



The Sizewell C Project

6.3 Volume 2 Main Development Site Chapter 16 Terrestrial Historic Environment Appendices 16A - 16H - Part 1 of 3

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VOLUME 2, CHAPTER 16, TERRESTRIAL HISTORIC ENVIRONMENT, APPENDICES 16A – 16H

Documents included in Part 1 are:

APPENDIX 16A: GAZETTEER OF HERITAGE ASSETS

APPENDIX 16B: UPDATED HISTORIC ENVIRONMENT DESK BASED ASSESSMENT

APPENDIX 16C: GEOPHYSICAL SURVEY REPORTS



VOLUME 2, CHAPTER 16, APPENDIX 16A : GAZETTEER OF HERITAGE ASSETS

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None provided.

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None provided.

1. Gazetteer of Heritage Assets

Table 1.1: Listed buildings within study area.

Historic England List Entry.	Name	Grade	Easting	Northing
1215702	Thorpeness Mill.	II	646808	259840
1215753	St Mary's Abbey.	I	644521	264174
1215754	Retreat.House	II	644468	264172
1216380	Barn at Abbey Farm.	II	644442	264252
1216394	Upper Abbey Farmhouse.	II	645295	264573
1216395	Cottage 450 metres south-west of Upper Abbey Farmhouse.	II	644902	264420
1216655	Barn 40 Metres north of Upper Abbey Farmhouse.	II	645312	264606
1228262	The Cottage.	II	644676	265713
1228263	Flash Cottages.	II	644646	265705
1228265	Woodview	II	644673	265857
1228267	Potter's Farmhouse.	II	644984	265188
1228271	Ogilvie Almshouses.	II	647200	259930
1228493	3, Westgate.	II	647190	259798
1228496	1, The Whinlands.	II	647122	259755
1228498	8, The Whinlands.	II	647162	259839
1228546	6 and 7, The Whinlands.	II	647153	259820
1228553	9 and 10, The Whinlands.	II	647168	259849
1247244	Number 3 and attached walls to north and east and south including garage.	II	646360	256736
1268290	The Guesten Hall at Abbey Farm.	II	644412	264266
1269690	Group of seven chest tombs approximately Seven Metres east of chancel of Church of St Peter and St Paul.	II	646366	256848
1269691	Group of three chest tombs approximately 11m south-east of Church of St Peter and St Paul.	II	646379	256847
1269692	Lifeboat disaster monument approximately Eighty Five Metres north-east of the Church of St Peter and St Paul.	II	646435	256906
1269693	Monument approximately three	II	646345	256872

NOT PROTECTIVELY MARKED

Historic England List Entry.	Name	Grade	Easting	Northing
	metres west of north vestry of Church of St Peter and St Paul.			
1269694	Mill Inn.	II	646526	256856
1269695	Uplands Hotel.	II	646272	256832
1269696	North House.	II	646542	257075
1269697	Tiffany House.	II	646530	256879
1269698	Garden House fifty metres west of Tiffany House (Number Three).	II	646507	257086
1269711	Red House.	II	645468	257880
1269712	8-14, Market Cross Place.	II	646542	256940
1269713	White Lion Hotel.	II	646538	256908
1269714	Market Cross House.	II	646535	256884
1269715	Moot House.	II	646529	256873
1269716	Moot Hall.	I	646552	256862
1269717	Oakley House.	II	646509	256547
1269718	Priors Hill.	II	646073	256478
1269719	Dolphin House.	II	645958	256537
1269720	Sandhill	II	645960	256478
1269722	Water Tower.	II	646050	256564
1269723	Aldeburgh Hall.	II	645704	257110
1269724	Martello Tower.	II*	646295	254908
1269725	1 and 3, Town Steps.	II	646442	256598
1269726	2-10, Town Steps.	II	646446	256583
1269727	Cherry Cottage.	II	646426	256608
1269728	Water pump.	II	646420	256593
1269729	Wyndham House.	II	646464	256874
1269730	Church Farmhouse.	II	646217	256898
1269731	Church of St Peter and St Paul.	II*	646351	256851
1269732	Bell Cottage.	II	646452	256610
1269733	Dart Cottage.	II	646446	256597
1269734	Aldeburgh Pharmacy.	II	646443	256520
1269735	Old Cottage.	II	646479	256478
1269736	The Suffolk.	II	646485	256470
1269737	170 and 172, High Street.	II	646471	256414

NOT PROTECTIVELY MARKED

Historic England List Entry.	Name	Grade	Easting	Northing
1269738	Lewis House.	II	646434	256378
1269739	Numbers 213A and 215 incorporating number 213.	II	646413	256251
1269740	Dutch Flat.	II	646408	256235
1269741	White Hart Inn.	II	646448	256272
1269742	The Old Custom House.	II	646413	256225
1269743	Lavender Cottage.	II	646409	256216
1269744	229 and 229A, High Street.	II	646404	256206
1269745	End Cottage.	II	646402	256189
1269746	Cranstons	II	646393	256176
1269749	259, High Street.	II	646391	256110
1269750	267,269,271, High Street.	II	646388	256083
1269751	Union Baptist Chapel including forecourt railings, gates and gate piers.	II	646424	256431
1269752	Half Crown Cottage.	II	646479	256173
1269764	Alde House.	II	646230	256629
1269765	Adair Lodge.	II	646422	256744
1269766	Thelluson Lodge.	II	646406	256810
1269767	Swiss Cottage.	II	646515	256829
1269768	Cross Keys Inn.	II	646504	256620
1269769	Ocean Strand.	II	646522	256638
1269770	Stafford House.	II	646490	256356
1269771	The North Lookout.	II	646538	256567
1269772	The South Lookout.	II	646516	256371
1269773	Crespigny House.	II	646387	256313
1269774	84, High Street.	II	646484	256654
1287172	Westbar	II	647227	259759
1287190	Cherleigh	II	647170	259809
1287214	Church of St Mary.	II	647342	259824
1287261	House in the Clouds.	II	646849	259876
1287262	2, Westgate.	II	647178	259804
1380274	The Studio.	II	650776	276010
1384310	Old Water Tower.	II	650202	276256

