassland, flying in to perch before flying on. perch hunting., kestrel flew in to land on hedgerow at top of quarry cliff face. then flew to perch at 4 different points along the quarry wall in quick succession, before flying out over quarry and farmland. in view for 290s in total.	probable nest site; probable breeding	PW

Table 7-4-4- 4 Kestrel Winter Walkover Survey Data

Winter Walkover Surveys						
Ref.	Date	Time	Species	Number	Habitat and activity	Surveyor
K.001	08/10/2020	11:36	Kestrel	1	conifer plantation; flying, flew along edge of mature WD4 with forest road and clearfelled areas at 10-25m. in view in flight for 11s. (wintering)	PW
K.002	08/10/2020	11:51	Kestrel	1	improved agricultural grassland and hedgerows; flying, in view in flight for 21s (wintering)	PW
K.003	08/10/2020	12:34	Kestrel	1	improved agricultural grassland, conifer plantation and scrub; hunting by hovering, in view in flight for 132s. (wintering)	PW
K.004	08/10/2020	12:42	Kestrel	1	scrub and conifer plantation; flying, in view in flight for 30s. (wintering)	PW

K.005	08/10/2020	12:50	Kestrel	1	conifer plantation; hunting by hovering, in view in flight for 62s. (wintering)	PW
K.006	08/10/2020	13:53	Kestrel	1	improved agricultural grassland and wet grassland; flying and hunting by hovering, in view in flight for 94s (wintering)	PW
K.007	08/10/2020	14:17	Kestrel	1	wet grassland, improved agricultural grassland and hedgerows; hunting by hovering, in view in flight for 127s. (wintering)	PW
K.008	08/10/2020	14:48	Kestrel	1	wet grassland and conifer plantation; flying to perch in conifers., in view in flight for 5s. female flew to perch in conifers by wet grassland. (wintering)	PW
K.009	08/10/2020	14:51	Kestrel	1	wet grassland and hedgerows; hunting by hovering., in view in flight for 20s. (wintering)	PW
K.010	08/10/2020	14:59	Kestrel	1	improved agricultural grassland and hedgerows; flying to perch on telegraph pole., in view in flight for 5s before perching on telegraph pole. (wintering)	PW
K.013	14/01/2021	11:08	Kestrel	1	conifer plantation; hunting by hovering, mobbed., in view for 100s. was mobbed by sparrowhawk at first then hunting by hovering, then mobbed by hooded crow and dropped into forestry out of view over treeline. (wintering)	PW
K.014	14/01/2021	11:10	Kestrel	1	conifer plantation; hunting by hovering, perched., flew to perch to land in spruce at edge of forest track. in view in flight for 124s. (wintering)	PW
K.015	14/01/2021	12:59	Kestrel	1	wet grassland and conifer plantation; hunting by hovering, in view for 44s. (wintering)	PW
K.016	14/01/2021	13:23	Kestrel	1	conifer plantation; hunting by hovering (wintering)	PW
K.020	12/02/2021	11:04	Kestrel	1	wet grassland and conifer plantation; flying, female flying along forest edge at 15m. (wintering)	PW
K.021	12/02/2021	11:12	Kestrel	1	conifer plantation, wet grassland and treelines; flying hunting, perched., female flying hunting in view for 49s before perching on treeline at roadside. (wintering)	PW
K.024	22/03/2021	13:00	Kestrel	1	improved agricultural grassland, hedgerows and conifer plantation; hunting by hovering. (wintering)	PW
K.025	22/03/2021	14:47	Kestrel	1	improved agricultural grassland, scrub and hedgerows; hunting by hovering., hunting in view for 6 mins. (wintering)	PW
K.026	22/03/2021	14:57	Kestrel	1	scrub and wet grassland; flying. (wintering)	PW
K.027	27/10/2021	15:16	Kestrel	1	improved agricultural grassland, wet grassland and hedgerows; hunting, t2 male (wintering)	SP
K.028	24/11/2021	13:38	Kestrel	1	conifer plantation and improved agricultural grassland; hovering/flying, ignore blue line between sightings (wintering)	JM
K.029	24/11/2021	14:21	Kestrel	1	conifer plantation; perched then flew, ignore the blue line linking two sightings (wintering)	JM

Table 7-4-4-5 Kestrel Incidental Observations

Incidental Observations							
Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
K.001	Breeding Woodcock Survey; T3	01/06/2020	21:17	Kestrel	1	conifer plantation; flew to sitka spruce tree at edge of clear felled areas, perched and after 10 seconds flew around tree landing lower down.	PW
K.002	Breeding Woodcock Survey; T3	01/06/2020	21:23	Kestrel	1	conifer plantation; flew over WD4 clear felled areas to perch on top of spruce on border of clear felled areas and GA1 male	PW
K.003	Breeding Woodcock Survey; T3	01/06/2020	21:24	Kestrel	1	conifer plantation; flew from spruce at edge of clear felled areas and GA1 to mature WD4 over trees when lost from view. male	PW
K.004	Breeding Woodcock Survey; T3	01/06/2020	21:31	Kestrel	1	conifer plantation; hovering hunting then fly before hovering again and then flew over WD4 and clear felled areas to perch in tree until 21:38	PW
K.005	Breeding Woodcock Survey; T3	01/06/2020	21:50	Kestrel	1	conifer plantation; hovering hunting over clear felled areas the descends and comes back over clear felled areas	PW
K.006	Breeding Woodcock Survey; T3	01/06/2020	22:01	Kestrel	1	conifer plantation; hovering over wd4/GA1 edge after flying	PW
K.007	Breeding Woodcock Survey; T3	01/06/2020	22:02	Kestrel	1	conifer plantation; flying and hovering over clear felled areas and GA1 edge dropped down after 35 secs	PW
K.008	Breeding Woodcock Survey; T3	01/06/2020	22:09	Kestrel	1	conifer plantation; f22:09 flying to perch	PW
K.009	Waterbird Distribution Survey; Close to VP1	18/08/2020	09:05	Kestrel	2	eroding/upland rivers; at least 2 different kestrels observed on 3 occasions between 09:05-10:05.	PW
K.010	Waterbird Distribution Survey; Close to VP1	31/08/2020		Kestrel	1	conifer plantation; hunting by hovering	PW
K.011	Waterbird Distribution Survey; Lackan	04/09/2020	18:08	Kestrel	1	improved agricultural grassland, hedgerows and eroding/upland rivers; flying for 10s. juvenile perched on telegraph pole flew to next one before flying off out of view.	PW
K.012	Waterbird Distribution Survey; Agharue	04/09/2020	19:30	Kestrel	1	improved agricultural grassland, hedgerows and eroding/upland rivers; flying at 15-20m for 117s.	PW
K.013	Waterbird Distribution Survey; Ballygorteen	18/09/2020	13:15	Kestrel	1	eroding/upland rivers; flying and hovering.	PW
K.014	Waterbird Distribution Survey; Annagar	18/09/2020	14:22	Kestrel	1	eroding/upland rivers; perch hunting and hovering hunting in clearfelled areas.	PW

Incidental Observations							
Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
K.015	Waterbird Distribution Survey; Annagar	18/09/2020	14:46	Kestrel	1	eroding/upland rivers; flying low over GA1 hunting.	PW
K.016	Waterbird Distribution Survey; Agharue	12/10/2020	14:45	Kestrel	1	improved agricultural grassland and hedgerows; hunting by hovering	PW
K.017	Hen Harrier Roost Survey; HHVP1	12/10/2020	17:32	Kestrel	1	raised bog and conifer plantation;	PW
K.018	Hen Harrier Roost Survey; HHVP1	12/10/2020	17:35	Kestrel	1	raised bog and conifer plantation;	PW
K.019	Waterbird Distribution Survey; Cloydagha	23/10/2020	13:41	Kestrel	1	improved agricultural grassland, conifer plantation and depositing/lowland rivers; flying, hunting by hovering	PW
K.020	Waterbird Distribution Survey; Agharue	04/11/2020	11:00	Kestrel	1	conifer plantation and scrub; hunting by hovering.	PW
K.021	Waterbird Distribution Survey; Clara	18/11/2020	12:22	Kestrel	1	improved agricultural grassland; hunting by hovering	PW
K.022	Waterbird Distribution Survey; Seskinrea	18/11/2020	14:15	Kestrel	1	improved agricultural grassland and hedgerows; hunting by hovering	PW
K.023	Hen Harrier Roost Survey; HHVP1	18/11/2020	15:03	Kestrel	1	raised bog, conifer plantation and improved agricultural grassland; flying, hunting by hovering	PW
K.024	Hen Harrier Roost Survey; HHVP2	23/12/2020	14:56	Kestrel	1	conifer plantation, scrub and wet grassland; hunting, perched, hunting by hovering for 129s before perching for 180s before flying off out of view over treeline out of view.	PW
K.025	Hen Harrier Roost Survey; HHVP2	23/12/2020	15:09	Kestrel	1	improved agricultural grassland and wet grassland; hunting by hovering, 41s	PW
K.026	Hen Harrier Roost Survey; HHVP1	06/01/2021	14:45	Kestrel	1	conifer plantation; flying	PW
K.027	Hen Harrier Roost Survey; HHVP1	06/01/2021	15:51	Kestrel	1	conifer plantation, wet grassland and; hunting by hovering, flying,, in view in flight for 27s.	PW
K.028	Waterbird Distribution Survey; Coolraheen	10/02/2021	14:33	Kestrel	1	conifer plantation, improved agricultural grassland and wet grassland; hunting by hovering above PCH.	PW
K.029	Waterbird Distribution Survey; Agharue	25/02/2021	18:03	Kestrel	1	improved agricultural grassland and hedgerows; hunting by hovering	PW
K.030	Hen Harrier Roost Survey; HHVP4	02/03/2021	16:47	Kestrel	1	improved agricultural grassland, hedgerows and treelines; flying	PW

Incidental Observations							
Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
K.031	Hen Harrier Roost Survey; HHVP4	02/03/2021	17:39	Kestrel	1	improved agricultural grassland and conifer plantation; flying to perch., male, perched for 5 mins at forest edge before flying on.	PW
K.032	Hen Harrier Roost Survey; HHVP4	02/03/2021	17:40	Kestrel	1	conifer plantation, improved agricultural grassland and treelines; flying, male	PW
K.033	Waterbird Distribution Survey; Boherboy (Paulstown)	11/03/2021	10:22	Kestrel	1	improved agricultural grassland and hedgerows; flying, flying	PW
K.034	Waterbird Distribution Survey; Cloydagh	11/03/2021	16:20	Kestrel	1	depositing/lowland rivers and bog woodland; perched, calling., male.	PW
K.035	Waterbird Distribution Survey; Rossmore	31/03/2021	15:22	Kestrel	1	wet grassland and hedgerows; perched., male.	PW
K.036	Hen Harrier Roost Survey; HHVP4	31/03/2021	19:12	Kestrel	1	improved agricultural grassland, hedgerows and conifer plantation; gliding.	PW
K.037	Waterbird Distribution Survey; Gortahile	15/04/2021	12:15	Kestrel	1	wet grassland, hedgerows and improved agricultural grassland; female.	PW
K.038	Breeding Walkover Survey; Baunreagh	18/05/2021	15:15	Kestrel	1	conifer plantation, hedgerows and improved agricultural grassland; flew from perch on telegraph pole across road and over hedge into GA1.	PW
K.039	Waterbird Distribution Survey; Rossmore	09/08/2021	13:55	Kestrel	1	recolonising bare ground, scrub and dry meadows and grassy verges; hunting by hovering over old quarry., WD4	PW
K.040	Waterbird Distribution Survey; Gortahile	09/08/2021	14:31	Kestrel	1	wet grassland, improved agricultural grassland and hedgerows; hunting by hovering.	PW
K.041	Waterbird Distribution Survey; The Ridge	09/08/2021	15:09	Kestrel	1	improved agricultural grassland and hedgerows; hunting by hovering.	PW
K.042	Waterbird Distribution Survey; Gortahile	26/08/2021	15:28	Kestrel	1	conifer plantation, wet grassland and scrub; hunting by hovering.	PW
K.043	Waterbird Distribution Survey; Gortahile	06/09/2021	16:00	Kestrel	1	conifer plantation, improved agricultural grassland and dry calcareous and neutral grassland; perch hunting and flying along forestry edge., 1 of 2 birds in the area.	PW
K.044	Waterbird Distribution Survey; Gortahile	06/09/2021	16:03	Kestrel	1	wet grassland, improved agricultural grassland and scrub; perched preening., second of 2 birds in the area.	PW
K.045	Waterbird Distribution Survey; Clogrenan	27/09/2021	16:28	Kestrel	1	improved agricultural grassland and hedgerows; hunting by hovering.	PW

Incidental Observations							
Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
K.046	Waterbird Distribution Survey; Gortnahile	19/10/2021	13:25	Kestrel	1	improved agricultural grassland and wet grassland; hunting (male)	SP
K.047	Waterbird Distribution Survey; Gortnahile	19/10/2021	13:40	Kestrel	1	improved agricultural grassland and wet grassland; being mobbed by hooded crows	SP
K.048	Waterbird Distribution Survey; Seskinrea	19/10/2021	14:45	Kestrel	1	improved agricultural grassland and hedgerows; hunting (male)	SP
K.049	Waterbird Distribution Survey; Tomard	19/10/2021	14:52	Kestrel	1	improved agricultural grassland and hedgerows; female hunting	SP
K.050	Waterbird Distribution Survey; Coolraheen north	16/11/2021	10:31	Kestrel	1	improved agricultural grassland and conifer plantation; perched	JM
K.051	Waterbird Distribution Survey; NE of Bilboa	16/11/2021	11:08	Kestrel	1	improved agricultural grassland; perched	JM
K.052	Hen Harrier Roost Survey; HHVP3	22/11/2021	16:29	Kestrel	1	scrub; hovering	JM
K.053	Hen Harrier Roost Survey; HHVP2	09/12/2021	15:57	Kestrel	1	conifer plantation; travelling	JM
K.054	Hen Harrier Roost Survey; Raheen, HHVP3	24/01/2022	16:11	Kestrel	1	recently felled woodland and conifer plantation; perched/flying	JM
K.055	Vantage Point Survey; Old Leighlin VP1	25/01/2022	16:20	Kestrel	1	improved agricultural grassland; travelling	JM
K.056	Hen Harrier Roost Survey; Knockagarry	13/02/2022	17:45	Kestrel	1	immature woodland and conifer plantation; travelling/hovering	JM
K.057	Waterbird Distribution Survey; Fonthill	14/03/2022	14:18	Kestrel	1	improved agricultural grassland; hovering/hunting	JM
K.058	Waterbird Distribution Survey; An Coan	28/03/2022	15:26	Kestrel	1	improved agricultural grassland; travelling	JM
K.059	Waterbird Distribution Survey; Powerstown	26/04/2022	11:13	Kestrel	1	refuse and other waste; hovering	CB
K.060	Waterbird Distribution Survey; Cloydagh	04/05/2022	14:00	Kestrel	1	improved agricultural grassland and hedgerows; travelling	CB

Table 7-4-4- 6 Kestrel Supplementary Vantage Point Survey Data

Supplementary Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
K.007	VP2	21/04/2020	07:08	Kestrel	1	463	0	115	348	0	hedgerows, scrub and improved agricultural grassland; hunting by hovering over farmland flying in between hovering	PW
K.008	VP2	21/04/2020	07:48	Kestrel	1	130	0	0	130	0	conifer plantation; hunting by hovering before flying back to forestry to perch, hunting over clearfelled areas, flight line located west of the townland of Feamore over WD4	PW
K.009	VP2	21/04/2020	08:02	Kestrel	1	320	0	50	260	0	conifer plantation and improved agricultural grassland; hunting by hovering over forestry and farmland disappeared down in low, hover near end when lost from view behind trees	PW
K.010	VP2	21/04/2020	08:25	Kestrel	1	57	7	50	0	0	improved agricultural grassland, hedgerows and treelines; hovering hunting dropped down from view then	PW
K.011	VP2	21/04/2020	09:12	Kestrel	1	192	0	18	174	0	conifer plantation, improved agricultural grassland and hedgerows; hovering hunting then flying hunting followed by hovering it then dropped down behind trees	PW
K.012	VP2	21/04/2020	09:21	Kestrel	1	170	0	45	125	0	conifer plantation and improved agricultural grassland; hunting by hovering before flying to conifers at area that has been clearfelled and perched	PW
K.013	VP2	21/04/2020	09:29	Kestrel	1	25	0	25	0	0	conifer plantation and improved agricultural grassland; hovering lost from view below treeline	PW
K.014	VP2	21/04/2020	11:16	Kestrel	1	55	0	3	52	0	conifer plantation; clearfelled forestry. hunting over clearfelled areas dropped below PCH and treeline when lost from view	PW
K.016	VP2	06/05/2020	18:28	Kestrel	1	20	0	0	20	0	improved agricultural grassland and hedgerows; soaring circling	PW
K.019	VP2	10/06/2020	16:24	Kestrel	1	164	0	4	160	0	conifer plantation and improved agricultural grassland; circling and flying before hovering a couple of times. eventually dropped below treeline out of view	PW

Supplementary Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
K.021	VP2	10/06/2020	16:33	Kestrel	1	5	0	5	0	0	treelines and improved agricultural grassland; flew from pole to spruce tree	PW
K.022	VP2	10/06/2020	16:34	Kestrel	1	6	0	6	0	0	treelines and improved agricultural grassland; flew from tree out of view	PW
K.024	VP2	10/06/2020	17:05	Kestrel	1	297	0	297	0	0	improved agricultural grassland, hedgerows and treelines; female perched on Sitka spruce preening. briefly mobbed by mistle thrush	PW
K.025	VP2	10/06/2020	17:10	Kestrel	1	40	0	5	35	0	improved agricultural grassland, hedgerows and treelines; female flew after 297 secs, flew out of view behind trees	PW
K.027	VP2	10/06/2020	17:19	Kestrel	1	3	3	0	0	0	improved agricultural grassland, hedgerows and stone walls and other stonework; female dropped down into GA1 near fence posts out of view as hovered on ground behind stone wall	PW
K.028	VP2	10/06/2020	17:19	Kestrel	1	177	10	7	160	0	improved agricultural grassland, hedgerows and stone walls and other stonework; male circled over where the female was and began hovering. flew and hovered again dropping briefly out of view before seen hovering again and finally dropping below treeline.	PW
K.029	VP2	10/06/2020	17:25	Kestrel	1	24	3	21	0	0	improved agricultural grassland, hedgerows and stone walls and other stonework; female hovering again flew lower dropping out of view	PW
K.030	VP2	10/06/2020	17:29	Kestrel	1	56	6	50	0	0	improved agricultural grassland, hedgerows and stone walls and other stonework; female up hovering again and circling and flying before dropping to 5m above ground hovering and then lost from view	PW
K.032	VP2	10/06/2020	17:56	Kestrel	1	10	5	5	0	0	improved agricultural grassland, scrub and hedgerows; female flew from perch on pole gaining height and flew out of view behind trees	PW
K.034	VP2	10/06/2020	18:03	Kestrel	1	122	2	20	100	0	improved agricultural grassland, hedgerows and conifer plantation; female flew from	PW

Supplementary Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
											pole over farmland and forestry out of view	
K.035	VP2	10/06/2020	18:14	Kestrel	1	14	0	14	0	0	treelines and improved agricultural grassland; female picked up perched on spruce in treeline. flew after 2 secs to perch in spruce further down	PW
K.036	VP2	10/06/2020	18:15	Kestrel	1	5	0	5	0	0	treelines and improved agricultural grassland; female mobbed by magpie that flew to land on perch. kestrel flew out of view	PW
K.038	VP2	10/06/2020	18:57	Kestrel	1	20	20	0	0	0	treelines, spoil and bare ground and recolonising bare ground; female flew from perch across GA1 low out of view though to perch in WL1	PW
K.041	VP2	23/06/2020	15:10	Kestrel	1	420	0	205	215	0	conifer plantation, improved agricultural grassland and hedgerows; male appeared in view hovering over GA1 by VP2 moved over WD4 hovering and hunting and flying. disappeared below treeline out of view	PW
K.045	VP2	23/06/2020	15:33	Kestrel	1	34	0	4	30	0	conifer plantation; hovering over WD4 dropped down briefly before hovering and eventually dropped out of view	PW
K.047	VP2	23/06/2020	15:44	Kestrel	1	30	0	0	30	0	conifer plantation; flying	PW
K.049	VP2	23/06/2020	16:03	Kestrel	1	130	0	0	130	0	conifer plantation, hedgerows and recolonising bare ground; circling and gliding in wind over WD4 before gliding in straight line out over GA1, WL1 by WD4 clear-fell	PW
K.059	VP2	02/07/2020	13:18	Kestrel	2	130	0	130	0	0	hedgerows; 2 kestrel adults over WD4 hunting. juveniles calling	PW
K.060	VP2	02/07/2020	13:21	Kestrel	3	230	30	200	0	0	improved agricultural grassland, conifer plantation and hedgerows; 2 juveniles and female over GA1 hovering and hunting. female lost from view. 1 juvenile landed in WD4	PW

Supplementary Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
K.063	VP2	02/07/2020	13:35	Kestrel	1	200	0	133	67	0	treelines, improved agricultural grassland and hedgerows; flying and calling	PW
K.064	VP2	02/07/2020	13:45	Kestrel	1	-	-	-	-	-	treelines; juvenile perched calling on spruce by road. not observed leaving perch	PW
K.065	VP2	02/07/2020	13:45	Kestrel	1	329	0	289	40	0	improved agricultural grassland, treelines and conifer plantation; flying and hovering and hunting. out of view for 30 secs	PW
K.066	VP2	02/07/2020	13:47	Kestrel	1	108	0	8	100	0	improved agricultural grassland; gliding/hovering at PCH	PW
K.067	VP2	02/07/2020	13:56	Kestrel	1	16	0	16	0	0	hedgerows; flying	PW
K.068	VP2	02/07/2020	13:59	Kestrel	1	75	19	46	0	0	conifer plantation, treelines and improved agricultural grassland; flying lost from view behind horizon	PW
K.073	VP2	02/07/2020	14:21	Kestrel	1	39	39	0	0	0	hedgerows and improved agricultural grassland; flew from spruce hovered and flew back to another spruce further down treeline.	PW
K.076	VP2	02/07/2020	14:37	Kestrel	2	325	0	30	295	0	improved agricultural grassland and conifer plantation; 1 bird in view at PCH for 295. the other for 175 secs soaring over WD4. 1 adult other possibly juvenile	PW
K.077	VP2	02/07/2020	14:39	Kestrel	1	35	0	35	0	0	improved agricultural grassland, conifer plantation and hedgerows; flying (juvenile)	PW
K.083	VP2	02/07/2020	15:39	Kestrel	1	59	0	49	0	0	conifer plantation; hovering over WD4 dropped down into trees out of view	PW
K.084	VP2	02/07/2020	15:43	Kestrel	1	8	0	8	0	0	conifer plantation: appeared briefly above treeline again flying	PW
K.085	VP2	02/07/2020	15:49	Kestrel	1	60	0	40	20	0	conifer plantation; flying and hovering	PW
K.092	VP2	19/08/2020	15:48	Kestrel	1	485	485	0	0	0	stone walls and other stonework, scrub and improved agricultural grassland; perched, perched on telegraph pole near vp2. WL1 habitat also.	PW

Supplementary Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
K.093	VP2	19/08/2020	15:56	Kestrel	1	25	21	4	0	0	stone walls and other stonework, scrub and improved agricultural grassland; flying, flew from telegraph pole to quarry out of view onto face of quarry. ED3 and WL1 habitats also.	PW
K.108	VP2	05/09/2020	07:14	Kestrel	1	2	0	0	0	0	recolonising bare ground; flying, in old quarry. observed briefly before the bird dropped out of view.	PW
K.109	VP2	05/09/2020	07:19	Kestrel	1	52	0	0	0	0	improved agricultural grassland and hedgerows; flying and hovering, hunting by hovering.	PW
K.110	VP2	05/09/2020	09:05	Kestrel	1	6	2	4	0	0	improved agricultural grassland, hedgerows and recolonising bare ground; flying, flew to quarry and out of view.	PW
K.111	VP2	05/09/2020	10:09	Kestrel	1	26	0	26	0	0	improved agricultural grassland, hedgerows and conifer plantation; flying, being mobbed by hooded crow. flew low into forestry out of view.	PW
K.112	VP2	05/09/2020	10:21	Kestrel	1	84	1	2	81	0	conifer plantation; circling and diving,, circling among hirundines which were mobbing it, before diving down below treeline out of view.	PW
K.113	VP2	05/09/2020	10:39	Kestrel	1	158	0	3	155	0	conifer plantation, improved agricultural grassland and hedgerows; soaring and hovering before dropping below treeline out of view., juvenile	PW
K.114	VP2	05/09/2020	10:49	Kestrel	1	929	156	0	0	0	improved agricultural grassland, hedgerows and conifer plantation; calling at first perched on fencepost. flew to another fencepost and perched before repeating again. then flew to WD4 and around it over GA1 to perch on spruce near road. perched here for several minutes before calling and flying after male k to quarry and landing out of sight. flying for a total of 156s, perched for remainder. male	PW

Supplementary Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
K.115	VP2	05/09/2020	10:52	Kestrel	1	17	17	0	0	0	improved agricultural grassland; conifer plantation and stone walls and other stonework; flying and hunting	PW
K.116	VP2	05/09/2020	11:04	Kestrel	1	49	49	0	0	0	improved agricultural grassland, hedgerows and recolonising bare ground; flew to quarry. male	PW
K.117	VP2	05/09/2020	11:05	Kestrel	1	7	7	0	0	0	recolonising bare ground, hedgerows and treelines; flew from quarry to WL2, calling. ws1 and GA1 also., juvenile	PW
K.118	VP2	05/09/2020	11:13	Kestrel	1	23	23	0	0	0	treelines, conifer plantation and improved agricultural grassland; flew from WL2 south over GA1 to perch in WD4, calling. WL1 also., juvenile	PW
K.119	VP2	05/09/2020	11:14	Kestrel	1	16	16	0	0	0	improved agricultural grassland, scrub and recolonising bare ground; flew from quarry to perch on telegraph pole in GA1, calling., male	PW
K.120	VP2	05/09/2020	11:59	Kestrel	1	67	0	57	10	0	conifer plantation and improved agricultural grassland; flying and being mobbed by a sparrowhawk.	PW
K.137	VP2	14/10/2020	13:15	Kestrel	1	235	0	16	219	0	conifer plantation; flying and hunting by hovering	PW
K.138	VP2	14/10/2020	13:21	Kestrel	1	38	0	0	38	0	conifer plantation; hunting by hovering	PW
K.139	VP2	14/10/2020	13:31	Kestrel	1	21	2	2	17	0	conifer plantation and scrub; hunting by hovering, dropped down from hover to ground out of view (clearfelled areas).	PW
K.140	VP2	14/10/2020	13:53	Kestrel	1	22	3	19	0	0	improved agricultural grassland and treelines; flying and calling, male	PW
K.141	VP2	14/10/2020	13:54	Kestrel	1	-	-	-	-	-	improved agricultural grassland; calling, heard, not seen.	PW
K.142	VP2	14/10/2020	13:59	Kestrel	1	300	0	15	105	180	improved agricultural grassland, conifer plantation and hedgerows; soaring at height before dropping down and hunting by hovering	PW

Supplementary Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
K.143	VP2	14/10/2020	14:31	Kestrel	1	32	0	0	32	0	conifer plantation; hunting by hovering, over clearfelled areas.	PW
K.144	VP2	14/10/2020	14:53	Kestrel	1	5	0	0	5	0	scrub; hovering, observed briefly when following buzzards	PW
K.145	VP2	14/10/2020	15:01	Kestrel	1	41	21	20	0	0	improved agricultural grassland, hedgerows and scrub; flying, juvenile	PW
K.146	VP2	14/10/2020	17:08	Kestrel	1	35	6	29	0	0	scrub, treelines and improved agricultural grassland; flying to perch on telegraph pole, male	PW
K.147	VP2	14/10/2020	17:12	Kestrel	1	11	11	0	0	0	improved agricultural grassland; flying	PW
K.148	VP2	14/10/2020	17:21	Kestrel	1	2	2	0	0	0	scrub and recolonising bare ground; flew to perch, female	PW
K.149	VP2	14/10/2020	17:22	Kestrel	1	-	-	-	-	-	scrub and recolonising bare ground; perched, preening, female	PW
K.150	VP2	14/10/2020	17:23	Kestrel	1	8	8	0	0	0	scrub and treelines; flying, 2nd bird	PW
K.151	VP2	14/10/2020	17:28	Kestrel	1	3	3	0	0	0	scrub and recolonising bare ground; flew from perch, dropping down out of view, female	PW
K.152	VP2	14/10/2020	17:45	Kestrel	1	54	14	40	0	0	improved agricultural grassland, conifer plantation and stone walls and other stonework; flying, hunting by hovering	PW
K.153	VP2	14/10/2020	17:51	Kestrel	1	48	8	40	0	0	scrub, treelines and recolonising bare ground; circling low before flying low	PW
K.154	VP2	14/10/2020	17:53	Kestrel	1	-	-	-	-	-	recolonising bare ground and scrub; perched on telegraph pole, 1 of 2 birds, the other was flying	PW
K.155	VP2	17/11/2020	07:37	Kestrel	1	40	10	30	0	0	improved agricultural grassland and treelines; hunting by hovering, flying	PW
K.156	VP2	17/11/2020	08:49	Kestrel	1	41	20	21	0	0	improved agricultural grassland, hedgerows and stone walls and other stonework; hunting by hovering	PW

Supplementary Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
K.157	VP2	17/11/2020	09:18	Kestrel	1	9	0	9	0	0	conifer plantation; flying, hovering, being mobbed by hooded crow, clearfell	PW
K.158	VP2	17/11/2020	09:49	Kestrel	1	26	0	26	0	0	conifer plantation; flying, mobbing sparrowhawk	PW
K.159	VP2	17/11/2020	10:29	Kestrel	1	60	39	21	0	0	treelines and improved agricultural grassland; hunting by hovering, dropped below treeline out of view	PW
K.160	VP2	17/11/2020	10:38	Kestrel	1	330	0	22	308	0	improved agricultural grassland, stone walls and other stonework and hedgerows; hunting by hovering	PW
K.161	VP2	17/11/2020	11:22	Kestrel	1	42	0	42	0	0	conifer plantation, treelines and improved agricultural grassland; flying	PW
K.162	VP2	17/11/2020	11:22	Kestrel	1	7	0	7	0	0	conifer plantation; flying	PW
K.163	VP2	17/11/2020	13:15	Kestrel	1	132	0	0	132	0	conifer plantation, improved agricultural grassland and hedgerows; hunting by hovering	PW
K.164	VP2	17/11/2020	13:31	Kestrel	1	60	0	0	60	0	conifer plantation; hunting by hovering over clearfelled areas, as survey ended	PW
K.172	VP2	10/12/2020	13:05	Kestrel	1	269	66	153	50	0	improved agricultural grassland, hedgerows and treelines; hunting by hovering, male	PW
K.173	VP2	10/12/2020	13:37	Kestrel	1	263	0	120	143	0	conifer plantation, improved agricultural grassland and hedgerows; hunting by hovering	PW
K.204	VP2	13/01/2021	10:42	Kestrel	1	6	6	0	0	0	scrub and improved agricultural grassland; flying	PW
K.205	VP2	13/01/2021	11:28	Kestrel	1	-	-	-	-	-	treelines, improved agricultural grassland and hedgerows; perched, male. perched for 290s.	PW
K.206	VP2	13/01/2021	11:29	Kestrel	1	9	9	0	0	0	improved agricultural grassland, hedgerows and treelines; flying to perch, male	PW
K.207	VP2	13/01/2021	11:30	Kestrel	1	71	25	35	11	0	improved agricultural grassland, hedgerows and treelines; flying, male, dropped below treeline over forestry out of view.	PW

Supplementary Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
K.208	VP2	13/01/2021	12:15	Kestrel	1	124	0	67	57	0	hedgerows, conifer plantation and improved agricultural grassland; flying, hunting by hovering	PW
K.209	VP2	13/01/2021	12:43	Kestrel	1	158	19	139	0	0	scrub, stone walls and other stonework and improved agricultural grassland; hunting by hovering, moved off low over forestry out of view.	PW
K.210	VP2	13/01/2021	13:09	Kestrel	1	191	127	64	0	0	improved agricultural grassland and stone walls and other stonework; hunting by hovering, moved off downslope out of view.	PW
K.211	VP2	13/01/2021	13:15	Kestrel	1	13	0	0	13	0	conifer plantation, improved agricultural grassland and scrub; flying, hunting by hovering.	PW
K.233	VP2	03/02/2021	12:27	Kestrel	1	335	6	120	155	0	conifer plantation, stone walls and other stonework and scrub; hunting by hovering,, male. caught prey and fed on post with it then.	PW
K.234	VP2	03/02/2021	12:27	Kestrel	1	364	0	0	364	0	conifer plantation and scrub; hunting by hovering, female. hunting over clearfelled areas.	PW
K.235	VP2	03/02/2021	12:31	Kestrel	1	-	-	-	-	-	stone walls and other stonework, scrub and wet grassland; feeding, male, feeding on prey on fence post. in view for 85s before continuing to hunt.	PW
K.236	VP2	03/02/2021	12:33	Kestrel	1	158	130	28	0	0	wet grassland, scrub and stone walls and other stonework; hunting by hovering,, male, caught prey, then proceeded to feed on ground with it.	PW
K.237	VP2	03/02/2021	12:37	Kestrel	1	107	0	107	0	0	wet grassland, conifer plantation and stone walls and other stonework; hunting by hovering, female	PW
K.238	VP2	03/02/2021	12:38	Kestrel	1	-	-	-	-	-	scrub, improved agricultural grassland and stone walls and other stonework; feeding, male feeding on ground on prey caught moments ago. in view for 435s on ground before lost from view when following female kestrel	PW

Supplementary Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
K.239	VP2	03/02/2021	12:40	Kestrel	1	168	0	0	97	71	stone walls and other stonework, wet grassland and scrub; hunting by hovering, female	PW
K.240	VP2	03/02/2021	12:44	Kestrel	1	32	0	0	32	0	wet grassland, conifer plantation and scrub; hunting by hovering, female	PW
K.241	VP2	03/02/2021	12:45	Kestrel	1	332	0	0	332	0	wet grassland, conifer plantation and scrub; hunting by hovering, female. hunting over rank wet grassland, clearfelled areas and scrub.	PW
GP052	VP2	03/02/2021	12:52	Kestrel	1	75	0	0	75	0	conifer plantation; hunting by hovering, female hunting over forestry and clearfelled areas.	PW
K.255	VP2	30/03/2021	06:56	Kestrel	1	2	2	0	0	0	scrub, hedgerows and improved agricultural grassland; flying., flew low across road to field. lost from view in fog.	PW
K.256	VP2	30/03/2021	07:04	Kestrel	1	2	2	0	0	0	improved agricultural grassland, scrub and hedgerows; flying., flew from scrub area at old quarry across road to field and out of view in fog.	PW
K.257	VP2	30/03/2021	14:16	Kestrel	1	74	0	3	71	0	conifer plantation; circling, hovering, diving., 1 of 2 birds. dived down into clearfelled area after hovering at height above it.	PW
K.258	VP2	30/03/2021	14:16	Kestrel	1	100	0	2	98	0	conifer plantation; hunting by hovering, diving., dropped down into clearfelled areas after other kestrel.	PW
K.259	VP2	30/03/2021	14:25	Kestrel	1	58	0	58	0	0	conifer plantation; hunting. dropping into land in conifers., perched on conifers in view then for a further 226s.	PW
K.260	VP2	30/03/2021	14:38	Kestrel	1	236	0	0	115	6	conifer plantation, improved agricultural grassland and stone walls and other stonework; hunting by hovering., at height before descending below treeline in dive to area at forest entrance.	PW
K.261	VP2	30/03/2021	15:13	Kestrel	1	-	-	-	-	-	improved agricultural grassland; perched preening., female on telegraph pole. 145s. then flew to another perch.	PW

Supplementary Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
K.262	VP2	30/03/2021	15:15	Kestrel	1	-	-	-	-	-	treelines, hedgerows and improved agricultural grassland; perched preening., same female. perched for 513s.	PW
K.263	VP2	30/03/2021	15:15	Kestrel	1	15	0	0	0	0	improved agricultural grassland, hedgerows and treelines; flying from perch to perch. female.	PW
K.264	VP2	30/03/2021	15:24	Kestrel	1	457	3	142	310	0	treelines, conifer plantation and improved agricultural grassland; hunting by hovering., female. same bird as before. moved off perch to begin hunting over grassland and stone walls before dropping down lower and lower hovering far side of treeline at farmyard.	PW
K.265	VP2	30/03/2021	16:16	Kestrel	1	580	0	0	535	0	improved agricultural grassland, conifer plantation and hedgerows; hunting by hovering at height.	PW
K.269	VP2	14/04/2021	19:06	Kestrel	1	105	2	48	8	0	conifer plantation, improved agricultural grassland and scrub; flying., male, flew from forestry low to quarry and then out of view.	PW
K.270	VP2	14/04/2021	19:08	Kestrel	1	143	0	8	0	0	improved agricultural grassland, scrub and recolonising bare ground; flying., female, flew in to join male flying around quarry before landing on spruce tree in treeline.	PW
K.275	VP2	14/04/2021	19:27	Kestrel	1	33	0	0	0	0	recolonising bare ground, improved agricultural grassland and scrub; flying., male, descended below horizon out of view.	PW
K.277	VP2	14/04/2021	19:33	Kestrel	1	38	19	19	0	0	treelines, hedgerows and improved agricultural grassland; flying., female, same bird as before. flew from perch low and out of view behind vegetation.	PW
K.278	VP2	14/05/2021	08:56	Kestrel	1	46	0	0	46	0	conifer plantation; hunting by hovering., hunting over clearfelled areas.	PW
K.279	VP2	14/05/2021	10:30	Kestrel	1	17	0	0	17	0	conifer plantation; flying, dropped behind treeline out of view when still over forestry clearfelled areas.	PW
K.289	VP2	01/06/2021	14:29	Kestrel	1	47	0	0	0	0	conifer plantation, improved agricultural grassland and stone walls and other	PW

Supplementary Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
											stonework; hunting by hovering, dove down near forest road from hover out of view.	
K.290	VP2	01/06/2021	15:47	Kestrel	1	10	0	2	8	0	improved agricultural grassland, stone walls and other stonework and wet grassland; flying, descended below out of view.	PW
K.291	VP2	01/06/2021	15:51	Kestrel	1	53	0	0	42	0	conifer plantation, improved agricultural grassland and stone walls and other stonework; hunting by hovering and flying., dropped below treeline out of view.	PW
K.292	VP2	01/06/2021	16:02	Kestrel	1	27	0	0	0	0	stone walls and other stonework, treelines and improved agricultural grassland; hunting by hovering., hunting over stone walls.	PW
K.293	VP2	02/06/2021	10:33	Kestrel	1	58	0	0	0	0	improved agricultural grassland, conifer plantation and stone walls and other stonework; flying hunting by hovering.	PW
K.294	VP2	02/06/2021	10:41	Kestrel	1	90	0	0	0	0	improved agricultural grassland, hedgerows and buildings and artificial surfaces; hunting by hovering., dropped down from hover near hedgerow out of view.	PW
K.304	VP2	06/07/2021	13:18	Kestrel	1	167	0	0	131	0	improved agricultural grassland, conifer plantation and scrub; hunting circling and hovering., male.	PW
K.305	VP2	06/07/2021	13:25	Kestrel	1	112	1	2	119	0	improved agricultural grassland, stone walls and other stonework and hedgerows; hunting by hovering., female. dropped down from hover out of view in dive to ground.	PW
K.306	VP2	06/07/2021	13:29	Kestrel	1	8	0	0	8	0	improved agricultural grassland, hedgerows and buildings and artificial surfaces; flying., dropped below treeline out of view.	PW
K.307	VP2	06/07/2021	13:47	Kestrel	1	109	0	0	58	0	scrub, recolonising bare ground and treelines; hunting by hovering, perched., female. perched after hunting by hovering before dropping off perch out of view.	PW
K.310	VP2	06/07/2021	14:42	Kestrel	1	3	3	0	0	0	stone walls and other stonework, wet grassland and improved agricultural grassland; perch hunting from stone wall and fence posts., female. flew for 3s. perched for	PW

Supplementary Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
											192s.	
K.311	VP2	06/07/2021	14:46	Kestrel	2	45	40	5	0	0	stone walls and other stonework, improved agricultural grassland and wet grassland; flying low near each other around stone walls., female flew up off wall as another kestrel came into view flying.	PW
K.314	VP2	06/07/2021	15:03	Kestrel	1	35	0	0	35	0	wet grassland, conifer plantation and scrub; hunting by hovering., a second bird hunting in vicinity of female. dropped below ridge out of view.	PW
K.315	VP2	06/07/2021	15:40	Kestrel	1	20	3	5	12	0	improved agricultural grassland, wet grassland and stone walls and other stonework; flying., descended down slope out of view.	PW
K.316	VP2	06/07/2021	15:50	Kestrel	1	30	0	0	25	0	conifer plantation, improved agricultural grassland and hedgerows; flying hunting., descended in fast flight off site to below treeline out of view.	PW
K.317	VP2	08/07/2021	12:44	Kestrel	1	115	0	0	115	0	improved agricultural grassland, wet grassland and stone walls and other stonework; flying and hunting by hovering., male. hunting near female.	PW
K.318	VP2	08/07/2021	12:45	Kestrel	1	540	0	0	440	0	recolonising bare ground, scrub and stone walls and other stonework; hunting by hovering., female.	PW
K.319	VP2	08/07/2021	12:50	Kestrel	1	69	0	0	69	0	conifer plantation, improved agricultural grassland and wet grassland; flying circling., male. briefly mobbed by ravens.	PW
K.320	VP2	08/07/2021	13:15	Kestrel	1	2	2	0	0	0	improved agricultural grassland, stone walls and other stonework and hedgerows; perched hunting then dropped off perch out of view., female perched on telegraph pole in view for 95s before dropping off perch out of view.	PW
K.321	VP2	08/07/2021	13:24	Kestrel	1	333	0	2	331	0	improved agricultural grassland, recolonising bare ground and scrub; circling soaring and	PW