NOT PROTECTIVELY MARKED

Historic England List Entry.	Name	Grade	Easting	Northing
1384311	15 and 16, Barnaby Green.	II	650525	276391
1384312	17, Barnaby Green.	II	650526	276377
1384313	1 and 2, Bartholomew Green.	II	650693	276318
1384314	3 and 4, Bartholomew Green.	II	650693	276330
1384315	5 and 6, Bartholomew Green.	II	650692	276346
1384316	Iona	II	650697	276360
1384317	Vanessa Villa.	II	650694	276367
1384318	Oak Cottage.	II	650758	276311
1384319	Churchyard gates approximately 15 metres south of Church of St Edmund.	II	650749	276356
1384321	Church of St Edmund.	I	650750	276388
1384322	Chest tomb approximately 5 metres south-east of Church of St Edmund.	II	650783	276375
1384323	Headstone to A. Nolloth approximately 15 metres south of chancel of Church of St Edmund.	II	650787	276362
1384324	2 headstones approximately 12 metres south-east of Church of St Edmund.	II	650785	276365
1384325	2 headstones approximately 15 metres east-south-east of Church of St Edmund.	II	650800	276384
1384326	Pair off headstones approximately 5 metres south of porch of Church of St Edmund.	II	650748	276367
1384327	Bardwell monument approximately 15 metres south of the chancel of Church of St Edmund.	II	650772	276366
1384328	Headstone approximately 10 metres south of porch of Church of St Edmund.	II	650738	276365
1384329	1-19, Church Street.	II	650800	276249
1384330	24 and 26, Church Street.	II	650815	276235
1384331	Headstone approximately 7 metres south of porch of Church of St Edmund.	II	650738	276364
1384332	Iona Cottage and Iona Flat.	II	650733	275876
1384333	Lydstep House and Coign.	II	650751	275897

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Historic England List Entry.	Name	Grade	Easting	Northing
1384334	Rowan Cottage.	II	650741	275888
1384335	Cliff House and Shrimp Cottage.	II	650957	276104
1384336	5 and 6, East Cliff.	II	650968	276128
1384337	7, East Cliff.	II	650965	276140
1384338	East Cliff Cottage.	II	650962	276143
1384339	Back to Front Cottage.	II	650958	276148
1384340	Bay View (number 14) and East Cliff (number 15) and railing attached to front.	II	650969	276174
1384341	Sailors' Reading Room.	II	650952	276094
1384342	3-6, East Green.	II	650898	276257
1384343	Sole Bay Inn.	II	650916	276277
1384344	8 and 9, East Green.	II	650909	276279
1384345	10, East Green.	II	650904	276284
1384346	2, East Street.	II	650802	276248
1384347	Gordon House.	II	650857	276119
1384348	Trafalgar Cottage.	II	650896	276099
1384349	Spindrift	II	650898	276120
1384350	Reading Room Cottage.	II	650937	276101
1384351	Salt Works Cottage.	II	650692	275773
1384352	Park Lane Cottage.	II	650679	276012
1384353	Gun Hill Place.	II	650812	275846
1384354	Stone House.	II	650753	275704
1384355	Watch House.	II	650796	275736
1384356	Ferndale Cottage.	II	650529	276459
1384357	13 and 15, High Street.	II	650532	276448
1384358	Barnaby Cottage.	II	650577	276398
1384359	White Horse Cottage.	II	650536	276431
1384360	20, High Street.	II	650585	276403
1384361	22, High Street.	II	650589	276398
1384362	King's Head Hotel.	II	650565	276376
1384363	25, High Street.	II	650574	276366
1384364	Montague House and railings attached at front.	II	650612	276344

NOT PROTECTIVELY MARKED

Historic England List Entry.	Name	Grade	Easting	Northing
1384365	38 and 60, High Street.	II	650616	276334
1384366	The Old House (number 49).	II	650651	276268
1384367	54 and 54A, High Street.	II	650656	276295
1384368	55-63, High Street.	II	650678	276244
1384369	Sutherland House.	II*	650667	276289
1384370	Manor House and Manor Gate including forecourt walls.	II*	650699	276219
1384371	66, High Street.	II	650695	276256
1384372	Olde Banke House.	II	650731	276185
1384373	71, High Street.	II	650737	276183
1384374	Rutland House.	II	650730	276230
1384375	Buckenham House.	II*	650763	276161
1384376	82, 84 And 86, High Street.	II	650738	276221
1384377	Crown Hotel.	II	650760	276204
1384378	94, High Street.	II	650770	276190
1384379	96, High Street.	II	650775	276185
1384380	98, 98A and 100, High Street.	II	650783	276182
1384381	United Reformed Church.	II	650711	276201
1384382	3, Market Place.	II	650785	276153
1384383	10, Market Place.	II	650842	276150
1384384	11 and 13, Market Place.	II	650793	276144
1384385	15, Market Place.	II	650800	276132
1384386	Lloyds Bank.	II*	650801	276122
1384387	19, Market Place.	II	650804	276113
1384388	21, Market Place.	II	650825	276119
1384389	23, Market Place.	II	650831	276128
1384390	25, Market Place (see details for further address information).	II	650841	276128
1384391	Swan Hotel.	II	650838	276167
1384392	Town Hall.	II	650808	276166
1384393	Town pump.	II	650815	276141
1384394	Rosemary Cottages.	II	650754	276102
1384395	The Old Chapel.	II	650746	276100
1384396	Primrose Cottage and Dolphin	II	650584	276485