Supplementary Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
											hunting by hovering., dove down from hover out of view.	
K.322	VP2	08/07/2021	13:25	Kestrel	1	132	0	0	132	0	improved agricultural grassland, stone walls and other stonework and conifer plantation; hunting by circling and hovering., lost from view when following other kestrel in view at the time.	PW
K.323	VP2	08/07/2021	13:30	Kestrel	1	74	0	24	50	0	improved agricultural grassland, stone walls and other stonework and conifer plantation; flying calling and circling., 1 of two birds in view at the time.	PW
K.324	VP2	08/07/2021	13:32	Kestrel	1	330	0	0	239	61	conifer plantation, wet grassland and improved agricultural grassland; circling soaring hunting.	PW
K.325	VP2	08/07/2021	13:52	Kestrel	1	581	40	174	367	0	wet grassland, stone walls and other stonework and improved agricultural grassland; hunting by hovering., male.	PW
K.326	VP2	08/07/2021	14:23	Kestrel	1	21	0	0	0	0	conifer plantation; hunting by hovering., over clearfelled areas and resown area of conifers.	PW
K.327	VP2	08/07/2021	14:38	Kestrel	1	22	5	17	0	0	improved agricultural grassland, stone walls and other stonework and treelines; hunting by hovering., dropped down from hover out of view.	PW
K.328	VP2	08/07/2021	14:41	Kestrel	1	31	0	0	31	0	improved agricultural grassland, stone walls and other stonework and conifer plantation; flying., male.	PW
K.329	VP2	08/07/2021	15:03	Kestrel	1	229	0	0	229	0	conifer plantation, improved agricultural grassland and stone walls and other stonework; flying and circling., female.	PW
K.330	VP2	08/07/2021	15:33	Kestrel	1	119	0	0	119	0	conifer plantation and scrub; circling soaring.	PW
K.333	VP2	13/07/2021	13:53	Kestrel	1	267	0	0	36	0	improved agricultural grassland, conifer plantation and hedgerows; hunting by hovering., associating with a second kestrel.	PW
K.334	VP2	13/07/2021	13:53	Kestrel	1	313	0	5	185	0	improved agricultural grassland, conifer plantation and hedgerows; hunting by hovering., dropped down for 32s before	PW

Supplementary Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
											continuing hunting again. associating with another kestrel in the area.	
K.338	VP2	10/08/2021	11:02	Kestrel	1	59	0	0	59	0	conifer plantation, scrub and wet grassland; hunting by circling and then flying on.	PW
K.339	VP2	10/08/2021	11:16	Kestrel	1	1599	33	73	869	24	conifer plantation, improved agricultural grassland and stone walls and other stonework; flying and hunting by soaring circling and hovering and perch hunting., female. picked up above PCH off site. hunting wide area. dropped from height in dive off site. dove onto road hunting at WL1. perched on WL2, WD4 edge, fencepost, dropped to ground, back to fencepost, then onto hawthorn, then off out of view. perched for additional 334s to 1599s.	PW
K.340	VP2	10/08/2021	11:54	Kestrel	1	60	0	0	60	0	conifer plantation; flying, hunting and perched., flew to perch briefly before dropping off perch out of view as another kestrel approached.	PW
K.341	VP2	10/08/2021	11:55	Kestrel	1	24	0	0	24	0	conifer plantation; flying to perch., perched on top of spruce for 170s before dropping off out of view. second kestrel in the area.	PW
K.342	VP2	10/08/2021	12:49	Kestrel	1	78	3	25	39	0	treelines, conifer plantation and improved agricultural grassland; flew to perch then flew on., male. flew to perch in WL2 for 270s before flying over forestry and dropping down out of view.	PW
K.343	VP2	10/08/2021	13:17	Kestrel	1	46	10	8	18	0	treelines, stone walls and other stonework and improved agricultural grassland; hunting, perched., female. hunting flying, dove down from flight to land in top of spruce WL2 where it mantled for a few seconds. it did not appear to eat anything though. perched for 644s before flying low to stone wall where perched in view for 125s.	PW

Supplementary Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
K.344	VP2	10/08/2021	14:14	Kestrel	1	189	0	0	189	0	conifer plantation; hunting by hovering., hunting over immature conifer and scrub area. dropped below treeline out of view.	PW
K.345	VP2	10/08/2021	14:27	Kestrel	1	178	0	0	0	0	conifer plantation; hunting by hovering., recently sown clearfelled areas	PW
K.346	VP2	10/08/2021	14:45	Kestrel	1	115	52	3	60	0	improved agricultural grassland, stone walls and other stonework and treelines; hunting by hovering and perch hunting. calling., hunting by hovering before perch hunting. then flew behind trees at farmyard out of view calling shortly after. perched for an additional 110s.	PW
K.347	VP2	10/08/2021	15:42	Kestrel	1	88	0	0	0	0	scrub, conifer plantation and stone walls and other stonework; hunting by hovering., hunting over recently clear felled area near scrub and bordered by old stone walls.	PW
K.348	VP2	10/08/2021	16:05	Kestrel	1	76	0	0	0	0	conifer plantation, scrub and stone walls and other stonework; hunting by hovering., hunting over recently clear felled area and scrub.	PW
K.352	VP2	10/08/2021	17:01	Kestrel	1	121	0	0	0	0	conifer plantation and scrub; hunting by hovering.	PW
K.374	VP2	10/09/2021	15:25	Kestrel	1	-	-	-	-	-	improved agricultural grassland and stone walls and other stonework; perched., female. perched on telegraph pole for 503s before flushed by rook.	PW
K.375	VP2	10/09/2021	15:33	Kestrel	1	55	18	21	16	0	improved agricultural grassland, stone walls and other stonework and hedgerows; perched at first before flushed, hunting by hovering and mobbed., female. flushed from perch on telegraph pole by rook before briefly hunting by hovering before mobbed by rook and flew off low downslope out of view.	PW
K.376	VP2	10/09/2021	15:52	Kestrel	1	197	5	62	130	0	improved agricultural grassland, stone walls and other stonework and conifer plantation; hunting by hovering., hunting over rough	PW

Supplementary Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
											grassland and old stone walls; mobbed by swifts	
K.377	VP2	10/09/2021	17:00	Kestrel	1	53	30	21	2	0	improved agricultural grassland, hedgerows and stone walls and other stonework; flying.	PW
K.378	VP2	10/09/2021	18:02	Kestrel	1	-	-	-	-	-	improved agricultural grassland; perched., female immature perched on telegraph pole.	PW
K.379	VP2	10/09/2021	18:06	Kestrel	1	137	7	54	76	0	improved agricultural grassland, hedgerows and stone walls and other stonework; flying hunting by hovering., female immature. perched on pole before flying and hunting by hovering, dropped down in fast flight down slope out of view.	PW
K.380	VP2	10/09/2021	18:33	Kestrel	1	51	42	9	0	0	improved agricultural grassland, conifer plantation and recolonising bare ground; flying low to perch in quarry., flew low across farmland by forestry edge to perch on quarry wall out of view.	PW
K.381	VP2	10/09/2021	19:09	Kestrel	1	-	-	-	-	-	improved agricultural grassland; perched feeding., perched on telegraph pole feeding.	PW
K.383	VP2	10/09/2021	19:17	Kestrel	1	-	-	-	-	-	improved agricultural grassland and stone walls and other stonework; perched before dropping off out of view., perched for 210s on telegraph pole in view.	PW
K.399	VP2	30/10/2021	12:36	Kestrel	1	60	60	0	0	0	improved agricultural grassland, wet grassland and hedgerows; hunting fields southwest of VP2, female	SP
K.400	VP2	30/10/2021	14:11	Kestrel	1	20	20	0	0	0	mixed conifer woodland, improved agricultural grassland and wet grassland; hunting over forestry edge, female	SP
K.401	VP2	30/10/2021	14:28	Kestrel	1	60	0	0	0	0	mixed conifer woodland, improved agricultural grassland and wet grassland; over Annagar into forestry, female flew west	SP
K.402	VP2	30/10/2021	14:52	Kestrel	1	300	300	0	0	0	improved agricultural grassland, wet grassland and hedgerows; hunting fields southwest of VP2, female flew north towards the townland of Lacken	SP

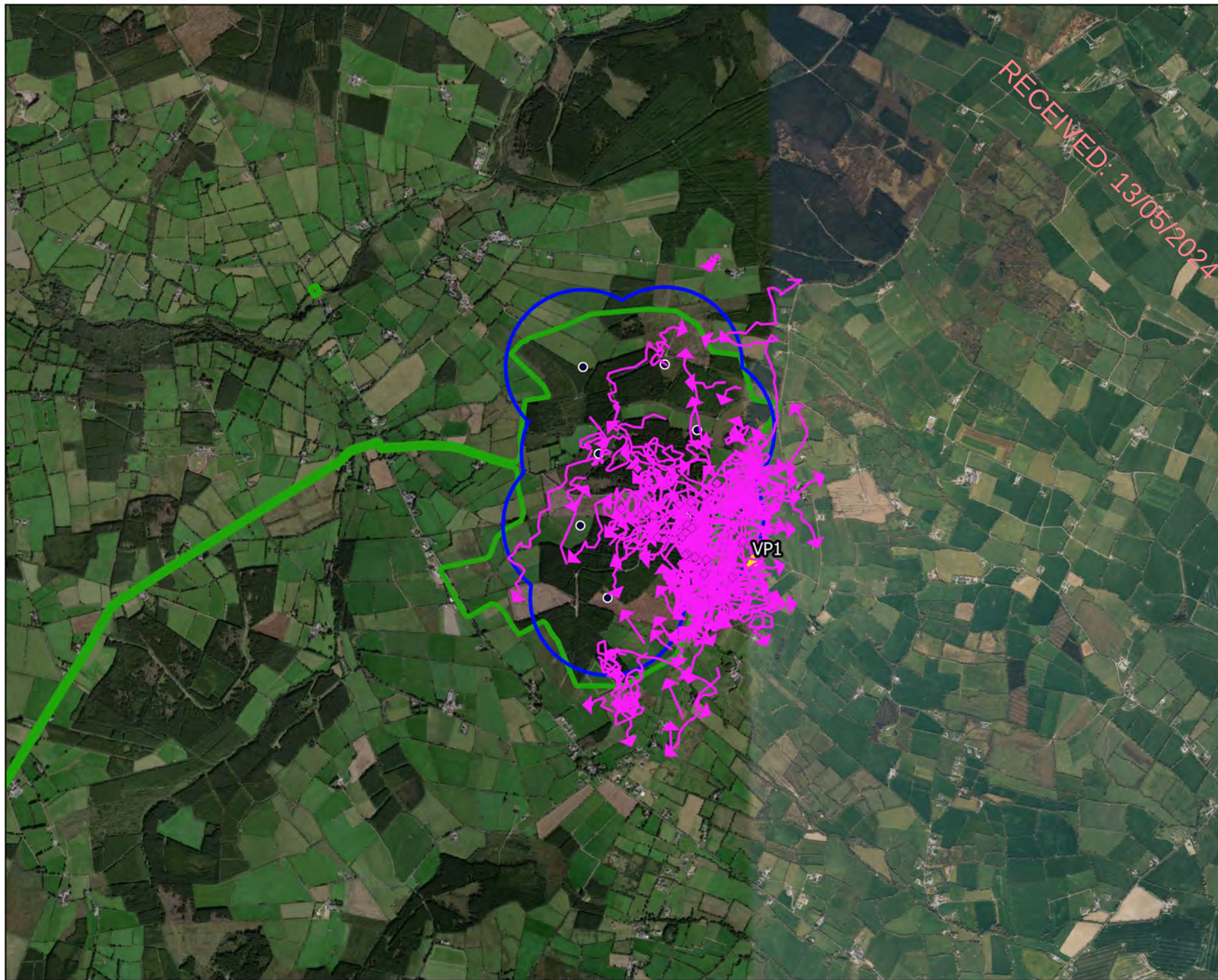
Supplementary Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
K.403	VP2	30/10/2021	15:05	Kestrel	1	60	60	0	0	0	improved agricultural grassland, wet grassland and hedgerows; flew low southeast across VP2, moved southeast quickly towards fields	SP
K.404	VP2	30/10/2021	16:04	Kestrel	1	60	60	0	0	0	improved agricultural grassland, wet grassland and hedgerows; hunting fields south of VP2, female	SP
K.405	VP2	30/10/2021	17:46	Kestrel	1	300	300	0	0	0	mixed conifer woodland; flew in forestry landed on tree, bird perched on tree and then dropped into forestry	SP
K.406	VP2	15/11/2021	12:25	Kestrel	1	11	11	0	0	0	improved agricultural grassland; travelling	JM
K.407	VP2	15/11/2021	15:46	Kestrel	1	42	25	17	0	0	improved agricultural grassland and conifer plantation; travelling	JM
K.408	VP2	15/11/2021	16:27	Kestrel	1	48	0	48	0	0	improved agricultural grassland and conifer plantation; travelling, female	JM
K.410	VP2	18/01/2022	12:24	Kestrel	1	160	60	100	0	0	conifer plantation and improved agricultural grassland; travelling/hovering	JM
K.411	VP2	18/01/2022	12:43	Kestrel	1	200	130	70	0	0	conifer plantation and improved agricultural grassland; travelling	JM
K.417	VP2	10/03/2022	13:47	Kestrel	1	21	18	0	0	0	improved agricultural grassland and conifer plantation; travelling, female kestrel	JM
K.418	VP2	10/03/2022	16:53	Kestrel	1	29	29	0	0	0	improved agricultural grassland; travelling, female	JM
K.419	VP2	10/03/2022	17:50	Kestrel	1	348	300	48	0	0	improved agricultural grassland and conifer plantation; travelling/hovering, female	JM

Table 7-4-4- 7 Kestrel Supplementary Breeding Walkover Survey Data

Breeding Walkover Surveys						
Ref.	Date	Time	Species	Number	Habitat and activity	Surveyor
K.006	21/04/2021	16:32	Kestrel	1	conifer plantation; flying. (flyover; non-breeding)	PW
K.012	23/06/2021	16:50	Kestrel	1	conifer plantation, wet grassland and improved agricultural grassland; flying. (suitable nesting habitat; possible breeder)	PW
K.015	26/07/2021	15:13	Kestrel	1	conifer plantation and scrub; circling hunting and flying., flew on over behind treeline out of view. (permanent territory; probable breeding)	PW

Table 7-4-4- 8 Kestrel Supplementary Winter Walkover Survey Data

Winter Walkover Surveys						
Ref.	Date	Time	Species	Number	Habitat and activity	Surveyor
K.011	08/10/2020	15:03	Kestrel	1	wet grassland and hedgerows; perched on telegraph pole. (wintering)	PW
K.012	08/10/2020	15:12	Kestrel	1	conifer plantation; flying, in view in flight for 2s. flew along forest road. (wintering)	PW
K.017	14/01/2021	15:05	Kestrel	1	improved agricultural grassland and stone walls and other stonework; hunting by hovering, perched, being mobbed, hunting over stone walls. mobbed by hooded crow. (wintering)	PW
K.018	14/01/2021	16:48	Kestrel	1	conifer plantation and improved agricultural grassland; perched and flying, perched before flying out of view. in view for 120s. (wintering)	PW
K.019	14/01/2021	16:57	Kestrel	1	conifer plantation; perched and flying, perched in view before flying off over trees out of view. in view for 48s. (wintering)	PW
K.022	12/02/2021	14:10	Kestrel	1	conifer plantation; hunting by hovering, hunting over clearfelled areas and edge of mature WD4. in view for 123s. (wintering)	PW
K.023	12/02/2021	15:24	Kestrel	1	conifer plantation; hunting by hovering., in view for 107s. (wintering)	PW



Map Legend

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



Drawing Title

Vantage Point Survey
Kestrel Observations

Project Title

Seskin Wind Farm, Co. Carlow

Drawn By

D. Woods

Checked By

P. Cregg

Project No.

220246

Drawing No.

Fig. 7.4.4.1

Scale

1:32000

Date

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Map Legend

- EIAR Site Boundary
- Turbine Layout
- 500m Survey Area
- Flight Observation



Drawing Title:

**Breeding Walkover Survey
Kestrel Observations**

Project Title:

Seskin Wind Farm, Co. Carlow

Drawn By:

D. Woods

Checked By:

P. Clegg

Project No.:

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Drawing No.:

Fig. 7.4.4.2

Scale:

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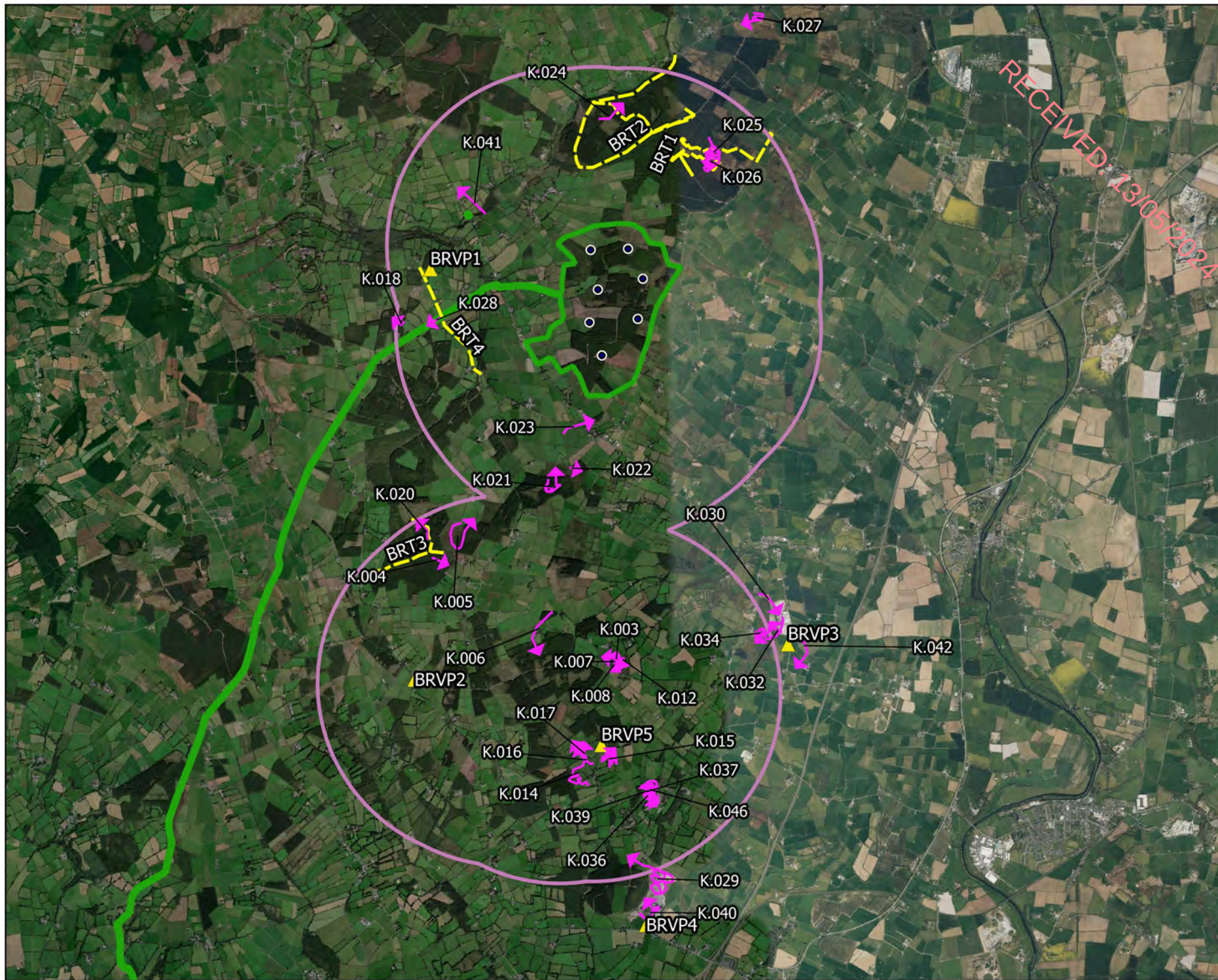
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Map Legend

- EIAR Site Boundary
- Turbine Layout
- ▲ BRVP Locations
- BR Transect Locations
- 2km Buffer of Site Boundary
- Flight Observation



Drawing Title

**Breeding Raptor Survey
Kestrel Observations**

Project Title

Seskin Wind Farm, Co. Carlow

Drawn By

D. Woods

Checked By

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Project No.

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Drawing No.

Fig. 7.4.4.3

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Map Legend

- EIAR Site Boundary
- Turbine Layout
- 500m Survey Area
- Flight Observation



Drawing Title:

Winter Walkover Survey
Kestrel Observations

Project Title:

Seskin Wind Farm, Co. Carlow

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D. Woods

Checked By:

P. Cregg

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Fig. 7.4.4.4

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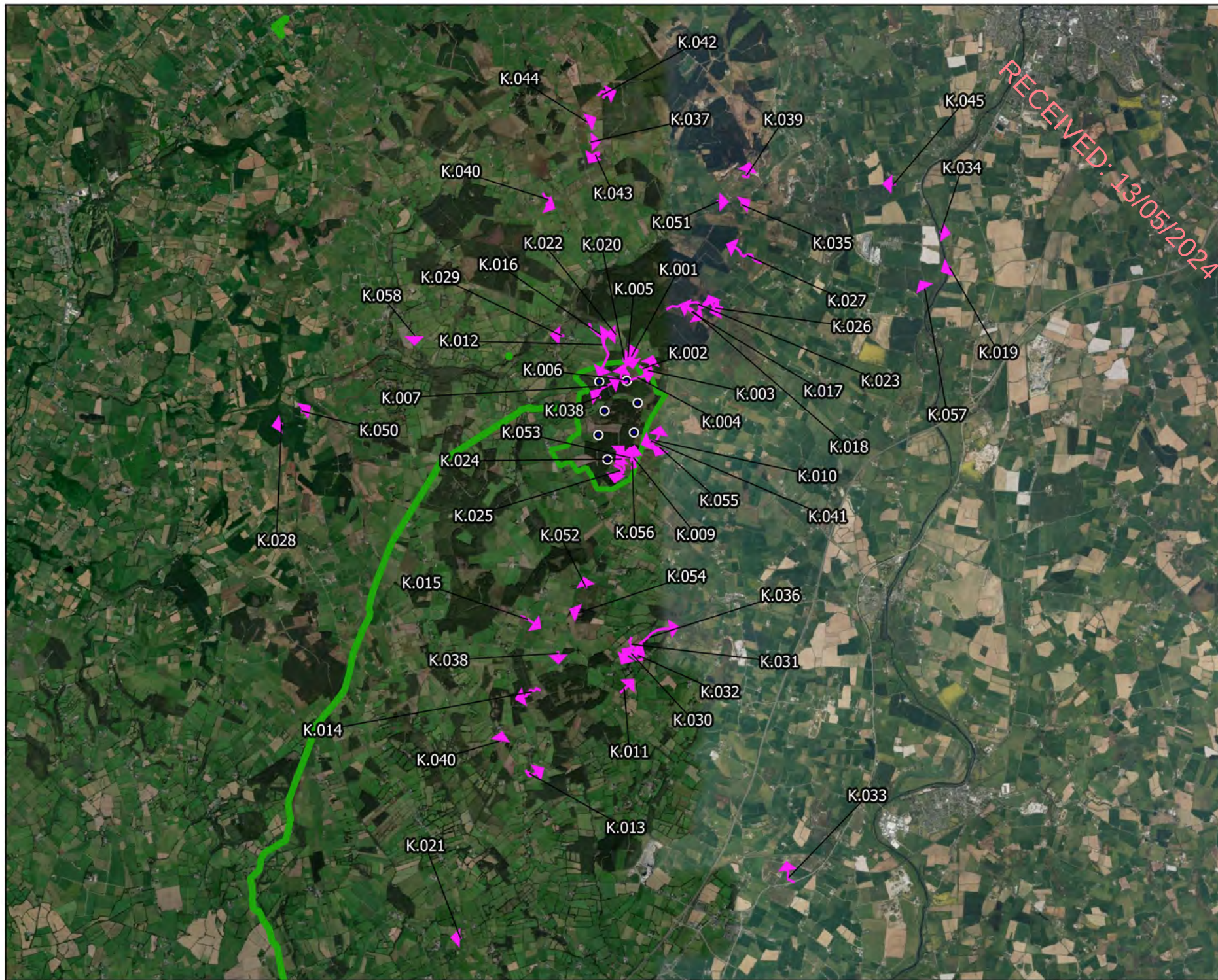
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Map Legend

- EIA Site Boundary
- Turbine Layout
- Flight Observation



Drawing Title

Incidental Kestrel Observations

Project Title

Seskin Wind Farm, Co. Carlow

Drawn By

D. Woods

Checked By

P. Cregg

Project No.

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Drawing No.

Fig. 7.4.4.5

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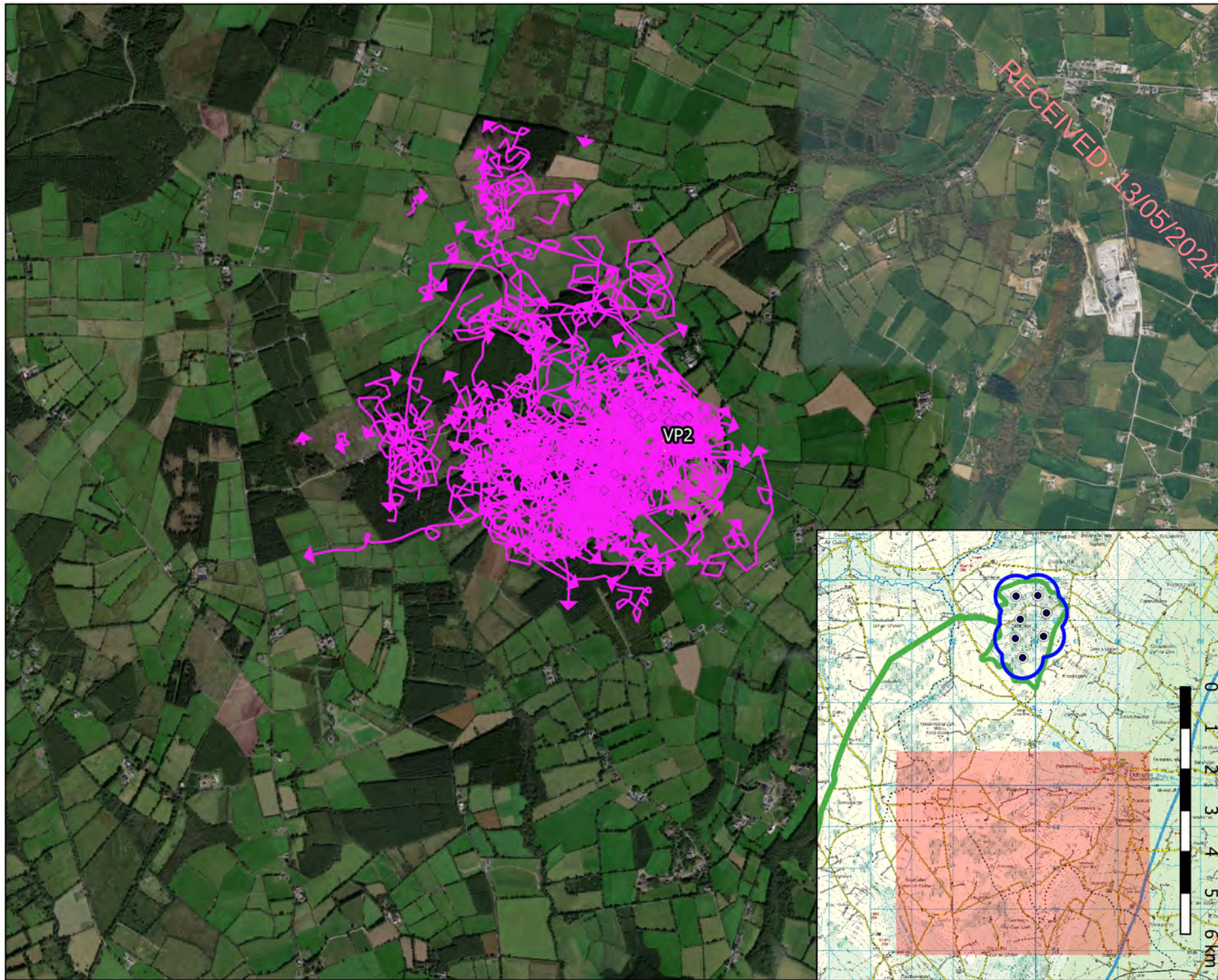
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Map Legend

- E.I.A.R. Site Boundary
- Turbine Layout
- 500m Radius of Turbines
- Supplementary VP Location
- Flight Observation
- Non-flight Observation

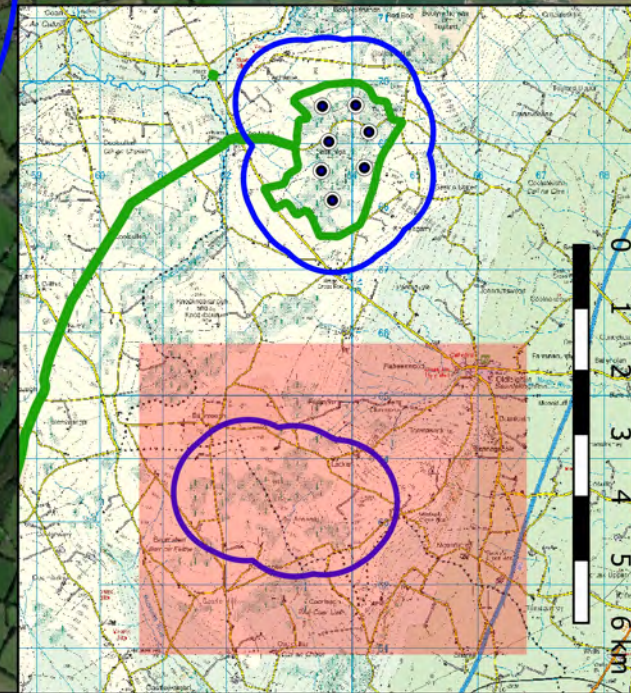
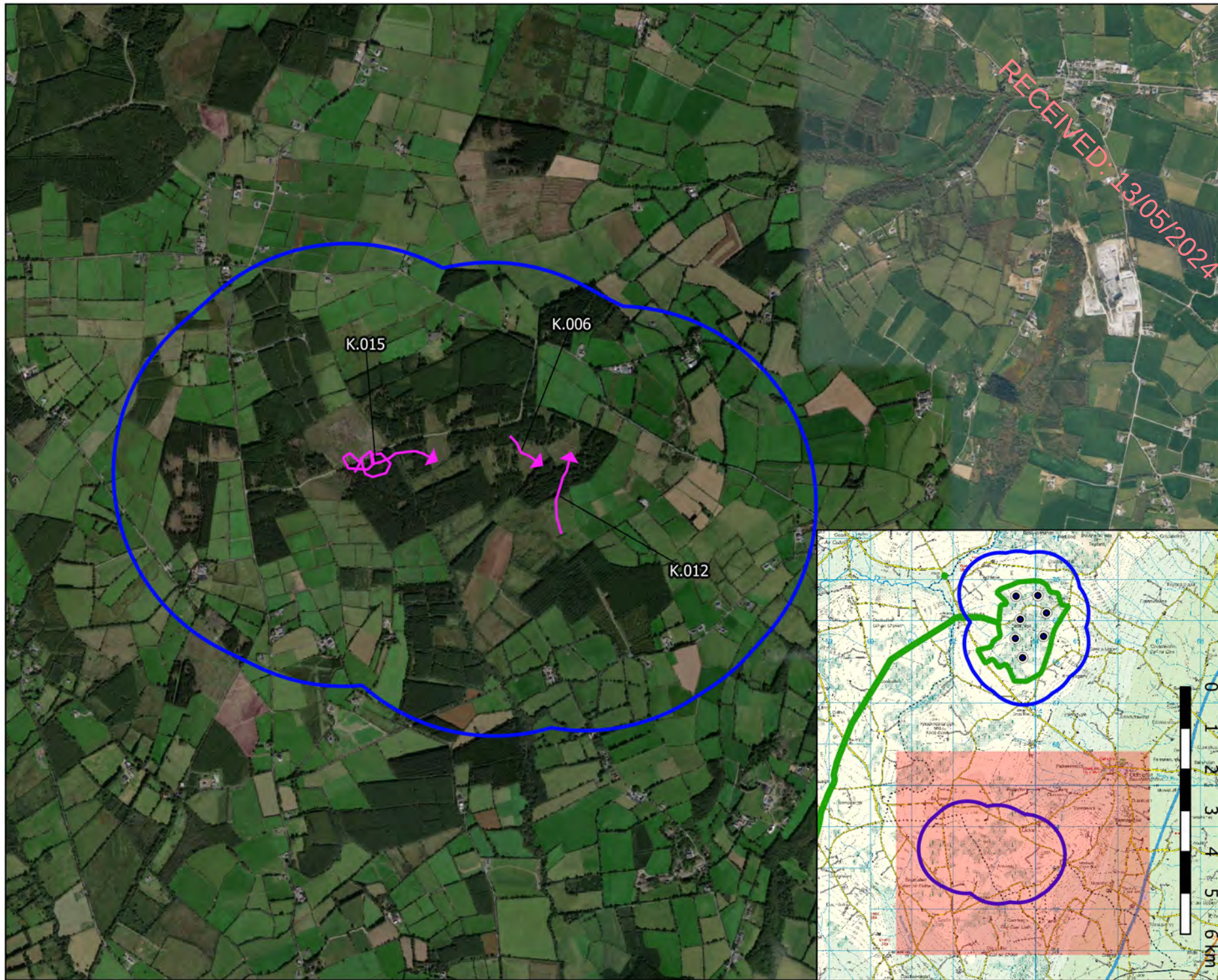


Drawing Title
Supplementary Vantage Point Survey
Kestrel Observations

Project Title
Seskin Wind Farm, Co. Carlow

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Project No. 220246	Drawing No. Fig. 7.4.4.6
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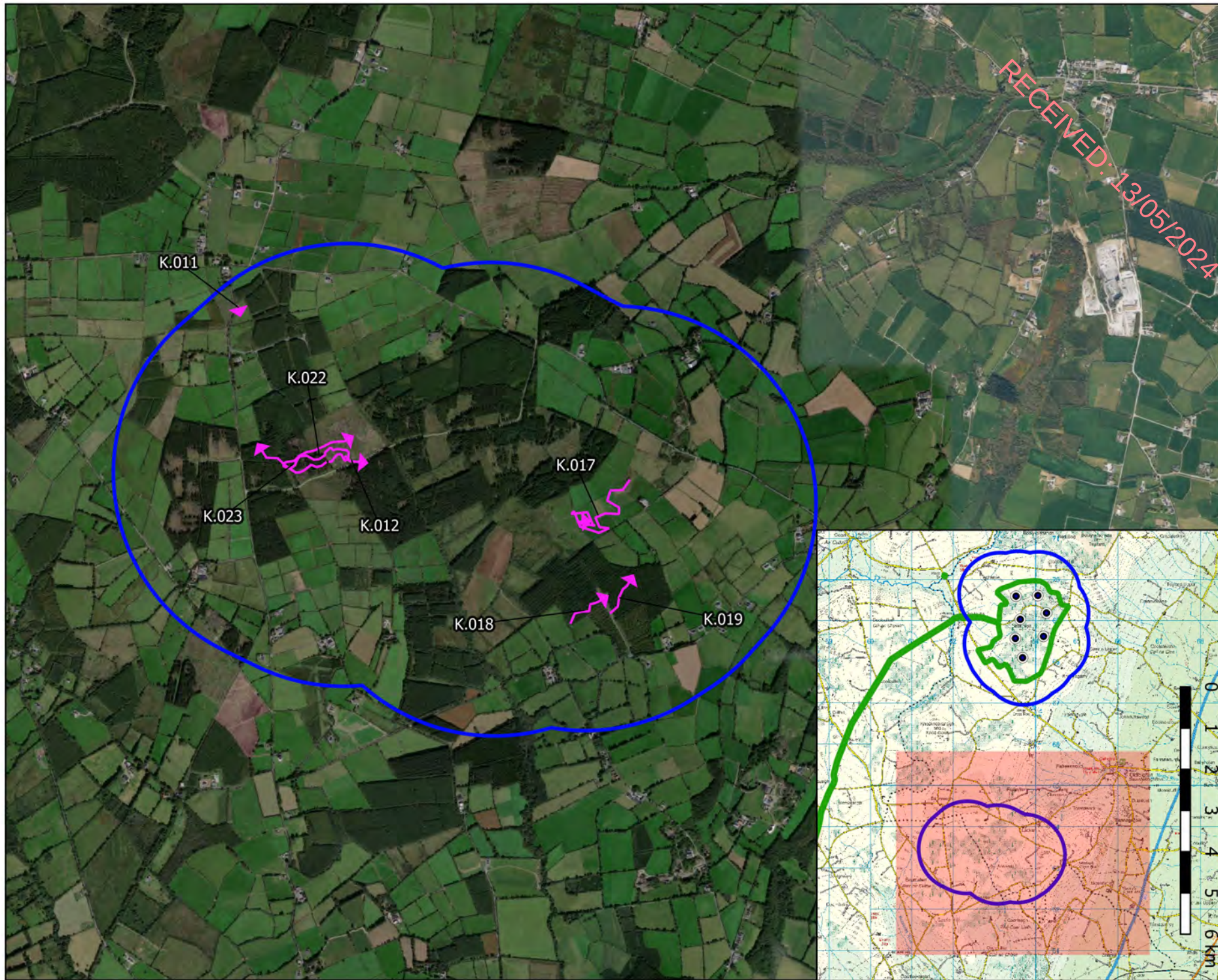


Map Legend

- EIAR Site Boundary
- Turbine Layout
- 500m Survey Area
- Flight Observation



Drawing Title	
Supplementary Breeding Walkover Survey Kestrel Observations	
Project Title	
Seskin Wind Farm, Co. Carlow	
Drawn By	Checked By
D. Woods	P. Cregg
Project No.	Drawing No.
220246	Fig. 7.4.4.7
Scale	Date
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Map Legend

- EIAR Site Boundary
- Turbine Layout
- 500m Survey Area
- Flight Observation



Drawing Title
Supplementary Winter Walkover Survey
Kestrel Observations

Project Title
Seskin Wind Farm, Co. Carlow

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Project No. 220246	Drawing No. Fig. 7.4.4.8
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5.

LAPWING

Table 7-4-5- 1 Lapwing Vantage Point Survey Data

Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
L.001	VP1	12/05/2020	16:00	Lapwing	2	40	0	0	40	0	hedgerows, conifer plantation and improved agricultural grassland; flying close together near forestry then lost from view	PW
L.002	VP1	12/05/2020	16:03	Lapwing	2	38	0	8	30	0	hedgerows, conifer plantation and improved agricultural grassland; flying close together returning over GA1 dropping down and lost from view. appeared to land in field	PW
L.003	VP1	19/07/2021	20:23	Lapwing	12	611	0	0	166	0	conifer plantation, improved agricultural grassland and hedgerows; flying commuting at height., flock flying at upper PCH continued out over valley at same height and so were above PCH off site. lost from view in scope in distance as continued flying on.	PW

Table 7-4-5- 2 Lapwing Waterbird Distribution Survey Data

Waterbird Distribution Surveys							
Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
L.001	Cloydagh	12/10/2020	13:15	Lapwing	63	improved agricultural grassland; perched, roosting, flooded field by river barrow	PW
L.002	Cloydagh	23/10/2020	14:02	Lapwing	68	improved agricultural grassland and depositing/lowland rivers; feeding, flooded field	PW
L.003	Cloydagh	04/11/2020	08:54	Lapwing	58	treelines, improved agricultural grassland and depositing/lowland rivers; flying in to land in flooded field	PW
L.004	Cloydagh	04/11/2020	09:20	Lapwing	27	improved agricultural grassland, depositing/lowland rivers and riparian woodland; flying, flew south along flooded fields to join other flock of 58 birds	PW

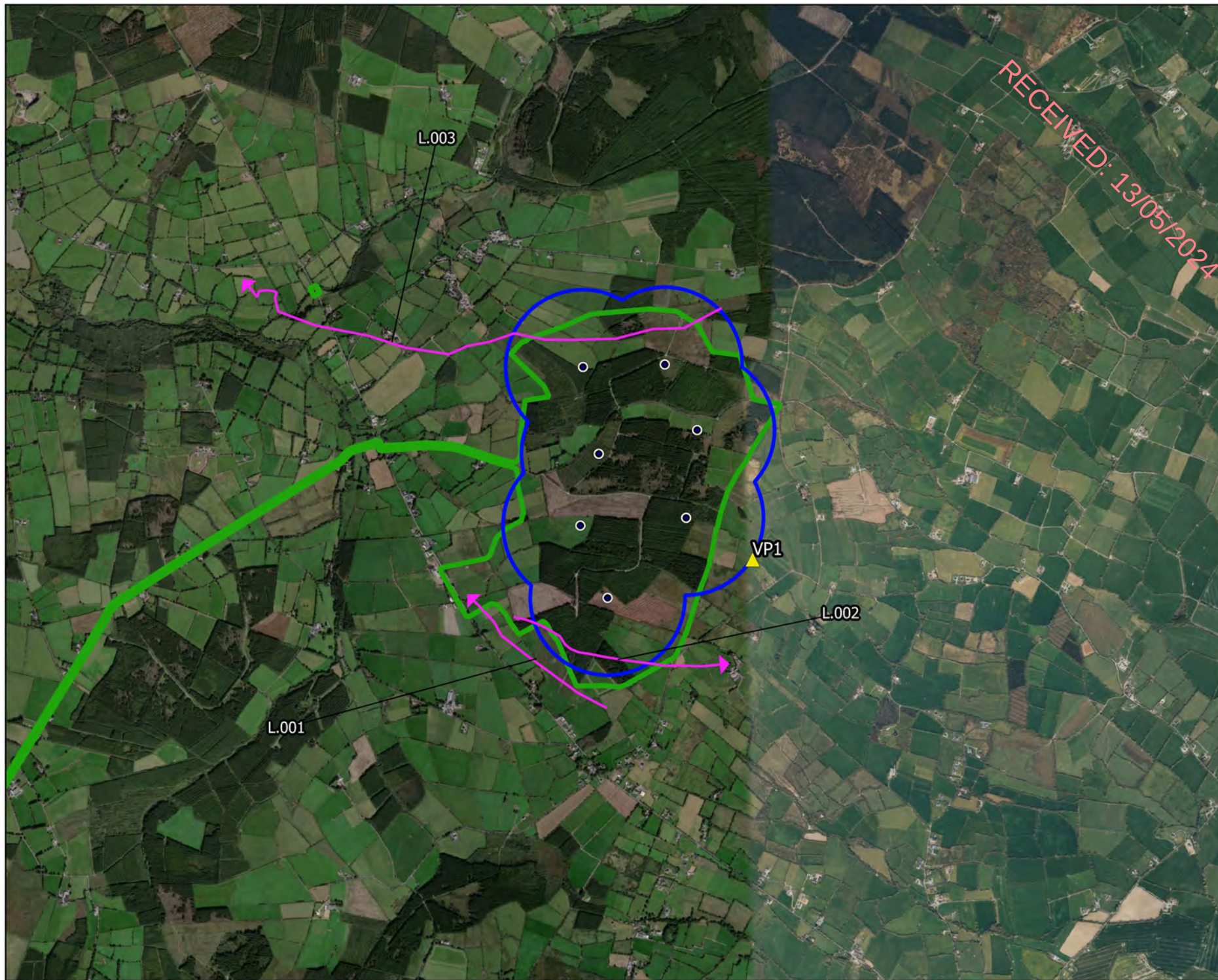
Waterbird Distribution Surveys							
Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
L.005	Powerstown	04/11/2020	12:10	Lapwing	55	improved agricultural grassland and depositing/lowland rivers; preening, roosting, perched, flooded field by river barrow	PW
L.006	Fenniscourt	06/01/2021	12:50	Lapwing	75	improved agricultural grassland, arable crops and depositing/lowland rivers; flying, a loose flock of 1 were spotted flying over this general area. most went northwest, while some turned back and flew se over the river.	PW
L.007	Ballytarsna	06/01/2021	13:16	Lapwing	30	arable crops; flying into land., a small flock of 1 came up off the winter grazed arable crop field with some golden plover. these 1 then landed back down in the field out of view. there may have been more birds in the field.	PW
L.008	Powerstown	29/01/2021	11:06	Lapwing	302	depositing/lowland rivers, drainage ditches and improved agricultural grassland; roosting and flying, roosting and flying over floodwater.	PW
L.009	Cloydagh	29/01/2021	11:38	Lapwing	212	wet grassland, improved agricultural grassland and arable crops; flying north, strung out flock of 212 birds flying north.	PW
L.010	Cloydagh	29/01/2021	12:08	Lapwing	878	improved agricultural grassland, depositing/lowland rivers and drainage ditches; flying and roosting, flying around and landed on floodwater of river barrow. at least 878 birds in air. unknown number obscured from view through trees. possibly over 1000 birds.	PW
L.011	Powerstown	10/02/2021	12:20	Lapwing	143	depositing/lowland rivers, improved agricultural grassland and hedgerows; feeding, flying, large flock on receding floodwater feeding and flying about over area coming in to land. larger flock further west a couple of fields.	PW
L.012	Rathornan	10/02/2021	12:27	Lapwing	229	improved agricultural grassland, arable crops and depositing/lowland rivers; flying in to land, in vicinity of floodwater. associating with field (GA1) where farmer spreading slurry. this flock was separate to those at Powerstown. so at least 372 lapwing in this general area.	PW
L.013	Powerstown	25/02/2021	15:43	Lapwing	2	improved agricultural grassland and depositing/lowland rivers; roosting, flooded field.	PW
L.014	Cloydagh	11/03/2021	16:11	Lapwing	11	improved agricultural grassland and depositing/lowland rivers; preening, roosting, feeding., flooded field.	PW
L.015	Cloghna	09/08/2021	13:08	Lapwing	1	hedgerows, improved agricultural grassland and arable crops; feeding.	PW
L.016	Cloydagh	21/12/2021	14:45	Lapwing	420	improved agricultural grassland; preening, feeding, loafing., flooded field river barrow.	PW



Table 7-4.5-3 Lapwing Incidental Observations

Incidental Observations							
Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
L.001	[REDACTED]	06/01/2021	15:28	Lapwing	8	conifer plantation and improved agricultural grassland; flying, commuting, in view flying for 14s.	PW

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Map Legend

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



Drawing Title

Vantage Point Survey
Lapwing Observations

Project Title

Seskin Wind Farm, Co. Carlow

Drawn By

D. Woods

Checked By

P. Cregg

Project No.

220246

Drawing No.

Fig. 7.4.5.1

Scale

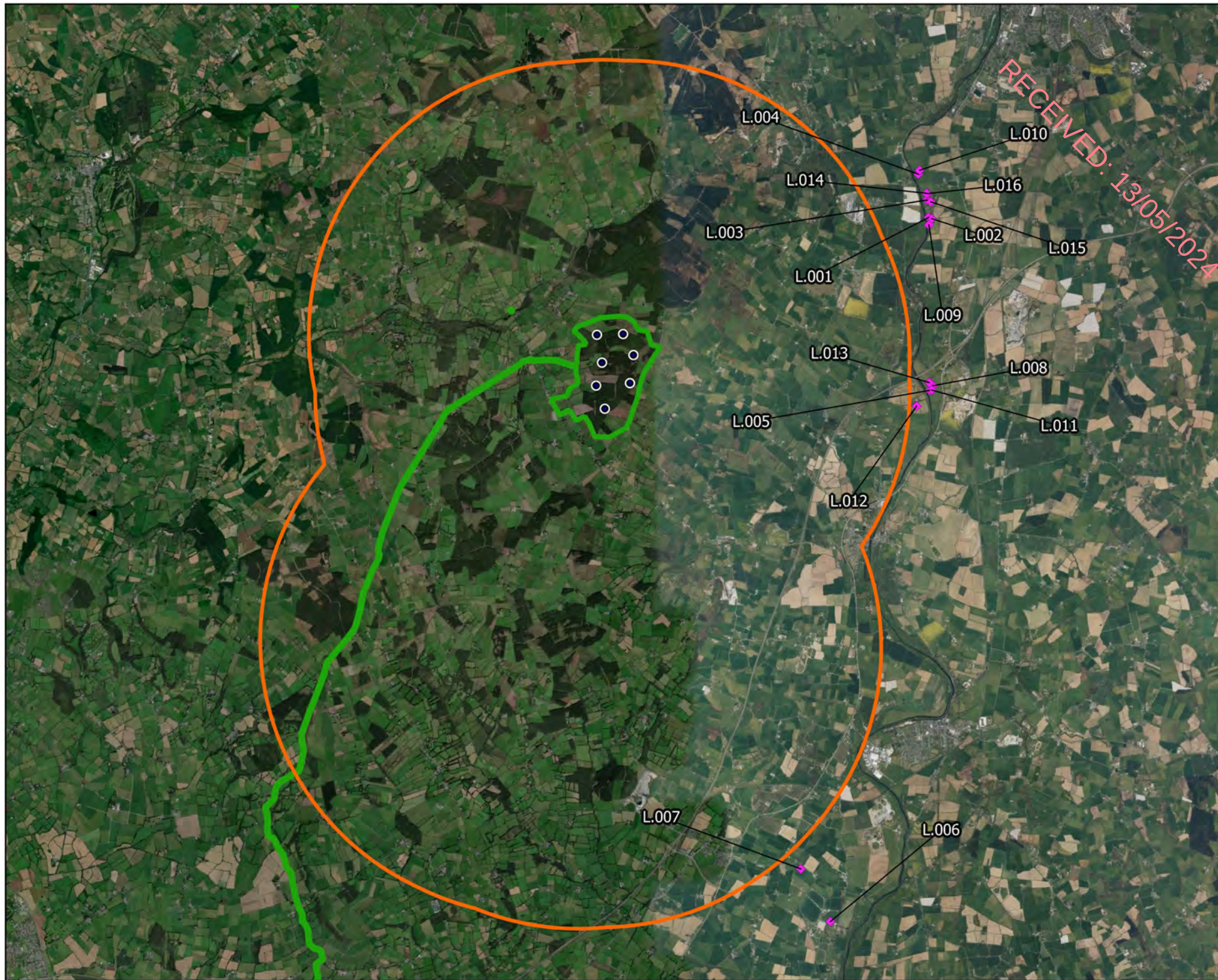
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Map Legend

- EIA Site Boundary
- Turbine Layout
- 5km Survey Radius
- Observation



Drawing Title

Waterbird Distribution Survey
Lapwing Observations

Project Title

Seskin Wind Farm, Co. Carlow

Drawn By

D. Woods

Checked By

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Project No.

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Drawing No.

Fig. 7.4.5.2

Scale

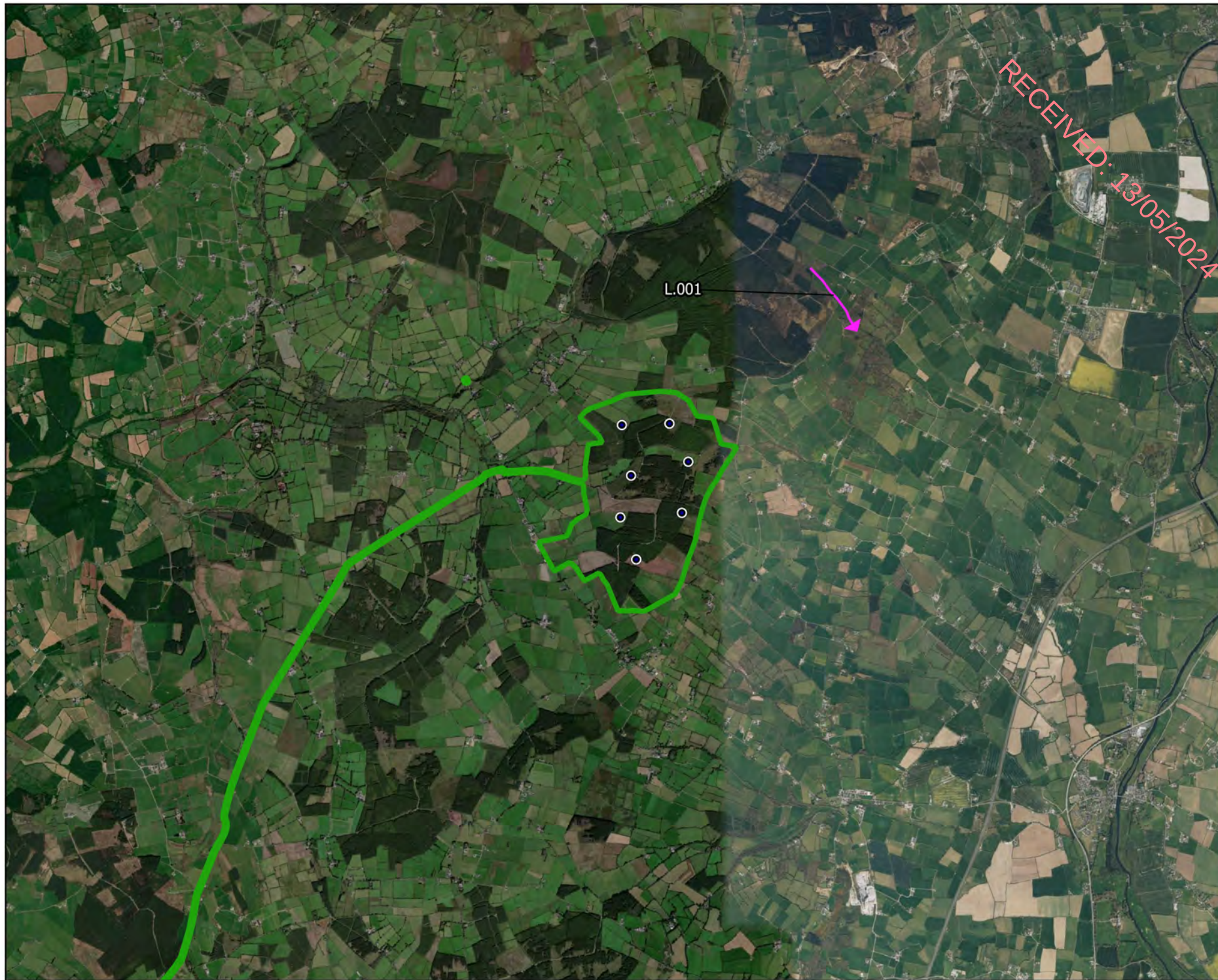
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Map Legend

-  EIA Site Boundary
-  Turbine Layout
-  Flight Observation



Drawing Title

Incidental Lapwing Observations

Project Title

Seskin Wind Farm, Co. Carlow

Drawn By	Checked By
D. Woods	P. Cregg
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220246	Fig. 7.4.5.3
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6.

SNIFE

Table 7-4-6- 1 Snipe Vantage Point Survey Data

Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
SN001	VP1	16/04/2020	05:28	Snipe	1	2	2	0	0	0	improved agricultural grassland, hedgerows and wet grassland; called and flushed from field	PW
SN002	VP1	16/04/2020	07:26	Snipe	1	2	2	0	0	0	improved agricultural grassland; heard calling as if flushed (not singing)	PW
SN003	VP1	16/04/2020	11:18	Snipe	1	5	0	0	0	0	wet grassland and hedgerows; flew low behind WL1 and dropped down into wet field	PW
SN005	VP1	09/10/2020	14:00	Snipe	2	180	3	17	160	0	wet grassland, hedgerows and conifer plantation; calling and flying, presumed to flush from GS4 as picked up calling when flying low. flew off into distance out of view	PW
SN006	VP1	09/10/2020	16:07	Snipe	2	141	0	6	135	0	wet grassland and improved agricultural grassland; flying	PW
SN007	VP1	09/10/2020	16:16	Snipe	1	32	15	17	0	0	wet grassland; flying	PW
SN008	VP1	09/10/2020	19:25	Snipe	2	36	12	12	12	0	wet grassland and improved agricultural grassland; flying, calling and flying. appeared to get up from one patch of GS4 and fly to another.	PW
SN009	VP1	09/10/2020	19:35	Snipe	1	12	0	12	0	0	improved agricultural grassland; flying and calling, presumed flightpath, heard not seen as too dark	PW
SN013	VP1	19/11/2020	10:52	Snipe	1	35	8	20	7	0	improved agricultural grassland, hedgerows and wet grassland; flying and calling, came up off field	PW
SN014	VP1	19/11/2020	10:52	Snipe	1	10	10	0	0	0	wet grassland; flying and calling	PW
SN015	VP1	19/11/2020	12:06	Snipe	1	42	2	2	38	0	conifer plantation and wet grassland; flying in to land from a height, landed in wet clearfelled areas	PW

Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
SN016	VP1	10/12/2020	16:50	Snipe	1	5	5	0	0	0	improved agricultural grassland; calling and flying	PW
SN018	VP1	11/12/2020	11:24	Snipe	1	244	2	3	239	0	improved agricultural grassland, conifer plantation and hedgerows; flying and calling, flew into land. was joined by a second bird for a couple of minutes.	PW
SN019	VP1	11/12/2020	11:25	Snipe	1	234	2	3	229	0	improved agricultural grassland, conifer plantation and hedgerows; flying, joined another bird and then flew on to land in a separate field.	PW
SN020	VP1	11/12/2020	13:02	Snipe	1	-	-	-	-	-	improved agricultural grassland; calling, heard, not seen	PW
SN021	VP1	11/12/2020	14:36	Snipe	1	60	0	0	60	0	improved agricultural grassland, hedgerows and wet grassland; flying and calling	PW
SN022	VP1	11/12/2020	16:53	Snipe	3	48	0	0	48	0	improved agricultural grassland; flying and calling	PW
SN023	VP1	11/12/2020	16:55	Snipe	1	-	-	-	-	-	improved agricultural grassland; calling and flying, heard, not seen	PW
SN024	VP1	15/01/2021	07:43	Snipe	1	7	0	7	0	0	improved agricultural grassland, hedgerows and wet grassland; flying and calling	PW
SN025	VP1	15/01/2021	13:06	Snipe	1	47	0	0	47	0	wet grassland and improved agricultural grassland; calling and flying	PW
SN026	VP1	15/01/2021	13:50	Snipe	1	38	2	2	34	0	improved agricultural grassland, wet grassland and conifer plantation; flying into land., landed in newly sown conifers in GS4 beside clearfelled areas.	PW
SN027	VP1	26/03/2021	05:21	Snipe	2	-	-	-	-	-	improved agricultural grassland; calling and flying.	PW
SN028	VP1	26/03/2021	05:22	Snipe	3	-	-	-	-	-	improved agricultural grassland; calling and flying., possibly includes two previously observed birds.	PW
SN029	VP1	26/03/2021	05:27	Snipe	1	-	-	-	-	-	improved agricultural grassland; calling., heard, not seen.	PW

Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
SN030	VP1	26/03/2021	05:30	Snipe	1	-	-	-	-	-	improved agricultural grassland; calling and flying., heard, not seen.	PW
SN031	VP1	07/04/2021	20:20	Snipe	1	14	14	0	0	0	improved agricultural grassland and hedgerows; calling, flying., came up off field and looped around flying fast and low.	PW
SN032	VP1	07/04/2021	20:45	Snipe	1	15	0	15	0	0	improved agricultural grassland and wet grassland; flying calling.	PW
SN033	VP1	07/04/2021	20:47	Snipe	1	-	-	-	-	-	improved agricultural grassland; calling, heard not seen, presumed flying.	PW
SN042	VP1	14/09/2021	20:14	Snipe	1	39	3	10	26	0	improved agricultural grassland and hedgerows; flying and calling.	PW
SN043	VP1	21/10/2021	08:25	Snipe	1	10	10	0	0	0	improved agricultural grassland and wet grassland; rose off VP1 field, did a circuit flew southeast	SP

Table 7-4-6- 2 Snipe Winter Walkover Survey Data

Winter Walkover Surveys							
Ref.	Date	Time	Species	Number	Habitat and activity		Surveyor
SN001	14/01/2021	11:44	Snipe	5	conifer plantation; flushed from forest road. flew off out over young forestry. (wintering)		PW
SN002	12/02/2021	11:38	Snipe	1	conifer plantation and scrub; flushed and flew calling, 1 of 2 birds (wintering)		PW
SN003	12/02/2021	11:39	Snipe	1	conifer plantation and scrub; flushed and flew calling, 2 of 2 birds. birds flew in opposite directions. (wintering)		PW
SN004	12/01/2022	14:29	Snipe	1	recently felled woodland and conifer plantation; flying/calling (wintering)		JM
SN005	08/03/2022	13:25	Snipe	1	drainage ditches and scrub; flushed (wintering)		JM

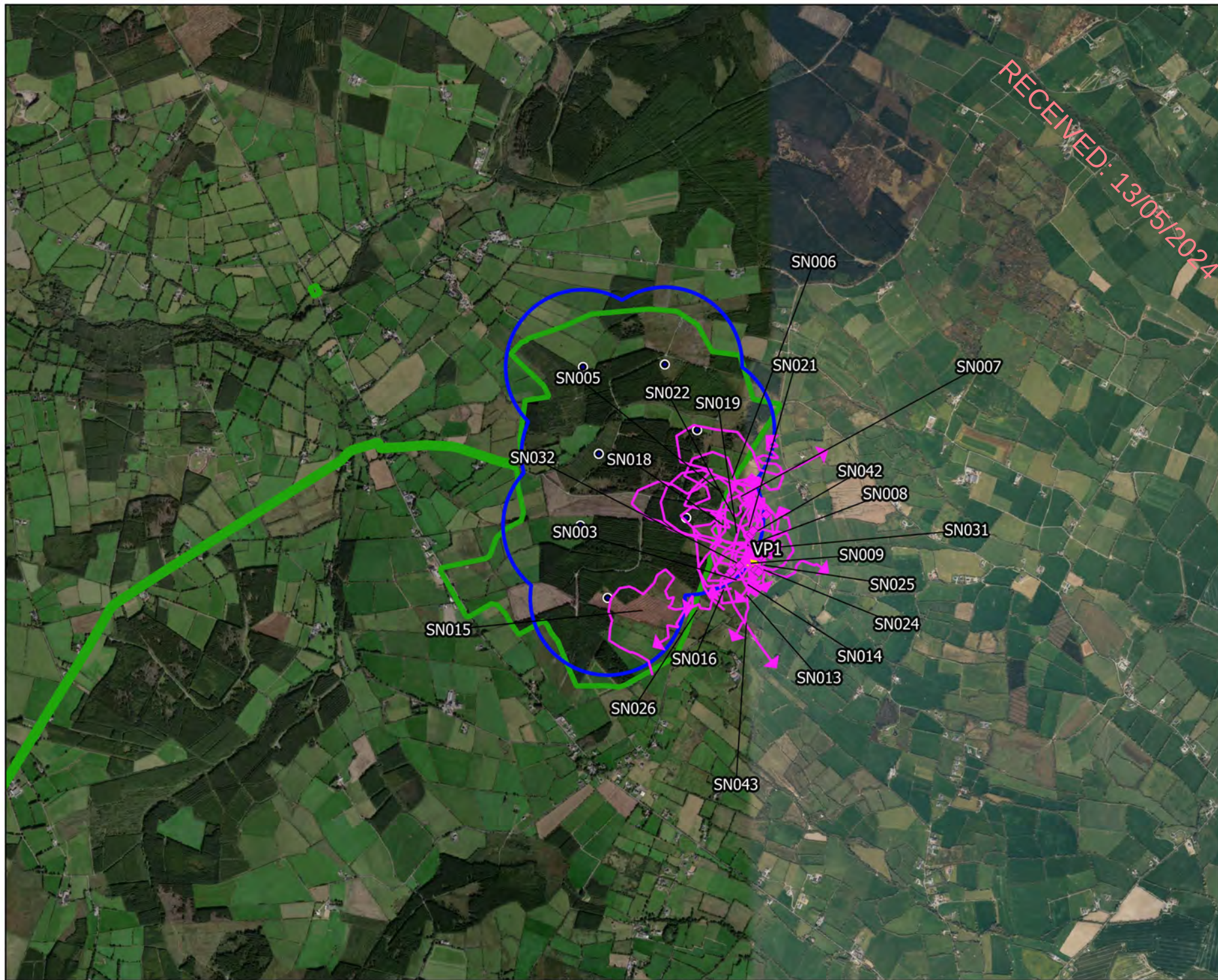
Table 7-4-6- 3 Snipe Incidental Observations

Incidental Observations							
Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
SN001	Hen Harrier Roost Survey; HHVP1	12/10/2020	17:30	Snipe	6	raised bog;	PW
SN002	Hen Harrier Roost Survey; HHVP1	12/10/2020	19:05	Snipe	1	raised bog; heard, not seen	PW
SN003	Hen Harrier Roost Survey; HHVP1	18/11/2020	14:59	Snipe	1	raised bog and conifer plantation; flushed from edge of bog	PW
SN004	Hen Harrier Roost Survey; HHVP2	20/11/2020	17:01	Snipe	1	conifer plantation, wet grassland and scrub; flying and calling, clearfelled areas regrowing with new conifers. flew around this area calling for 180s.	PW
SN005	Hen Harrier Roost Survey; HHVP1	08/12/2020	16:52	Snipe	1	raised bog and conifer plantation; calling, heard not seen, presumed flying	PW
SN006	Hen Harrier Roost Survey; HHVP1	06/01/2021	17:15	Snipe	1	raised bog; calling and flying, came up off bog and flew. heard, not seen.	PW
SN007	Hen Harrier Roost Survey; HHVP1	06/01/2021	17:09	Snipe	1	conifer plantation; calling and flying, heard, not seen,	PW
SN008	Hen Harrier Roost Survey; HHVP1	06/01/2021	17:11	Snipe	1	conifer plantation, dry siliceous heath and raised bog; calling and flying, heard, not seen,	PW
SN009	Hen Harrier Roost Survey; HHVP3	25/01/2021	15:27	Snipe	1	wet grassland and scrub; flushed and flew	PW
SN010	Hen Harrier Roost Survey; HHVP3	25/01/2021	15:40	Snipe	1	scrub, improved agricultural grassland and wet grassland; flying, in view for 70s.	PW
SN011	Hen Harrier Roost Survey; HHVP3	25/01/2021	16:09	Snipe	1	improved agricultural grassland; flying	PW
SN012	Hen Harrier Roost Survey; HHVP3	25/01/2021	17:41	Snipe	1	wet grassland and scrub; flying and calling	PW
SN013	Hen Harrier Roost Survey; HHVP1	10/02/2021	18:06	Snipe	1	raised bog; calling, calling presumed flying, heard not seen.	PW
SN014	Hen Harrier Roost Survey; HHVP1	10/02/2021	19:02	Snipe	1	conifer plantation and raised bog; flying	PW
SN015	Hen Harrier Roost Survey; HHVP1	10/02/2021	19:04	Snipe	1	raised bog and conifer plantation; calling, calling, heard not seen.	PW
SN016	Hen Harrier Roost Survey; HHVP1	24/03/2021	19:00	Snipe	1	conifer plantation, raised bog and wet heath; calling, flying., heard, not seen. presumed flightpath.	PW

Incidental Observations							
Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
SN017	Hen Harrier Roost Survey; HHVP1	24/03/2021	19:08	Snipe	2	raised bog, conifer plantation and wet heath; calling, flying., presumed flightline, heard, not seen.	PW
SN018	Hen Harrier Roost Survey; HHVP1	24/03/2021	19:17	Snipe	1	raised bog and conifer plantation; calling., heard, not seen.	PW
SN019	Hen Harrier Roost Survey; HHVP1	24/03/2021	19:18	Snipe	1	raised bog; calling., heard, not seen.	PW
SN020	Hen Harrier Roost Survey; HHVP1	24/03/2021	19:22	Snipe	1	conifer plantation, raised bog and wet heath; calling., heard, not seen.	PW
SN021	Vantage Point Survey; VP1	07/04/2021	17:51	Snipe	1	improved agricultural grassland and hedgerows; flushed and flew before dropping into land in next field.	PW
SN022	Hen Harrier Roost Survey; Red Bog (HHVP1)	19/10/2021	16:49	Snipe	1	upland blanket bog and mixed conifer woodland; flew in and landed	SP
SN023	Hen Harrier Roost Survey; HHVP2 viewshed	16/11/2021	07:04	Snipe	1	improved agricultural grassland and conifer plantation; calling, only heard, not seen	JM
SN024	Hen Harrier Roost Survey; HHVP3	22/11/2021	17:07	Snipe	3	scrub and marsh; calling/flying, heard but not seen	JM
SN025	Hen Harrier Roost Survey; HHVP2	09/12/2021	16:50	Snipe	2	immature woodland and conifer plantation; calling	JM
SN026	Hen Harrier Roost Survey; HHVP1	15/12/2021	16:55	Snipe	8	bogs and conifer plantation; calling/flying, snipe became active all around	JM
SN027	Hen Harrier Roost Survey; HHVP3 Raheen	24/01/2022	17:28	Snipe	5	marsh and wet grassland; calling/flying	JM
SN028	Hen Harrier Roost Survey; Tomard, Old Leighlin	03/02/2022	18:11	Snipe	1	bogs and conifer plantation; flushed	JM

Table 7-4-6- 4 Snipe Supplementary Vantage Point Survey Data

Supplementary Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
SN004	VP2	06/05/2020	21:38	Snipe	1	5	0	5	0	0	spoil and bare ground and recolonising bare ground; calling in flight (not drumming)	PW
SN010	VP2	14/10/2020	19:06	Snipe	4	55	0	0	55	0	conifer plantation; flying, clearfelled areas, open coniferous woodland	PW
SN011	VP2	14/10/2020	19:08	Snipe	1	3	0	0	3	0	conifer plantation; flying, dropped below treeline out of view.	PW
SN012	VP2	14/10/2020	19:13	Snipe	1	7	0	7	0	0	improved agricultural grassland; flying	PW
SN017	VP2	10/12/2020	16:56	Snipe	1	-	-	-	-	-	improved agricultural grassland; calling, heard, not seen.	PW
SN034	VP2	14/04/2021	20:58	Snipe	1	100	0	0	48	0	improved agricultural grassland, hedgerows and conifer plantation; calling and flying.	PW
SN035	VP2	14/04/2021	21:00	Snipe	1	72	0	0	72	0	conifer plantation and improved agricultural grassland; flying and calling.	PW
SN036	VP2	14/04/2021	21:00	Snipe	3	-	-	-	-	-	improved agricultural grassland; calling and flying., heard, not seen.	PW
SN037	VP2	14/04/2021	21:05	Snipe	1	46	0	0	46	0	improved agricultural grassland, hedgerows and conifer plantation; flying and calling.	PW
SN038	VP2	14/04/2021	21:05	Snipe	1	30	0	0	15	0	improved agricultural grassland and hedgerows; flying and calling.	PW
SN039	VP2	14/04/2021	21:11	Snipe	1	-	-	-	-	-	improved agricultural grassland; calling and flying., heard, not seen.	PW
SN040	VP2	14/04/2021	21:12	Snipe	1	-	-	-	-	-	improved agricultural grassland; calling., heard, not seen.	PW
SN041	VP2	14/04/2021	21:15	Snipe	1	31	0	0	31	0	conifer plantation and improved agricultural grassland; flying.	PW



Map Legend

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



Drawing Title

Vantage Point Survey
Snipe Observations

Project Title

Seskin Wind Farm, Co. Carlow

Drawn By

D. Woods

Checked By

P. Cregg

Project No.

220246

Drawing No.

Fig. 7.4.6.1

Scale

1:32000

Date

03.11.23



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Map Legend

- EIA Site Boundary
- Turbine Layout
- 500m Survey Area
- Flight Observation



Drawing Title

Winter Walkover Survey
Snipe Observations

Project Title

Seskin Wind Farm, Co. Carlow

Drawn By

D. Woods

Checked By

P. Cregg

Project No.

220246

Drawing No.

Fig. 7.4.6.2

Scale

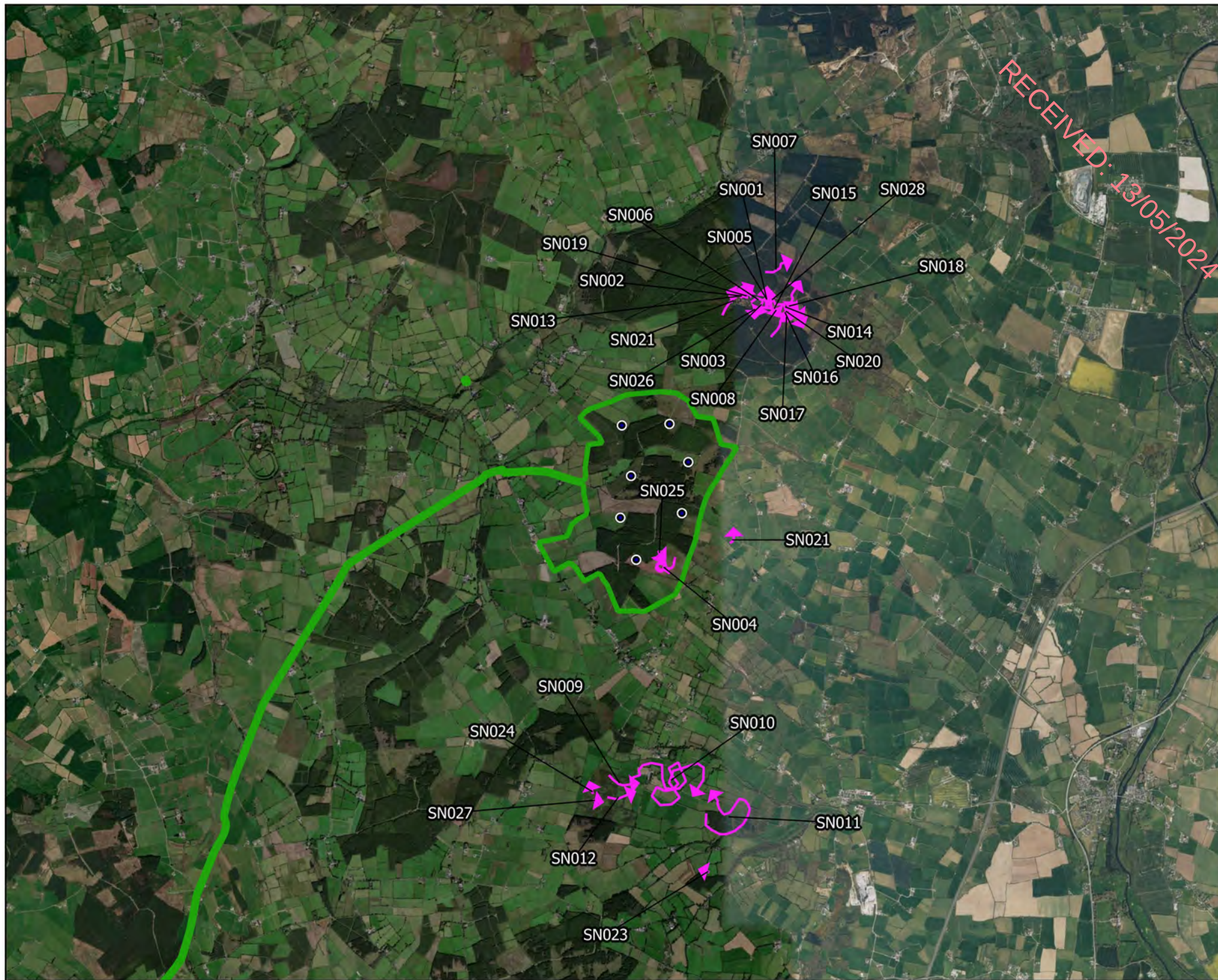
1:25000

Date

03.11.23



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Map Legend

- EIA Site Boundary
- Turbine Layout
- Flight Observation



Drawing Title

Incidental Snipe Observations

Project Title

Seskin Wind Farm, Co. Carlow

Drawn By

D. Woods

Checked By

P. Cregg

Project No.

220246

Drawing No.

Fig. 7.4.6.3

Scale

1:55000

Date

03.11.23



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Map Legend

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

Drawing Title:
Supplementary Vantage Point Survey
Snipe Observations

Project Title:
Seskin Wind Farm, Co. Carlow

Drawn By: D. Woods	Checked By: P. Cregg
Project No.: 220246	Drawing No.: Fig. 7.4.6.4
Scale: 1:25000	Date: 03.11.23

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7.

WOODCOCK

Table 7-4-7- 1 Woodcock Vantage Point Survey Data

Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
WK001	VP1	16/04/2020	06:06	Woodcock	1	10	0	10	0	0	conifer plantation; flying low over canopy of wood, lost from view behind trees	PW
WK002	VP1	16/04/2020	06:12	Woodcock	1	65	0	5	60	0	conifer plantation; flying over canopy of woodland back and forth lost from view below treeline	PW
WK003	VP1	12/05/2020	21:25	Woodcock	1	25	0	0	25	0	improved agricultural grassland and hedgerows; display flight over forestry	PW
WK004	VP1	12/05/2020	21:28	Woodcock	1	103	0	3	100	0	conifer plantation; display flight over forestry dropped below treeline and lost from view	PW
WK005	VP1	12/05/2020	21:41	Woodcock	1	32	0	0	32	0	conifer plantation; display flight	PW
WK006	VP1	12/05/2020	21:46	Woodcock	1	30	0	30	0	0	conifer plantation; flying over forestry edge	PW
WK007	VP1	11/12/2020	16:47	Woodcock	1	5	5	0	0	0	improved agricultural grassland; flying, flying low over the ground near VP1	PW

Table 7-4-7- 2 Breeding Woodcock Survey Data

Breeding Woodcock Surveys							
Ref.	Transect	Date	Time	Species	Number	Habitat and activity	Surveyor
WK001	WKT1	24/05/2020	20:57	Woodcock	1	conifer plantation and scrub, roding, calling over treetops	PW
WK002	WKT1	24/05/2020	21:01	Woodcock	1	conifer plantation and scrub, roding calling over treetops across forest road	PW
WK003	WKT1	24/05/2020	21:02	Woodcock	1	conifer plantation and scrub, flying over treetops along forestry road	PW

Breeding Woodcock Surveys							
Ref.	Transect	Date	Time	Species	Number	Habitat and activity	Surveyor
WK004	WKT1	24/05/2020	21:18	Woodcock	1	conifer plantation and scrub, heard roding in location shown on map	PW
WK005	WKT1	24/05/2020	21:20	Woodcock	1	conifer plantation and scrub, roding and calling flying over forest road out to clearfelled areas and then over mature conifers. flying together with another bird before splitting	PW
WK006	WKT1	24/05/2020	21:20	Woodcock	1	conifer plantation and scrub, roding and calling flying over forest road out to clearfelled areas and then over mature conifers. flying together with another bird before splitting	PW
WK007	WKT1	24/05/2020	21:24	Woodcock	1	conifer plantation and scrub, roding and flew out over clearfelled areas and looped around	PW
WK008	WKT1	24/05/2020	21:29	Woodcock	1	conifer plantation and scrub, roding calling over forest road and conifers	PW
WK009	WKT1	24/05/2020	21:30	Woodcock	1	conifer plantation and scrub, roding calling over forest road and conifers, possible same bird as above	PW
WK010	WKT1	24/05/2020	21:30	Woodcock	2	conifer plantation and scrub, flying close together calling high pitch call, heard roding low over trees above forest track later one heard calling roding south of this forest path.	PW
WK011	WKT1	24/05/2020	21:37	Woodcock	1	conifer plantation and scrub, roding big loop around clearfelled areas	PW
WK012	WKT1	24/05/2020	21:41	Woodcock	1	conifer plantation and scrub, roding bird calling flying	PW
WK013	WKT1	24/05/2020	21:42	Woodcock	2	conifer plantation and scrub, calling (high pitch) birds close together <1m turned quick on each other over forest path then back over conifers	PW
WK014	WKT1	24/05/2020	21:45	Woodcock	1	conifer plantation and scrub, roding	PW
WK015	WKT1	24/05/2020	21:46	Woodcock	1	conifer plantation and scrub, roding	PW
WK016	WKT1	24/05/2020	21:48	Woodcock	1	conifer plantation and scrub, roding	PW
WK017	WKT1	24/05/2020	21:49	Woodcock	1	conifer plantation and scrub, roding	PW
WK018	WKT1	24/05/2020	21:52	Woodcock	1	conifer plantation and scrub, roding	PW

Breeding Woodcock Surveys							
Ref.	Transect	Date	Time	Species	Number	Habitat and activity	Surveyor
WK019	WKT1	24/05/2020	21:54	Woodcock	1	conifer plantation and scrub, roding	PW
WK020	WKT1	24/05/2020	21:55	Woodcock	1	conifer plantation and scrub, roding	PW
WK021	WKT1	24/05/2020	22:00	Woodcock	1	conifer plantation and scrub, roding	PW
WK022	WKT1	24/05/2020	22:04	Woodcock	1	conifer plantation and scrub, roding	PW
WK023	WKT1	24/05/2020	22:08	Woodcock	1	conifer plantation and scrub, calling roding heard not seen	PW
WK024	WKT1	24/05/2020	22:20	Woodcock	1	conifer plantation and scrub, roding	PW
WK025	WKT2	29/05/2020	21:48	Woodcock	1	conifer plantation, roding over WD4 mature and clearfelled areas, met with other woodcock, both birds observed over clearfelled areas before spilling over forestry	PW
WK026	WKT2	29/05/2020	21:48	Woodcock	1	conifer plantation, calling with the other woodcock flying over clearfelled areas and continuing over forest road into WD4 mature	PW
WK027	WKT2	29/05/2020	21:55	Woodcock	1	conifer plantation, flying 30m over clearfelled areas and WD4 before lost from view over mature WD4	PW
WK028	WKT2	29/05/2020	21:57	Woodcock	1	conifer plantation, roding, flew all around mature WD4 and clearfelled areas	PW
WK029	WKT2	29/05/2020	22:02	Woodcock	1	conifer plantation, roding, calling	PW
WK030	WKT2	29/05/2020	22:05	Woodcock	1	conifer plantation, roding, calling	PW
WK031	WKT2	29/05/2020	22:08	Woodcock	1	conifer plantation, roding, calling	PW
WK032	WKT2	29/05/2020	22:10	Woodcock	1	conifer plantation, roding, calling	PW
WK033	WKT2	29/05/2020	22:13	Woodcock	1	conifer plantation, roding flying along over forest road and WD4 and newly planted area	PW
WK034	WKT2	29/05/2020	22:14	Woodcock	1	conifer plantation, roding flying over newly planted and mature WD4	PW