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Historic England List Entry.	Name	Grade	Easting	Northing
	Cottage.			
1384397	Bradwell House (number 6).	II	650784	275990
1384398	9, Park Lane.	II	650754	276007
1384399	10 and 12, Park Lane.	II	650770	275990
1384400	13 and 15, Park Lane.	II	650744	276008
1384401	14, Park Lane.	II	650763	275990
1384402	16 and 18, Park Lane.	II	650753	275990
1384403	Honeysuckle Cottage (number 17).	II	650736	276008
1384404	20, Park Lane.	II	650743	275990
1384405	21 and 23, Park Lane.	II	650722	276009
1384406	Strickland House.	II	650697	276024
1384407	Park Lane Cottage.	II	650677	276006
1384408	6, Pinkney's Lane.	II	650843	276055
1384409	The Elms (number 1).	II	650810	276094
1384410	4 and 6, Queen Street.	II	650832	276100
1384411	Evington	II	650813	276082
1384412	Holmwood	II	650832	276094
1384413	10, Queen Street.	II	650832	276088
1384414	12, Queen Street.	II	650835	276083
1384415	14, Queen Street.	II	650832	276078
1384416	16, Queen Street.	II	650834	276073
1384417	18, Queen Street.	II	650834	276065
1384418	Coachman's Cottage.	II	650727	275824
1384419	6, Queen's Road.	II	650718	275822
1384420	8, Queen's Road.	II	650716	275817
1384421	The Bolt Hole and Wayside Cottage.	II	650706	275813
1384422	Whitehall and Guardship.	II	650997	276260
1384423	Greyfriars North and Greyfriars South and Regency House.	II	650809	276012
1384424	Red Lion Inn.	II	650844	276040
1384425	Sole Bay Cottage.	II	650846	276032
1384426	South Green Cottage.	II	650851	276025
1384427	7, South Green.	II	650810	275992
1384428	South Green House.	II	650857	276022

NOT PROTECTIVELY MARKED

Historic England List Entry.	Name	Grade	Easting	Northing
1384429	10A, 10B, 10C and 10D, South Green.	II	650873	276012
1384430	Dartmouth Cottage.	II	650795	275965
1384431	South House.	II	650897	276019
1384432	Wellesley Cottage.	II	650788	275967
1384433	14 and 14A, South Green.	II	650887	275964
1384434	Providence Cottage.	II	650778	275966
1384435	The Retreat and Pin Cottage.	II	650863	275940
1384436	24, South Green.	II	650858	275924
1384437	Tudor Cottage.	II	650780	275932
1384438	Hill House and Woldside.	II	650768	275918
1384439	Adnams Wine Merchants.	II	650836	276049
1384440	Cannon Lodge.	II	650760	275909
1384441	Centre Cliff.	II	650907	276033
1384442	Centre Cliff.	II	650916	276048
1384443	May Place.	II	650816	276066
1384444	The Lighthouse.	II	650942	276284
1384445	8, Trinity Street.	II	650922	276144
1384446	10, Trinity Street.	II	650926	276150
1384447	Trinity Cottage.	II	650929	276159
1384448	Lantern Cottage (number 52).	II	650912	276204
1384449	75 and 77, Victoria Street.	II	650901	276188
1384450	Southwold Museum.	II	650702	276300
1384451	Church of the Sacred Heart and attached Presbytery.	II	650569	276230
1391360	The Watch-House.	II	647545	262750
1392631	Orfordness Lighthouse.	II	644995	248880
1416866	Orford Ness: former Royal Flying Corps barrack block.	II	643594	248822
1416867	Orford Ness: former RFC Officers' Mess And AWRE canteen building.	II	643332	248637
1416868	Orford Ness: the Black Beacon and associated power house.	II	644510	248810
1416869	Orford Ness: Bomb Ballistics Building.	II	644554	249209

Historic England List Entry.	Name	Grade	Easting	Northing
1030873	Orford Castle.	I	641890	249793

Table 1.2: Scheduled monuments within study area.

Historic England List Entry.	Name	Easting	Northing
1014860	Orford Castle with adjoining quarry and remains of 20th century look-out post.	641875	249848
1416933	Orford Ness: the Atomic Weapons Research Establishment test buildings and associated structures.	643326	248114
1014520	Leiston Abbey (second site) and moated site.	644457	264189
1015687	Leiston Abbey (first site) with later chapel and pill box.	647257	266007
1006041	Slaughdon Martello Tower.	646269	254932

Table 1.3: Non-designated heritage assets within study area (scoped into assessment).

Name	Easting	Northing
Coastguard Cottages, Dunwich Heath.	647627	267780

Table 1.4: Historic Environment Record (HER) monument records within study area.

Parish Reference.	Monument Number.	Name	HER Summary Description.	Period	Easting	Northing
DUN 107.	MSF26332	World War II anti-tank blocks on the beach.	Anti-tank blocks on beach.	Second World War.	647840	266500
LCS 034.	MSF21543	Site of previously recorded ring ditch.	A causewayed ring ditch has been recorded at this location on aerial photographs, however further assessment has suggested that this may relate to non-archaeological features.	Unknown	646530	265308
LCS 038.	MSF21556	Medieval artefact scatter of a number of coarse ware sherds. (Med)	A number of medieval coarse ware sherds found.	Undated	645836	264595
LCS 038.	MSF21557	Prehistoric artefact scatter of worked flints, including 2 scrapers and a pot boiler flint. (Preh)	A number of worked flints, including two scrapers and one pot boiler flint.	Undated	645839	264595
LCS 039.	MSF21558	Cropmarks of uncertain archaeological significance.	Cropmarks of uncertain archaeological significance have been recorded from aerial photographs. They have been interpreted as the remains of a large causewayed ring ditch of unknown, but possibly Bronze Age date. They were not recognised in a subsequent survey.	Unknown	645735	264498