Breeding Woodcock Surveys							
Ref.	Transect	Date	Time	Species	Number	Habitat and activity	Surveyor
WK035	WKT2	29/05/2020	22:19	Woodcock	1	conifer plantation, roding along forest path and second bird in the area	PW
WK036	WKT2	29/05/2020	22:20	Woodcock	1	conifer plantation and scrub, roding and second bird in area	PW
WK043	WKT1	10/06/2020	21:36	Woodcock	1	conifer plantation and scrub, roding flying over WD4 north south across forest path	PW
WK044	WKT1	10/06/2020	21:39	Woodcock	1	conifer plantation and scrub, roding over forest path over trees 30m up	PW
WK045	WKT1	10/06/2020	21:40	Woodcock	1	conifer plantation and scrub, roding met 2nd woodcock over forest path and chased it calling	PW
WK046	WKT1	10/06/2020	21:40	Woodcock	1	conifer plantation and scrub, calling, flying 2 birds met and chased each other	PW
WK047	WKT1	10/06/2020	21:43	Woodcock	1	conifer plantation and scrub, roding	PW
WK048	WKT1	10/06/2020	21:47	Woodcock	1	conifer plantation and scrub, roding	PW
WK049	WKT1	10/06/2020	21:58	Woodcock	1	conifer plantation and scrub, roding over canopy of WD4	PW
WK050	WKT1	10/06/2020	22:00	Woodcock	1	conifer plantation and scrub, calling heard not seen	PW
WK051	WKT1	10/06/2020	22:04	Woodcock	1	conifer plantation and scrub, roding	PW
WK052	WKT1	10/06/2020	22:06	Woodcock	1	conifer plantation and scrub, roding	PW
WK053	WKT1	10/06/2020	22:07	Woodcock	1	conifer plantation and scrub, roding	PW
WK054	WKT1	10/06/2020	22:07	Woodcock	2	conifer plantation and scrub, calling and chasing each other, turning sharply when appeared over forest road, down to 10m height. continued flying along path at 10m alone forest edge	PW
WK055	WKT1	10/06/2020	22:10	Woodcock	1	conifer plantation and scrub, calling, heard not seen	PW
WK056	WKT1	10/06/2020	22:13	Woodcock	1	conifer plantation and scrub, roding over mature WD4, clearfelled areas and forest road	PW

Breeding Woodcock Surveys							
Ref.	Transect	Date	Time	Species	Number	Habitat and activity	Surveyor
WK057	WKT1	10/06/2020	22:15	Woodcock	1	conifer plantation and scrub, roding	PW
WK058	WKT1	10/06/2020	22:18	Woodcock	1	conifer plantation and scrub, roding over mature WD4 and clearfelled areas	PW
WK059	WKT1	10/06/2020	22:21	Woodcock	1	conifer plantation and scrub, roding	PW
WK060	WKT1	10/06/2020	22:27	Woodcock	1	conifer plantation and scrub, roding	PW
WK061	WKT1	10/06/2020	22:36	Woodcock	2	conifer plantation and scrub, roding and alarm calling, heard not seen. possibly two birds	PW
WK062	WKT1	10/06/2020	22:37	Woodcock	1	conifer plantation and scrub, roding	PW
WK063	WKT1	10/06/2020	22:39	Woodcock	1	conifer plantation and scrub, roding	PW
WK064	WKT1	10/06/2020	22:39	Woodcock	1	conifer plantation and scrub, roding	PW
WK065	WKT1	10/06/2020	22:41	Woodcock	1	conifer plantation and scrub, roding	PW
WK066	WKT2	15/06/2020	22:04	Woodcock	1	conifer plantation and scrub/transitional woodland, calling roding calls (heard not seen)	PW
WK067	WKT2	15/06/2020	22:05	Woodcock	1	conifer plantation and scrub/transitional woodland, roding over clearfelled areas and mature WD4	PW
WK068	WKT2	15/06/2020	22:07	Woodcock	1	conifer plantation and scrub/transitional woodland, roding	PW
WK069	WKT2	15/06/2020	22:08	Woodcock	1	conifer plantation and scrub/transitional woodland, roding	PW
WK070	WKT2	15/06/2020	22:11	Woodcock	1	conifer plantation and scrub/transitional woodland, roding	PW
WK071	WKT2	15/06/2020	22:20	Woodcock	1	conifer plantation and scrub/transitional woodland, roding	PW
WK072	WKT2	15/06/2020	22:22	Woodcock	1	conifer plantation and scrub/transitional woodland, roding	PW

Breeding Woodcock Surveys							
Ref.	Transect	Date	Time	Species	Number	Habitat and activity	Surveyor
WK073	WKT2	15/06/2020	22:25	Woodcock	1	conifer plantation and scrub/transitional woodland, roding along forest track and WD4	PW
WK074	WKT2	15/06/2020	22:27	Woodcock	1	conifer plantation and scrub/transitional woodland, displaying	PW
WK075	WKT2	15/06/2020	22:30	Woodcock	1	conifer plantation and scrub/transitional woodland, displaying	PW
WD001	WKT1+2	11/05/2021	21:25	Woodcock	1	conifer plantation, roding	TR
WK086	WKT1+2	11/05/2021	21:28	Woodcock	1	conifer plantation, roding	TR
WK087	WKT1+2	11/05/2021	21:43	Woodcock	1	conifer plantation, roding	TR
WK102	WKT1+2	11/05/2021	21:52	Woodcock	2	conifer plantation, flying as pair	TR
WK088	WKT1+2	11/05/2021	22:08	Woodcock	1	conifer plantation, roding	TR
WK089	WKT1+2	11/05/2021	22:13	Woodcock	1	conifer plantation, roding	TR
WK104	WKT2	01/06/2021	21:52	Woodcock	1	conifer plantation, recently felled woodland and scrub, seen and heard roding over clearfelled areas	IH
WK105	WKT2	01/06/2021	21:53	Woodcock	1	conifer plantation, recently felled woodland and scrub, seen and heard roding over clearfelled areas, different bird than above	IH
WK106	WKT2	01/06/2021	22:01	Woodcock	1	conifer plantation, seen and heard roding over woodland	IH
WK107	WKT2	01/06/2021	22:06	Woodcock	1	conifer plantation, seen and heard roding over woodland	IH
WK108	WKT2	01/06/2021	22:06	Woodcock	1	conifer plantation, seen and heard roding over woodland, different bird than above	IH
WK109	WKT2	01/06/2021	22:09	Woodcock	1	conifer plantation, seen and heard roding over woodland	IH
WK110	WKT2	01/06/2021	22:11	Woodcock	1	conifer plantation, seen and heard roding over woodland ride	IH

Breeding Woodcock Surveys							
Ref.	Transect	Date	Time	Species	Number	Habitat and activity	Surveyor
WK111	WKT2	01/06/2021	22:15	Woodcock	1	conifer plantation, not seen but heard roding, approximate location recorded	IH
WK112	WKT1	01/06/2021	22:28	Woodcock	1	conifer plantation and recently felled woodland, seen and heard roding	IH
WK113	WKT1	01/06/2021	22:28	Woodcock	1	conifer plantation and recently felled woodland, seen and heard roding, different bird than above	IH
WK114	WKT1	01/06/2021	22:35	Woodcock	1	conifer plantation and recently felled woodland, heard roding (not seen), approximate location mapped	IH
WK115	WKT1	01/06/2021	22:36	Woodcock	1	conifer plantation and recently felled woodland, seen and heard roding	IH
WK116	WKT1	01/06/2021	22:40	Woodcock	1	conifer plantation and recently felled woodland, seen and heard roding, beside woodland ride over clearfelled areas	IH
WK117	WKT1	01/06/2021	22:45	Woodcock	1	conifer plantation and recently felled woodland, seen and heard roding, in opposite direction to bird above	IH
WK118	WKT1	01/06/2021	22:47	Woodcock	1	conifer plantation and recently felled woodland, heard roding (not seen), approx. location mapped	IH
WK119	WKT1	01/06/2021	22:48	Woodcock	1	conifer plantation and recently felled woodland, heard roding (not seen), approximate location mapped	IH
WK120	WKT1	01/06/2021	22:50	Woodcock	1	conifer plantation and recently felled woodland, heard roding (not seen), approximate location mapped over clearfelled areas	IH
WK144	WKT2	10/06/2021	21:55	Woodcock	1	conifer plantation and recently felled woodland, heard chipping but not seen	IH
WK145	WKT2	10/06/2021	21:59	Woodcock	1	conifer plantation and recently felled woodland, seen and heard roding	IH
WK146	WKT2	10/06/2021	22:05	Woodcock	1	conifer plantation and recently felled woodland, seen and heard roding	IH
WK147	WKT2	10/06/2021	22:05	Woodcock	2	conifer plantation and recently felled woodland, second bird chasing observation above - both chipping in flight	IH
WK148	WKT2	10/06/2021	22:07	Woodcock	1	conifer plantation and recently felled woodland, seen and heard chipping only	IH
WK149	WKT2	10/06/2021	22:08	Woodcock	1	conifer plantation and recently felled woodland, seen and heard chipping only	IH

Breeding Woodcock Surveys							
Ref.	Transect	Date	Time	Species	Number	Habitat and activity	Surveyor
WK150	WKT2	10/06/2021	22:16	Woodcock	1	conifer plantation and recently felled woodland, seen and heard roding	IH
WK151	WKT1	10/06/2021	22:20	Woodcock	1	conifer plantation and recently felled woodland, seen and head roding	IH
WK152	WKT1	10/06/2021	22:22	Woodcock	1	conifer plantation and recently felled woodland, seen and heard chipping only, wind made it hard to hear if a grunt followed the chipping	IH
WK153	WKT1	10/06/2021	22:25	Woodcock	1	conifer plantation and recently felled woodland, seen and heard chipping only, wind made it hard to hear if a grunt followed the chipping	IH
WK154	WKT1	10/06/2021	22:31	Woodcock	1	conifer plantation and recently felled woodland, seen and heard roding	IH
WK155	WKT1	10/06/2021	22:40	Woodcock	1	conifer plantation and recently felled woodland, heard chipping only	IH
WK156	WKT1	10/06/2021	22:45	Woodcock	1	conifer plantation and recently felled woodland, seen and heard roding	IH
WK157	WKT1	10/06/2021	22:45	Woodcock	1	conifer plantation and recently felled woodland, seen and heard roding	IH
WK158	WKT1	10/06/2021	22:50	Woodcock	1	conifer plantation and recently felled woodland, heard chirping only	IH
WK159	WKT1	10/06/2021	22:52	Woodcock	1	conifer plantation and recently felled woodland, heard roding but not seen	IH

Table 7-4-7-3 Woodcock Winter Walkover Survey Data

Winter Walkover Surveys						
Ref.	Date	Time	Species	Number	Habitat and activity	Surveyor
WK001	22/03/2021	12:52	Woodcock	1	conifer plantation and improved agricultural grassland; flying., came up off forest floor and flew towards field. (wintering)	PW
WK003	12/01/2022	14:07	Woodcock	1	conifer plantation; flushed, in conifer ride (wintering)	JM

Table 7-4-7- 4 Woodcock Incidental Observations

Incidental Observations							
Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
WK001	Hen Harrier Roost Survey; HHVP1	08/12/2020	17:05	Woodcock	1	conifer plantation and recolonising bare ground; flushed and flew, flushed from forest road.	PW
WK002	Hen Harrier Roost Survey; HHVP1	08/12/2020	17:07	Woodcock	1	conifer plantation and recolonising bare ground; flushed and flew, flushed from forest road	PW
WK003	Hen Harrier Roost Survey; HHVP1	06/01/2021	17:07	Woodcock	2	conifer plantation and dry siliceous heath; flying	PW
WK004	Hen Harrier Roost Survey; HHVP1	24/03/2021	19:01	Woodcock	1	conifer plantation, raised bog and stone walls and other stonework; roding., display, calling.	PW
WK005	Hen Harrier Roost Survey; HHVP1	24/03/2021	19:08	Woodcock	1	conifer plantation, wet heath and raised bog; roding display.	PW
WK006	Hen Harrier Roost Survey; HHVP1	24/03/2021	19:16	Woodcock	1	conifer plantation and raised bog; roding display.	PW
WK007	Hen Harrier Roost Survey; HHVP1	24/03/2021	19:19	Woodcock	2	conifer plantation and raised bog; roding display., flying close together and calling,	PW
WK008	Hen Harrier Roost Survey; HHVP1	24/03/2021	19:41	Woodcock	1	conifer plantation and raised bog; roding display., heard on way out from HHVP1.	PW
WK009	Hen Harrier Roost Survey; Red Bog (HHVP1)	19/10/2021	18:50	Woodcock	1	upland blanket bog and mixed conifer woodland; flying out of forestry	SP
WK010	Hen Harrier Roost Survey; track towards HHVP1	15/12/2021	14:00	Woodcock	1	hedgerows, conifer plantation and immature woodland; flushed	JM
WK011	Hen Harrier Roost Survey; Tomard, Oldleighlin	03/02/2022	15:32	Woodcock	1	bogs and conifer plantation; flushed	JM

Table 7-4-7- 5 Woodcock Supplementary Vantage Point Survey Data

Supplementary Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
WK008	VP2	21/12/2020	16:54	Woodcock	1	27	27	0	0	0	improved agricultural grassland, scrub and hedgerows; flying	PW

Table 7-4-7- 6 Woodcock Supplementary Breeding Woodcock Survey Data

Supplementary Breeding Woodcock Surveys							
Ref.	Transect	Date	Time	Species	Number	Habitat and activity	Surveyor
WK037	WKT3	01/06/2020	21:56	Woodcock	1	conifer plantation, roding over mature WD4 near forest road	PW
WK038	WKT3	01/06/2020	21:59	Woodcock	1	conifer plantation, roding over mature WD4 at edge of clearfelled areas	PW
WK039	WKT3	01/06/2020	22:13	Woodcock	1	conifer plantation, roding over WD4 by forest road and clearfelled areas	PW
WK040	WKT3	01/06/2020	22:18	Woodcock	1	conifer plantation, roding along forest path through mature and clearfelled areas	PW
WK041	WKT3	01/06/2020	22:21	Woodcock	1	conifer plantation, roding over mature WD4	PW
WK042	WKT3	01/06/2020	22:28	Woodcock	1	conifer plantation, heard calling (roding) in this area	PW
WK076	WKT3	17/06/2020	22:12	Woodcock	1	conifer plantation and scrub/transitional woodland, roding	PW
WK077	WKT3	17/06/2020	22:17	Woodcock	1	conifer plantation and scrub/transitional woodland, roding, flew out over mature WD4 over clearfelled areas and forest road	PW
WK078	WKT3	17/06/2020	22:19	Woodcock	1	Conifer plantation and scrub/transitional woodland, roding, came out over clearfelled areas then continued along forest path	PW
WK079	WKT3	17/06/2020	22:21	Woodcock	1	conifer plantation and scrub/transitional woodland, roding, came out over clearfelled areas and continued to another block of mature WD4 along forest path	PW
WK080	WKT3	17/06/2020	22:24	Woodcock	1	conifer plantation and scrub/transitional woodland, roding, came along forest path in mature clear fell to open at clearfelled areas before turning back to WD4	PW

Supplementary Breeding Woodcock Surveys							
Ref.	Transect	Date	Time	Species	Number	Habitat and activity	Surveyor
WK081	WKT3	17/06/2020	22:25	Woodcock	1	conifer plantation and scrub/transitional woodland, roding, flew across path over trees	PW
WK082	WKT3	17/06/2020	22:31	Woodcock	1	conifer plantation and scrub/transitional woodland, roding, calling heard moving along over mature WD4 parallel with forest path	PW
WK083	WKT3	17/06/2020	22:37	Woodcock	1	conifer plantation and scrub/transitional woodland, roding, calling not seen presumed location mapped	PW
WK084	WKT3	17/06/2020	22:39	Woodcock	1	conifer plantation and scrub/transitional woodland, roding, crossed the forest path	PW
WK085	WKT3	17/06/2020	22:49	Woodcock	1	conifer plantation and scrub/transitional woodland, roding, came out from mature WD4 over immature d4 and continued to mature WD4 out of view	PW
WK090	WKT3	21/05/2021	21:09	Woodcock	2	highly modified/non-native woodland, flying as pair	TR
WK091	WKT3	21/05/2021	21:44	Woodcock	1	highly modified/non-native woodland, roding	TR
WK092	WKT3	21/05/2021	21:47	Woodcock	1	highly modified/non-native woodland, roding	TR
WK093	WKT3	21/05/2021	21:52	Woodcock	1	highly modified/non-native woodland, roding	TR
WK094	WKT3	21/05/2021	21:58	Woodcock	1	highly modified/non-native woodland, roding	TR
WK095	WKT3	21/05/2021	22:00	Woodcock	1	highly modified/non-native woodland, roding	TR
WK096	WKT3	21/05/2021	22:02	Woodcock	1	highly modified/non-native woodland, roding	TR
WK097	WKT3	21/05/2021	22:04	Woodcock	1	highly modified/non-native woodland, roding	TR
WK098	WKT3	21/05/2021	22:17	Woodcock	1	highly modified/non-native woodland, roding	TR
WK099	WKT3	21/05/2021	22:21	Woodcock	1	highly modified/non-native woodland, roding	TR
WK100	WKT3	21/05/2021	22:22	Woodcock	1	highly modified/non-native woodland, roding	TR

Supplementary Breeding Woodcock Surveys							
Ref.	Transect	Date	Time	Species	Number	Habitat and activity	Surveyor
WK101	WKT3	21/05/2021	23:03	Woodcock	1	highly modified/non-native woodland, roding	TR
WK121	WKT3	02/06/2021	21:15	Woodcock	1	conifer plantation, seen and heard roding	IH
WK122	WKT3	02/06/2021	21:16	Woodcock	2	conifer plantation, two birds seen and heard together before splitting off in different directions	IH
WK123	WKT3	02/06/2021	21:21	Woodcock	1	conifer plantation, seen but not heard	IH
WK124	WKT3	02/06/2021	21:22	Woodcock	1	conifer plantation, seen but not heard	IH
WK125	WKT3	02/06/2021	21:24	Woodcock	1	conifer plantation, seen and heard roding	IH
WK126	WKT3	02/06/2021	21:26	Woodcock	1	conifer plantation, seen and heard roding	IH
WK127	WKT3	02/06/2021	21:44	Woodcock	1	conifer plantation, seen and heard roding	IH
WK128	WKT3	02/06/2021	21:45	Woodcock	1	conifer plantation, heard roding only (not seen)	IH
WK129	WKT3	02/06/2021	21:48	Woodcock	1	conifer plantation, seen and heard roding	IH
WK130	WKT3	02/06/2021	21:48	Woodcock	1	conifer plantation, seen and head roding, different bird to one recorded above	IH
WK131	WKT3	02/06/2021	21:50	Woodcock	1	conifer plantation, seen and heard roding	IH
WK132	WKT3	02/06/2021	21:51	Woodcock	1	conifer plantation, heard roding (not seen)	IH
WK133	WKT3	02/06/2021	21:55	Woodcock	1	conifer plantation, seen and heard roding	IH
WK134	WKT3	02/06/2021	21:56	Woodcock	1	conifer plantation, seen and heard roding	IH
WK135	WKT3	02/06/2021	22:00	Woodcock	1	conifer plantation, seen and heard roding	IH

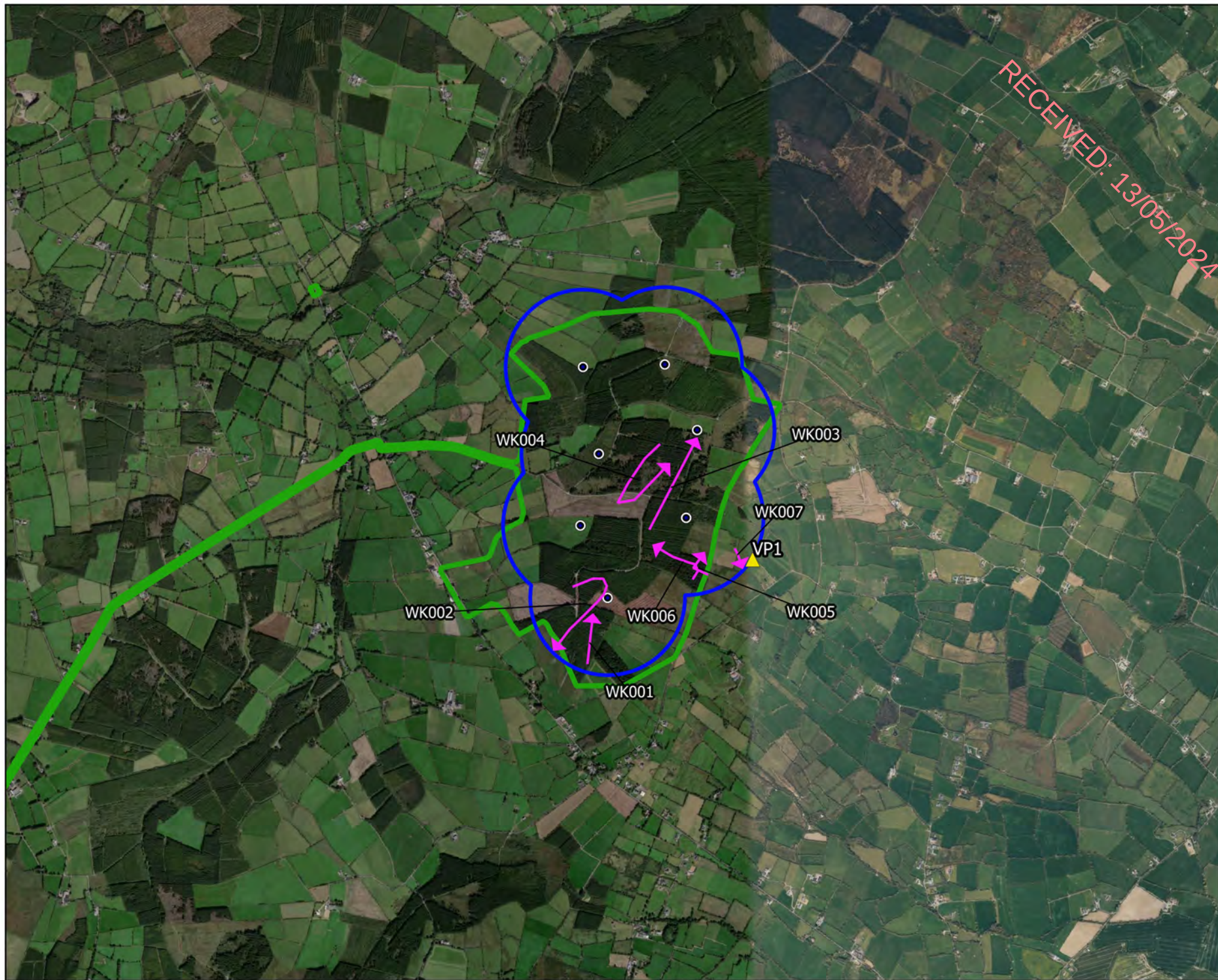
Supplementary Breeding Woodcock Surveys							
Ref.	Transect	Date	Time	Species	Number	Habitat and activity	Surveyor
WK136	WKT3	02/06/2021	22:00	Woodcock	1	conifer plantation, seen and heard roding, different bird to one recorded above	IH
WK137	WKT3	02/06/2021	22:02	Woodcock	1	conifer plantation, heard roding only (not seen)	IH
WK138	WKT3	02/06/2021	22:08	Woodcock	1	conifer plantation, seen and heard roding	IH
WK139	WKT3	02/06/2021	22:10	Woodcock	1	conifer plantation, heard roding only (not seen)	IH
WK140	WKT3	02/06/2021	22:14	Woodcock	1	conifer plantation, seen and heard roding	IH
WK141	WKT3	02/06/2021	22:19	Woodcock	1	conifer plantation, seen and heard roding	IH
WK142	WKT3	02/06/2021	22:21	Woodcock	1	conifer plantation, seen and heard roding	IH
WK143	WKT3	02/06/2021	22:24	Woodcock	1	conifer plantation, heard roding only (not seen)	IH
WK160	WKT3	11/06/2021	21:55	Woodcock	1	conifer plantation and recently felled woodland, seen only	IH
WK161	WKT3	11/06/2021	21:57	Woodcock	1	conifer plantation and recently felled woodland, seen and heard chipping only	IH
WK162	WKT3	11/06/2021	21:59	Woodcock	1	conifer plantation and recently felled woodland, seen and heard roding	IH
WK163	WKT3	11/06/2021	22:01	Woodcock	1	conifer plantation and recently felled woodland, heard chipping - not seen	IH
WK164	WKT3	11/06/2021	22:04	Woodcock	1	conifer plantation and recently felled woodland, seen and heard roding	IH
WK165	WKT3	11/06/2021	22:04	Woodcock	1	conifer plantation and recently felled woodland, seen and heard roding, different bird to observation above	IH
WK166	WKT3	11/06/2021	22:05	Woodcock	1	conifer plantation and recently felled woodland, seen only	IH
WK167	WKT3	11/06/2021	22:11	Woodcock	1	conifer plantation and recently felled woodland, seen and heard roding	IH

Supplementary Breeding Woodcock Surveys							
Ref.	Transect	Date	Time	Species	Number	Habitat and activity	Surveyor
WK168	WKT3	11/06/2021	22:14	Woodcock	1	conifer plantation and recently felled woodland, seen and heard roding	IH
WK169	WKT3	11/06/2021	22:15	Woodcock	1	conifer plantation and recently felled woodland, seen and heard roding	IH
WK170	WKT3	11/06/2021	22:15	Woodcock	1	conifer plantation and recently felled woodland, seen and heard roding, different bird to observation above	IH
WK171	WKT3	11/06/2021	22:16	Woodcock	1	conifer plantation and recently felled woodland, seen and heard roding, different bird to observation above	IH
WK172	WKT3	11/06/2021	22:18	Woodcock	1	conifer plantation and recently felled woodland, seen and heard roding	IH
WK173	WKT3	11/06/2021	22:25	Woodcock	1	conifer plantation and recently felled woodland, seen and heard roding	IH
WK174	WKT3	11/06/2021	22:27	Woodcock	1	conifer plantation and recently felled woodland, seen and heard roding	IH
WK175	WKT3	11/06/2021	22:33	Woodcock	1	conifer plantation and recently felled woodland, heard chipping only - not seen	IH
WK176	WKT3	11/06/2021	22:35	Woodcock	1	conifer plantation and recently felled woodland, seen and heard roding	IH
WK177	WKT3	11/06/2021	22:40	Woodcock	1	conifer plantation and recently felled woodland, heard roding not seen	IH
WK178	WKT3	11/06/2021	22:40	Woodcock	1	conifer plantation and recently felled woodland, heard chipping not seen	IH
WK179	WKT3	11/06/2021	22:48	Woodcock	2	conifer plantation and recently felled woodland, 2 males chasing each other over clearfelled areas	IH
WK180	WKT3	11/06/2021	22:53	Woodcock	1	conifer plantation and recently felled woodland, seen and heard roding	IH



Table 7-4-7- 7 Woodcock Supplementary Winter Walkover Survey Data

Supplementary Winter Walkover Surveys						
Ref.	Date	Time	Species	Number	Habitat and activity	Surveyor
WK002	22/03/2021	17:10	Woodcock	1	conifer plantation, scrub and wet grassland; flushed and flew., came up out of edge of wood with grass/scrub area flying low southwest. (wintering)	PW



Map Legend

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



Drawing Title

Vantage Point Survey
Woodcock Observations

Project Title

Seskin Wind Farm, Co. Carlow

Drawn By

D. Woods

Checked By

P. Cregg

Project No.

220246

Drawing No.

Fig. 7.4.7.1

Scale

1:32000

Date

03.11.23



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Map Legend

-  EIAR Site Boundary
-  Turbine Layout
-  Transects
-  Flight Observation



Drawing Title	
Breeding Woodcock Survey Woodcock Observations	
Project Title	
Seskin Wind Farm, Co. Carlow	
Drawn By	Checked By
D. Woods	P. Cregg
Project No.	Drawing No.
220246	Fig. 7.4.7.2
Scale	Date
1:18,000	03.11.23
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Map Legend

- Eiar Site Boundary
- Turbine Layout
- 500m Survey Area
- Flight Observation



Drawing Title

Winter Walkover Survey
Woodcock Observations

Project Title

Seskin Wind Farm, Co. Carlow

Drawn By

D. Woods

Checked By

P. Cregg

Project No.

220246

Drawing No.

Fig. 7.4.7.3

Scale

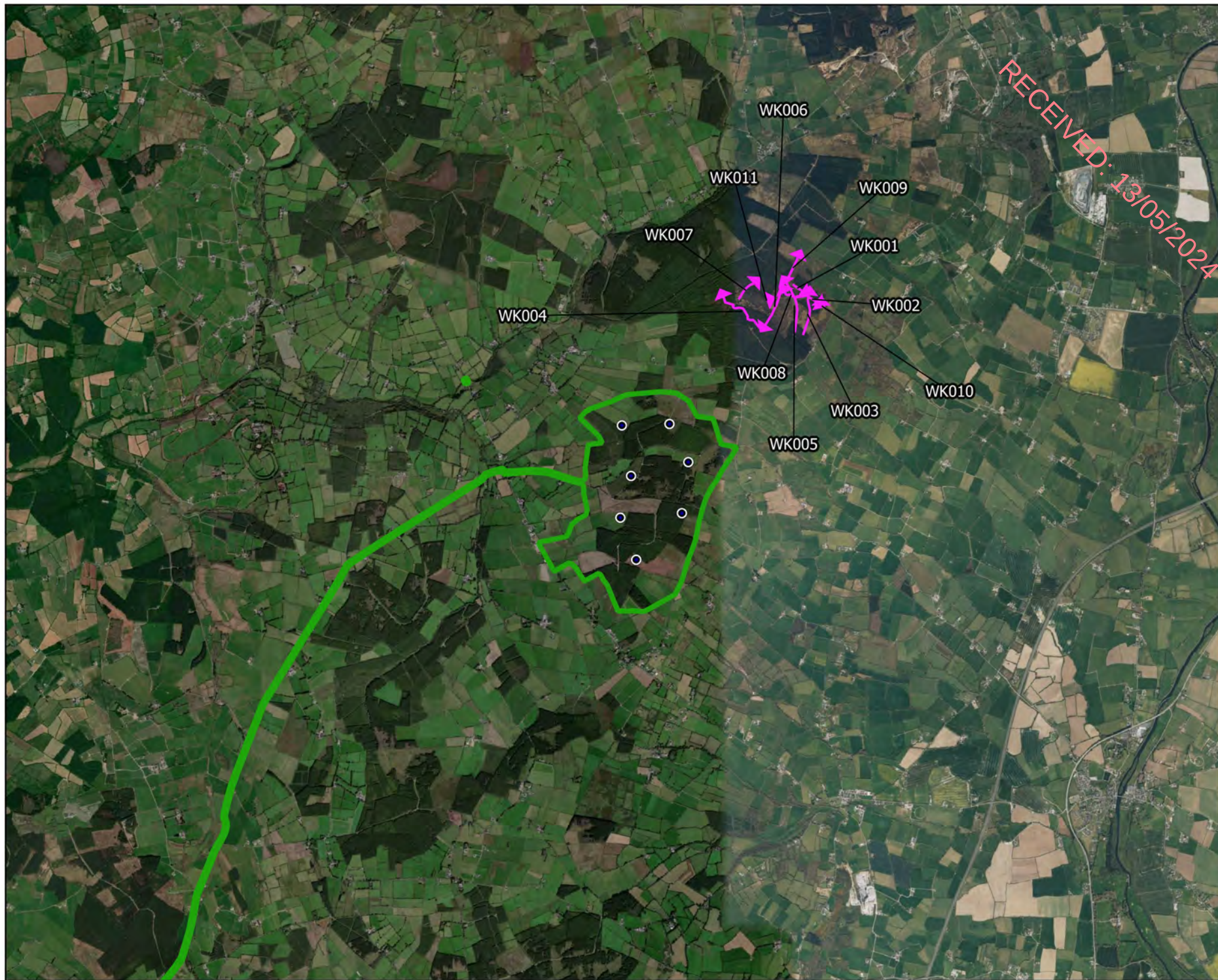
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Date

03.11.23



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Map Legend

- EIAR Site Boundary
- Turbine Layout
- Flight Observation



Drawing Title

Incidental Woodcock Observations

Project Title

Seskin Wind Farm, Co. Carlow

Drawn By
D. Woods

Checked By
P. Cregg

Project No.
220246

Drawing No.
Fig. 7.4.7.4

Scale
1:55000

Date
03.11.23



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Map Legend

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

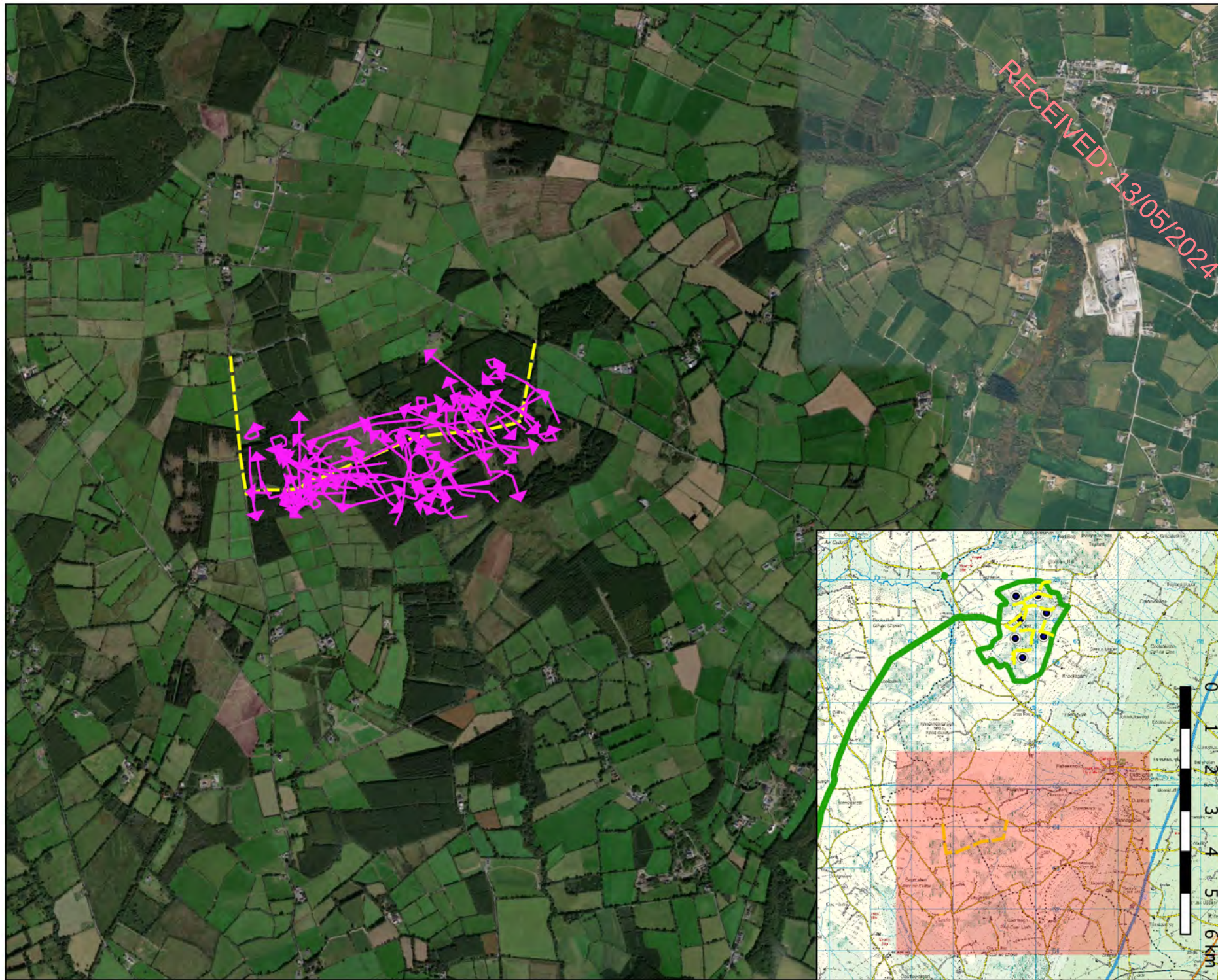


Drawing Title
Supplementary Vantage Point Survey
Woodcock Observations

Project Title
Seskin Wind Farm, Co. Carlow

Drawn By	Checked By
D. Woods	P. Cregg
Project No.	Drawing No.
220246	Fig. 7.4.7.5
Scale	Date
1:25000	03.11.23

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Map Legend

- EIAR Site Boundary
- Turbine Layout
- 500m Survey Area
- Transect
- Flight Observation

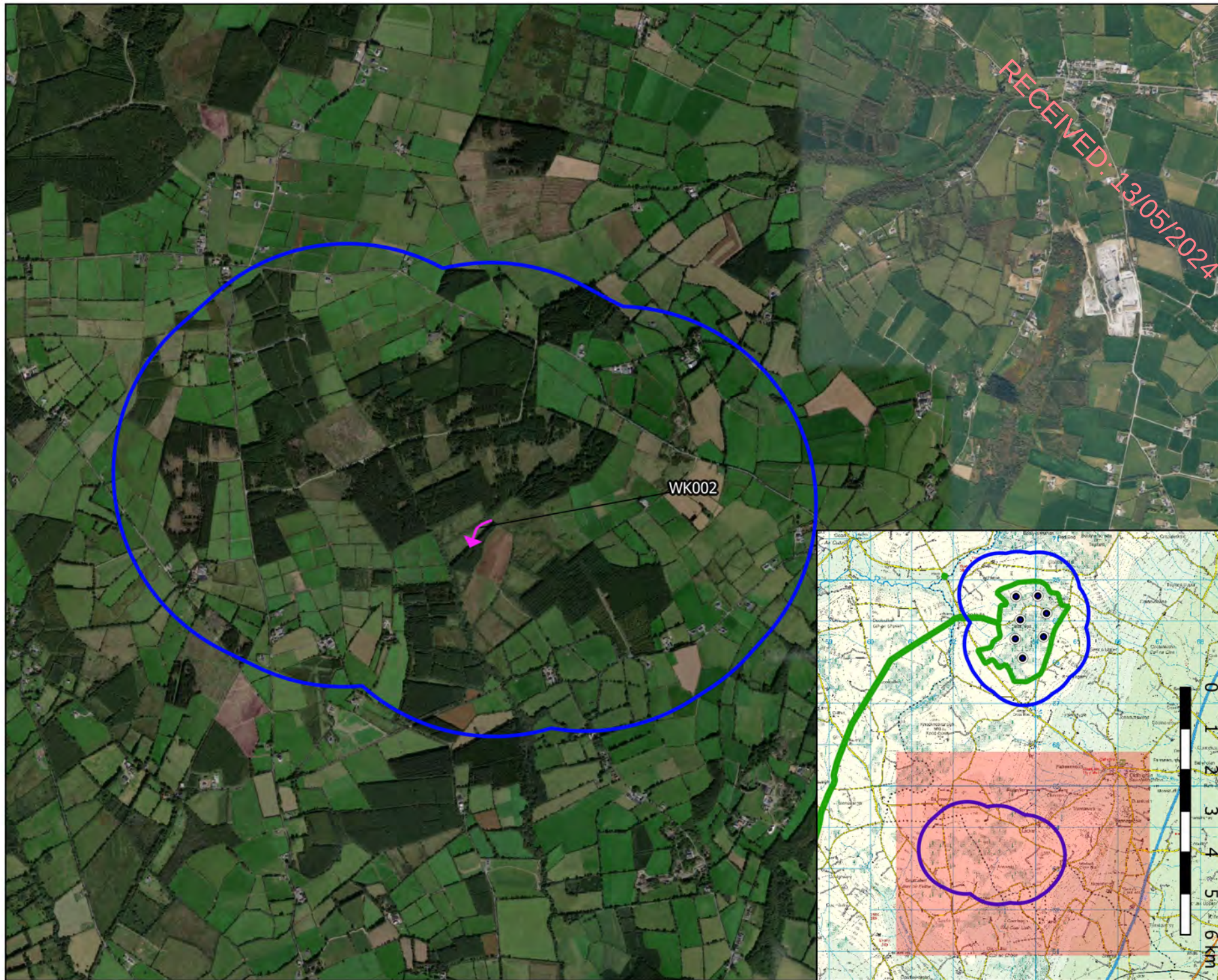


Drawing Title
Supplementary Breeding Woodcock Survey
Woodcock Observations

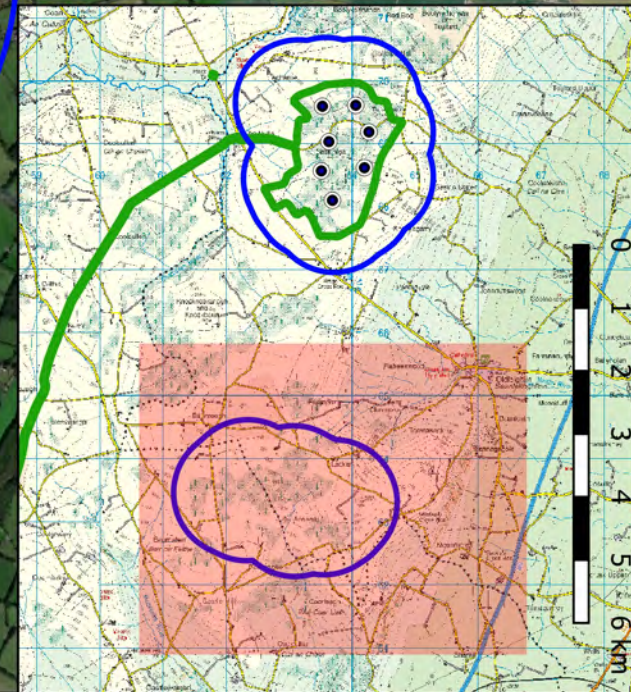
Project Title
Seskin Wind Farm, Co. Carlow

Drawn By D. Woods	Checked By P. Cregg
Project No. 220246	Drawing No. Fig. 7.4.7.6
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- ### Map Legend
- EIAR Site Boundary
 - Turbine Layout
 - 500m Survey Area
 - Flight Observation



Drawing Title	
Supplementary Winter Walkover Survey Woodcock Observations	
Project Title	
Seskin Wind Farm, Co. Carlow	
Drawn By	Checked By
D. Woods	P. Cregg
Project No.	Drawing No.
220246	Fig. 7.4.7.7
Scale	Date
1:25000	03.11.23
 MKO Planning and Environmental Consultants Tuam Road, Galway Ireland, H91 VV84 +353 (0) 91 23 5611 email: info@mkofireland.ie Website: www.mkofireland.ie	

RECEIVED: 13/05/2024

8.