NOT PROTECTIVELY MARKED

Parish Reference.	Monument Number.	Name	HER Summary Description.	Period	Easting	Northing
LCS 040.	MSF21559	Cropmarks of uncertain archaeological significance.	Cropmarks of uncertain archaeological significance have been recorded from aerial photographs. They have been interpreted as the remains of a ring ditch of unknown, but possibly Bronze Age date. They were not recognised in a subsequent survey of aerial photographs.	Unknown	645754	264424
LCS 041.	MSF21560	Cropmarks of uncertain archaeological significance.	Cropmarks of uncertain archaeological significance have been recorded from aerial photographs. They have been interpreted as the remains of a large causewayed ring ditch of unknown, but possibly Bronze Age date. They were not recognised in a subsequent survey.	Unknown	645980	264437
LCS 042.	MSF21561	Cropmarks of uncertain archaeological significance.	Cropmarks of uncertain archaeological significance have been recorded from aerial photographs. They have been interpreted as the remains of a causewayed ring ditch of unknown, but possibly Bronze Age date. They were not recognised in a subsequent survey.	Unknown	646067	264450

NOT PROTECTIVELY MARKED

Parish Reference.	Monument Number.	Name	HER Summary Description.	Period	Easting	Northing
LCS 044.	MSF21564	Cropmarks of uncertain archaeological significance.	Cropmarks of uncertain archaeological significance have been recorded from aerial photographs. They have been interpreted as the remains of a large causewayed ring ditch of unknown, but possibly Bronze Age date. They were not recognised in a subsequent survey.	Unknown	645553	264565
LCS 045.	MSF21565	Prehistoric artefact scatter of three pieces of worked flint. (Prehistoric).	Three pieces of worked flint.	Prehistoric	645408	264197
LCS 045.	MSF21566	Medieval artefact scatter of coarse ware pottery sherds. (Medieval).	C13/C14 Med coarse ware pottery.	Undated	645411	264194
LCS 046.	MSF21567	Cropmarks of uncertain archaeological significance.	Cropmarks of uncertain archaeological significance have been recorded from aerial photographs. They comprise what has been interpreted as a possibly Bronze Age causewayed ring ditch. They were not recognised in a subsequent survey of aerial photographs.	Unknown	645414	264105

NOT PROTECTIVELY MARKED

Parish Reference.	Monument Number.	Name	HER Summary Description.	Period	Easting	Northing
LCS 047.	MSF21568	Cropmarks of uncertain archaeological significance.	Cropmarks of uncertain archaeological significance have been recorded from aerial photographs. They comprise what has been interpreted as a possibly Bronze Age concentric ring ditch. They were not recognised in a subsequent survey of aerial photographs.	Unknown	645466	264152
LCS 048.	MSF21569	Cropmarks of uncertain archaeological significance.	Cropmarks of uncertain archaeological significance have been recorded from aerial photographs. They comprise what has been interpreted as a causewayed ring ditch of unknown date. They were not recognised in a subsequent survey of aerial photographs.	Unknown	646082	263386
LCS 049.	MSF21570	Medieval artefact scatter of pottery sherds, including Thetford ware type. (Med)	Three possible Thetford ware type sherds C9-C12, medieval coarse ware C12-C14 & 5 glazed medieval sherds.	Undated	647211	262855
LCS 049.	MSF21571	Prehistoric artefact scatter of worked flint and flint gritted sherds. (Preh)	Several pieces of worked flint plus flint gritted sherd found.	Undated	647206	262855
LCS 049.	MSF21572	Find spot of a Roman pottery sherd. (Rom)	One Romano British .sherd found.	Undated	647208	262858
LCS 049.	MSF21573	Find spot of a jet bead of unknown date. (Un)	One jet bead found.	Undated	647219	262863

NOT PROTECTIVELY MARKED

Parish Reference.	Monument Number.	Name	HER Summary Description.	Period	Easting	Northing
LCS 050.	MSF21574	Possible track and ring ditch of unknown date, visible as cropmarks.	Possible track in south end of field, plus possible part of ring ditch and other cropmarks.	Unknown	647267	262789
LCS 051.	MSF21575	Prehistoric artefact scatter of worked flint and a pottery sherd. (Preh)	Several pieces of worked flint including pot boiler flints and scrapers plus a Preh sherd.	Undated	646975	262792
LCS 051.	MSF21576	Roman artefact scatter of pottery sherds and a tile fragment. (Rom)	Roman sherds and possible Roman tile fragment found.	Undated	646977	262789
LCS 051.	MSF21577	Medieval artefact scatter of pottery sherds. (Med)	Majority of sherds found were medieval coarseware of C13/C14 date with possible C12 presence.	Undated	646980	262789
LCS 052.	MSF21578	Cropmarks of uncertain archaeological significance	Cropmarks of uncertain archaeological significance have been recorded from aerial photographs. They have been interpreted as a ring ditch of possible Bronze Age date, together with possible undated field boundaries and tracks. They were not recognised in a subsequent survey of aerial photographs.	Unknown	646951	262825

NOT PROTECTIVELY MARKED

Parish Reference.	Monument Number.	Name	HER Summary Description.	Period	Easting	Northing
LCS 053.	MSF21579	Cropmarks of uncertain archaeological significance	Cropmarks of uncertain archaeological significance have been recorded from aerial photographs. They have been interpreted as a ring ditch of possible Bronze Age date. They were not recognised in a subsequent survey of aerial photographs for this area.	Unknown	646991	262729
LCS 054.	MSF21580	Medieval artefact scatter of coarseware sherds. (Med)	C13/C14 coarseware sherds.	Undated	646826	262643
LCS 054.	MSF21581	Prehistoric artefact scatter of flint flakes, including pot boiler flints and scrapers. (Preh)	Several flint flakes and others were found, including some pot boiler flints and scrapers.	Undated	646825	262643
LCS 054.	MSF21582	Find spot of a glass bead of unknown date. (Un)	One glass bead found, date unknown.	Undated	646822	262640
LCS 055.	MSF21583	Cropmarks of uncertain archaeological significance	Cropmarks of uncertain archaeological significance have been recorded from aerial photographs. They have been interpreted as a causewayed ring ditch of possible Bronze Age date, and possible undated field boundaries. They were not recognised in a subsequent survey of aerial photographs.	Unknown	646759	262598