BUZZARD

Note: Sensitive data relating to breeding sites has been omitted from this appendix and is provided in Confidential Appendix 7-7.

Table 7-4-8- 1 Buzzard Vantage Point Survey Data

Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
BZ001	VP1	16/04/2020	05:45	Buzzard	1	180	180	0	0	0	hedgerows, wet grassland and improved agricultural grassland; perched on telegraph pole lost from view	PW
BZ002	VP1	16/04/2020	06:32	Buzzard	1	13	13	0	0	0	wet grassland and hedgerows; flew low over field and hedgerow before perching in tree. dropped down and lost from view	PW
BZ003	VP1	16/04/2020	11:28	Buzzard	1	100	0	0	100	0	improved agricultural grassland and hedgerows; soaring mobbed by hooded crow lost from view behind tree line	PW
BZ004	VP1	16/04/2020	11:38	Buzzard	1	154	0	100	54	0	conifer plantation, wet grassland and improved agricultural grassland; soaring and flying joined by 2nd buzzard at 11:39 both birds landed in tree	PW
BZ005	VP1	16/04/2020	11:39	Buzzard	1	64	0	64	0	0	conifer plantation, wet grassland and improved agricultural grassland; flying and joined another and followed it to the same tree	PW
BZ021	VP1	12/05/2020	12:12	Buzzard	1	510	0	30	480	0	improved agricultural grassland and hedgerows; picked up hovering at PCH then began soaring and dropping down below PCH and hovering before lost from view	PW
BZ022	VP1	12/05/2020	17:42	Buzzard	1	16	0	16	0	0	conifer plantation; flying low over rough grassland and into forestry low over trees before dropping below treetops	PW
BZ023	VP1	12/05/2020	18:04	Buzzard	1	120	-	-	-	-	conifer plantation, improved agricultural grassland and hedgerows; soaring and gliding lost behind trees	PW
BZ024	VP1	12/05/2020	18:09	Buzzard	1	77	0	0	77	0	conifer plantation, improved agricultural grassland and hedgerows; circling and soaring before flying	PW

Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
BZ025	VP1	12/05/2020	18:19	Buzzard	1	273	0	3	270	0	conifer plantation; soaring and gliding before dropping down into forestry	PW
BZ026	VP1	12/05/2020	19:42	Buzzard	1	360	0	0	360	0	conifer plantation; soaring and circling	PW
BZ027	VP1	12/05/2020	19:43	Buzzard	1	60	0	0	0	60	conifer plantation; soaring and circling lost from view	PW
BZ028	VP1	12/05/2020	20:09	Buzzard	1	42	0	0	42	0	conifer plantation; soaring and gliding	PW
BZ033	VP1	15/06/2020	17:29	Buzzard	1	1851	0	0	1851	0	conifer plantation, wet grassland and hedgerows; circling and soaring, picked up at 30m over GA1 in WL1. gained height and hovered over WD4. moved back over GA1 and dived down feet first and lost from view behind treeline after 31 mins of hovering and circling	PW
BZ034	VP1	15/06/2020	18:01	Buzzard	1	301	0	0	301	0	conifer plantation; circling soaring at PCH lost from view when following other buzzard. over WD4 near GA1 and road	PW
BZ035	VP1	15/06/2020	18:02	Buzzard	1	64	0	4	60	0	conifer plantation, improved agricultural grassland and hedgerows; hanging in breeze hovering at height as 100+ rooks flew by it. buzzard then descended hovered again and finally dropped below treeline out of view	PW
BZ036	VP1	15/06/2020	18:04	Buzzard	2	303	0	203	100	0	conifer plantation and wet grassland; picked up at PCH over WD4 edge. both birds dropped down into WD4 after 122 secs, with 1 buzzard coming back up seen for another 181 secs before lost from view	PW
BZ037	VP1	15/06/2020	18:05	Buzzard	1	557	0	92	465	0	conifer plantation, hedgerows and improved agricultural grassland; gliding over farmland and forest edge. moved to GS4 and descending hovering at 20m-15m. then gliding northwest towards road dropping below horizon out of view	PW
BZ038	VP1	15/06/2020	18:06	Buzzard	1	5	0	0	5	0	conifer plantation; circling over WD4	PW

Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
BZ039	VP1	15/06/2020	18:09	Buzzard	1	240	0	0	240	0	conifer plantation and improved agricultural grassland; hovering and gliding over WD4 near lesser black-backed gulls	PW
BZ040	VP1	15/06/2020	19:56	Buzzard	1	135	0	0	135	0	improved agricultural grassland and hedgerows; circling and hovering hunting over farmland	PW
BZ047	VP1	03/07/2020	11:10	Buzzard	1	21	16	5	0	0	improved agricultural grassland, hedgerows and wet grassland; hovering hunting over rough grassland descended and then flew to perch in spruce at edge of WD4 by road. perched until 11:22	PW
BZ048	VP1	03/07/2020	11:22	Buzzard	1	563	146	361	0	56	wet grassland, hedgerows and conifer plantation; hovering and hunting before flying back to tree to perch as weather got worse dropped out of view. lost from perch at 11:59. perched for 1620 secs	PW
BZ049	VP1	03/07/2020	15:09	Buzzard	1	10	0	10	0	0	conifer plantation; appeared flying low over treetops before dropping back out of view into forestry	PW
BZ050	VP1	03/07/2020	15:36	Buzzard	1	165	0	75	90	0	conifer plantation; flying and hanging in air and hovering over WD4 low over treetops. moving between PCH and below 25m. dropped down from view among trees then	PW
BZ051	VP1	03/07/2020	15:44	Buzzard	1	12	0	0	12	0	conifer plantation; flying lost from view behind WL1	PW
BZ059	VP1	22/08/2020	15:22	Buzzard	1	23	7	16	0	0	improved agricultural grassland and hedgerows; gliding, gliding about low in breeze over grassland before dropping behind WL1 out of sight.	PW
BZ060	VP1	22/08/2020	15:41	Buzzard	1	105	0	4	101	0	improved agricultural grassland, wet grassland and conifer plantation; flying, also WL1 habitat.	PW
BZ061	VP1	22/08/2020	18:00	Buzzard	1	19	0	0	19	0	conifer plantation; flying	PW
BZ062	VP1	22/08/2020	19:08	Buzzard	1	85	0	0	85	0	conifer plantation; hovering, hovering hanging in breeze	PW

Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
BZ063	VP1	22/08/2020	19:15	Buzzard	1	14	0	0	14	0	conifer plantation; flying	PW
BZ064	VP1	22/08/2020	19:20	Buzzard	1	65	0	0	65	0	improved agricultural grassland and hedgerows; flying	PW
BZ067	VP1	21/09/2020	06:58	Buzzard	1	58	28	30	0	0	hedgerows, improved agricultural grassland and treelines; flying, calling, perched., flying low and calling before landing to perch in a tree out of sight.	PW
BZ068	VP1	21/09/2020	11:49	Buzzard	1	271	2	5	264	0	conifer plantation, improved agricultural grassland and hedgerows; soaring, circling, gliding, diving., soaring and circling before gliding and then diving pulling out of dive before diving again and landing on a tree out of view.	PW
BZ069	VP1	21/09/2020	12:09	Buzzard	1	19	1	3	15	0	wet grassland, scrub and hedgerows; circling, flying and being mobbed., circling low being mobbed by peregrine. flew down low to trees near road and out of view.	PW
BZ070	VP1	09/10/2020	14:43	Buzzard	1	54	0	48	6	0	conifer plantation; flying being mobbed by hooded crow	PW
BZ071	VP1	09/10/2020	15:01	Buzzard	2	396	25	131	240	0	wet grassland and conifer plantation; hunting by hovering/hanging in breeze. soaring, 1bz at first joined by a second after first 120s.	PW
BZ072	VP1	09/10/2020	16:46	Buzzard	1	181	20	161	0	0	improved agricultural grassland, wet grassland and conifer plantation; flying, hovering, perched, finished by flying to perch in edge of WD4	PW
BZ087	VP1	19/11/2020	07:27	Buzzard	1	203	203	0	0	0	improved agricultural grassland and hedgerows; flew to perch, called as a second buzzard appeared, then flushed by another buzzard and flew again., 1 of 2 buzzards	PW
BZ088	VP1	19/11/2020	07:29	Buzzard	1	123	123	0	0	0	improved agricultural grassland and hedgerows; flying, hunting by hovering, perched, flew in over first buzzard and began hovering hunting low down before taking the other birds perch. it then	PW

Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
											dropped off the perch out of view into the next field.	
BZ089	VP1	19/11/2020	07:49	Buzzard	1	-	-	-	-	-	treelines; calling, heard, not seen, called on and off for 8 mins.	PW
BZ090	VP1	19/11/2020	09:46	Buzzard	1	-	-	-	-	-	treelines; calling, heard, not seen.	PW
BZ091	VP1	11/12/2020	14:18	Buzzard	1	-	-	-	-	-	treelines and improved agricultural grassland; calling, calling, heard for 249s	PW
BZ092	VP1	11/12/2020	14:35	Buzzard	1	16	8	8	0	0	improved agricultural grassland and hedgerows; flying and calling, dropped below treeline out of view.	PW
BZ093	VP1	11/12/2020	14:38	Buzzard	1	5	5	0	0	0	treelines and improved agricultural grassland; flying, dropped off perch in treeline and flew around far side low out of view.	PW
BZ097	VP1	15/01/2021	08:16	Buzzard	1	-	-	-	-	-	treelines and improved agricultural grassland; calling, not visible with fog.	PW
BZ098	VP1	15/01/2021	08:19	Buzzard	1	44	44	0	0	0	improved agricultural grassland and hedgerows; calling and flying, heard calling before appeared through fog and lost in fog again.	PW
BZ099	VP1	15/01/2021	08:23	Buzzard	1	35	35	0	0	0	improved agricultural grassland and hedgerows; calling and flying, lost in fog	PW
BZ100	VP1	15/01/2021	08:25	Buzzard	2	-	-	-	-	-	treelines, improved agricultural grassland and wet grassland; calling, not visible through fog, calling on and off.	PW
BZ101	VP1	15/01/2021	08:26	Buzzard	1	-	-	-	-	-	hedgerows and improved agricultural grassland; calling, not visible with fog, possibly a third in addition to the other two heard calling nearby.	PW
BZ102	VP1	15/01/2021	08:30	Buzzard	1	-	-	-	-	-	hedgerows and improved agricultural grassland; calling, not visible with fog.	PW
BZ103	VP1	15/01/2021	08:39	Buzzard	1	-	-	-	-	-	improved agricultural grassland and hedgerows; calling, second buzzard in area, heard not seen as foggy, possibly flew.	PW

Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
BZ104	VP1	15/01/2021	08:39	Buzzard	1	49	49	0	0	0	improved agricultural grassland, hedgerows and treelines; calling and flying to perch., picked up calling before appearing through fog flying low to perch in treeline.	PW
BZ105	VP1	15/01/2021	08:43	Buzzard	1	-	-	-	-	-	improved agricultural grassland; calling, heard not seen through fog.	PW
BZ106	VP1	15/01/2021	09:19	Buzzard	1	7	7	0	0	0	improved agricultural grassland, hedgerows and treelines; flying, flying around trees at farmstead.	PW
BZ107	VP1	15/01/2021	09:34	Buzzard	1	-	-	-	-	-	wet grassland and improved agricultural grassland; calling, heard when following kestrel, thus heard, not seen.	PW
BZ108	VP1	15/01/2021	12:36	Buzzard	1	-	-	-	-	-	improved agricultural grassland and treelines; calling, heard calling for 127s.	PW
BZ109	VP1	15/01/2021	12:38	Buzzard	1	-	-	-	-	-	wet grassland and scrub; perched, perched for 920s on lone ash tree.	PW
BZ110	VP1	15/01/2021	12:38	Buzzard	1	14	14	0	0	0	wet grassland, improved agricultural grassland and scrub; flying to perch., came into view flying after previously calling when not visible.	PW
BZ111	VP1	15/01/2021	12:53	Buzzard	1	-	-	-	-	-	hedgerows and improved agricultural grassland; perched, perched on telegraph pole for 770s.	PW
BZ112	VP1	15/01/2021	12:55	Buzzard	1	18	18	0	0	0	wet grassland, hedgerows and scrub; flying from perch to perch	PW
BZ113	VP1	15/01/2021	12:59	Buzzard	1	-	-	-	-	-	hedgerows; perched, additional buzzard perched on two telegraph poles up the road.	PW
BZ114	VP1	15/01/2021	13:00	Buzzard	1	8	8	0	0	0	improved agricultural grassland and hedgerows; flying, flew low from perch on telegraph pole.	PW
BZ115	VP1	15/01/2021	13:09	Buzzard	1	14	14	0	0	0	improved agricultural grassland, treelines and hedgerows; flying, dropped off perch out of view.	PW
BZ116	VP1	15/01/2021	13:30	Buzzard	1	-	-	-	-	-	treelines; calling, heard when following kestrel, not seen.	PW

Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
BZ123	VP1	15/02/2021	12:23	Buzzard	2	98	0	0	98	0	conifer plantation and improved agricultural grassland; circling, soaring, dropped below forestry treeline out of view.	PW
BZ124	VP1	15/02/2021	13:15	Buzzard	1	211	0	0	211	0	conifer plantation and wet grassland; circling soaring, moved out of view behind treeline in foreground.	PW
BZ125	VP1	15/02/2021	14:09	Buzzard	1	962	0	0	225	737	improved agricultural grassland and eroding/upland rivers; soaring, 1 of 3 buzzard observed in this area.	PW
BZ126	VP1	15/02/2021	14:11	Buzzard	2	300	0	0	0	300	improved agricultural grassland, hedgerows and eroding/upland rivers; flying soaring, two birds picked up in addition to first bird before moving out of view when following first buzzard.	PW
BZ127	VP1	15/02/2021	16:12	Buzzard	1	80	0	0	56	0	conifer plantation, improved agricultural grassland and hedgerows; flying, 24s PCH off site.	PW
BZ128	VP1	26/03/2021	09:50	Buzzard	1	55	0	0	55	0	conifer plantation; flying gliding.	PW
BZ129	VP1	26/03/2021	10:46	Buzzard	1	434	0	0	310	70	conifer plantation and improved agricultural grassland; soaring., 1 of 2 buzzards dropped into forestry out of view.	PW
BZ130	VP1	26/03/2021	10:46	Buzzard	1	315	0	0	191	70	conifer plantation and improved agricultural grassland; soaring., second of two buzzards. moved out of view before the other bird.	PW
BZ139	VP1	07/04/2021	15:18	Buzzard	1	281	0	0	281	0	conifer plantation and improved agricultural grassland; flying, circling, soaring, being mobbed by hooded crow., 1 of 2 birds in the area.	PW
BZ140	VP1	07/04/2021	15:19	Buzzard	1	141	0	0	141	0	conifer plantation; circling, hunting by hovering., dropped down in hover to below treeline over clearfelled areas. second of 2 birds in area.	PW
BZ141	VP1	07/04/2021	15:35	Buzzard	1	39	0	0	15	0	conifer plantation and improved agricultural grassland; flying, hunting by hovering.	PW
BZ142	VP1	07/04/2021	16:14	Buzzard	1	5	0	5	0	0	improved agricultural grassland and hedgerows; flying., flying low. lost from view	PW

Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
											when following golden plover	
BZ143	VP1	07/04/2021	16:37	Buzzard	1	194	0	0	194	0	conifer plantation, improved agricultural grassland and scrub; circling, soaring, hunting by hovering., ascended in spirals before descending in series of glides before hunting by hovering. dropped below treeline after hovering out of view.	PW
BZ150	VP1	17/05/2021	09:20	Buzzard	1	-	-	-	-	-	conifer plantation, wet grassland and hedgerows; calling, heard calling, not observed.	PW
BZ151	VP1	17/05/2021	09:43	Buzzard	1	-	-	-	-	-	conifer plantation, hedgerows and improved agricultural grassland; calling., heard calling on and off for at least 10 minutes.	PW
BZ152	VP1	17/05/2021	10:29	Buzzard	1	-	-	-	-	-	conifer plantation, hedgerows and improved agricultural grassland; calling, heard not seen, second bird in area.	PW
BZ153	VP1	17/05/2021	10:29	Buzzard	1	58	10	20	28	0	wet grassland, hedgerows and improved agricultural grassland; hunting by hovering., 1 of 2 birds in the area.	PW
BZ154	VP1	17/05/2021	10:34	Buzzard	1	312	0	62	250	0	wet grassland and conifer plantation; hunting by hovering., mobbed by mg before gaining height. then hovered again before dropping down out of view.	PW
BZ155	VP1	17/05/2021	10:48	Buzzard	1	146	0	0	146	0	conifer plantation and improved agricultural grassland; hunting by circling and hovering., near clearfelled areas.	PW
BZ156	VP1	17/05/2021	11:06	Buzzard	1	31	0	0	3	0	conifer plantation and improved agricultural grassland; flying	PW
BZ162	VP1	03/06/2021	13:33	Buzzard	1	76	0	0	76	0	conifer plantation and wet grassland; hunting gliding and flying.	PW
BZ163	VP1	03/06/2021	13:49	Buzzard	1	130	0	0	130	0	conifer plantation; hunting by hovering and gliding circling.	PW
BZ164	VP1	03/06/2021	14:15	Buzzard	1	328	0	0	328	0	conifer plantation, wet grassland and scrub; hunting and dropping into land., hunting before flying and gliding to forestry where it dropped down into trees out of view. one of	PW

Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
											three buzzards in the area at the time.	
BZ165	VP1	03/06/2021	14:20	Buzzard	1	182	0	0	182	0	conifer plantation; flying and gliding, second of three buzzard in the area. associating with another buzzard.	PW
BZ166	VP1	03/06/2021	14:22	Buzzard	1	130	0	0	130	0	conifer plantation; flying, third of three buzzards in the area at the time.	PW
BZ167	VP1	03/06/2021	14:39	Buzzard	1	40	0	0	40	0	conifer plantation; gliding hunting.	PW
BZ168	VP1	03/06/2021	14:46	Buzzard	1	12	0	0	12	0	conifer plantation; gliding in breeze.	PW
BZ169	VP1	03/06/2021	14:49	Buzzard	1	54	0	0	54	0	conifer plantation, wet grassland and treelines; flying hunting.	PW
BZ170	VP1	03/06/2021	15:06	Buzzard	1	93	5	66	22	0	conifer plantation, improved agricultural grassland and scrub; flying, dropped down out of view over rough ground with scrub after flying low.	PW
BZ171	VP1	03/06/2021	15:14	Buzzard	1	156	0	0	156	0	conifer plantation; hunting by hovering.	PW
BZ172	VP1	03/06/2021	15:20	Buzzard	1	474	0	0	335	139	improved agricultural grassland, conifer plantation and hedgerows; soaring, circling, gliding, descended below treeline out of view.	PW
BZ173	VP1	03/06/2021	15:47	Buzzard	1	64	0	0	64	0	conifer plantation; hunting gliding, dropped into forestry quickly out of view.	PW
BZ174	VP1	04/06/2021	12:48	Buzzard	1	74	0	0	74	0	conifer plantation; gliding hunting over forestry, dropped down into trees out of view.	PW
BZ175	VP1	04/06/2021	12:56	Buzzard	1	139	0	0	139	0	conifer plantation and wet grassland; hunting by hanging in breeze and gliding.	PW
BZ176	VP1	04/06/2021	13:35	Buzzard	1	100	0	0	100	0	conifer plantation; hunting by hovering, dropped into forestry out of view.	PW
BZ177	VP1	04/06/2021	13:37	Buzzard	1	366	0	0	366	0	conifer plantation and improved agricultural grassland; hunting by hovering, dropped into forestry out of view.	PW

Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
BZ178	VP1	04/06/2021	14:03	Buzzard	1	79	0	0	79	0	conifer plantation; gliding before dropping into forestry.	PW
BZ179	VP1	04/06/2021	14:08	Buzzard	1	179	0	11	168	0	conifer plantation and scrub; hunting by hovering., hunting over mature forestry and clearfelled areas. dropped down out of view.	PW
BZ180	VP1	04/06/2021	14:30	Buzzard	1	151	0	0	151	0	conifer plantation and wet grassland; hunting by hovering.	PW
BZ181	VP1	04/06/2021	14:46	Buzzard	1	647	0	0	647	0	conifer plantation; hunting by hovering, soaring and gliding., at height soaring. came down to above trees and hovered hunting before soaring again. then descended in dive down into forestry out of view.	PW
BZ182	VP1	04/06/2021	15:08	Buzzard	1	264	0	0	264	0	conifer plantation; hunting by gliding and hanging in breeze hovering.	PW
BZ183	VP1	04/06/2021	15:34	Buzzard	1	65	0	0	65	0	conifer plantation; hovering hunting.	PW
BZ184	VP1	04/06/2021	15:42	Buzzard	1	148	0	0	148	0	conifer plantation, improved agricultural grassland and hedgerows; soaring	PW
BZ190	VP1	13/07/2021	13:13	Buzzard	1	20	0	20	0	0	wet grassland, conifer plantation and scrub; flying.	PW
BZ191	VP1	13/07/2021	13:14	Buzzard	1	9	2	7	0	0	conifer plantation, hedgerows and improved agricultural grassland; flying to perch., flew to perch in spruce at hedge. perched for 276s before dropping off out of view.	PW
BZ192	VP1	13/07/2021	13:40	Buzzard	1	91	0	0	10	0	improved agricultural grassland, conifer plantation and hedgerows; hunting by hovering, flying and gliding.	PW
BZ193	VP1	13/07/2021	13:53	Buzzard	1	104	0	0	40	0	improved agricultural grassland, hedgerows and conifer plantation; flying.	PW
BZ195	VP1	13/07/2021	14:40	Buzzard	1	882	0	0	535	347	conifer plantation, wet grassland and improved agricultural grassland; soaring and hunting by hovering., 1 of 3 birds in the area. soared to above PCH with 2 other buzzards. descended from well above PCH in series of dives before hunting over resown clearfelled areas /scrubby area.	PW

Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
BZ196	VP1	13/07/2021	14:40	Buzzard	1	410	0	0	63	347	conifer plantation, wet grassland and improved agricultural grassland; soaring at height., associating with another buzzard, while a third was also nearby.	PW
BZ197	VP1	13/07/2021	14:43	Buzzard	1	124	0	0	0	124	wet grassland, conifer plantation and improved agricultural grassland; soaring., picked up above PCH when following the other two buzzard in the area.	PW
BZ198	VP1	13/07/2021	15:19	Buzzard	1	880	0	48	832	0	improved agricultural grassland, hedgerows and conifer plantation; hunting flying and hovering., GS4. WL2. descended over forestry out of view among trees.	PW
BZ199	VP1	13/07/2021	15:28	Buzzard	1	70	0	0	0	70	conifer plantation; soaring., picked up briefly when following buzzard in foreground.	PW
BZ200	VP1	13/07/2021	15:31	Buzzard	1	107	0	0	107	0	conifer plantation, improved agricultural grassland and wet grassland; flying and gliding.	PW
BZ201	VP1	13/07/2021	15:42	Buzzard	1	-	-	-	-	-	conifer plantation; calling., heard, not seen. 4th of 5 birds in the area.	PW
BZ202	VP1	13/07/2021	15:42	Buzzard	1	-	-	-	-	-	conifer plantation; calling., heard, not seen. 5th of 5 birds in the area at the time.	PW
BZ203	VP1	13/07/2021	15:42	Buzzard	3	138	0	6	132	0	conifer plantation, wet grassland and scrub; calling, circling, flying, perched., three birds soaring and calling together while two other buzzard called from separate parts of the forestry. descended to below treeline with one bird landing in pine tree among scrub in view.	PW
BZ204	VP1	13/07/2021	15:45	Buzzard	1	55	0	0	55	0	conifer plantation; flying.	PW
BZ205	VP1	13/07/2021	16:02	Buzzard	1	-	-	-	-	-	conifer plantation; calling., heard, not seen. possibly flying.	PW
BZ206	VP1	19/07/2021	20:20	Buzzard	1	11	2	9	0	0	scrub, wet grassland and conifer plantation; flying low into forestry out of view.	PW

Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
BZ214	VP1	12/08/2021	14:08	Buzzard	1	51	0	51	0	0	wet grassland, dry meadows and grassy verges and drainage ditches; hunting by hovering., dropped down out of view.	PW
BZ215	VP1	12/08/2021	15:54	Buzzard	1	96	0	20	76	0	wet grassland, treelines and improved agricultural grassland; circling before flying on lower. being mobbed by 2 kestrels, lost from view when following hen harrier	PW
BZ216	VP1	12/08/2021	15:58	Buzzard	1	40	0	0	40	0	scrub, dry meadows and grassy verges and wet grassland; hunting by hovering., WD4. hunting over rough grazing and scrub near newly planted conifers.	PW
BZ217	VP1	12/08/2021	16:00	Buzzard	1	20	20	0	0	0	scrub, dry meadows and grassy verges and wet grassland; hunting by hovering., WD4. hunting over rough grazing and scrub near newly planted conifers.	PW
BZ218	VP1	12/08/2021	16:15	Buzzard	1	-	-	-	-	-	conifer plantation; calling., juvenile bird heard calling, not seen.	PW
BZ219	VP1	12/08/2021	16:33	Buzzard	1	47	0	0	47	0	conifer plantation; hunting by hovering, gliding on., dropped below treeline out of view.	PW
BZ220	VP1	12/08/2021	16:34	Buzzard	1	-	-	-	-	-	treelines; calling., juvenile calling from spruce WL2.	PW
BZ221	VP1	12/08/2021	17:36	Buzzard	1	-	-	-	-	-	treelines; calling., juvenile calling, heard, not seen.	PW
BZ222	VP1	12/08/2021	17:38	Buzzard	1	16	4	12	0	0	treelines and improved agricultural grassland; flying in to land. perched. then flying on., dropped into land at spruce WL2, perched for a minute, then dropped off perch out of view down slope.	PW
BZ223	VP1	12/08/2021	18:22	Buzzard	1	-	-	-	-	-	treelines and improved agricultural grassland; calling., juvenile, heard, not seen.	PW
BZ224	VP1	12/08/2021	18:27	Buzzard	1	13	0	4	9	0	treelines, improved agricultural grassland and wet grassland; flying into land., flew in around treeline where juvenile buzzard was heard calling from. lost from view behind trees. possibly adult provisioning juvenile	PW

Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
BZ225	VP1	12/08/2021	19:05	Buzzard	1	-	-	-	-	-	treelines, improved agricultural grassland and wet grassland; calling., juvenile. calling from spruce WL2. heard, not seen.	PW
BZ226	VP1	12/08/2021	19:05	Buzzard	1	21	0	0	21	0	conifer plantation; flying.	PW
BZ227	VP1	12/08/2021	19:47	Buzzard	1	-	-	-	-	-	treelines; calling., juvenile.	PW
BZ228	VP1	12/08/2021	20:03	Buzzard	1	-	-	-	-	-	conifer plantation and wet grassland; calling., juvenile.	PW
BZ229	VP1	12/08/2021	20:16	Buzzard	1	-	-	-	-	-	conifer plantation and wet grassland; calling., juvenile.	PW
BZ230	VP1	14/09/2021	17:06	Buzzard	1	16	16	0	0	0	improved agricultural grassland, conifer plantation and improved agricultural grassland; flying in to land in birch treeline., WL2. being mobbed by hooded crow. perched out of view.	PW
BZ231	VP1	21/10/2021	10:51	Buzzard	1	60	60	0	0	0	improved agricultural grassland, wet grassland and mixed conifer woodland; hunting fields/forestry southwest of VP1	SP
BZ232	VP1	21/10/2021	12:17	Buzzard	1	120	120	0	0	0	mixed conifer woodland; soaring/calling low over forestry, flew slowly south	SP
BZ233	VP1	21/10/2021	12:30	Buzzard	1	60	60	0	0	0	wet grassland, mixed conifer woodland and improved agricultural grassland; hunting fields/forestry southwest of VP1	SP
BZ234	VP1	21/10/2021	12:42	Buzzard	2	180	180	0	0	0	improved agricultural grassland, wet grassland and mixed conifer woodland; hunting fields/forestry southwest of VP1	SP
BZ244	VP1	10/12/2021	08:02	Buzzard	1	15	15	0	0	0	improved agricultural grassland and conifer plantation; travelling	JM
BZ245	VP1	16/03/2022	15:07	Buzzard	1	382	0	0	382	0	conifer plantation; circling/travelling	JM

Table 7-4-8- 2 Buzzard Breeding Walkover Survey Data

Breeding Walkover Surveys						
Ref.	Date	Time	Species	Number	Habitat and activity	Surveyor
BZ001	19/05/2020	10:15	Buzzard	1	conifer plantation; calling heard but not seen (flyover; non-breeding)	PW
BZ002	19/05/2020	10:30	Buzzard	4	conifer plantation; calling and soaring above PCH over WD4 (flyover; non-breeding)	PW
BZ003	19/05/2020	10:50	Buzzard	1	conifer plantation; calling from WD4 (suitable nesting habitat; possible breeder)	PW
BZ004	19/05/2020	10:51	Buzzard	1	conifer plantation; flying then soaring 30m over WD4 (suitable nesting habitat; possible breeder)	PW
BZ012	31/07/2020		Buzzard	1	conifer plantation; calling, heard only (suitable nesting habitat; possible breeder)	PW
BZ013	21/04/2021	10:24	Buzzard	2	conifer plantation, hedgerows and wet grassland; calling. (singing male; possible breeder)	PW
BZ014	21/04/2021	10:48	Buzzard	1	conifer plantation; circling soaring., second of 4 buzzards in view at the time. (flyover; non-breeding)	PW
BZ015	21/04/2021	10:48	Buzzard	2	conifer plantation; circling soaring., 2 of 4 buzzards in view at the time. (flyover; non-breeding)	PW
BZ016	21/04/2021	10:50	Buzzard	1	conifer plantation and improved agricultural grassland; flying, calling, circling., being mobbed by hooded crow. 1 of 4 buzzards in view at the time. (flyover; non-breeding)	PW
BZ017	21/04/2021	11:40	Buzzard	1	conifer plantation, improved agricultural grassland and hedgerows; circling soaring., flying low over treeline before climbing circling. (flyover; non-breeding)	PW
BZ018	21/04/2021	12:35	Buzzard	1	conifer plantation; circling. (flyover; non-breeding)	PW
BZ019	21/04/2021	13:15	Buzzard	2	conifer plantation; circling. (flyover; non-breeding)	PW
BZ020	21/04/2021	13:21	Buzzard	1	conifer plantation; calling., heard, not seen. (singing male; possible breeder)	PW
BZ023	11/05/2021		Buzzard	2	improved agricultural grassland; soaring (suitable nesting habitat; possible breeder)	TREA
BZ024	11/05/2021		Buzzard	1	improved agricultural grassland; perched on pole near motorway (suitable nesting habitat; possible breeder)	TREA

Breeding Walkover Surveys						
Ref.	Date	Time	Species	Number	Habitat and activity	Surveyor
BZ025	18/05/2021	09:03	Buzzard	1	conifer plantation, improved agricultural grassland and hedgerows; perched and flying. (suitable nesting habitat; possible breeder)	PW
BZ026	18/05/2021	10:07	Buzzard	2	hedgerows, improved agricultural grassland and treelines; calling, flying, perched., WD4. pair. came out of treeline perching at edge calling, before circling overhead calling. presumed nest here. (occupied nest; confirmed breeding)	PW
BZ027	18/05/2021	11:50	Buzzard	1	conifer plantation, wet grassland and improved agricultural grassland; circling, flying, gliding., 1 of 2 birds in area. (suitable nesting habitat; possible breeder)	PW
BZ028	18/05/2021	11:50	Buzzard	1	conifer plantation, improved agricultural grassland and wet grassland; calling from edge of WD4 as other buzzard circles overhead. (suitable nesting habitat; possible breeder)	PW
BZ034	21/05/2021		Buzzard	1	improved agricultural grassland; soaring (suitable nesting habitat; possible breeder)	TREA
BZ035	21/05/2021		Buzzard	1	improved agricultural grassland; flying and hovering (suitable nesting habitat; possible breeder)	TREA
BZ036	23/06/2021	10:56	Buzzard	1	conifer plantation, wet grassland and scrub; perched., perched at edge of clearfelled areas with grass field. (permanent territory; probable breeding)	PW
BZ042	26/07/2021	12:15	Buzzard	1	conifer plantation; calling., heard, not seen. (agitated behaviour; probable breeding)	PW

Table 7-4-8- 3 Buzzard Breeding Raptor Survey Data

Breeding Raptor Surveys								
Ref.	BR	Date	Time	Species	Number	Habitat and activity	Breeding status	Surveyor
BZ001	BRVP1	24/05/2020	09:15	Buzzard	1	improved agricultural grassland, soaring over WD4 at PCH.	suitable nesting habitat; possible breeder	PW
BZ002	BRVP1	24/05/2020	09:33	Buzzard	1	improved agricultural grassland and conifer plantation, soaring at PCH over GA1 and WD4 then hovering followed by soaring again	suitable nesting habitat; possible breeder	PW
BZ003	BRVP1	24/05/2020	09:39	Buzzard	1	improved agricultural grassland and conifer plantation, gliding over GA1 and WD4 30m high	suitable nesting habitat; possible breeder	PW
BZ004	BRVP1	24/05/2020	09:41	Buzzard	1	conifer plantation, hovering over farmland edge with forestry below PCH	suitable nesting habitat; possible breeder	PW
BZ005	BRVP1	24/05/2020	09:47	Buzzard	1	conifer plantation, hovering hunting over WD4 (all below PCH)	suitable nesting habitat; possible breeder	PW
BZ006	BRVP1	24/05/2020	09:50	Buzzard	1	conifer plantation, hovering in air over WD4 moving about hunting at PCH. dropped down into trees at end and lost from view	suitable nesting habitat; possible breeder	PW
BZ007	BRVP1	24/05/2020	10:49	Buzzard	1	conifer plantation, flying over WD4 at PCH being mobbed by kestrel then glided west	suitable nesting habitat; possible breeder	PW
BZ008	BRT2	24/05/2020	19:41	Buzzard	1	conifer plantation, flying from WD4 over road to forestry on northwest side road at PCH then descending for last 10 secs below PCH when nearing trees	suitable nesting habitat; possible breeder	PW
BZ009	BRVP3	26/05/2020	09:20	Buzzard	1	improved agricultural grassland and hedgerows, soaring at PCH then glided and descended out of view over ridgeline at old state quarry	suitable nesting habitat; possible breeder	PW
BZ010	BRVP3	26/05/2020	09:36	Buzzard	1	improved agricultural grassland and hedgerows, soaring then dove down in dive into woods and lost from view	suitable nesting habitat; possible breeder	PW
BZ011	BRVP3	26/05/2020	09:37	Buzzard	1	improved agricultural grassland and hedgerows, soaring	suitable nesting habitat; possible breeder	PW
BZ012	BRVP3	26/05/2020	09:45	Buzzard	1	conifer plantation, soaring	suitable nesting habitat; possible breeder	PW
BZ013	BRVP3	26/05/2020	10:17	Buzzard	1	conifer plantation, soaring	flyover; non-breeding	PW
BZ014	BRVP3	26/05/2020	10:46	Buzzard	1	conifer plantation, soaring and gliding	flyover; non-breeding	PW

Breeding Raptor Surveys								
Ref.	BR	Date	Time	Species	Number	Habitat and activity	Breeding status	Surveyor
BZ015	BRVP3	26/05/2020	10:53	Buzzard	1	conifer plantation, flying low over spruce trees gained height, mobbed by hooded crow and then glided on	suitable nesting habitat; possible breeder	PW
BZ016	BRVP2	29/05/2020	17:23	Buzzard	1	conifer plantation, soaring	suitable nesting habitat; possible breeder	PW
BZ017	BRVP2	29/05/2020	17:45	Buzzard	1	improved agricultural grassland and hedgerows, soaring	suitable nesting habitat; possible breeder	PW
BZ018	BRVP2	29/05/2020	17:51	Buzzard	1	improved agricultural grassland and hedgerows, soaring	suitable nesting habitat; possible breeder	PW
BZ019	BRVP2	29/05/2020	19:00	Buzzard	1	conifer plantation, gliding/circling 30m rose to 60m briefly before diving down into WD4 out of view behind treeline	suitable nesting habitat; possible breeder	PW
BZ020	BRVP2	29/05/2020	19:40	Buzzard	1	hedgerows, improved agricultural grassland and conifer plantation, flew from sycamore tree low over WL1 and GA1 into WD4	suitable nesting habitat; possible breeder	PW
BZ021	BRVP2	29/05/2020	19:57	Buzzard	1	hedgerows, treelines and improved agricultural grassland, flew in over WD4 forestry then was mobbed by hooded crow, circled over GA1 and continued over WD4 where a third buzzard was circling low down	suitable nesting habitat; possible breeder	PW
BZ022	BRVP2	29/05/2020	19:58	Buzzard	1	conifer plantation, a second buzzard came in low over WD4 and was also mobbed by hooded crow. this bird circled for a bit and then was lost from view in trees (beech)	suitable nesting habitat; possible breeder	PW
BZ023	BRVP2	29/05/2020	19:59	Buzzard	1	conifer plantation and improved agricultural grassland, circling low over. both birds moved over WD4 and were lost from view behind treeline.	suitable nesting habitat; possible breeder	PW
BZ024	BRVP1	01/06/2020	17:36	Buzzard	1	improved agricultural grassland and conifer plantation, hovering hunting over rough grassland dropped down in height out of skyline and lost from view	suitable nesting habitat; possible breeder	PW
BZ025	BRVP1	01/06/2020	17:44	Buzzard	1	improved agricultural grassland and hedgerows, circling and hovering around 20m over GA1 and WL1 near lower north of road	suitable nesting habitat; possible breeder	PW
BZ026	BRVP1	01/06/2020	17:48	Buzzard	1	improved agricultural grassland and hedgerows, circling/soaring at PCH then hovering over GA1 and WL1 moving over lowland hay meadow. began soaring again briefly before being mobbed by hooded crow. soared close to two other sparrowhawks on two occasions. visible until 17:58	suitable nesting habitat; possible breeder	PW

Breeding Raptor Surveys								
Ref.	BR	Date	Time	Species	Number	Habitat and activity	Breeding status	Surveyor
BZ027	BRT3	02/06/2020	10:05	Buzzard	1	improved agricultural grassland and hedgerows, flying	suitable nesting habitat; possible breeder	PW
BZ028	BRT3	02/06/2020	10:34	Buzzard	1	improved agricultural grassland and hedgerows, soaring/circling at PCH being mobbed by hooded crow. dropped below horizon and lost from view	suitable nesting habitat; possible breeder	PW
BZ029	BRT3	02/06/2020	11:49	Buzzard	1	improved agricultural grassland and conifer plantation, flying	suitable nesting habitat; possible breeder	PW
BZ030	BRVP2	02/06/2020	16:13	Buzzard	1	improved agricultural grassland and hedgerows, soaring and gliding at	suitable nesting habitat; possible breeder	PW
BZ031	BRVP2	02/06/2020	16:28	Buzzard	1	improved agricultural grassland and hedgerows, flying low across GA1 along edge of field being mobbed by a hooded crow. passed directly in front of survey location	suitable nesting habitat; possible breeder	PW
BZ032	BRVP2	02/06/2020	18:35	Buzzard	1	improved agricultural grassland and hedgerows, soaring	suitable nesting habitat; possible breeder	PW
BZ033	BRT1	03/06/2020	10:11	Buzzard	1	conifer plantation, gliding, flying	flyover; non-breeding	PW
BZ034	BRT1	03/06/2020	11:51	Buzzard	2	conifer plantation, flying	suitable nesting habitat; possible breeder	PW
BZ035	BRT1	03/06/2020	12:33	Buzzard	3	conifer plantation, 1 bz picked up soaring and gliding in wind over WD4 and clearfelled area near bog and unimproved grassland, 2 more buzzards then observed at 20-30m in same area, moved north. last bird lost from view as dropped down from behind treeline.	suitable nesting habitat; possible breeder	PW
BZ036	BRVP4 & BRVP5	02/07/2020	10:46	Buzzard	1	conifer plantation, improved agricultural grassland and hedgerows, soaring and hovered briefly before disappearing over trees	suitable nesting habitat; possible breeder	PW
BZ037	BRVP4 & BRVP5	02/07/2020	10:46	Buzzard	1	improved agricultural grassland, soaring higher than other bz, lost from view when following other buzzard	suitable nesting habitat; possible breeder	PW
BZ038	BRVP4 & BRVP5	02/07/2020	10:58	Buzzard	2	hedgerows and improved agricultural grassland, soaring. one descended out of behind trees. the other soared higher and further away out of view	suitable nesting habitat; possible breeder	PW
BZ039	BRVP4 & BRVP5	02/07/2020	11:09	Buzzard	1	hedgerows and improved agricultural grassland, soaring at and above PCH	flyover; non-breeding	PW