NOT PROTECTIVELY MARKED

Parish Reference.	Monument Number.	Name	HER Summary Description.	Period	Easting	Northing
LCS 056.	MSF21584	Cropmarks of uncertain archaeological significance.	Cropmarks of uncertain archaeological significance have been recorded from aerial photographs. They have been interpreted as an undated enclosure. They were not recognised in a subsequent survey of aerial photographs for this area.	Unknown	646967	262884
LCS 057.	MSF21585	Cropmarks of uncertain archaeological significance	Cropmarks of uncertain archaeological significance have been recorded from aerial photographs. They have been interpreted as a causewayed ring ditch of possible Bronze Age date. They were not recognised in a subsequent survey of aerial photographs for this area.	Unknown	646879	262588
LCS 058.	MSF21586	Medieval artefact scatter of coarseware pottery. (Med)	Medieval coarseware pottery found.	Undated	646520	262578
LCS 058.	MSF21587	Prehistoric artefact scatter of pot boiler flints and worked flints. (Preh)	Several pot boiler flints and other worked flints found.	Undated	646517	262576
LCS 060.	MSF21589	Prehistoric artefact scatter of worked flint, including pot boiler flints and scrapers. (Preh)	Prehistoric worked flint including pot boiler flints and scrapers.	Undated	646171	262571

NOT PROTECTIVELY MARKED

Parish Reference.	Monument Number.	Name	HER Summary Description.	Period	Easting	Northing
LCS 060.	MSF21590	Medieval artefact scatter of pottery sherds, including Thetford ware and coarseware. (Med)	One Thetford-type ware sherd and medieval coarseware found.	Undated	646174	262571
LCS 060.	MSF21591	World War II building debris. (PMed)	Large amount of modern building debris noted on this field, probably World War II.	Undated	646174	262574
LCS 061.	MSF21592	Cropmarks of uncertain archaeological significance.	Cropmarks of uncertain archaeological significance have been recorded from aerial photographs. They have been interpreted as a causewayed ring ditch of unknown but possibly Bronze Age date. They were not recognised in a subsequent survey of aerial photographs.	Unknown	646206	262610
LCS 062.	MSF21593	Cropmarks of uncertain archaeological significance.	Cropmarks of uncertain archaeological significance have been recorded from aerial photographs. They have been interpreted as an incomplete causewayed ring ditch of unknown but possibly Bronze Age date. They were not recognised in a subsequent survey of aerial photographs.	Unknown	646156	262604
LCS 064.	MSF21595	Prehistoric artefact scatter of worked flints, pot boiler flints and scrapers. (Preh)	A number of worked flints including two pot boiler flints and scrapers.	Undated	646093	262981

NOT PROTECTIVELY MARKED

Parish Reference.	Monument Number.	Name	HER Summary Description.	Period	Easting	Northing
LCS 064.	MSF21596	Medieval artefact scatter of coarseware pottery sherds. (Med)	Majority of pottery found was Med coarseware, there was one stray find of a Rom sherd.	Undated	646093	262981
LCS 065.	MSF21597	Cropmarks of uncertain archaeological significance	Cropmarks of uncertain archaeological significance have been recorded from aerial photographs. They have been interpreted as a possible enclosure, possible ring ditches and possible trackways of unknown date. They were not recognised in a subsequent survey of aerial photographs.	Unknown	646190	263076
LCS 066.	MSF21598	Medieval artefact scatter of coarseware sherds. (Med)	Fifteen Med coarseware sherds found.	Undated	645759	263108
LCS 066.	MSF21599	Post Medieval artefact scatter of pottery sherds. (PMed)	Thirteen PMed sherds found (S1)(S2).	Undated	645759	263108
LCS 067.	MSF21600	Cropmarks of uncertain archaeological significance.	Cropmarks of uncertain archaeological significance have been recorded from aerial photographs. They comprise what has been interpreted as a causewayed ring ditch, together with other, unspecified cropmarks, possibly tracks.	Unknown	645896	263192

NOT PROTECTIVELY MARKED

Parish Reference.	Monument Number.	Name	HER Summary Description.	Period	Easting	Northing
LCS 068.	MSF21601	Cropmarks of uncertain archaeological significance.	Cropmarks of uncertain archaeological significance have been recorded from aerial photographs. They have been interpreted as double concentric semi-circular ring ditches of unknown, but possibly Bronze Age date. They were not recognised in a subsequent survey.	Unknown	646530	262745
LCS 069.	MSF21602	Cropmarks of uncertain archaeological significance.	Cropmarks of uncertain archaeological significance have been recorded from aerial photographs. They have been interpreted as a semi-circular ring ditch of unknown but possibly Bronze Age date. They were not recognised in a subsequent survey of aerial photographs.	Unknown	646288	262629
LCS 070.	MSF21603	Cropmarks of uncertain archaeological significance.	Cropmarks of uncertain archaeological significance have been recorded from aerial photographs. They comprise what has been interpreted as two small ring ditches of unknown date. They were not recognised in a subsequent survey of aerial photographs.	Unknown	646358	263428

NOT PROTECTIVELY MARKED

Parish Reference.	Monument Number.	Name	HER Summary Description.	Period	Easting	Northing
LCS 071.	MSF21604	Cropmarks of uncertain archaeological significance.	Cropmarks of uncertain archaeological significance have been recorded from aerial photographs. They comprise what has been interpreted as a causewayed ring ditch surrounded by an oval boundary. Their archaeological significance is doubtful, however.	Unknown	645791	263463
LCS 072.	MSF21605	Cropmarks of uncertain archaeological significance.	Cropmarks of uncertain archaeological significance have been recorded from aerial photographs. They comprise what has been interpreted as a causewayed ring ditch of unknown date. They were not recognised in a subsequent survey of aerial photographs.	Unknown	646077	263447
LCS 074.	MSF21608	Goose Hill.	Ring ditch visible from APs.	Unknown	647132	264821
LCS 075.	MSF21609	Cropmarks of uncertain archaeological significance.	Cropmarks of uncertain archaeological significance have been recorded from aerial photographs. They have been interpreted as a causewayed ring ditch or circular enclosure of unknown but possibly Bronze Age date. They were not recognised in a subsequent survey of aerial photographs.	Unknown	646149	264287

NOT PROTECTIVELY MARKED

Parish Reference.	Monument Number.	Name	HER Summary Description.	Period	Easting	Northing
LCS 076.	MSF21610	Cropmarks of uncertain archaeological significance.	Cropmarks of uncertain archaeological significance have been recorded from aerial photographs. They have been interpreted as a causewayed ring ditch of unknown but possibly Bronze Age date. They were not recognised in a subsequent survey of aerial photographs.	Unknown	646778	264937
LCS 077.	MSF21611	Roughly half of a Bronze-Age ring ditch.	Circa half ring ditch visible from APs.	Unknown	647217	264598
LCS 078.	MSF21612	Cropmarks of uncertain archaeological significance.	Cropmarks of uncertain archaeological significance have been recorded from aerial photographs. They comprise what has been interpreted as a causewayed ring ditch of unknown date. They were not recognised in a subsequent survey of aerial photographs.	Unknown	646230	263447
LCS 079.	MSF21613	Cropmarks of uncertain archaeological significance.	Cropmarks of uncertain archaeological significance have been recorded from aerial photographs. They have been interpreted as a causewayed ring ditch of unknown but possibly Bronze Age date. They were not recognised in a subsequent survey of aerial photographs.	Unknown	646235	264052

NOT PROTECTIVELY MARKED

Parish Reference.	Monument Number.	Name	HER Summary Description.	Period	Easting	Northing
LCS 080.	MSF21614	Cropmarks of uncertain archaeological significance.	Cropmarks of uncertain archaeological significance have been recorded from aerial photographs. They comprise a large sub-rectangular enclosure. Their archaeological significance is doubtful, however, and they may instead be of natural and/or recent agricultural origin.	Unknown	645720	263984
LCS 081.	MSF21615	Small Bronze Age causewayed penannular ring ditch.	A small causewayed ring ditch approximately 10m diameter, penannular, visible on APs.	Unknown	647520	264271
LCS 082.	MSF21616	Cropmarks of uncertain archaeological significance.	Cropmarks of uncertain archaeological significance have been recorded from aerial photographs. They have been interpreted as a causewayed ring ditch of unknown, but possibly Bronze Age date. They were not recognised in a subsequent survey of aerial photographs.	Unknown	646178	264168
LCS 168.	MSF26813	Pottery scatter.	Small scatter of medieval and postmedieval pottery.	Medieval to IPS: Post Medieval	646200	263300
LCS 170.	MSF23995	Sizewell	Former town/township of Sizewell. A market was recorded in Sizewell in 1237.	Medieval	647500	262750
LCS Misc.	MSF21539	Prehistoric artefact scatter of 4 flint flakes. (Preh)	Four flint flakes found on a casual basis.	Undated	646100	264900

NOT PROTECTIVELY MARKED

Parish Reference.	Monument Number.	Name	HER Summary Description.	Period	Easting	Northing
LCS Misc.	MSF21540	Medieval artefact scatter of 4 coarseware sherds. (Med)	Four Med coarseware sherds found on a casual basis.	Undated	646100	264900
LCS Misc.	MSF21541	Cropmarks of unknown date. (Un)	Cropmarks visible from APs.	Undated	646500	265300
LCS Misc.	MSF21542	Second World War site (LCS 094)	Series of military cropmarks visible from SCC APs. See LCS 094 for recording of these Second World War features.	Undated	646500	265300
LCS Misc.	MSF21547	Site of World War Two Diver anti aircraft battery	The remains of a Second World War Diver anti aircraft battery were recorded as cropmarks from aerial photographs. They are recorded in more detail as LCS 094.	Second World War	646400	264800
LCS Misc.	MSF21548	Cropmarks of unknown date.	Cropmarks visible from APs. See LCS 190 for recording of these cropmarks.	Undated	646400	264800
LCS Misc.	MSF21549	Findspot of a Prehistoric pot boiler flint. (Preh)	Pot boiler flint found.	Undated	646200	264800
LCS Misc.	MSF21550	Cropmarks of uncertain archaeological significance	Cropmarks of uncertain archaeological significance have been recorded from aerial photographs. No interpretation of them has been made and they are undated. They were not recognised in a subsequent survey of aerial photographs for this area.	Unknown	645900	264800

NOT PROTECTIVELY MARKED

Parish Reference.	Monument Number.	Name	HER Summary Description.	Period	Easting	Northing
LCS Misc.	MSF21551	Cropmarks of uncertain archaeological significance.	Cropmarks of uncertain archaeological significance have been recorded from aerial photographs. No interpretation of them has been made and they are undated. They were not recognised in a subsequent survey of aerial photographs for this area.	Unknown	646100	264600
LCS Misc.	MSF21552	Prehistoric artefact scatter of pottery sherds, 2 flakes, one blade and 2 burnt flints. (Preh)	Very few sherds, two flakes, one blade and two burnt flints of Prehistoric period.	Undated	646100	264600
LCS Misc.	MSF21618	Cropmarks of uncertain archaeological significance.	Cropmarks of uncertain archaeological significance have been recorded from aerial photographs. They have been interpreted as possible field boundaries of unknown date. They were not recognised in a subsequent survey of aerial photographs for this area.	Unknown	645900	262700
LCS Misc.	MSF21619	Medieval artefact scatter of coarseware and one Prehistoric flint gritted sherd. (Med)	Medieval coarseware, plus one possible Preh flint gritted sherd(?).	Medieval	645900	262700