Breeding Raptor Surveys								
Ref.	BR	Date	Time	Species	Number	Habitat and activity	Breeding status	Surveyor
BZ040	BRVP4 & BRVP5	02/07/2020	11:25	Buzzard	1	improved agricultural grassland and hedgerows, soaring, gliding	flyover; non-breeding	PW
BZ041	BRVP4 & BRVP5	02/07/2020	11:38	Buzzard	1	improved agricultural grassland, soaring and gliding and flying to bottom of valley and soaring again. lost from view when kestrel picked up in foreground	flyover; non-breeding	PW
BZ042	BRVP4 & BRVP5	02/07/2020	11:43	Buzzard	1	conifer plantation, flying low at 10-20m over field adjacent to wd4 before gliding up and over wd4 out of view	suitable nesting habitat; possible breeder	PW
BZ043	BRVP4 & BRVP5	02/07/2020	11:46	Buzzard	2	improved agricultural grassland, circling over GA1 together	flyover; non-breeding	PW
BZ044	BRVP4 & BRVP5	02/07/2020	12:16	Buzzard	1	conifer plantation, hovering over rough grassland near wd4. then soared over wd4 and briefly lost from view for 23 secs	flyover; non-breeding	PW
BZ045	BRVP4 & BRVP5	02/07/2020	12:38	Buzzard	1	conifer plantation and scrub, soaring, gliding	flyover; non-breeding	PW
BZ046	BRVP1 & BRT4	15/07/2020	11:50	Buzzard	1	conifer plantation and scrub, hovering before dropping out of view	flyover; non-breeding	PW
BZ047	BRVP1 & BRT4	15/07/2020	12:45	Buzzard	1	improved agricultural grassland, hovering and flying. quatering over hedgrow at 15m-20m. then soared and gained height circling before moving over across gs4 and hovering at height before descending out of view	suitable nesting habitat; possible breeder	PW
BZ048	BRVP2 & BRT3	20/07/2020	09:23	Buzzard	1	conifer plantation, improved agricultural grassland and hedgerows, gliding along edge of forestry out of view	suitable nesting habitat; possible breeder	PW
BZ050	BRVP2 & BRT3	20/07/2020	10:14	Buzzard	1	improved agricultural grassland, improved agricultural grassland and hedgerows, calling adult dove down from height into trees	agitated behaviour; probable breeding	PW
BZ053	BRVP2 & BRT3	20/07/2020	10:25	Buzzard	1	conifer plantation, improved agricultural grassland and hedgerows,	permanent territory; probable breeding	PW
BZ054	BRVP2 & BRT3	20/07/2020	10:31	Buzzard	1	conifer plantation, improved agricultural grassland and hedgerows, flying, juvenile	fledged young; confirmed breeding	PW

Breeding Raptor Surveys								
Ref.	BR	Date	Time	Species	Number	Habitat and activity	Breeding status	Surveyor
BZ055	BRVP2 & BRT3	20/07/2020	10:56	Buzzard	1	conifer plantation, improved agricultural grassland and hedgerows, calling, flying, soaring, adult	permanent territory; probable breeding	PW
BZ056	BRVP2 & BRT3	20/07/2020	10:58	Buzzard	1	conifer plantation, improved agricultural grassland and hedgerows, flying	singing male; possible breeder	PW
BZ058	BRT1	15/04/2021	13:33	Buzzard	1	hedgerows and improved agricultural grassland, circling, soaring.	flyover; non-breeding	PW
BZ059	BRT1	15/04/2021	14:05	Buzzard	1	conifer plantation, circling diving., dropped down into forestry in dive.	suitable nesting habitat; possible breeder	PW
BZ060	BRT3	19/04/2021	17:30	Buzzard	1	conifer plantation, improved agricultural grassland and hedgerows, perched then flying., perched for 224s low in conifer at forest edge and then flying low across fields for 76s before dropping below horizon out of view.	suitable nesting habitat; possible breeder	PW
BZ061	BRVP2	19/04/2021	18:30	Buzzard	1	treelines, conifer plantation and improved agricultural grassland, perched, hunting, flying, calling. (in view for 28 mins)., perched in treeline at edge of newly planted conifers (<4 years old). after 120s, dropped into long grass picking up prey before flying back to a separate tree in treeline and eating it. perched for another 600s before flying to another perch (960s).	suitable nesting habitat; possible breeder	PW
BZ062	BRVP3	27/04/2021	18:10	Buzzard	1	improved agricultural grassland and hedgerows, flying into land.	flyover; non-breeding	PW
BZ063	BRVP1	13/05/2021	12:32	Buzzard	1	improved agricultural grassland, hedgerows and wet grassland, circling	suitable nesting habitat; possible breeder	PW
BZ064	BRVP1	13/05/2021	12:45	Buzzard	1	treelines, improved agricultural grassland and conifer plantation, flying, circling, soaring.	suitable nesting habitat; possible breeder	PW
BZ065	BRVP1	13/05/2021	12:54	Buzzard	1	improved agricultural grassland, hedgerows, and treelines, circling soaring flying.	suitable nesting habitat; possible breeder	PW
BZ066	BRVP3	13/05/2021	16:16	Buzzard	1	mixed broadleaved woodland, active quarries and mines and spoil and bare ground, flying, mobbed, chased by hooded crow	suitable nesting habitat; possible breeder	PW
BZ067	BRVP3	13/05/2021	16:32	Buzzard	1	active quarries and mines, improved agricultural grassland and scrub, flying, hunting, perched, preening.	suitable nesting habitat; possible breeder	PW

Breeding Raptor Surveys								
Ref.	BR	Date	Time	Species	Number	Habitat and activity	Breeding status	Surveyor
BZ068	BRVP3	13/05/2021	16:52	Buzzard	1	improved agricultural grassland and hedgerows, perched	suitable nesting habitat; possible breeder	PW
BZ069	BRVP3	13/05/2021	17:01	Buzzard	1	hedgerows, mixed broadleaved woodland and active quarries and mines, flying, circling, soaring.	suitable nesting habitat; possible breeder	PW
BZ070	BRVP3	13/05/2021	17:20	Buzzard	2	mixed broadleaved woodland, active quarries and mines and improved agricultural grassland, flying, soaring.	suitable nesting habitat; possible breeder	PW
BZ071	BRVP3	13/05/2021	18:32	Buzzard	1	improved agricultural grassland, hedgerows and scrub, flying into land.	suitable nesting habitat; possible breeder	PW
BZ073	BRVP2	19/05/2021	15:37	Buzzard	1	improved agricultural grassland and hedgerows, circling soaring	suitable nesting habitat; possible breeder	PW
BZ074	BRVP2	19/05/2021	15:43	Buzzard	2	improved agricultural grassland, hedgerows, and conifer plantation, soaring	pair; probable breeding	PW
BZ075	BRVP2	19/05/2021	16:28	Buzzard	1	conifer plantation, improved agricultural grassland and hedgerows, gliding about in breeze.	permanent territory; probable breeding	PW
BZ076	BRVP2	19/05/2021	16:28	Buzzard	2	improved agricultural grassland and hedgerows, circling soaring., in view for 2 minutes.	pair; probable breeding	PW
BZ077	BRVP2	19/05/2021	16:42	Buzzard	2	conifer plantation, improved agricultural grassland and hedgerows, calling, flying, gliding.	permanent territory; probable breeding	PW
BZ078	BRVP2	19/05/2021	16:43	Buzzard	2	conifer plantation, wet grassland and improved agricultural grassland, calling, hunting, flying.	pair; probable breeding	PW
BZ079	BRVP2	19/05/2021	16:55	Buzzard	1	improved agricultural grassland, hedgerows and conifer plantation, circling, dropped below treeline out of view.	suitable nesting habitat; possible breeder	PW
BZ080	BRVP2	19/05/2021	16:57	Buzzard	2	improved agricultural grassland, hedgerows and conifer plantation, calling, gliding, flying.	permanent territory; probable breeding	PW
BZ081	BRVP4	19/05/2021	17:17	Buzzard	2	improved agricultural grassland, hedgerows and recolonising bare ground, gliding, hanging in breeze.	suitable nesting habitat; possible breeder	PW
BZ082	BRVP4	19/05/2021	17:46	Buzzard	1	hedgerows, improved agricultural grassland and mixed broadleaved woodland, flying	flyover; non-breeding	PW
BZ083	BRVP4	19/05/2021	17:46	Buzzard	1	mixed broadleaved woodland, improved agricultural grassland and hedgerows, circling, flying, diving.	flyover; non-breeding	PW
BZ084	BRT3	01/06/2021	11:38	Buzzard	1	conifer plantation, circling, diving hunting., circling before diving down into forestry out of view.	suitable nesting habitat; possible breeder	PW

Breeding Raptor Surveys								
Ref.	BR	Date	Time	Species	Number	Habitat and activity	Breeding status	Surveyor
BZ085	BRT3	01/06/2021	11:45	Buzzard	2	conifer plantation, calling flying, circling., first bird came up out of forestry alarm calling flying low over trees and forest road. then soared with second bird over forestry calling.	agitated behaviour, probable breeding	PW
BZ086	BRT3	01/06/2021	11:49	Buzzard	1	conifer plantation and improved agricultural grassland, hunting by hovering, circling, calling.	permanent territory; probable breeding	PW
BZ087	BRT3	01/06/2021	11:55	Buzzard	2	conifer plantation, circling, soaring, calling.	permanent territory; probable breeding	PW
BZ089	BRVP3	02/06/2021	18:25	Buzzard	2	improved agricultural grassland and hedgerows, circling	suitable nesting habitat; possible breeder	PW
BZ090	BRT2	03/06/2021	10:32	Buzzard	1	conifer plantation, improved agricultural grassland and hedgerows, hunting by hovering, circling and gliding., in view for 6 mins.	suitable nesting habitat; possible breeder	PW
BZ091	BRVP4	20/06/2021	21:22	Buzzard	1	recolonising bare ground and active quarries and mines, perched, perched on mound in quarry in view for 38 mins until survey ends.	suitable nesting habitat; possible breeder	PW
BZ092	BRVP3	08/07/2021	10:07	Buzzard	1	improved agricultural grassland, scrub and conifer plantation, flying.	permanent territory; probable breeding	PW
BZ093	BRVP3	08/07/2021	10:25	Buzzard	1	improved agricultural grassland, scrub and hedgerows, hunting circling and diving. in view 7 mins.	permanent territory; probable breeding	PW
BZ094	BRVP4	13/07/2021	10:14	Buzzard	1	active quarries and mines, recolonising bare ground and hedgerows, flying.	permanent territory; probable breeding	PW
BZ095	BRVP4	13/07/2021	10:19	Buzzard	1	active quarries and mines, recolonising bare ground and spoil and bare ground, circling and flying hunting.	permanent territory; probable breeding	PW
BZ096	BRVP4	13/07/2021	11:32	Buzzard	1	improved agricultural grassland, hedgerows and treelines, perched then flying hunting., perched for 5 minutes on telegraph pole before flying low and fast to yard flushing corvids into air. dropped behind treeline out of view here.	permanent territory; probable breeding	PW
BZ097	BRVP4	13/07/2021	11:48	Buzzard	1	improved agricultural grassland and hedgerows, perched., same bird as flew into farmyard now perched on another pole at road. 1 of 2 birds in the area at the time.	pair; probable breeding	PW
BZ100	BRT3	15/07/2021	19:14	Buzzard	1	conifer plantation, flying low across forest road into trees out of view.	permanent territory; probable breeding	PW
BZ101	BRVP5	20/07/2021	18:08	Buzzard	1	improved agricultural grassland, scrub and recolonising bare ground, hunting by hovering and gliding., in view for 5 minutes.	permanent territory; probable breeding	PW

Breeding Raptor Surveys								
Ref.	BR	Date	Time	Species	Number	Habitat and activity	Breeding status	Surveyor
BZ102	BRT2	20/07/2021	18:37	Buzzard	1	recolonising bare ground, scrub and improved agricultural grassland, circling soaring.	suitable nesting habitat; possible breeder	PW
BZ103	BRVP5	20/07/2021	20:42	Buzzard	1	improved agricultural grassland and hedgerows, calling., breeding call heard in distance. bird not seen. approximate location.	singing male; possible breeder	PW

Table 7-4-8- 4 Buzzard Winter Walkover Survey Data

Winter Walkover Surveys						
Ref.	Date	Time	Species	Number	Habitat and activity	Surveyor
BZ001	08/10/2020	12:08	Buzzard	2	improved agricultural grassland and hedgerows; soaring, in view in flight at PCH for 253s (wintering)	PW
BZ002	08/10/2020	14:29	Buzzard	1	conifer plantation and wet grassland; perched, in view for 10s (wintering)	PW
BZ003	14/01/2021	11:55	Buzzard	1	improved agricultural grassland and hedgerows; flying (wintering)	PW
BZ005	22/03/2021	13:52	Buzzard	1	treelines, wet grassland and improved agricultural grassland; flying calling., flew from treeline across grassland. (wintering)	PW
BZ006	27/10/2021	16:50	Buzzard	1	conifer plantation; flying low into forestry, t3 (wintering)	SP
BZ007	24/11/2021	11:00	Buzzard	1	conifer plantation; perched/calling, not seen, only heard (wintering)	JM
BZ008	24/11/2021	12:00	Buzzard	1	conifer plantation; calling, only heard calling (wintering)	JM
BZ009	24/11/2021	12:20	Buzzard	1	conifer plantation; calling, not seen, only heard calling (wintering)	JM

Table 7-4-8- 5 Buzzard Incidental Observations

Incidental Observations							
Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
BZ001	Breeding Woodcock Survey; T2	15/06/2020	21:01	Buzzard	1	conifer plantation; flew across forest road to trees lost from the view	PW
BZ002	Breeding Woodcock Survey; T3	17/06/2020	21:12	Buzzard	1	conifer plantation; perched on spruce tree	PW
BZ003	Breeding Woodcock Survey; T3	17/06/2020	22:08	Buzzard	1	conifer plantation; flew along forest path by WD4 with clearfelled areas	PW
BZ004	Waterbird Distribution Survey; Close to VP1	18/08/2020	08:52	Buzzard	1	conifer plantation; flew across the road here at 08:52.	PW
BZ005	Waterbird Distribution Survey; Close to VP1	18/08/2020	08:55	Buzzard	1	conifer plantation; juvenile calling between 08:55-09:06.	PW
BZ006	Waterbird Distribution Survey; Agharue	18/08/2020	10:28	Buzzard	2	conifer plantation; flying	PW
BZ007	Waterbird Distribution Survey; The Butts	18/08/2020	10:44	Buzzard	4	conifer plantation; circling and flying low at the butts	PW
BZ008	Waterbird Distribution Survey; Annagar/Coorleagh	04/09/2020	17:00	Buzzard	1	conifer plantation; seen briefly through trees.	PW
BZ009	Waterbird Distribution Survey; Annagar/Coorleagh	04/09/2020	17:52	Buzzard	1	conifer plantation; flying and gliding about in breeze for 132s.	PW
BZ010	Vantage Point Survey; VP2 (South of VP)	05/09/2020	06:35	Buzzard	1	conifer plantation; bz calling in area marked bz on map for 135s. heard, not seen. heard again at 06:50.	PW
BZ011	Waterbird Distribution Survey; Ballygorteen	18/09/2020	13:12	Buzzard	1	conifer plantation; flew across the road here at 08:52.	PW
BZ012	Waterbird Distribution Survey; Annagar	18/09/2020	14:56	Buzzard	1	improved agricultural grassland and hedgerows; flying	PW
BZ013	Waterbird Distribution Survey; Cloydagh	12/10/2020	13:26	Buzzard	1	improved agricultural grassland, hedgerows and treelines; flying, calling being mobbed by hooded crow	PW
BZ014	Waterbird Distribution Survey; Cloydagh	12/10/2020	13:54	Buzzard	1	conifer plantation; flying	PW
BZ015	Waterbird Distribution Survey; Bilboa	12/10/2020	15:05	Buzzard	1	improved agricultural grassland; hovering	PW

Incidental Observations							
Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
BZ016	Hen Harrier Roost Survey; HHVP1	12/10/2020	18:11	Buzzard	2	conifer plantation; flying	PW
BZ017	Hen Harrier Roost Survey; HHVP1	12/10/2020	18:15	Buzzard	2	conifer plantation; flying	PW
BZ018	Hen Harrier Roost Survey; HHVP1	12/10/2020	19:05	Buzzard	1	conifer plantation; flying	PW
BZ019	Waterbird Distribution Survey; Cloydagh	23/10/2020	14:02	Buzzard	1	improved agricultural grassland and hedgerows; flying	PW
BZ020	Hen Harrier Roost Survey; HHVP2	23/10/2020	17:00	Buzzard	1	conifer plantation; flying	PW
BZ021	Waterbird Distribution Survey; Cloydagh	04/11/2020	09:27	Buzzard	1	treelines and improved agricultural grassland; flying in to perch on tree, flooded field	PW
BZ022	Waterbird Distribution Survey; Royal Oak	04/11/2020	11:13	Buzzard	1	dry meadows and grassy verges; perched and flying, roadside verge	PW
BZ023	Waterbird Distribution Survey; Fenniscourt	04/11/2020	11:18	Buzzard	1	improved agricultural grassland and hedgerows; perched	PW
BZ024	Hen Harrier Roost Survey; HHVP2	20/11/2020	16:39	Buzzard	1	conifer plantation; flying, 33s in flight	PW
BZ025	Hen Harrier Roost Survey; HHVP2	23/12/2020	15:50	Buzzard	1	conifer plantation; flying, hanging in breeze gliding, 239s in view.	PW
BZ026	Waterbird Distribution Survey; Paulstown	10/02/2021	13:05	Buzzard	1	improved agricultural grassland; feeding, feeding on ground with gulls in GA1.	PW
BZ027	Waterbird Distribution Survey; Knockadeen	10/02/2021	13:56	Buzzard	1	improved agricultural grassland and hedgerows; perched and flying., flew to perch in tree by road in hedge before continuing to fly on in breeze.	PW
BZ028	Waterbird Distribution Survey; Coolraheen North	10/02/2021	14:34	Buzzard	1	improved agricultural grassland and hedgerows; circling soaring	PW
BZ029	Waterbird Distribution Survey; Powerstown	11/03/2021	06:59	Buzzard	1	improved agricultural grassland and treelines; perched., on fence post.	PW
BZ030	Waterbird Distribution Survey; Gortahile	31/03/2021	17:30	Buzzard	1	wet grassland, hedgerows and conifer plantation; perched and flying.	PW
BZ031	Hen Harrier Roost Survey; HHVP4	31/03/2021	18:58	Buzzard	1	scrub, wet grassland and conifer plantation; flying.	PW

Incidental Observations							
Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
BZ032	Hen Harrier Roost Survey; HHVP4	31/03/2021	20:36	Buzzard	1	scrub and conifer plantation; flying in to land in mature forestry.	PW
BZ033	Waterbird Distribution Survey; Bawnree	15/04/2021	09:40	Buzzard	1	improved agricultural grassland and hedgerows; perched and flying.	PW
BZ034	Waterbird Distribution Survey; Castlewarren	15/04/2021	11:12	Buzzard	1	hedgerows and treelines; flying along road.	PW
BZ035	Waterbird Distribution Survey; Mountrugent Upper	15/04/2021	11:36	Buzzard	1	hedgerows, improved agricultural grassland and conifer plantation; perched.	PW
BZ036	Vantage Point Survey; Oldleighlin	08/07/2021	17:04	Buzzard	1	hedgerows and improved agricultural grassland; perched on telegraph pole before flying on.	PW
BZ037	Waterbird Distribution Survey; Gortahile.	26/08/2021	15:25	Buzzard	1	wet grassland, wet heath and improved agricultural grassland; perched and flying.	PW
BZ038	Hen Harrier Roost Survey; Red Bog (HHVP1)	19/10/2021	17:32	Buzzard	1	upland blanket bog and mixed conifer woodland; flying	SP
BZ039	Hen Harrier Roost Survey; HHVP2 parking area	16/11/2021	07:20	Buzzard	1	conifer plantation and improved agricultural grassland; travelling/calling	JM
BZ040	Waterbird Distribution Survey; Goresbridge area	29/11/2021	10:41	Buzzard	1	improved agricultural grassland; travelling	JM
BZ041	Waterbird Distribution Survey; Black bridge	29/11/2021	13:00	Buzzard	2	mixed broadleaved woodland and eroding/upland rivers; 1 flying, 1 perched calling	JM
BZ042	Waterbird Distribution Survey; Slyguff lough area	09/12/2021	09:41	Buzzard	1	improved agricultural grassland; perched	JM
BZ043	Hen Harrier Roost Survey; HHVP2 near Knockagarry	09/12/2021	15:20	Buzzard	1	conifer plantation; travelling	JM
BZ044	Hen Harrier Roost Survey; HHVP2	09/12/2021	15:42	Buzzard	1	conifer plantation; travelling	JM
BZ045	Waterbird Distribution Survey; Castlewarren area	21/12/2021	09:47	Buzzard	1	improved agricultural grassland and hedgerows; perched	JM
BZ046	Waterbird Distribution Survey; North of Leighlinbridge	11/01/2022	10:26	Buzzard	1	improved agricultural grassland; perched	JM
BZ047	Waterbird Distribution Survey; Paulstown area	11/01/2022	11:51	Buzzard	1	improved agricultural grassland; perched in field	JM

Incidental Observations							
Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
BZ048	Vantage Point Survey; VP1	25/01/2022	11:38	Buzzard	1	improved agricultural grassland; calling, not seen, heard calling.	JM
BZ049	Hen Harrier Roost Survey; Tomard, Oldleighlin	03/02/2022	16:04	Buzzard	2	conifer plantation and bogs; travelling	JM
BZ050	Hen Harrier Roost Survey; Feamore	07/03/2022	17:38	Buzzard	1	conifer plantation and improved agricultural grassland; travelling	JM
BZ051	Waterbird Distribution Survey; Rathvinden	14/03/2022	14:26	Buzzard	3	improved agricultural grassland; flying/circling	JM
BZ052	Waterbird Distribution Survey; Coan east	14/03/2022	17:04	Buzzard	1	improved agricultural grassland and conifer plantation; perched-fly	JM
BZ053	Hen Harrier Roost Survey; Lacken	21/03/2022	17:58	Buzzard	1	improved agricultural grassland and conifer plantation; travelling/circling	JM
BZ054	Waterbird Distribution Survey; Fenniscourt	28/03/2022	13:00	Buzzard	2	improved agricultural grassland; one perched, one circling field	JM
BZ055	Waterbird Distribution Survey; Fenniscourt	28/03/2022	13:25	Buzzard	1	improved agricultural grassland; perched	JM
BZ056	Waterbird Distribution Survey; Mountnugent upper	28/03/2022	14:19	Buzzard	1	conifer plantation and improved agricultural grassland; travelling/calling/circling	JM
BZ057	Waterbird Distribution Survey; Lackan	28/03/2022	14:51	Buzzard	1	improved agricultural grassland and conifer plantation; perched	JM
BZ058	Waterbird Distribution Survey; Tomnasock	28/03/2022	15:02	Buzzard	1	improved agricultural grassland; travelling	JM
BZ059	Waterbird Distribution Survey; Old Leighlin	21/04/2022	11:48	Buzzard	1	conifer plantation and improved agricultural grassland; travelling	CB
BZ060	Waterbird Distribution Survey; Old Leighlin	21/04/2022	11:58	Buzzard	1	conifer plantation; hovering	CB
BZ061	Waterbird Distribution Survey; Old Leighlin	21/04/2022	14:09	Buzzard	1	conifer plantation and improved agricultural grassland; flushed then soaring	CB
BZ062	Waterbird Distribution Survey; Old Leighlin	21/04/2022	14:10	Buzzard	1	conifer plantation and recently-felled woodland; flushed from perch	CB
BZ063	Waterbird Distribution Survey; Goresbridge	26/04/2022	11:09	Buzzard	1	improved agricultural grassland; travelling	CB

Incidental Observations							
Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
BZ064	Waterbird Distribution Survey; Goresbridge	26/04/2022	11:11	Buzzard	3	improved agricultural grassland and riparian woodland; soaring	CB
BZ065	Waterbird Distribution Survey; Powerstown	26/04/2022	11:12	Buzzard	1	hedgerows; perched	CB
BZ066	Waterbird Distribution Survey; Cloydagh	26/04/2022	13:47	Buzzard	1	improved agricultural grassland and depositing/lowland rivers; mobbed by corvid	CB
BZ067	Waterbird Distribution Survey; Powerstown	04/05/2022	13:45	Buzzard	1	improved agricultural grassland and hedgerows; soaring	CB

Table 7-4-8- 6 Buzzard Supplementary Vantage Point Survey Data

Supplementary Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
BZ006	VP2	21/04/2020	07:31	Buzzard	1	20	0	20	0	0	conifer plantation; gliding low over coniferous forests mobbed by hooded crow before disappearing down into forestry	PW
BZ007	VP2	21/04/2020	09:33	Buzzard	1	280	1	2	277	0	improved agricultural grassland, hedgerows and treelines; soaring at PCH over farmland before diving down and lost by hedgerow	PW
BZ008	VP2	21/04/2020	10:29	Buzzard	1	40	0	5	35	0	conifer plantation, hedgerows and improved agricultural grassland; soaring before disappearing down behind treeline when lost from view	PW
BZ009	VP2	06/05/2020	14:46	Buzzard	2	15	0	5	10	0	hedgerows and improved agricultural grassland; soaring dropped down diving before lost from view behind ridge	PW
BZ010	VP2	06/05/2020	16:09	Buzzard	2	2	0	0	2	0	conifer plantation; soaring	PW
BZ011	VP2	06/05/2020	16:13	Buzzard	1	69	0	0	69	0	improved agricultural grassland, hedgerows and conifer plantation; soaring over farmland adjacent to forestry	PW
BZ012	VP2	06/05/2020	16:26	Buzzard	1	13	3	10	0	0	conifer plantation and improved agricultural grassland; flying up and down low over	PW

Supplementary Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
											forestry	
BZ013	VP2	06/05/2020	16:45	Buzzard	1	130	0	5	125	0	conifer plantation and improved agricultural grassland; hovering over WD4 at first before soaring and gliding down south-east when lost from view behind treeline	PW
BZ014	VP2	06/05/2020	17:07	Buzzard	1	16	0	2	14	0	conifer plantation; gliding down over conifers when lost from view behind treeline below PCH	PW
BZ015	VP2	06/05/2020	17:14	Buzzard	1	118	0	6	112	0	conifer plantation; gliding and soaring over WD4 being mobbed by hooded crow dropped below PCH and back into PCH briefly before dropping down into forestry	PW
BZ016	VP2	06/05/2020	17:26	Buzzard	1	58	0	58	0	0	conifer plantation and improved agricultural grassland; flying by over farmland and forestry being mobbed by 2 hooded crows dropped down behind forestry on horizon	PW
BZ017	VP2	06/05/2020	17:32	Buzzard	1	155	0	0	155	0	improved agricultural grassland and conifer plantation; flying and soaring over clear felled forestry and scrub mobbed by hooded crow	PW
BZ018	VP2	06/05/2020	17:46	Buzzard	1	69	0	0	69	0	conifer plantation and scrub; flying and hovering	PW
BZ019	VP2	06/05/2020	18:07	Buzzard	1	28	0	0	0	0	conifer plantation; circling over conifers before dropping down into them and lost from view	PW
BZ020	VP2	06/05/2020	19:37	Buzzard	1	35	0	0	35	0	conifer plantation; flying over WD4	PW
BZ029	VP2	10/06/2020	16:49	Buzzard	1	130	0	0	130	0	conifer plantation; gliding and hovering over mature woodland edge with clear felled areas. moved over and dropped east out of view	PW
BZ030	VP2	10/06/2020	16:58	Buzzard	1	11	0	10	0	0	conifer plantation and improved agricultural grassland; gliding over edge of WD4 (immature) and GA1 on hillside. dropped out of view as descending into forestry	PW

Supplementary Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
BZ031	VP2	10/06/2020	19:06	Buzzard	1	15	0	0	0	0	conifer plantation and improved agricultural grassland; hooded crow heard calling which alerted surveyor to flying buzzard at edge of WD4 that then perched and landed in spruce at edge of plantation and GA1	PW
BZ032	VP2	10/06/2020	19:16	Buzzard	1	130	5	40	85	0	conifer plantation, improved agricultural grassland and hedgerows; after perching the buzzard then flew off hanging over WD4 edge briefly before being mobbed by 3 hooded crows and lost from view	PW
BZ042	VP2	02/07/2020	13:34	Buzzard	1	134	0	4	130	0	treelines, improved agricultural grassland and hedgerows; flying gliding landed in wood	PW
BZ043	VP2	02/07/2020	13:43	Buzzard	1	20	0	20	0	0	conifer plantation; diving and swooping over WD4 then dropped down into WD4	PW
BZ044	VP2	02/07/2020	15:13	Buzzard	1	140	0	0	140	0	conifer plantation; soaring over WD4 before gliding down and dropping below treeline out of view.	PW
BZ045	VP2	02/07/2020	15:20	Buzzard	1	17	0	0	17	0	improved agricultural grassland and hedgerows; flying	PW
BZ046	VP2	02/07/2020	15:34	Buzzard	1	2	0	0	2	0	improved agricultural grassland and hedgerows; picked up briefly among trees flying	PW
BZ052	VP2	22/07/2020	13:09	Buzzard	2	63	0	0	63	0	improved agricultural grassland, conifer plantation and hedgerows; flying at PCH over forestry and farmland	PW
BZ053	VP2	22/07/2020	14:29	Buzzard	1	73	0	0	73	0	conifer plantation; flying and gliding before hovering and dropping below treeline out of view	PW
BZ054	VP2	22/07/2020	14:35	Buzzard	1	24	0	3	21	0	conifer plantation and improved agricultural grassland; flying at PCH over farmland by WD4 before dropping out of view over forestry	PW
BZ055	VP2	22/07/2020	14:56	Buzzard	1	120	0	0	120	0	conifer plantation; circling over forestry	PW
BZ056	VP2	22/07/2020	14:56	Buzzard	1	145	0	0	145	0	conifer plantation; circling over forestry before dropping below trees out of view	PW

Supplementary Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
BZ057	VP2	22/07/2020	15:18	Buzzard	1	21	0	21	0	0	improved agricultural grassland and conifer plantation; flying low over farmland and forestry being mobbed by hooded crow	PW
BZ058	VP2	22/07/2020	15:21	Buzzard	1	17	3	14	0	0	conifer plantation; flying before diving to ground	PW
BZ066	VP2	05/09/2020	11:56	Buzzard	1	101	0	0	101	0	conifer plantation and improved agricultural grassland; soaring	PW
BZ073	VP2	14/10/2020	13:28	Buzzard	1	37	0	0	37	0	improved agricultural grassland; gliding	PW
BZ074	VP2	14/10/2020	13:43	Buzzard	1	79	0	0	79	0	improved agricultural grassland, conifer plantation and scrub; circling	PW
BZ075	VP2	14/10/2020	13:56	Buzzard	3	372	0	0	372	0	improved agricultural grassland, conifer plantation and hedgerows; gliding, circling, soaring	PW
BZ076	VP2	14/10/2020	14:47	Buzzard	1	157	0	0	45	107	improved agricultural grassland and hedgerows; flying and gliding	PW
BZ077	VP2	14/10/2020	14:52	Buzzard	2	45	0	0	45	0	improved agricultural grassland and conifer plantation; flying	PW
BZ078	VP2	14/10/2020	15:10	Buzzard	1	106	0	0	106	0	wet grassland, improved agricultural grassland and conifer plantation; flying and hovering, being mobbed by hooded crows.	PW
BZ079	VP2	14/10/2020	15:17	Buzzard	1	44	0	0	44	0	scrub, improved agricultural grassland and treelines; hunting by hovering, dropped below treeline out of view.	PW
BZ080	VP2	14/10/2020	15:42	Buzzard	1	28	0	0	28	0	conifer plantation and improved agricultural grassland; flying, being mobbed by 3 hooded crows.	PW
BZ081	VP2	14/10/2020	16:27	Buzzard	1	20	0	20	0	0	improved agricultural grassland, hedgerows and scrub; flying, being mobbed by hooded crow	PW
BZ082	VP2	17/11/2020	08:10	Buzzard	1	18	0	18	0	0	improved agricultural grassland and hedgerows; flying	PW
BZ083	VP2	17/11/2020	10:51	Buzzard	1	306	0	89	217	0	improved agricultural grassland, stone walls and other stonework and treelines; flying, landed in tree at WL2	PW

Supplementary Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
BZ084	VP2	17/11/2020	11:49	Buzzard	1	175	0	8	167	0	conifer plantation, wet grassland and stone walls and other stonework; flying	PW
BZ085	VP2	17/11/2020	12:19	Buzzard	1	172	0	5	167	0	conifer plantation and improved agricultural grassland; flying, landed in conifers out of view by road.	PW
BZ086	VP2	17/11/2020	12:20	Buzzard	1	155	0	6	149	0	conifer plantation; flying, dropped below treeline over clear fell out of view below treeline from mature forestry in foreground.	PW
BZ094	VP2	13/01/2021	10:17	Buzzard	1	69	0	4	65	0	conifer plantation and scrub; flying, clear fell	PW
BZ095	VP2	13/01/2021	13:36	Buzzard	1	86	0	7	79	0	conifer plantation and improved agricultural grassland; hanging in air and gliding downslope.	PW
BZ096	VP2	13/01/2021	13:51	Buzzard	1	120	3	55	62	0	improved agricultural grassland and stone walls and other stonework; hunting by hovering, dropped down in a dive over ridge down slope out of view.	PW
BZ117	VP2	03/02/2021	12:07	Buzzard	1	202	0	0	202	0	conifer plantation, wet grassland and scrub; flying, gliding, hovering, diving., glided and flew over forestry, hovered briefly before dropping in dive out of view.	PW
BZ118	VP2	03/02/2021	12:19	Buzzard	1	160	0	0	160	0	conifer plantation, wet grassland and scrub; flying, gliding undulating flight display., 1 of 2 birds in the area.	PW
BZ119	VP2	03/02/2021	12:21	Buzzard	1	143	0	68	75	0	conifer plantation, wet grassland and stone walls and other stonework; hunting, hunting by hanging in breeze hovering and gliding over rough pasture. flew to edge of forestry out of view then.	PW
BZ120	VP2	03/02/2021	12:48	Buzzard	2	10	0	10	0	0	wet grassland, conifer plantation and scrub; circling low	PW
BZ121	VP2	03/02/2021	12:54	Buzzard	2	181	0	0	181	0	conifer plantation; soaring, circling together., dropped below horizon in distance out of view.	PW
BZ122	VP2	03/02/2021	15:34	Buzzard	1	75	0	36	39	0	conifer plantation, wet grassland and stone walls and other stonework; flying and gliding	PW

Supplementary Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
BZ131	VP2	30/03/2021	14:23	Buzzard	1	829	0	0	331	60	conifer plantation, improved agricultural grassland and stone walls and other stonework; flying, circling, soaring., 1 of 3 birds.	PW
BZ132	VP2	30/03/2021	14:24	Buzzard	1	760	0	0	322	0	conifer plantation, wet grassland and improved agricultural grassland; flying, circling, soaring., 2nd of 3 birds.	PW
BZ133	VP2	30/03/2021	14:25	Buzzard	1	313	0	0	290	0	conifer plantation, wet grassland and improved agricultural grassland; flying, circling, hunting., third of three birds.	PW
BZ134	VP2	30/03/2021	14:43	Buzzard	1	119	0	0	119	0	conifer plantation; circling soaring.	PW
BZ135	VP2	30/03/2021	16:23	Buzzard	2	25	0	0	25	0	conifer plantation; flying.	PW
BZ136	VP2	30/03/2021	16:25	Buzzard	1	690	0	0	315	330	conifer plantation, improved agricultural grassland and wet grassland; flying, soaring, gliding., briefly joined another buzzard circling, before continuing back west.	PW
BZ137	VP2	30/03/2021	16:29	Buzzard	1	95	0	0	95	0	conifer plantation; circling., second buzzard in area.	PW
BZ138	VP2	30/03/2021	16:38	Buzzard	1	43	0	0	43	0	conifer plantation; hunting, flying., over clear fell.	PW
BZ144	VP2	14/04/2021	15:03	Buzzard	1	440	0	0	188	230	conifer plantation, improved agricultural grassland and short rotation coppice; flying, circling, soaring., lost from view above PCH over the site when another buzzard came into view in foreground.	PW
BZ145	VP2	14/04/2021	15:10	Buzzard	1	747	0	0	487	120	conifer plantation, improved agricultural grassland and scrub; flying, circling, soaring., 1 of 2 buzzard in area at time.	PW
BZ146	VP2	14/04/2021	15:15	Buzzard	1	241	0	0	191	50	conifer plantation, improved agricultural grassland and hedgerows; circling soaring., second of 2 birds in the area. split off from other bird above PCH.	PW
BZ148	VP2	14/05/2021	10:17	Buzzard	1	301	0	0	0	0	conifer plantation, improved agricultural grassland and hedgerows; hunting, flying, circling, soaring, diving., ED3. soaring at	PW

Supplementary Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
											PCH and above PCH. then dove down to edge of treeline at old quarry out of view.	
BZ157	VP2	01/06/2021	14:22	Buzzard	2	138	0	0	0	0	conifer plantation, improved agricultural grassland and hedgerows; circling, flying, gliding., near a large recently clearfelled area.	PW
BZ158	VP2	01/06/2021	14:35	Buzzard	1	58	0	0	0	0	conifer plantation, improved agricultural grassland and hedgerows; flying circling., dropped behind treeline out of view.	PW
BZ159	VP2	01/06/2021	14:54	Buzzard	1	153	0	0	153	0	conifer plantation; hunting by soaring and hovering., dropped below treeline out of view.	PW
BZ160	VP2	01/06/2021	15:37	Buzzard	1	97	0	0	0	0	conifer plantation and improved agricultural grassland; circling	PW
BZ161	VP2	01/06/2021	16:12	Buzzard	1	154	0	0	154	0	conifer plantation; circling soaring., briefly mobbed by hooded crow at first.	PW
BZ185	VP2	06/07/2021	13:27	Buzzard	1	6	0	0	0	0	improved agricultural grassland and hedgerows; flying circling.	PW
BZ186	VP2	06/07/2021	13:29	Buzzard	1	3	0	0	3	0	improved agricultural grassland, hedgerows and buildings and artificial surfaces; flying.	PW
BZ187	VP2	06/07/2021	14:48	Buzzard	1	-	-	-	-	-	conifer plantation, improved agricultural grassland and hedgerows; perched at edge of WD4 with GA1., being mobbed by kestrel	PW
BZ188	VP2	08/07/2021	14:28	Buzzard	1	4	0	0	0	0	conifer plantation, improved agricultural grassland and stone walls and other stonework; flying low., flew across road low to behind trees out of view.	PW
BZ189	VP2	08/07/2021	15:04	Buzzard	1	-	-	-	-	-	conifer plantation; calling., heard, not seen. calling from woods.	PW
BZ207	VP2	10/08/2021	11:58	Buzzard	1	111	0	0	111	0	conifer plantation; circling and flying hunting., dropped below treeline out of view.	PW
BZ208	VP2	10/08/2021	13:24	Buzzard	1	46	0	0	0	0	improved agricultural grassland and hedgerows; circling soaring.	PW

Supplementary Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
BZ209	VP2	10/08/2021	14:37	Buzzard	1	262	0	0	152	66	conifer plantation, improved agricultural grassland and wet grassland; circling soaring and gliding., 1 of 3 buzzard in view at one time.	PW
BZ210	VP2	10/08/2021	14:40	Buzzard	2	66	0	0	0	0	improved agricultural grassland, hedgerows and conifer plantation; circling soaring.	PW
BZ211	VP2	10/08/2021	14:44	Buzzard	2	44	0	0	0	0	improved agricultural grassland, hedgerows and conifer plantation; circling soaring., above PCH near edge of site.	PW
BZ212	VP2	10/08/2021	14:47	Buzzard	1	287	0	0	287	0	improved agricultural grassland, conifer plantation and stone walls and other stonework; circling and gliding and hunting by hovering., dropped below treeline of forestry out of view down slope.	PW
BZ213	VP2	10/08/2021	16:48	Buzzard	2	114	0	0	0	0	conifer plantation, improved agricultural grassland and stone walls and other stonework; circling., one bird in view for 49s, other for 114s. dropped down out of view below treeline.	PW
BZ235	VP2	30/10/2021	12:54	Buzzard	1	120	0	120	0	0	conifer plantation; flying south over the townland of Annagar and onsite forestry	SP
BZ236	VP2	30/10/2021	13:13	Buzzard	1	20	20	0	0	0	improved agricultural grassland, wet grassland and hedgerows; hunting low over fields	SP
BZ237	VP2	30/10/2021	13:15	Buzzard	1	240	0	240	0	0	improved agricultural grassland and mixed conifer woodland; over the townland of Annagar into forestry	SP
BZ238	VP2	30/10/2021	13:24	Buzzard	2	240	0	240	0	0	mixed conifer woodland; circling over the townland of Annagar	SP
BZ239	VP2	30/10/2021	14:06	Buzzard	2	240	0	240	0	0	mixed conifer woodland; quartering forestry in the townland of Annagar	SP
BZ240	VP2	30/10/2021	14:22	Buzzard	1	180	0	180	0	0	mixed conifer woodland, improved agricultural grassland and wet grassland; circling over the townland of Annagar	SP
BZ241	VP2	30/10/2021	15:00	Buzzard	1	120	120	0	0	0	mixed conifer woodland; low over forestry within the townland of Annagar, flew north and dropped into forestry	SP

Supplementary Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
BZ242	VP2	30/10/2021	15:10	Buzzard	1	60	60	0	0	0	mixed conifer woodland, improved agricultural grassland and wet grassland; flew low over the townland of Annagar, moved west into central Annagar	SP
BZ243	VP2	30/10/2021	16:45	Buzzard	1	1200	1200	0	0	0	mixed conifer woodland; flew over forestry and landed on pole, bird remained perched for most of period, dropped into forestry	SP