NOT PROTECTIVELY MARKED

Parish Reference.	Monument Number.	Name	HER Summary Description.	Period	Easting	Northing
LCS Misc.	MSF21623	Cropmarks of uncertain archaeological significance.	Cropmarks of uncertain archaeological significance have been recorded from aerial photographs. They comprise what has been interpreted as possible enclosures of unknown date. They were not recognised in a subsequent survey of aerial photographs for this area.	Unknown	646400	263500
LCS Misc.	MSF21624	Cropmarks of uncertain archaeological significance.	Cropmarks of uncertain archaeological significance have been recorded from aerial photographs. They have been interpreted as two linear cropmarks of unknown date. They were not recognised in a subsequent survey of aerial photographs for this area.	Unknown	646900	262900
LCS Misc.	MSF21625	Linear boundaries of unknown date. (Un)	Linear ?boundaries approximately 200m in length, visible from APs.	Unknown	647200	264600
LCS Misc.	MSF21626	Possible track, visible as 2 curved cropmarks. (Un)	Set of two curved lines, possible track, visible from APs.	Unknown	647350	262900
LCS Misc.	MSF21627	Cropmarks of uncertain archaeological significance.	Cropmarks of uncertain archaeological significance have been recorded from aerial photographs. They comprise a series of linear cropmarks, interpreted as possible tracks, and a number of curvilinear features. Their archaeological significance is doubtful.	Unknown	645500	263800

NOT PROTECTIVELY MARKED

Parish Reference.	Monument Number.	Name	HER Summary Description.	Period	Easting	Northing
LCS Misc.	MSF21628	Cropmarks of uncertain archaeological significance.	Cropmarks of uncertain archaeological significance have been recorded from aerial photographs. They comprise a large curved cropmark with a number of small curvilinear marks. Their archaeological significance is doubtful.	Unknown	646700	263900
LCS Misc.	MSF21629	Series of curved cropmarks of unknown date. (Un)	Series of curved cropmarks visible on APs.	Unknown	647400	264700
LCS Misc.	MSF21630	Cropmarks of uncertain archaeological significance.	Linear cropmarks of uncertain archaeological significance have been recorded from aerial photographs. They may define an enclosure, of unknown date. They were not recognised in a subsequent survey of aerial photographs for this area and may be of natural or agricultural origin.	Unknown	645400	264600
LCS Misc.	MSF21631	Cropmarks of uncertain archaeological significance.	Cropmarks of uncertain archaeological significance have been recorded from aerial photographs. They have been interpreted as possible field boundaries of unknown date. They were not recognised in a subsequent survey of aerial photographs for this area.	Unknown	645500	262800
LCS Misc.	MSF2346	Upper Abbey Farm (Neo).	Polished grey flint axe, six and half inches long.	Neolithic	645350	264550

NOT PROTECTIVELY MARKED

Parish Reference.	Monument Number.	Name	HER Summary Description.	Period	Easting	Northing
LCS Misc.	MSF2347	Findspot of a Neolithic axe. (Neo).	Axe found at TM 473 660? "50 years ago" that is about 1917.	Neolithic	647350	266050
LCS Misc.	MSF2350	11, Valley Terrace. (Med)	Short cross penny John (1199 - 1216) probably Class 5c.	Medieval	644815	262815
THB 009.	MSF30764	Milestone on the B1122.	Milestone on the B1122.	Post-medieval.	644644	264744
ADB 226.	MSF35003	Aldeburgh branch railway line.	Aldeburgh to Saxmundham branch line.	19th century to modern.	642577	260504
LCS 002.	MSF17052	World War II pillbox within a medieval Abbey chapel	Scheduled 2nd World War Pill Box (within medieval Abbey chapel).	Second World War	647316	265982
LCS 003.	MSF2342	Sizewell beach.	Chipped flint axe, slightly rolled, length four and three quarter inches, found on Sizewell beach (about quarter of a mile from 1966 car park) about April 1966 by Master Kevin Hobbs, Alma Cottage, Ashbocking, who presented it to Ipswich Museum.	Neolithic	647664	263265
LCS 004.	MSF2343	Find spot of two Bronze-Age cinerary urns.	Two Bronze Age cinerary urns, found when digging trench for a gas main in Carr Road, near the Gas works, Leiston.	Bronze Age.	644656	262946
LCS 005.	MSF806	Mesolithic artefact scatter of 2 maceheads.	Two Mes maceheads one with hole not completely bored through.	Mesolithic	645008	263319

NOT PROTECTIVELY MARKED

Parish Reference.	Monument Number.	Name	HER Summary Description.	Period	Easting	Northing
LCS 009.	MSF11523	Medieval artefact scatter of pottery, much of it heavily burnt.	`Masses' of dark pottery (?Med), much of it heavily burnt.	Medieval	645344	263538
LCS 010.	MSF11524	Medieval artefact scatter of pottery. (Med)	Scatter of Med (& Rom) pottery found on field surface by farmer (S1)(S2).	Medieval	644989	263631
LCS 010.	MSF12096	Roman artefact scatter of pottery. (Rom)	Finds scatter of Med & Rom pottery found by farmer during ploughing and subsequent walking.	Roman	644989	263631
LCS 013.	MSF11527	Roman artefact scatter of 2 bronze sestertii coins.	Two bronze C1 sestertii found in area washed by storm water from drain pipes (S1).	Roman	644424	263610
LCS 014.	MSF12097	Medieval artefact scatter.	Finds scatter identified whilst farming, and subsequent random walking.	Medieval	644878	263573
LCS 015.	MSF12606	Minsmere Level.	Mill - wind pump.	19th century to modern.	647467	265912
LCS 016.	MSF12607	Minsmere Level, Eastbridge.	Mill - wind pump, site of.	19th century to modern.	646805	266220
LCS 017.	MSF12608	Sea Wall Mill.	Sea Wall Mill.	19th century to modern.	647745	266376
LCS 022.	MSF16889	Post Medieval bridge shown on Hodkinson's map.	Bridge shown crossing a small stream on Hodkinson's map (S1).	18th century to 19th century.	645456	263481
LCS 027.	MSF16786	Abbey Farm.	Small ring ditch cropmark, circa 10m diameter.	Unknown	644405	264301