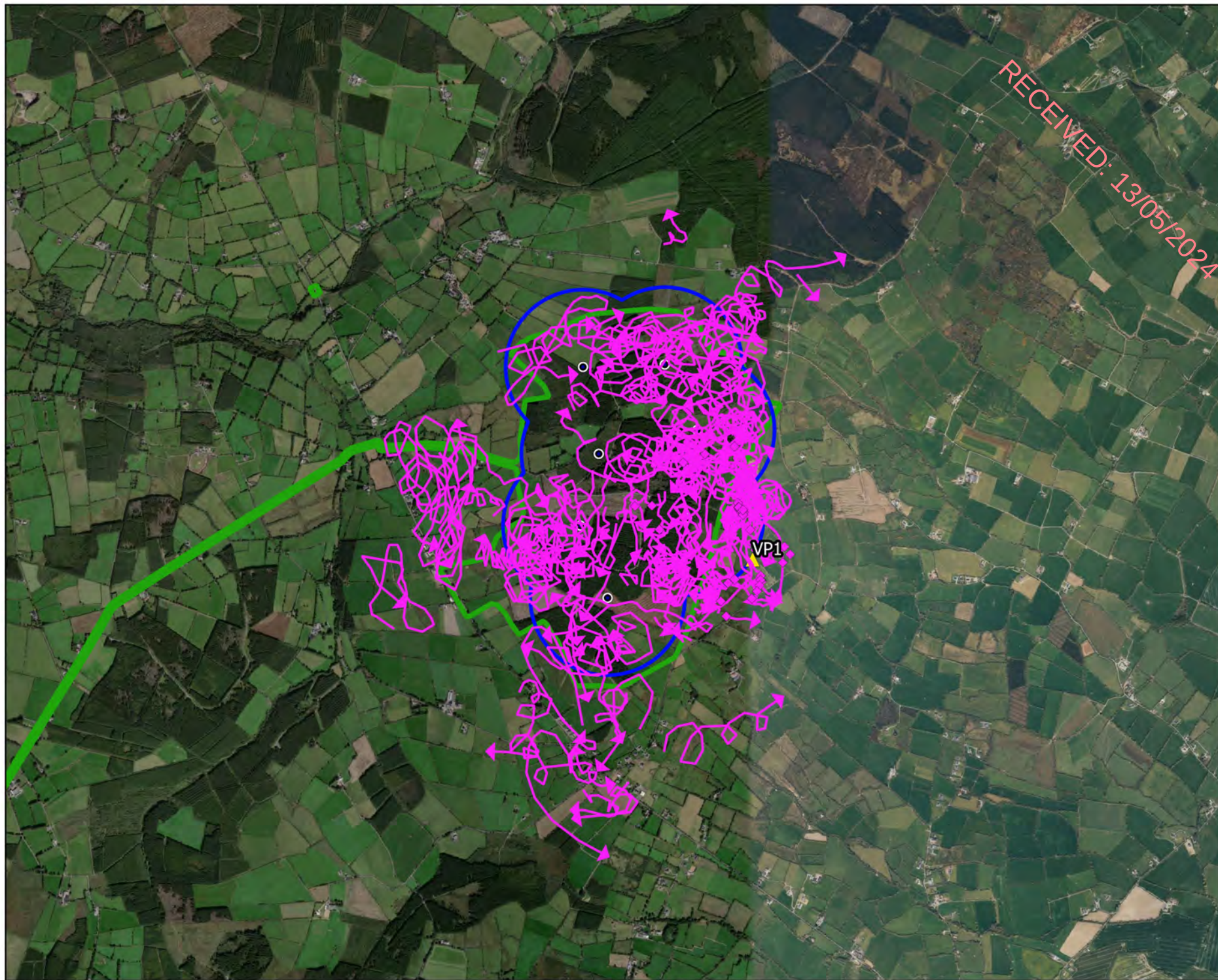
Table 7-4-8- 7 Buzzard Supplementary Breeding Walkover Survey Data

Supplementary Breeding Walkover Surveys							
Ref.	Date	Time	Species	Number	Habitat and activity		Surveyor
BZ005	19/05/2020	17:53	Buzzard	2	conifer plantation and improved agricultural grassland; flying at PCH east to west (pair; probable breeding)		PW
BZ006	19/05/2020	18:25	Buzzard	1	conifer plantation; soaring at PCH (flyover; non-breeding)		PW
BZ007	11/06/2020	13:12	Buzzard	1	conifer plantation and wet grassland; observed, one flying mobbed by hooded crow over WD4 GS4 edge, the other hovering over GS4 and WL1 (Annagar) (flyover; non-breeding)		PW
BZ008	11/06/2020	13:12	Buzzard	1	conifer plantation and wet grassland; observed, one flying mobbed by hooded crow over WD4 GS4 edge, the other hovering over GS4 and WL1 (Annagar) (flyover; non-breeding)		PW
BZ009	11/06/2020	13:12	Buzzard	1	conifer plantation and wet grassland; another earlier at forest edge at west side of the site from edge of forestry (flyover; non-breeding)		PW
BZ010	22/07/2020	10:07	Buzzard	1	perched on telegraph pole, flew after 10s, flew for 15s		PW
BZ011	22/07/2020	11:00	Buzzard	1	conifer plantation; calling from wood (suitable nesting habitat; possible breeder)		PW
BZ021	21/04/2021	16:20	Buzzard	1	conifer plantation; calling., calling from edge of forestry within clearfelled areas. (singing male; possible breeder)		PW
BZ022	21/04/2021	16:48	Buzzard	1	conifer plantation and improved agricultural grassland; hunting., in view for 280s. (flyover; non-breeding)		PW
BZ029	18/05/2021	13:03	Buzzard	2	improved agricultural grassland, conifer plantation and hedgerows; circling soaring, being mobbed. (pair; probable breeding)		PW

Supplementary Breeding Walkover Surveys						
Ref.	Date	Time	Species	Number	Habitat and activity	Surveyor
BZ030	18/05/2021	13:13	Buzzard	2	conifer plantation; circling, calling. (pair; probable breeding)	PW
BZ031	18/05/2021	13:14	Buzzard	1	conifer plantation, improved agricultural grassland and hedgerows; circling, third buzzard in view at the time. (suitable nesting habitat; possible breeder)	PW
BZ032	18/05/2021	14:10	Buzzard	1	improved agricultural grassland and hedgerows; circling soaring. (suitable nesting habitat; possible breeder)	PW
BZ033	18/05/2021	14:59	Buzzard	1	conifer plantation; hunting by hovering. (suitable nesting habitat; possible breeder)	PW
BZ038	23/06/2021	15:05	Buzzard	1	stone walls and other stonework, improved agricultural grassland and hedgerows; perched., perched on stone wall in sheep pasture. (suitable nesting habitat; possible breeder)	PW

Table 7-4-8- 8 Buzzard Supplementary Winter Walkover Survey Data

Winter Walkover Surveys						
Ref.	Date	Time	Species	Number	Habitat and activity	Surveyor
BZ004	14/01/2021	14:59	Buzzard	1	improved agricultural grassland, flying (wintering)	PW
BZ010	25/11/2021	11:19	Buzzard	1	conifer plantation; travelling (wintering)	JM
BZ011	25/11/2021	11:55	Buzzard	1	conifer plantation; travelling (wintering)	JM



Map Legend

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



Drawing Title

Vantage Point Survey
Buzzard Observations

Project Title

Seskin Wind Farm, Co. Carlow

Drawn By

D. Woods

Checked By

P. Cregg

Project No.

220246

Drawing No.

Fig. 7.4.8.1

Scale

1:32000

Date

03.11.23



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- Map Legend**
- EIA Site Boundary
 - Turbine Layout
 - 500m Survey Area
 - Flight Observation



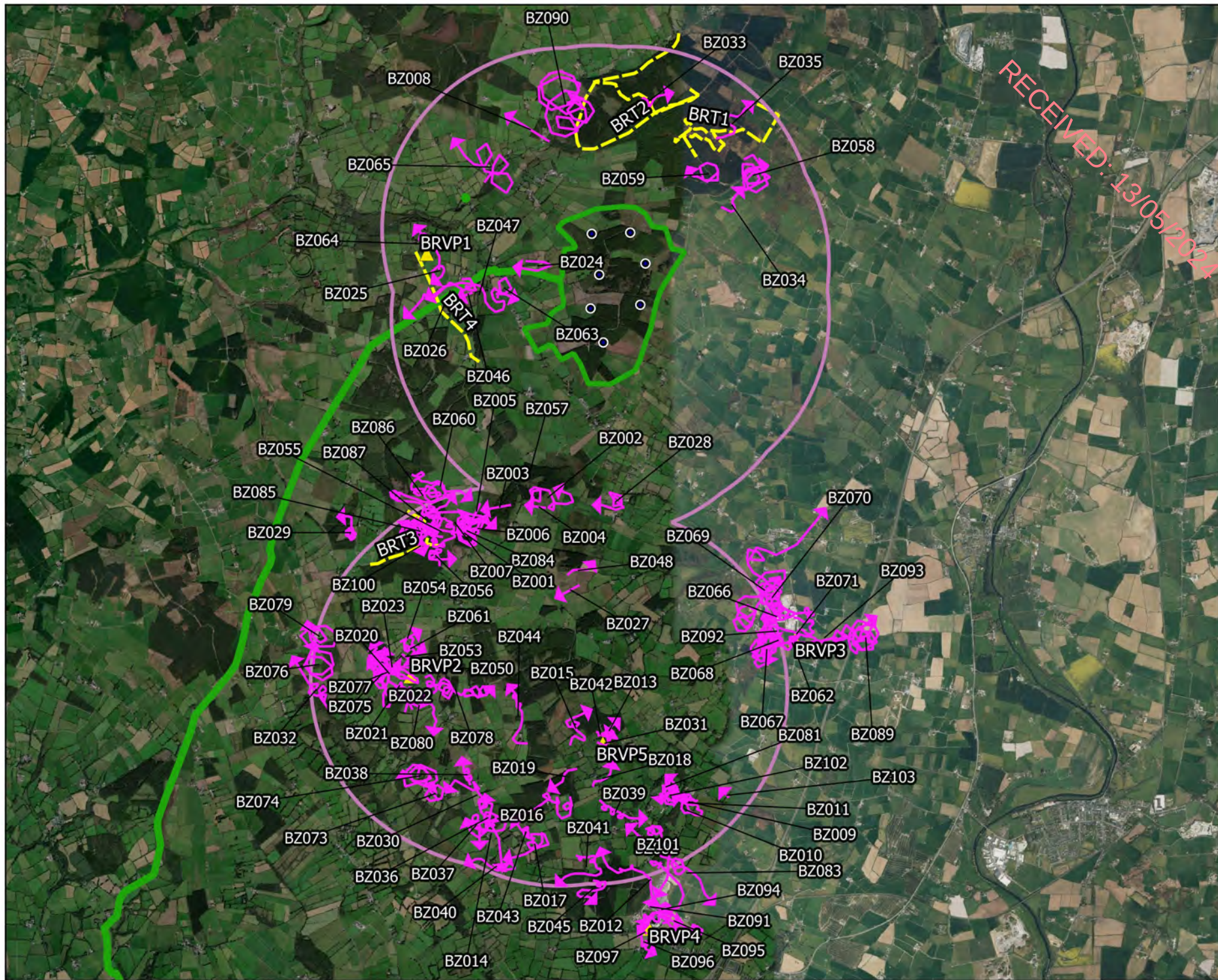
**Breeding Walkover Survey
Buzzard Observations**

Seskin Wind Farm, Co. Carlow

Drawn By D. Woods	Checked By P. Cregg
Project No. 220246	Drawing No. Fig. 7.4.8.2
Scale 1:25000	Date 03.11.23

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Map Legend

- EIAR Site Boundary
- Turbine Layout
- BRVP Locations
- BR Transect Locations
- 2km Buffer of Site Boundary
- Flight Observation

Drawing Title:
**Breeding Raptor Survey
Buzzard Observations**

Project Title:
Seskin Wind Farm, Co. Carlow

Drawn By: D. Woods	Checked By: P. Cregg
Project No.: 220246	Drawing No.: Fig. 7.4.8.3
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Map Legend

-  EIA Site Boundary
-  Turbine Layout
-  500m Survey Area
-  Flight Observation



Drawing Title

Winter Walkover Survey
Buzzard Observations

Project Title

Seskin Wind Farm, Co. Carlow

Drawn By

D. Woods

Checked By

P. Clegg

Project No.

220246

Drawing No.

Fig. 7.4.8.4

Scale

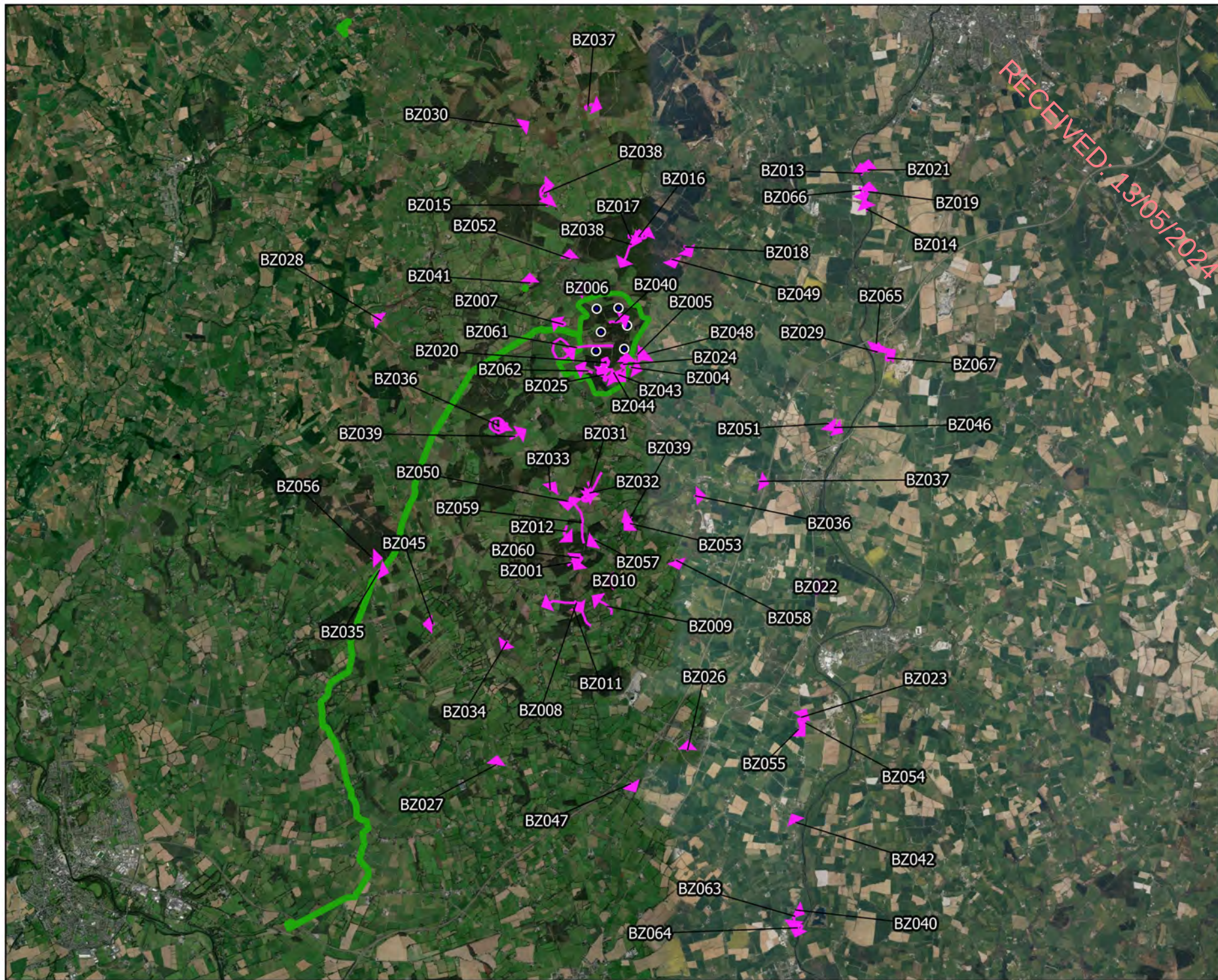
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Map Legend

-  EIAR Site Boundary
-  Turbine Layout
-  Flight Observation



Drawing Title:

Incidental Buzzard Observations

Project Title:

Seskin Wind Farm, Co. Carlow

Drawn By:

D. Woods

Checked By:

P. Cregg

Project No.:

220246

Drawing No.:

Fig. 7.4.8.5

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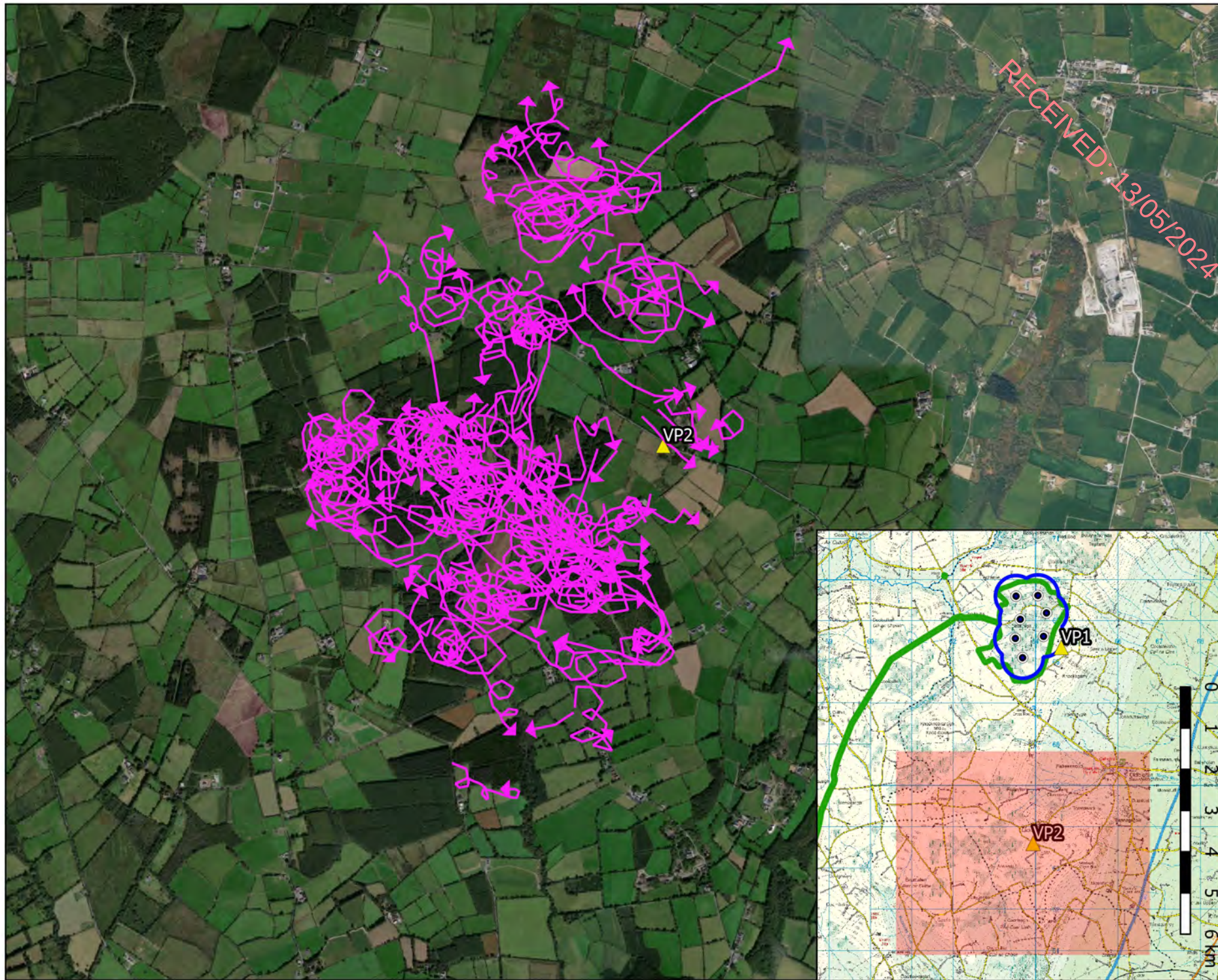
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Map Legend

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

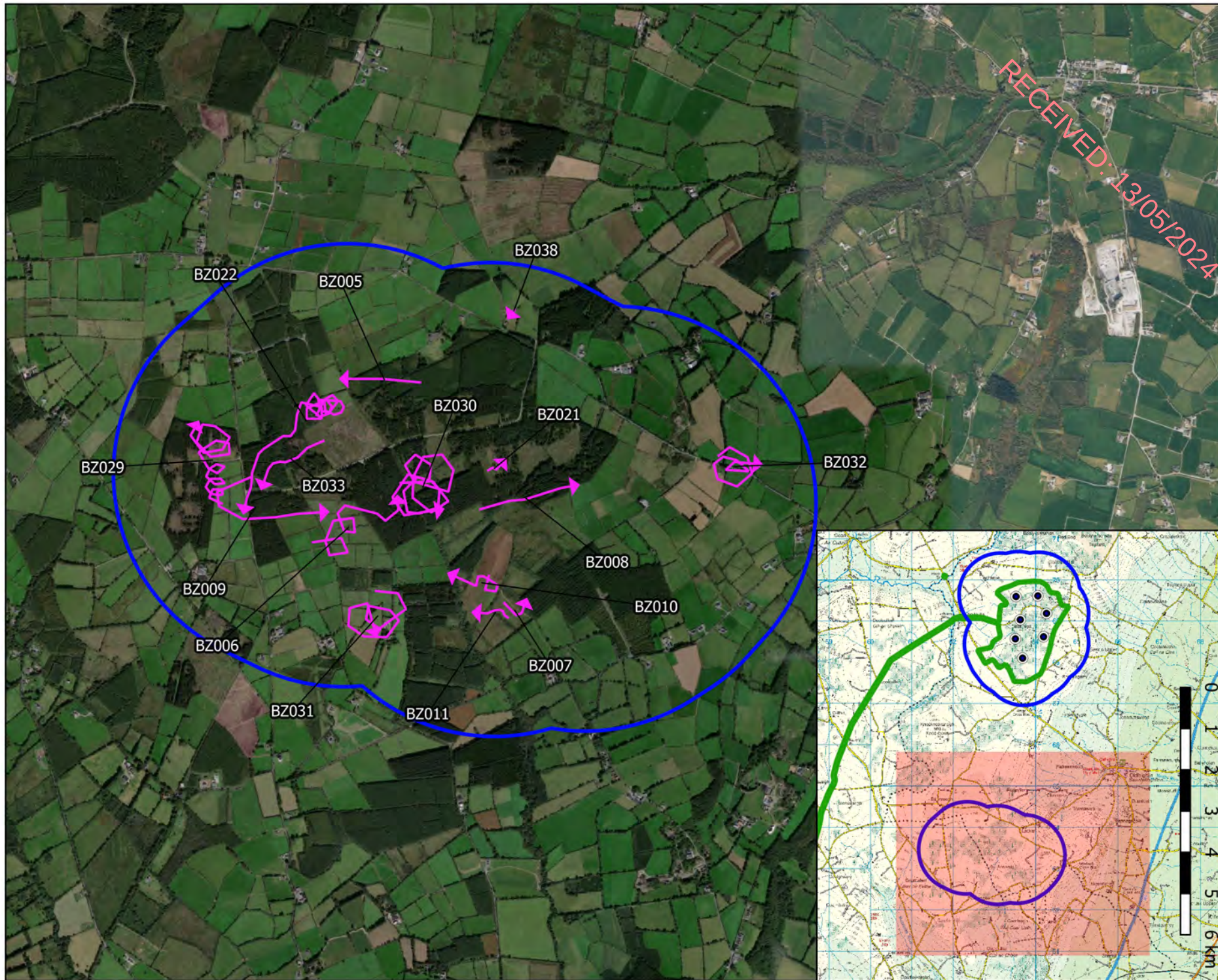


Drawing Title
Supplementary Vantage Point Survey
Buzzard Observations

Project Title
Seskin Wind Farm, Co. Carlow

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Project No. 220246	Drawing No. Fig. 7.4.8.6
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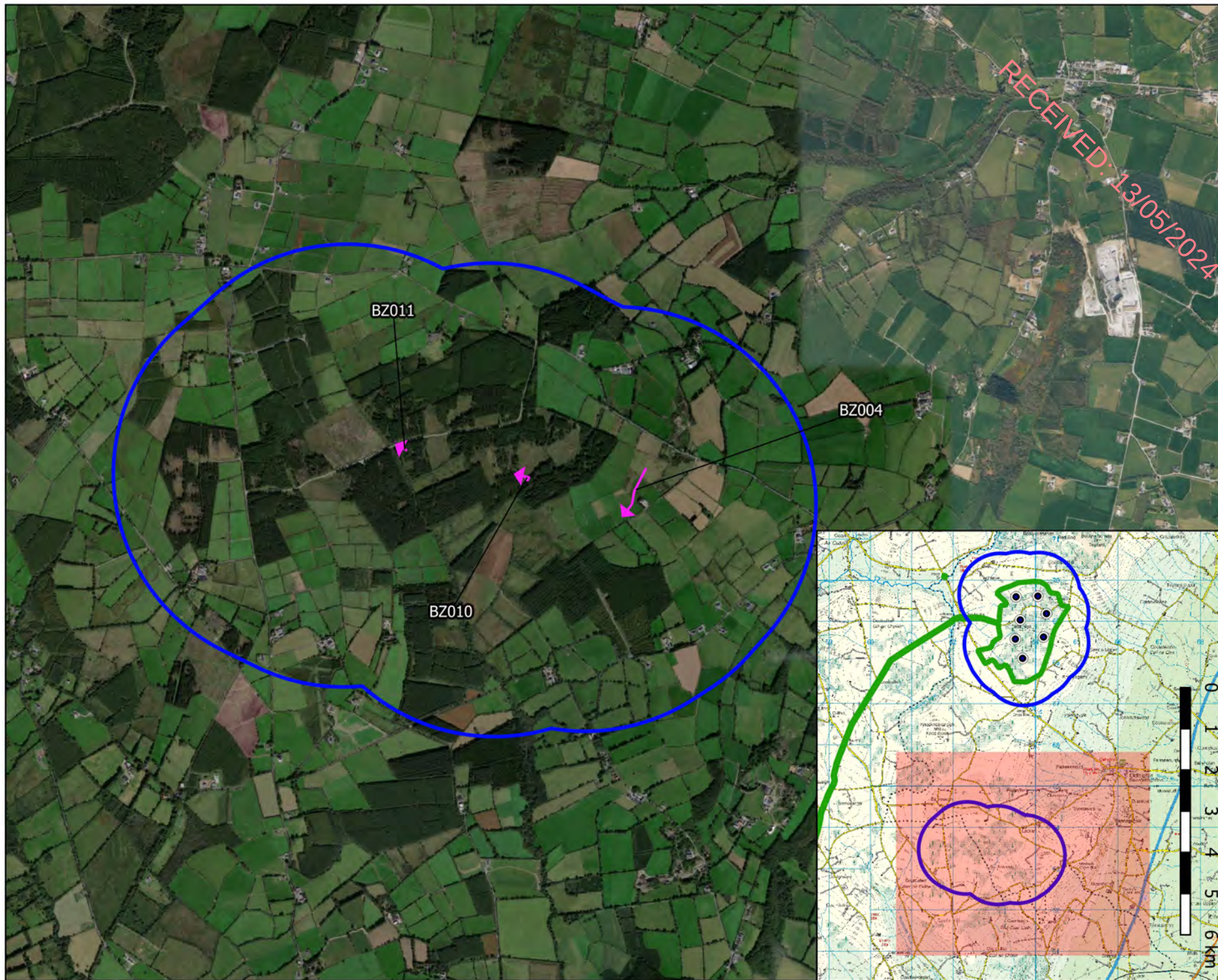


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- ### Map Legend
- EIAR Site Boundary
 - Turbine Layout
 - 500m Survey Area
 - Flight Observation



Drawing Title	
Supplementary Breeding Walkover Survey Buzzard Observations	
Project Title	
Seskin Wind Farm, Co. Carlow	
Drawn By	Checked By
D. Woods	P. Cregg
Project No.	Drawing No.
220246	Fig. 7.4.8.7
Scale	Date
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- ### Map Legend
- EIAR Site Boundary
 - Turbine Layout
 - 500m Survey Area
 - Flight Observation



Drawing Title Supplementary Winter Walkover Survey Buzzard Observations	
Project Title Seskin Wind Farm, Co. Carlow	
Drawn By D. Woods	Checked By P. Cregg
Project No. 220246	Drawing No. Fig. 7.4.8.8
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9.

LONG-EARED OWL

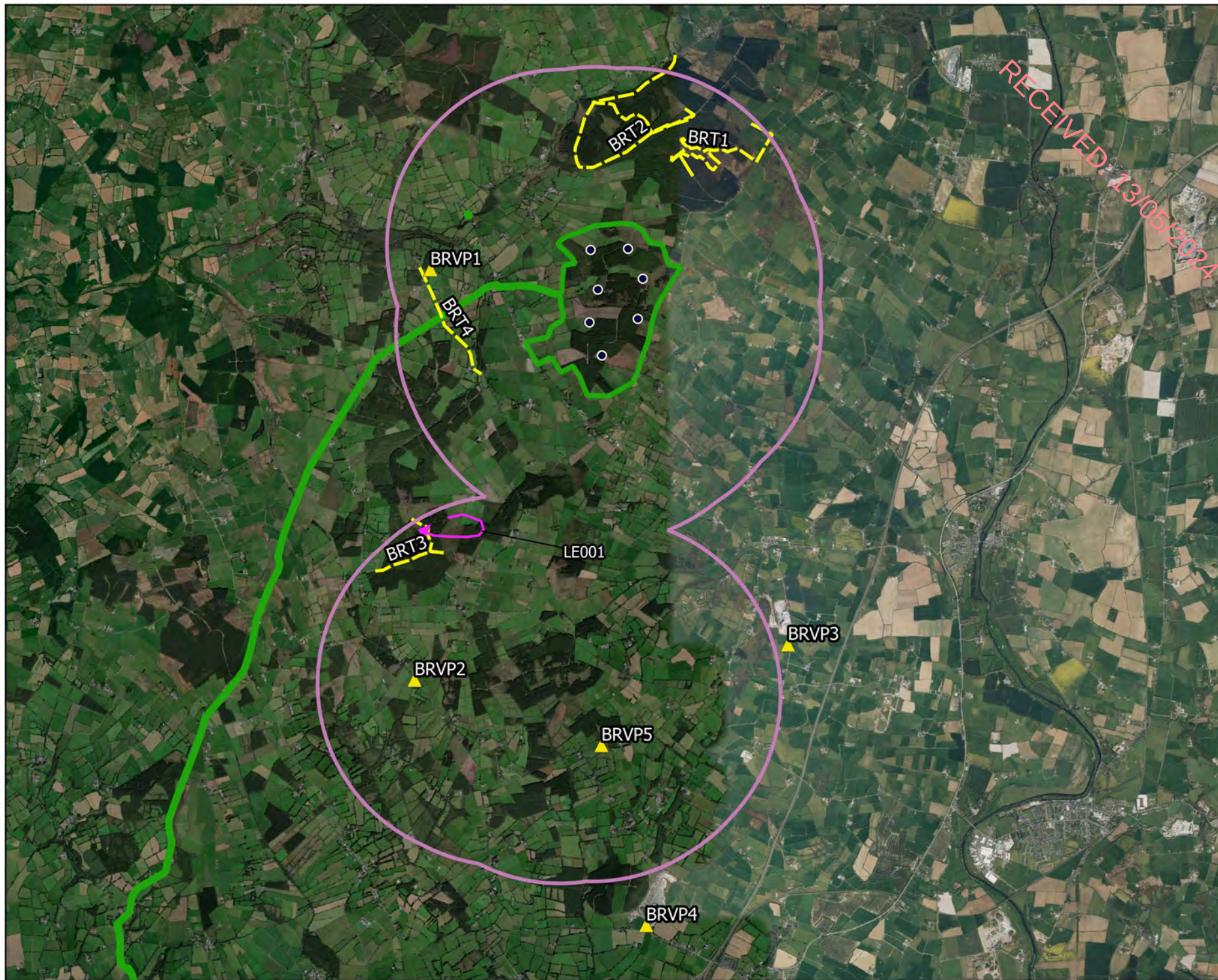
Note: Sensitive data relating to breeding sites has been omitted from this appendix and is provided in Confidential Appendix 7-7.

Table 7-4-9- 1 Long-eared Owl Breeding Raptor Survey Data

Breeding Raptor Surveys								
Ref.	BR	Date	Time	Species	Number	Habitat and activity	Breeding status	Surveyor
LE001	BRT2	24/05/2020	18:08	Long-eared Owl	1	conifer plantation, flew out of conifers adjacent to path on north side, across forest tract and into conifers on south side out of view through the trees 7m height flights. 18:08	suitable nesting habitat; possible breeder	PW

Table 7-4-9- 2 Long-eared Owl Incidental Observations

Incidental Observations							
Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
LE002	Breeding Raptor survey; IS64310 IG71203	20/07/2020		Long-Eared Owl	1		PW
LE003	Hen Harrier Roost Survey; HHVP1	24/03/2021	19:27	Long-Eared Owl	1	raised bog and conifer plantation; hunting flying., flew to within 2m of surveyor at 2m height. flew along through edge of forestry low then.	PW



Map Legend

- EIAR Site Boundary
- Turbine Layout
- ▲ BRVP Locations
- BR Transect Locations
- 2km Buffer of Site Boundary
- Flight Observation



Drawing Title

**Breeding Raptor Survey
Long-eared Owl Observations**

Project Title

Seskin Wind Farm, Co. Carlow

Drawn By

D. Woods

Checked By

P. Cregg

Project No.

220246

Drawing No.

Fig. 7.4.9.1

Scale

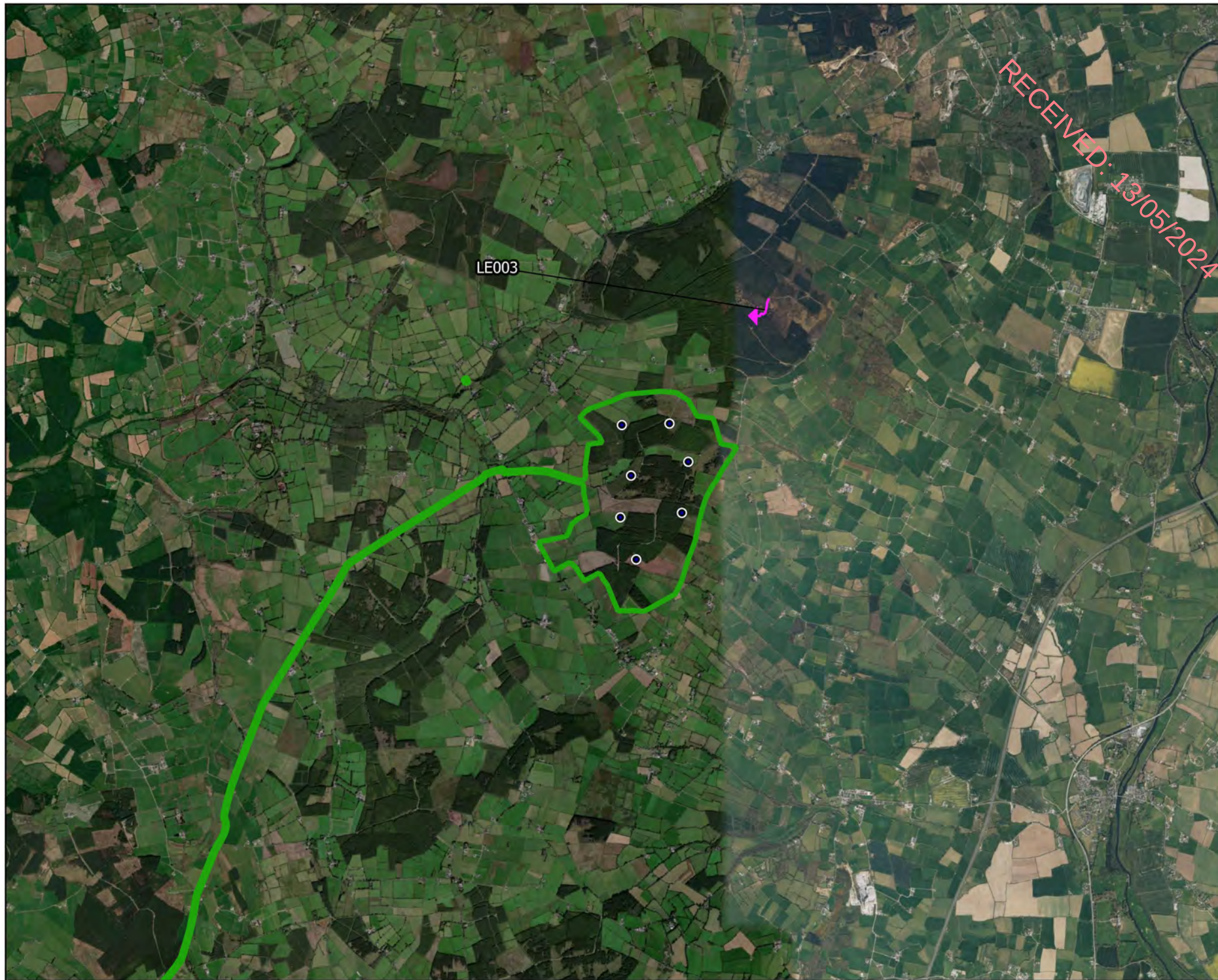
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Map Legend

- EIA Site Boundary
- Turbine Layout
- Flight Observation



Drawing Title	
Incidental Long-eared Owl Observations	
Project Title	
Seskin Wind Farm, Co. Carlow	
Drawn By	Checked By
D. Woods	P. Cregg
Project No.	Drawing No.
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Scale	Date
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10.

SPARROWHAWK

Note: Sensitive data relating to breeding sites has been omitted from this appendix and is provided in Confidential Appendix 7-7.

Table 7-4-10- 1 Sparrowhawk Vantage Point Survey Data

Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
SH001	VP1	16/04/2020	10:26	Sparrowhawk	1	40	0	3	37	0	conifer plantation; chasing hooded crow over WD4 turned back then before disappearing from view behind trees	PW
SH002	VP1	16/04/2020	10:28	Sparrowhawk	1	40	0	5	35	0	conifer plantation; gliding over forestry, descended in shelter dive, before lost from view behind treeline	PW
SH006	VP1	15/06/2020	19:36	Sparrowhawk	1	5	5	0	0	0	improved agricultural grassland and hedgerows; flying low to ground at 1m hunting along edge of WL1 (male) passed directly by observer	PW
SH007	VP1	15/06/2020	20:20	Sparrowhawk	1	100	0	0	100	0	improved agricultural grassland, hedgerows and conifer plantation; soaring and circling and flying	PW
SH010	VP1	22/07/2020	15:27	Sparrowhawk	1	5	5	0	0	0	improved agricultural grassland, conifer plantation and hedgerows; flew out of WD4 along WL1 in GA1 to WL1 at road out of view. swallow alarm calling, chasing it	PW
SH018	VP1	21/09/2020	10:35	Sparrowhawk	1	7	0	7	0	0	improved agricultural grassland and conifer plantation; flying and being mobbed., mobbed by a magpie	PW
SH019	VP1	21/09/2020	10:46	Sparrowhawk	1	21	0	1	20	0	conifer plantation; flying and gliding, flying and gliding over trees before diving into forestry.	PW
SH020	VP1	21/09/2020	11:09	Sparrowhawk	1	33	0	0	33	0	conifer plantation; flying and being mobbed., flying being mobbed by a rook before dropping down out of view.	PW
SH021	VP1	21/09/2020	11:59	Sparrowhawk	1	261	0	0	68	193	conifer plantation; soaring and flying, soaring among 4 ravens before flying off above PCH into distance at height out of view.	PW

Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
SH026	VP1	19/11/2020	08:56	Sparrowhawk	1	98	0	2	96	0	conifer plantation; flying, dropped into trees out of view.	PW
SH027	VP1	19/11/2020	07:54	Sparrowhawk	1	41	0	41	0	0	conifer plantation and wet grassland; flying, hunting fast along forest edge	PW
SH028	VP1	19/11/2020	07:57	Sparrowhawk	1	154	0	0	154	0	conifer plantation; flying	PW
SH029	VP1	19/11/2020	09:56	Sparrowhawk	1	8	0	0	8	0	conifer plantation; flying, mobbed by hooded crow, lost from view behind treeline.	PW
SH030	VP1	19/11/2020	11:14	Sparrowhawk	1	1179	0	0	939	240	conifer plantation and improved agricultural grassland; flying, mobbed by 2 hooded crows for last 400s. descended below treeline out of view.	PW
SH033	VP1	11/12/2020	10:53	Sparrowhawk	1	112	0	4	108	0	conifer plantation; flying circling, dropped down below treeline out of view.	PW
SH034	VP1	11/12/2020	11:56	Sparrowhawk	2	251	0	3	248	0	conifer plantation; flying, mobbing each other before separating and circling over forestry before dropping below treeline out of view.	PW
SH035	VP1	11/12/2020	11:56	Sparrowhawk	2	251	0	3	248	0	conifer plantation; flying, mobbing each other before separating and circling over forestry before dropping below treeline out of view.	PW
SH036	VP1	11/12/2020	13:22	Sparrowhawk	1	264	0	0	264	0	conifer plantation; flying, being mobbed constantly by hooded crow.	PW
SH037	VP1	11/12/2020	13:26	Sparrowhawk	1	30	0	0	30	0	conifer plantation; flying	PW
SH043	VP1	15/01/2021	13:28	Sparrowhawk	1	60	0	0	60	0	conifer plantation; circling flying, over forestry. possibly flushed kestrel as spotted when kestrel had flown from perch. dropped out of sight into forestry.	PW
SH045	VP1	15/02/2021	13:33	Sparrowhawk	1	254	0	18	236	0	conifer plantation; flying, circling, soaring, flying and then circling soaring before flying on out of view behind forestry.	PW
SH050	VP1	07/04/2021	15:36	Sparrowhawk	1	195	0	0	195	0	conifer plantation; circling soaring.	PW

Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
SH053	VP1	17/05/2021	09:32	Sparrowhawk	1	26	0	0	26	0	conifer plantation; flying before dropping down into forestry.	PW
SH055	VP1	14/09/2021	14:33	Sparrowhawk	1	54	21	19	4	0	improved agricultural grassland, hedgerows and conifer plantation; hunting flying after go flock., male. flew in low over field to flush go flock of about 40 birds feeding on thistles. looped around and then descended again flying low along road at forest edge out of view.	PW
SH056	VP1	14/09/2021	15:30	Sparrowhawk	1	3	0	0	0	0	recolonising bare ground, hedgerows and buildings and artificial surfaces; hunting flying., briefly spotted as large flock of go flushed from this area, before it dropped down out of view.	PW
SH057	VP1	21/10/2021	08:03	Sparrowhawk	1	20	0	20	0	0	mixed conifer woodland; flying north over forestry, female	SP
SH058	VP1	21/10/2021	08:19	Sparrowhawk	1	10	10	0	0	0	Mixed conifer woodland; flying north fast over forestry, female	SP
SH060	VP1	18/11/2021	12:56	Sparrowhawk	1	12	12	0	0	0	improved agricultural grassland and conifer plantation; travelling	JM
SH062	VP1	10/12/2021	09:40	Sparrowhawk	1	31	31	0	0	0	improved agricultural grassland and conifer plantation; travelling	JM
SH068	VP1	16/03/2022	15:09	Sparrowhawk	1	35	30	5	0	0	improved agricultural grassland; travelling	JM

Table 7-4-10- 2 Sparrowhawk Breeding Walkover Survey Data

Breeding Walkover Surveys						
Ref.	Date	Time	Species	Number	Habitat and activity	Surveyor
SH005	21/04/2021	10:34	Sparrowhawk	1	conifer plantation; flying., flew low about 2m from recently felled clearfelled areas into mature forestry. (suitable nesting habitat; possible breeder)	PW
SH006	21/04/2021	11:34	Sparrowhawk	1	conifer plantation; circling soaring, flying. (suitable nesting habitat; possible breeder)	PW
SH007	21/04/2021	14:00	Sparrowhawk	1	conifer plantation; circling. (flyover; non-breeding)	PW
SH008	18/05/2021	11:10	Sparrowhawk	1	conifer plantation and improved agricultural grassland; circling soaring hunting., briefly mobbed by hooded crow (suitable nesting habitat; possible breeder)	PW
SH011	26/07/2021	09:57	Sparrowhawk	1	conifer plantation and improved agricultural grassland; flying through recently thinned forestry. (suitable nesting habitat; possible breeder)	PW

Table 7-4-10- 3 Sparrowhawk Breeding Raptor Survey Data

Breeding Raptor Surveys								
Ref.	BR	Date	Time	Species	Number	Habitat and activity	Breeding status	Surveyor
SH001	BRVP1	24/05/2020	09:11	Sparrowhawk	1	conifer plantation, soaring	suitable nesting habitat; possible breeder	PW
SH003	BRVP1	01/06/2020	17:52	Sparrowhawk	1	improved agricultural grassland, hedgerows and conifer plantation, soaring	pair; probable breeding	PW
SH004	BRVP1	01/06/2020	17:56	Sparrowhawk	1	improved agricultural grassland, soaring	pair; probable breeding	PW
SH005	BRVP1	01/06/2020	18:02	Sparrowhawk	1	conifer plantation, soaring and circling	suitable nesting habitat; possible breeder	PW
SH006	BRVP2	02/06/2020	16:57	Sparrowhawk	1	improved agricultural grassland and hedgerows, soaring	suitable nesting habitat; possible breeder	PW
SH007	BRVP2	02/06/2020	17:44	Sparrowhawk	1	improved agricultural grassland, conifer plantation and hedgerows, soaring	suitable nesting habitat; possible breeder	PW
SH008	BRVP4 & BRVP5	02/07/2020	12:03	Sparrowhawk	1	improved agricultural grassland, circling	flyover; non-breeding	PW

Breeding Raptor Surveys								
Ref.	BR	Date	Time	Species	Number	Habitat and activity	Breeding status	Surveyor
SH009	BRVP1 & BRT4	15/07/2020	11:25	Sparrowhawk	1	conifer plantation, gliding along edge of forestry out of view	flyover; non-breeding	PW
SH010	BRVP1 & BRT4	15/07/2020	13:03	Sparrowhawk	1	conifer plantation, flying, adult male	suitable nesting habitat; possible breeder	PW
SH011	BRVP1 & BRT4	15/07/2020	13:12	Sparrowhawk	1	improved agricultural grassland, flying, perched	suitable nesting habitat; possible breeder	PW
SH012	BRVP2 & BRT3	20/07/2020	09:13	Sparrowhawk	1	conifer plantation, flying	flyover; non-breeding	PW
SH013	BRVP2 & BRT3	20/07/2020	09:45	Sparrowhawk	1	improved agricultural grassland and hedgerows, circling, flying, soaring	pair; probable breeding	PW
SH017	BRVP1	13/05/2021	12:30	Sparrowhawk	1	improved agricultural grassland, hedgerows and wet grassland, circling, flying, soaring	suitable nesting habitat; possible breeder	PW

Table 7-4-10- 4 Sparrowhawk Winter Walkover Survey Data

Winter Walkover Surveys							
Ref.	Date	Time	Species	Number	Habitat and activity	Surveyor	
SH001	14/01/2021	11:07	Sparrowhawk	1	wet grassland, scrub and conifer plantation; hunting soaring and mobbing., male. was mobbed by hooded crow before it mobbed a kestrel itself. dropped into forestry out of view. in view for 120s. (wintering)	PW	
SH002	12/02/2021	11:07	Sparrowhawk	1	conifer plantation and wet grassland; hunting flying, flying at 5m hugging forest edge. in view for 3s. (wintering)	PW	
SH004	27/10/2021	15:10	Sparrowhawk	1	improved agricultural grassland, wet grassland and hedgerows; hunting, t2 female (wintering)	SP	
SH005	12/01/2022	15:25	Sparrowhawk	1	conifer plantation and recently felled woodland; travelling, female carrying prey (wintering)	JM	

Table 7-4-10-5 Sparrowhawk Incidental Observation

Incidental Observations							
Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
SH001	Breeding Raptor Survey;	19/05/2020	18:17	Sparrowhawk	1	flying below PCH west-east across forestry/clearfelled areas, 30 seconds	PW
SH002	Waterbird Distribution Survey; East of Tullouoneen Crossroads	18/08/2020		Sparrowhawk	1	hedgerows; hunting along WL1.	PW
SH003	Waterbird Distribution Survey; The Butts	18/08/2020	10:45	Sparrowhawk	1	improved agricultural grassland and hedgerows; hunting over GA1 and WL1 near the buzzards, began to mob one of the buzzards then.	PW
SH004	Waterbird Distribution Survey; Annagar/Coorleagh	18/09/2020	12:51	Sparrowhawk	1	conifer plantation; perched on road, flew to WD4 and then across forest path into wood before survey commenced.	PW
SH005	Waterbird Distribution Survey; Annagar	18/09/2020	13:28	Sparrowhawk	1	flying	PW
SH006	Waterbird Distribution Survey; Milford Weir	12/10/2020	12:52	Sparrowhawk	1	depositing/lowland rivers; flying	PW
SH007	Hen Harrier Roost Survey; HHVP1	18/11/2020	15:33	Sparrowhawk	1	conifer plantation; flying low hunting over young forestry	PW
SH008	Hen Harrier Roost Survey; HHVP1	18/11/2020	16:20	Sparrowhawk	1	conifer plantation; flying hunting low over treetops	PW
SH009	Waterbird Distribution Survey; Seskinrea	04/12/2020	15:50	Sparrowhawk	1	improved agricultural grassland, hedgerows and wet grassland; flying hunting, female	PW
SH010	Hen Harrier Roost Survey; HHVP2	23/12/2020	15:14	Sparrowhawk	1	conifer plantation and dry calcareous and neutral grassland; hunting flying, flying low over treetops and along edge of forestry. 39s in flight in view.	PW
SH011	Hen Harrier Roost Survey; HHVP2	23/12/2020	15:34	Sparrowhawk	1	conifer plantation; flying, rose up out of forestry gaining height before dropping back down again out of view.	PW
SH012	Hen Harrier Roost Survey; HHVP1	06/01/2021	15:37	Sparrowhawk	1	conifer plantation; flying, male in view in flight for 84s.	PW
SH013	Waterbird Distribution Survey; Cloghna	09/08/2021	12:44	Sparrowhawk	1	hedgerows, arable crops and improved agricultural grassland; perched in ash tree on lane before flying over fields.	PW
SH014	Waterbird Distribution Survey; Cloydagh	27/09/2021	16:33	Sparrowhawk	1	improved agricultural grassland, hedgerows and conifer plantation; circling hunting.	PW

Incidental Observations							
Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
SH015	Waterbird Distribution Survey; Knockbaun	19/10/2021	14:10	Sparrowhawk	1	conifer plantation and improved agricultural grassland; hunting (male)	SP
SH016	Waterbird Distribution Survey; Knockbaun	19/10/2021	14:30	Sparrowhawk	1	conifer plantation and improved agricultural grassland; female being mobbed by hooded crows	SP
SH017	Vantage Point Survey; Castlewarren area	11/01/2022	11:58	Sparrowhawk	1	improved agricultural grassland, hedgerows and scattered trees and parkland; travelling	JM
SH018	Waterbird Distribution Survey; The Butts	11/01/2022	12:56	Sparrowhawk	1	improved agricultural grassland; flying/travelling, female	JM
SH019	Hen Harrier Roost Survey; HHVP4 Lackan	11/01/2022	16:08	Sparrowhawk	1	improved agricultural grassland, conifer plantation and hedgerows; flying/travelling	JM
SH020	Hen Harrier Roost Survey; Knockagarry	13/02/2022	17:39	Sparrowhawk	1	immature woodland and conifer plantation; travelling	JM
SH021	Waterbird Distribution Survey; Old Leighlin	21/04/2022	11:45	Sparrowhawk	1	conifer plantation; perched	CB
SH022	Waterbird Distribution Survey; Old Leighlin	21/04/2022	11:46	Sparrowhawk	1	conifer plantation; travelling	CB

Table 7-4-10- 6 Sparrowhawk Supplementary Vantage Point Survey Data

Supplementary Vantage Point Survey Data												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
SH003	VP2	18/04/2020	06:22	Sparrowhawk	1	10	10	0	0	0	improved agricultural grassland, hedgerows and treelines; perched on gate at bend in road, flushed and flew down road along WL1 before lost from view	PW
SH004	VP2	06/05/2020	16:08	Sparrowhawk	1	120	0	13	107	0	conifer plantation, treelines and improved agricultural grassland; gliding down over WD4 to below PCH over farmland before rising and soaring	PW
SH005	VP2	06/05/2020	19:45	Sparrowhawk	1	5	5	0	0	0	improved agricultural grassland, scrub and spoil and bare ground; flew low and fast across GA1 to scrub and quarry where it	PW

Supplementary Vantage Point Survey Data												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
											disappeared. it flushed starlings and woodpigeons	
SH008	VP2	23/06/2020	15:18	Sparrowhawk	1	35	7	28	0	0	conifer plantation, hedgerows and improved agricultural grassland; male flew out of wood, low	PW
SH009	VP2	23/06/2020	16:00	Sparrowhawk	3	100	0	100	20	0	conifer plantation, improved agricultural grassland and hedgerows; female flew from nest site dropping off food to WD4 and out of view	PW
SH011	VP2	05/09/2020	06:46	Sparrowhawk	1	2	2	0	0	0	improved agricultural grassland and conifer plantation; flying, being mobbed by a hooded crow.	PW
SH012	VP2	05/09/2020	06:48	Sparrowhawk	1	5	5	0	0	0	improved agricultural grassland and conifer plantation; flying, being mobbed by a hooded crow	PW
SH013	VP2	05/09/2020	07:57	Sparrowhawk	1	7	7	0	0	0	improved agricultural grassland and hedgerows; flying,	PW
SH015	VP2	05/09/2020	09:53	Sparrowhawk	1	150	13	137	0	0	improved agricultural grassland and conifer plantation; flying and circling, flying, and circling low down in wind being mobbed by a hooded crow	PW
SH016	VP2	05/09/2020	10:39	Sparrowhawk	1	153	0	18	125	0	improved agricultural grassland and conifer plantation; circling	PW
SH022	VP2	14/10/2020	15:22	Sparrowhawk	1	10	0	0	10	0	conifer plantation and wet grassland; flying, mobbing and being mobbed by hooded crow	PW
SH023	VP2	17/11/2020	08:50	Sparrowhawk	1	11		11	0	0	improved agricultural grassland and conifer plantation; flying	PW
SH024	VP2	17/11/2020	08:59	Sparrowhawk	2	38	0	0	68	0	wet grassland and conifer plantation; flying, briefly mobbing each other	PW
SH031	VP2	10/12/2020	14:22	Sparrowhawk	1	83	15	34	34	0	improved agricultural grassland and hedgerows; flying, female, being mobbed by hooded crow	PW
SH032	VP2	10/12/2020	14:22	Sparrowhawk	1	83	15	34	34	0	improved agricultural grassland and hedgerows; flying, female, being mobbed by hooded crow	PW

Supplementary Vantage Point Survey Data												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
SH038	VP2	13/01/2021	08:59	Sparrowhawk	1	22	0	0	22	0	conifer plantation; flying	PW
SH039	VP2	13/01/2021	11:53	Sparrowhawk	1	3	0	3	0	0	conifer plantation; mobbing, mobbing hooded crow, dived down below treeline out of view.	PW
SH040	VP2	13/01/2021	11:55	Sparrowhawk	1	9	0	0	9	0	conifer plantation; flying, flying lower PCH over treetops.	PW
SH041	VP2	13/01/2021	12:01	Sparrowhawk	1	87	0	0	87	0	conifer plantation; flying	PW
SH042	VP2	13/01/2021	12:17	Sparrowhawk	1	10	0	10	0	0	scrub, improved agricultural grassland and conifer plantation; flying	PW
SH048	VP2	30/03/2021	14:25	Sparrowhawk	1	195	0	0	135	60	conifer plantation; soaring flying., flying at height close to 3 buzzards before moving off in other direction.	PW
SH049	VP2	30/03/2021	15:25	Sparrowhawk	1	110	0	0	110	0	conifer plantation; circling soaring.	PW
SH051	VP2	14/04/2021	17:12	Sparrowhawk	1	241	0	0	221	0	conifer plantation, improved agricultural grassland and treelines; hunting flying circling., female.	PW
SH052	VP2	14/05/2021	07:14	Sparrowhawk	1	4	4	0	0	0	hedgerows, improved agricultural grassland and scrub; flying hunting along road., flying low and fast hugging road.	PW
SH054	VP2	01/06/2021	15:23	Sparrowhawk	1	21	0	21	0	0	improved agricultural grassland, hedgerows and conifer plantation; flying and calling., female. lost from view behind treeline. could still be heard calling briefly as it moved off.	PW
SH059	VP2	15/11/2021	11:08	Sparrowhawk	1	10	10	0	0	0	improved agricultural grassland and conifer plantation; travelling	JM
SH061	VP2	08/12/2021	09:13	Sparrowhawk	1	15	15	0	0	0	improved agricultural grassland and hedgerows; travelling, female	JM
SH063	VP2	18/01/2022	11:31	Sparrowhawk	1	51	11	40	0	0	conifer plantation and improved agricultural grassland; travelling	JM
SH064	VP2	18/01/2022	12:09	Sparrowhawk	1	12	10	2	0	0	conifer plantation and improved agricultural grassland; travelling	JM

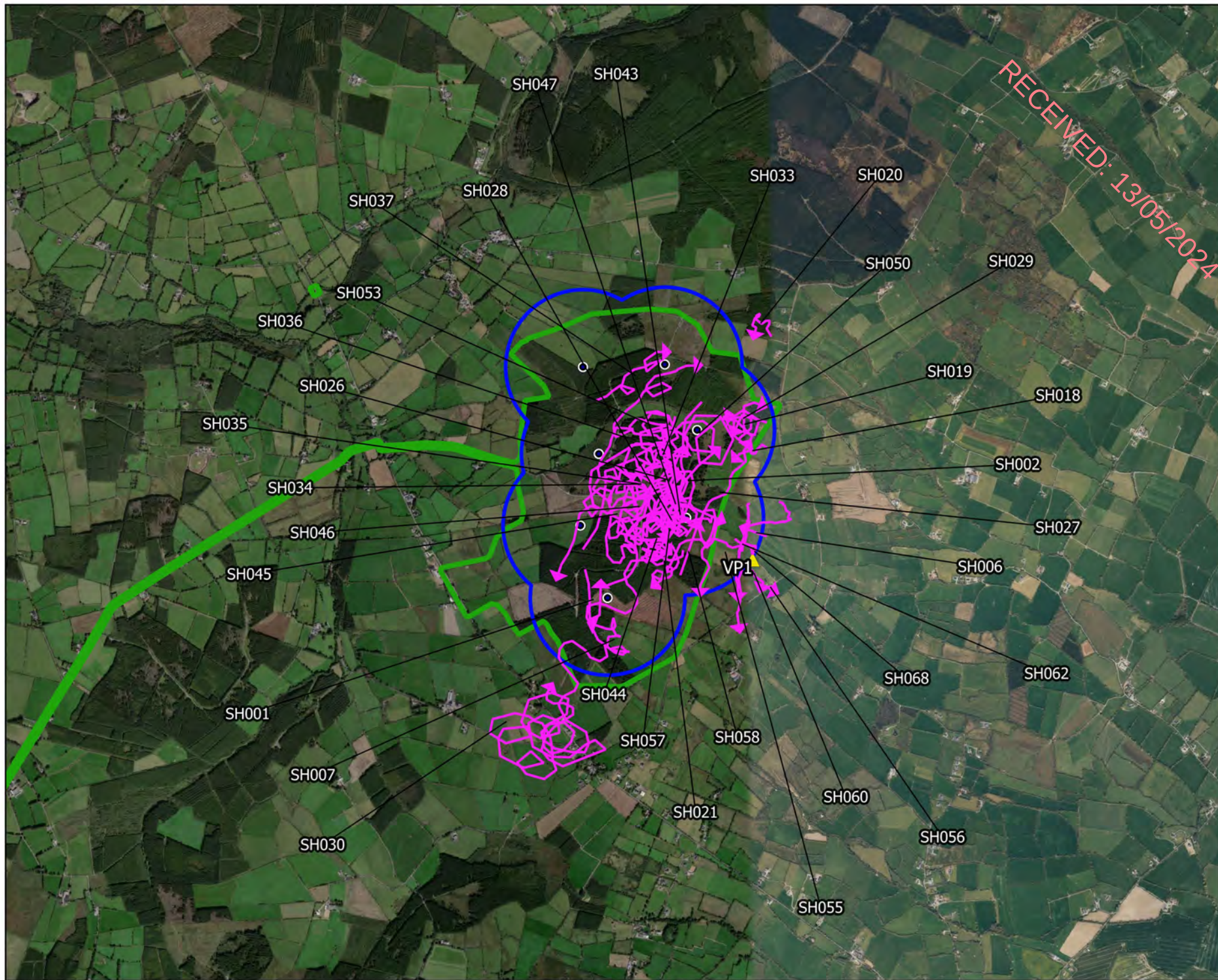
Supplementary Vantage Point Survey Data												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
SH065	VP2	18/01/2022	13:25	Sparrowhawk	1	70	40	20	10	0	conifer plantation and improved agricultural grassland; traveling, displaying	JM
SH066	VP2	01/02/2022	13:01	Sparrowhawk	1	10	10	0	0	0	improved agricultural grassland; travelling	JM
SH067	VP2	10/03/2022	17:26	Sparrowhawk	1	5	5	0	0	0	improved agricultural grassland; travelling, male	JM

Table 7-4-10- 7 Sparrowhawk Supplementary Breeding Walkover Survey Data

Supplementary Breeding Walkover Surveys						
Ref.	Date	Time	Species	Number	Habitat and activity	Surveyor
SH001	19/05/2020	18:17	Sparrowhawk	1	conifer plantation; flying below PCH west to east across 2nd conifer forestry 30secs (suitable nesting habitat; possible breeder)	PW
SH003	22/07/2020	09:31	Sparrowhawk	1	conifer plantation; one bird flew up (suitable nesting habitat; possible breeder)	PW
SH009	18/05/2021	13:13	Sparrowhawk	1	conifer plantation; hunting by flying circling low then soaring high and flying on. (suitable nesting habitat; possible breeder)	PW
SH010	18/05/2021	13:14	Sparrowhawk	1	conifer plantation; hunting circling., being mobbed by hooded crow. second sparrowhawk in view at the time. (suitable nesting habitat; possible breeder)	PW

Table 7-4-10- 8 Sparrowhawk Supplementary Winter Walkover Survey Data

Supplementary Winter Walkover Surveys						
Ref.	Date	Time	Species	Number	Habitat and activity	Surveyor
SH003	12/02/2021	14:10	Sparrowhawk	1	conifer plantation; circling low over forestry. hunting., dropped below treeline out of view after 36s. (wintering)	PW



Map Legend

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



Drawing Title:

Vantage Point Survey
Sparrowhawk Observations

Project Title:

Seskin Wind Farm, Co. Carlow

Drawn By:

D. Woods

Checked By:

P. Cregg

Project No.:

220246

Drawing No.:

Fig. 7.4.10.1

Scale:

1:32000

Date:

03.11.23



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Map Legend

-  EIAR Site Boundary
-  Turbine Layout
-  500m Survey Area
-  Flight Observation



Drawing Title

**Breeding Walkover Survey
Sparrowhawk Observations**

Project Title

Seskin Wind Farm, Co. Carlow

Drawn By

D. Woods

Checked By

P. Clegg

Project No.

220246

Drawing No.

Fig. 7.4.10.2

Scale

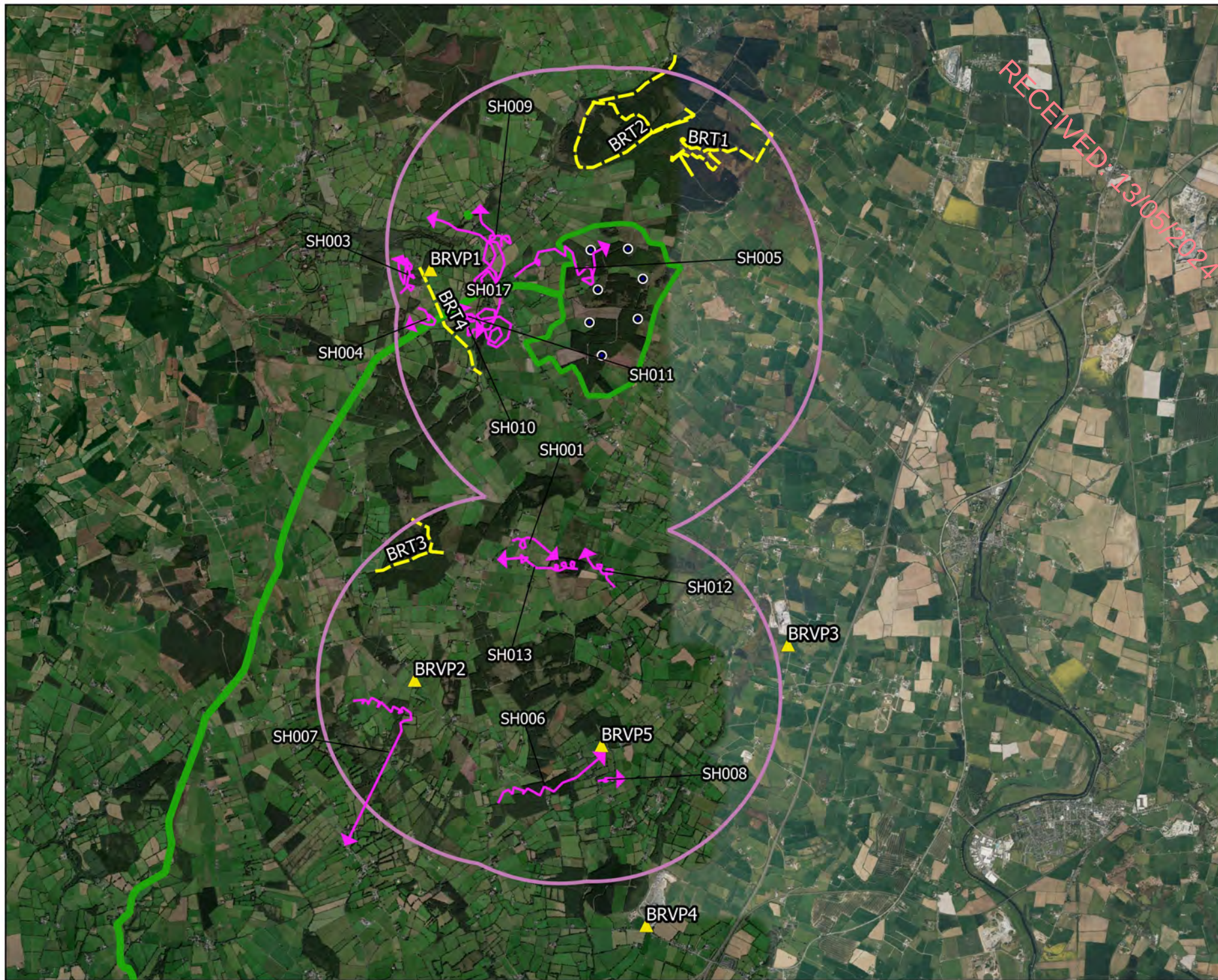
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- Map Legend**
- EIAR Site Boundary
 - Turbine Layout
 - BRVP Locations
 - BR Transect Locations
 - 2km Buffer of Site Boundary
 - Flight Observation



Drawing Title

**Breeding Raptor Survey
Sparrowhawk Observations**

Project Title

Seskin Wind Farm, Co. Carlow

Drawn By

D. Woods

Checked By

P. Cregg

Project No.

220246

Drawing No.

Fig. 7.4.10.3

Scale

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Date

03.11.23



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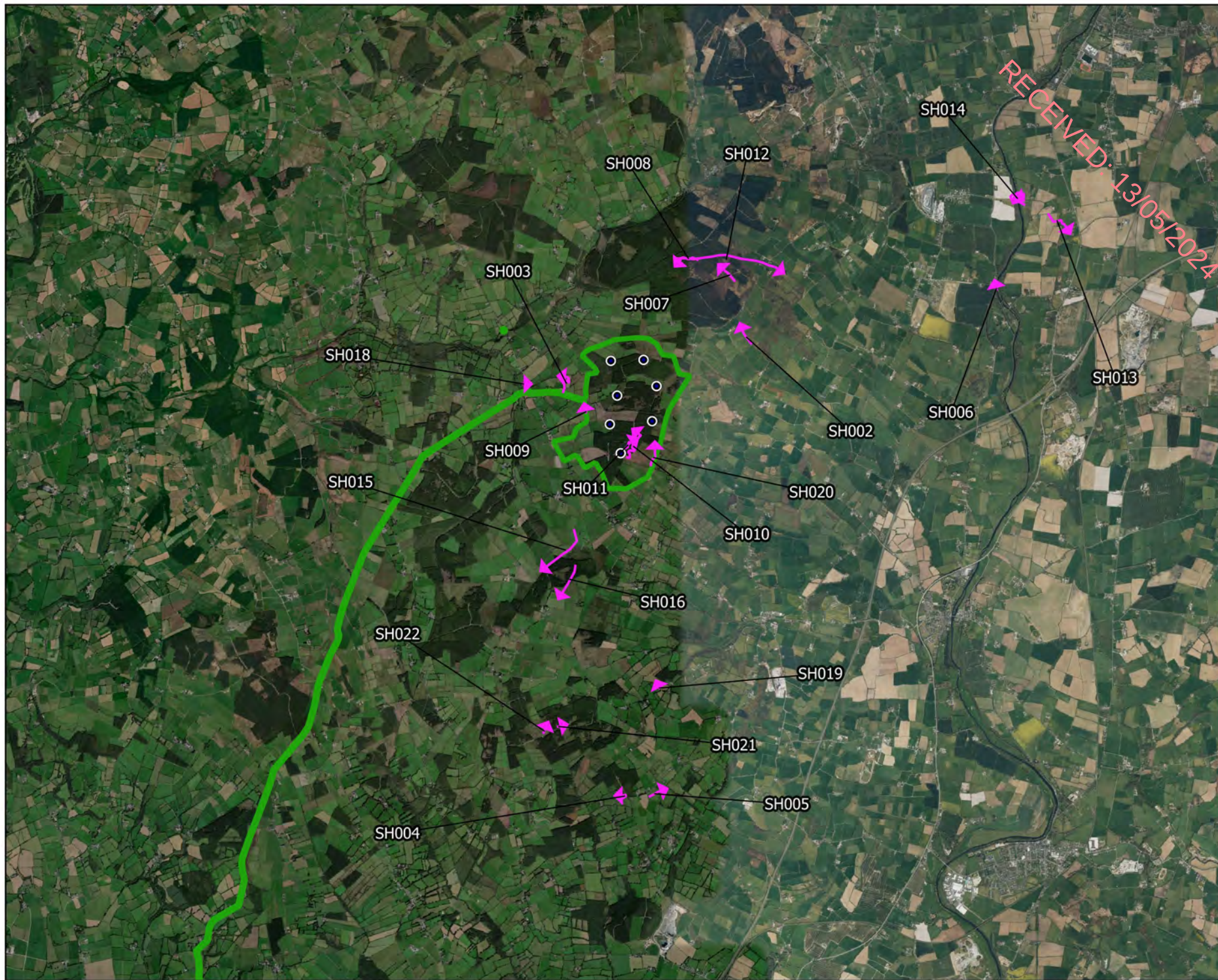


Map Legend

-  EIAR Site Boundary
-  Turbine Layout
-  500m Survey Area
-  Flight Observation



Drawing Title: Winter Walkover Survey Sparrowhawk Observations	
Project Title: Seskin Wind Farm, Co. Carlow	
Drawn By: D. Woods	Checked By: P. Cregg
Project No.: 220246	Drawing No.: Fig. 7.4.10.4
Scale: 1:25000	Date: 03.11.23
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Map Legend

- EIAR Site Boundary
- Turbine Layout
- Flight Observation



Drawing Title

**Incidental Sparrowhawk
Observations**

Project Title

Seskin Wind Farm, Co. Carlow

Drawn By

D. Woods

Checked By

P. Cregg

Project No.

220246

Drawing No.

Fig. 7.4.10.5

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Map Legend

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

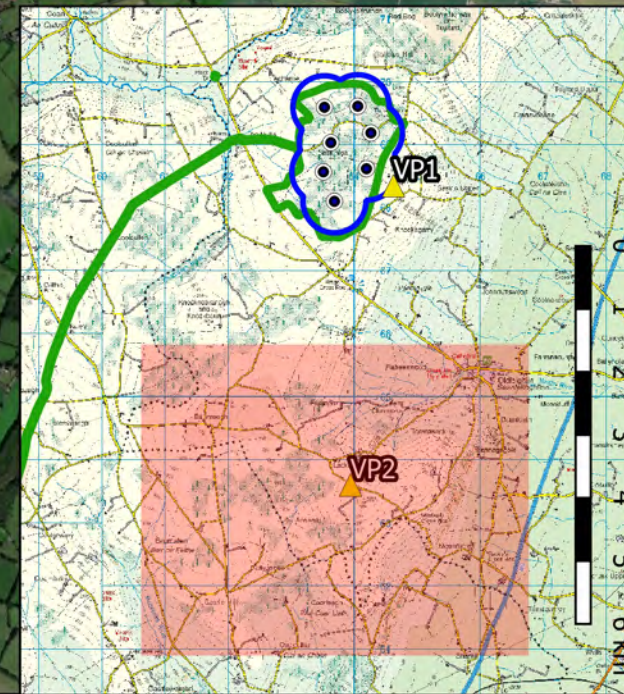


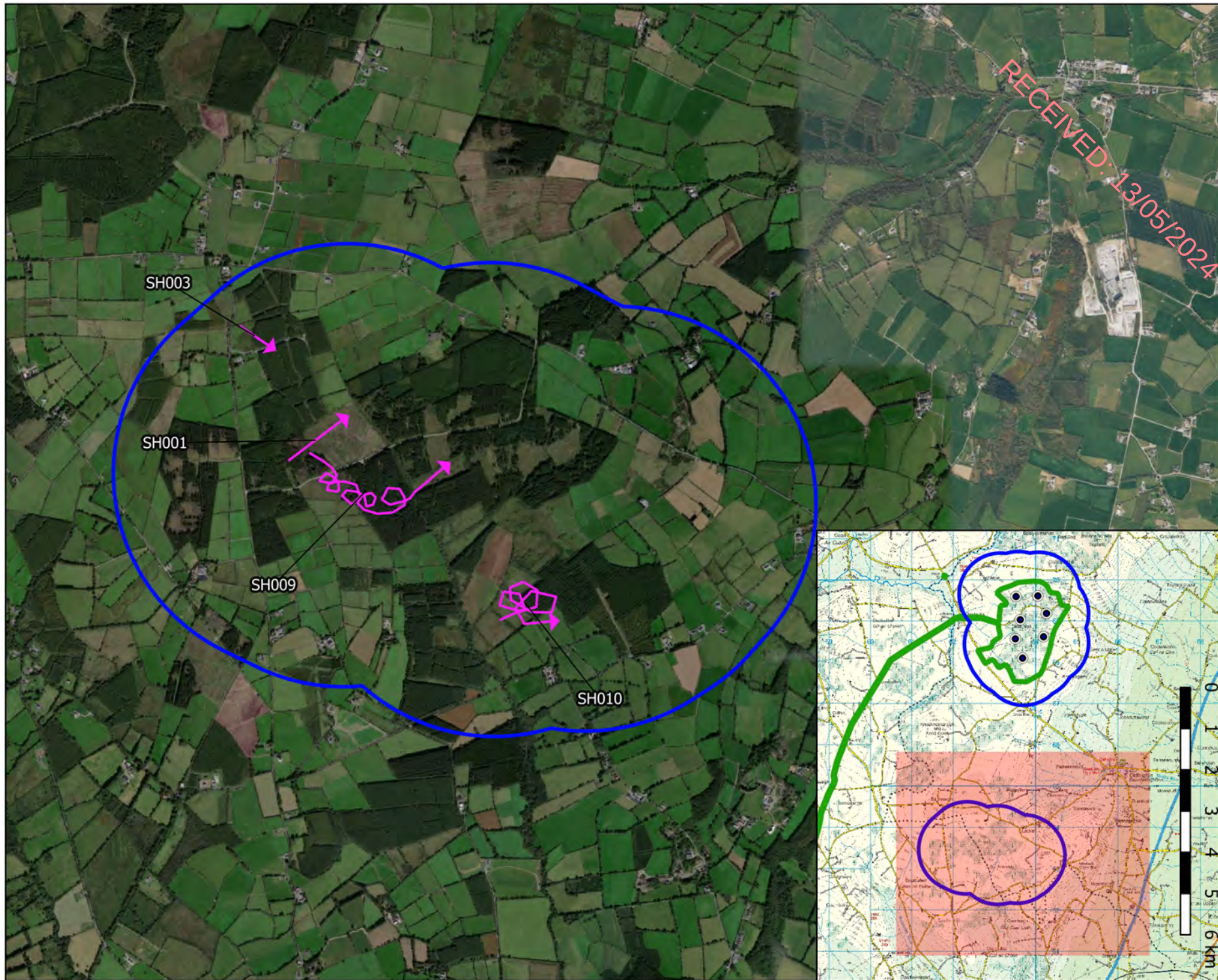
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Supplementary Vantage Point Survey
Sparrowhawk Observations

Project Title
Seskin Wind Farm, Co. Carlow

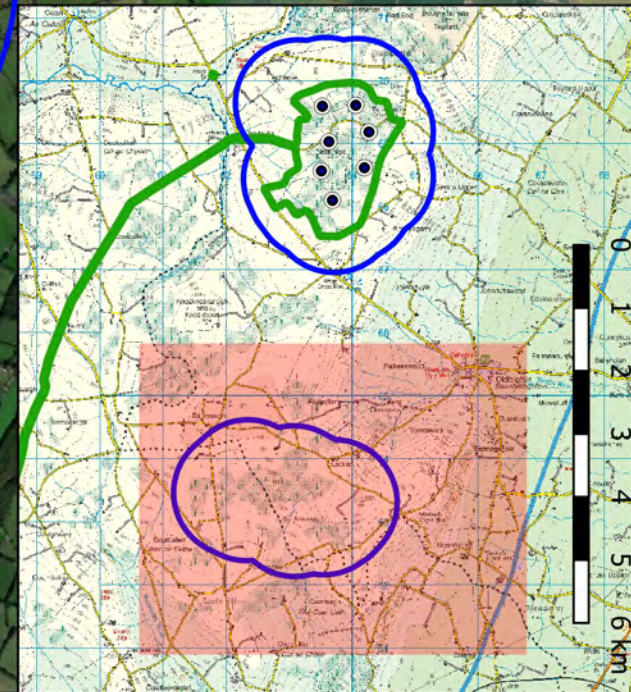
Drawn By D. Woods	Checked By P. Cregg
Project No. 220246	Drawing No. Fig. 7.4.8.6
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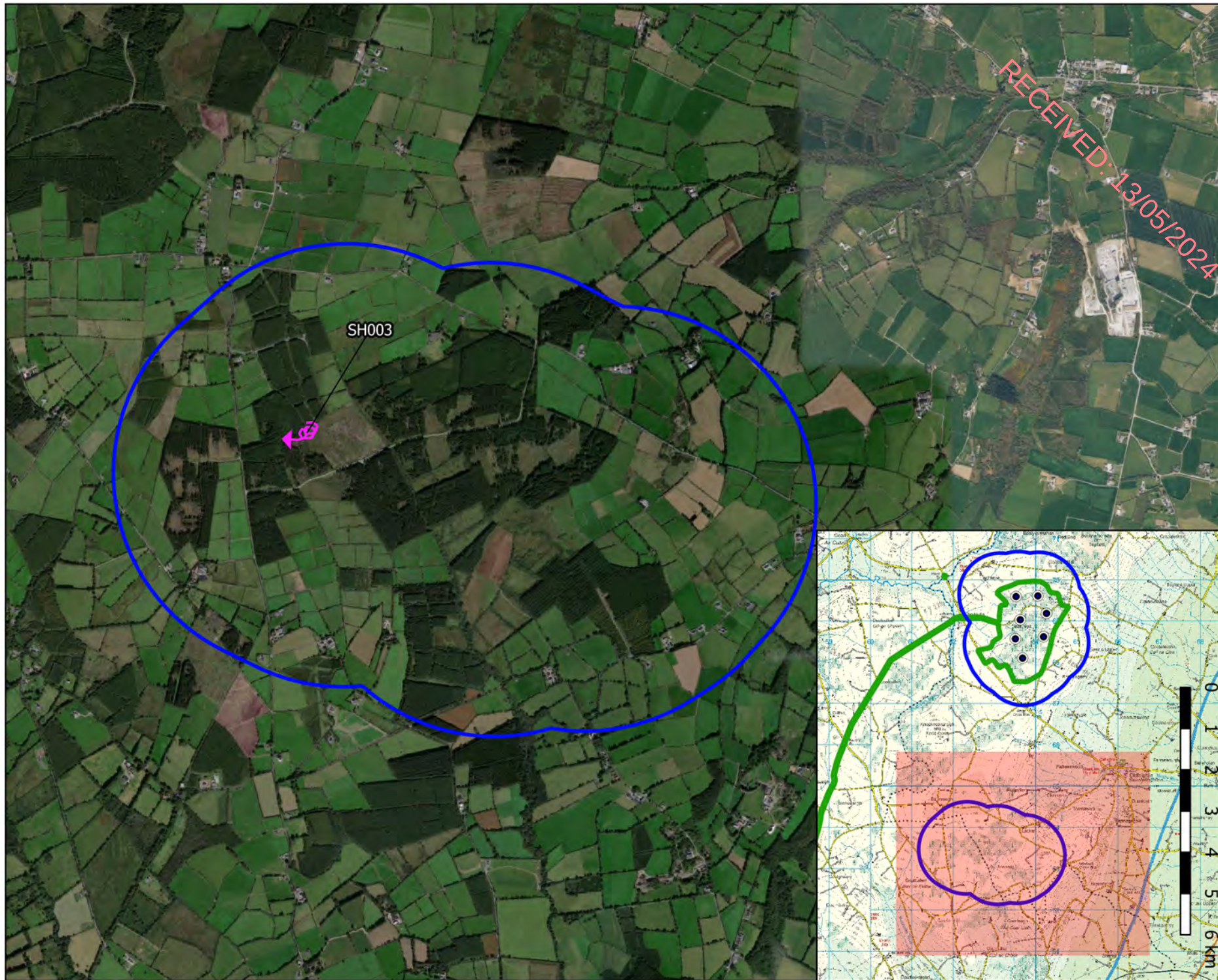


- ### Map Legend
- EIAR Site Boundary
 - Turbine Layout
 - 500m Survey Area
 - Flight Observation



Drawing Title	
Supplementary Breeding Walkover Survey Sparrowhawk Observations	
Project Title	
Seskin Wind Farm, Co. Carlow	
Drawn By	Checked By
D. Woods	P. Cregg
Project No.	Drawing No.
220246	Fig. 7.4.10.7
Scale	Date
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Map Legend

- EIAR Site Boundary
- Turbine Layout
- 500m Survey Area
- Flight Observation



Drawing Title	
Supplementary Winter Walkover Survey Sparrowhawk Observations	
Project Title	
Seskin Wind Farm, Co. Carlow	
Drawn By	Checked By
D. Woods	P. Cregg
Project No.	Drawing No.
220246	Fig. 7.4.10.8
Scale	Date
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