NOT PROTECTIVELY MARKED

Parish Reference.	Monument Number.	Name	HER Summary Description.	Period	Easting	Northing
LCS 132.	MSF21392	Modern ship's mast mounted in a metal sheath, possibly a lookout post.	Old ship's mast mounted in metal sheath. Metal footholds set into mast to aid climbing. Sited near old huts and boat winches of fisherman. Lookout?	Undated	647596	262646
LCS 133.	MSF21393	Remains of a possible modern wreck or groyne buried in shingle.	Metal and timber remains buried in shingle - wreck? Groyne? Timber appears to be sawn through although much of it eroded by wave action. Metal sheathing bent and buckled and rusty but in fairly good condition. No other groynes visible on beach.	Modern	647690	264900
THB 004.	MSF2061	Barrow, or C18 landscaping feature ? Circa 15 feet high, 25 feet in diameter, beside road in corner of wood.	Barrow, or C18 landscaping feature ? Circa 15 feet high, 25 feet in diameter, beside road in corner of wood.	Unknown	644758	264629
WLN 028.	MSF15745	Decoy, Minsmere.	Area of irregularly armed small body of water named 'Decoy' in area of Minsmere (WLN 029) on 1:10560 OS maps (S1).	Post Medieval	647150	266501
WLN 029.	MSF15746	Minsmere; The Broad (1783).	Minsmere peat cuttings, of at least 12th century date.	12th century to 13th century.	647215	266510

NOT PROTECTIVELY MARKED

Parish Reference.	Monument Number.	Name	HER Summary Description.	Period	Easting	Northing
ARG 017.	MSF16194	Second World War anti-glider ditches and military training activity on The Walks, Aldringham Common.	An extensive network of Second World War anti-glider ditches is visible as earthworks on aerial photographs of The Walks, Aldringham Common. Traces of Second World War (and perhaps earlier) military training activity is also visible, as earthworks.	Modern	646468	261621
DUN 086.	MXS19495	World War II coastal defences on the beach.	World War II coastal defences on the beach to the east of Minsmere bird reserve.	Second World War.	647844	267053
LCS 001.	MSF2340	Leiston Abbey, Abbey Farm.	Founded 1182 on a site about 2 miles away nearer the sea (see LCS 002) as a Premonstratensian house, dedicated to the Blessed Virgin, by Ranulf de Glanville, Henry II's chief Justicier. listed building scheduled.	Medieval	644454	264205
LCS 002.	MSF2341	Site of first Leiston Abbey.	Site of the first Premonstratensian abbey at Leiston, founded in 1182 and moved to its present site in 1363 (see LCS 001).	Medieval to IPS: Late Medieval Transitional	647272	265985
LCS 006.	MSF4001	Cropmarks of undated field boundaries.	Cropmarks of undated field boundaries, and perhaps other features, are visible on aerial photographs.	Unknown	644788	263057
LCS 011.	MSF11525	Abbey Road.	Scatter of red tile over most of field surface (S1).	Undated	644400	263800

NOT PROTECTIVELY MARKED

Parish Reference.	Monument Number.	Name	HER Summary Description.	Period	Easting	Northing
LCS 012.	MSF11526	Abbey Lane.	Scatter of metalwork found by farmer, includes groat and cut halfpenny and 'many Nuremberg tokens' (S1).	Medieval	644250	263850
LCS 023.	MSF16197	Earthworks of an undated sub-rectangular enclosure on Broom Covert.	An undated sub rectangular enclosure is visible as an earthwork on aerial photographs. It survives on an area of heathland, Broome Covert, and could perhaps have been a stock enclosure, for which a medieval to post-medieval date is likely.	Medieval to IPS: Post Medieval	646256	263184
LCS 032.	MSF21534	Six sherds of Rom material. (Rom)	Six sherds of Rom material.	Undated	647113	264928
LCS 032.	MSF21535	Medieval artefact scatter of roughly 553 coarseware sherds. (Med)	553 medieval coarseware sherds.	Undated	647116	264929
LCS 032.	MSF21536	Prehistoric artefact scatter of roughly 90 worked flints. (Preh)	Circa 90 worked flints artefacts found.	Undated	647119	265051
LCS 032.	MSF21537	Trackways and ditches of potential Roman date.	The cropmarks of a trackway and fragmentary ditches of unknown, but potential Roman date, are visible on aerial photographs. Significant amounts of Roman date material have been found in the vicinity (LCS 032/MSF21534).	Roman	647133	265101

NOT PROTECTIVELY MARKED

Parish Reference.	Monument Number.	Name	HER Summary Description.	Period	Easting	Northing
LCS 033.	MSF21538	Oval enclosure and 2 smaller ring ditches of unknown date, visible as cropmarks.	Cropmarks of a circa 50m by 35m oval enclosure (open to NE side) and two possible smaller (circa 20m) 'pennanular' or 'causewayed' ring ditches (probably natural).	Unknown	647113	265213
LCS 035.	MSF21544	Prehistoric artefact scatter of 5 pieces of worked flint. (Preh)	Five pieces of worked flint found.	Undated	646408	264941
LCS 035.	MSF21545	Medieval artefact scatter of 7 sherds of coarseware. (Med)	Seven sherds of Med coarseware found.	Undated	646409	264941
LCS 035.	MSF21546	Findspot of 1 Roman pottery sherd. (Rom)	One Roman sherd found.	Undated	646406	264941
LCS 036.	MSF21553	Site of a ring ditch, reinterpreted as a possible saltern mound (LCS 182).	A ring ditch of unknown but probably Bronze Age date was recorded from cropmarks visible on aerial photographs. The ring ditch was not recognised in a subsequent survey of aerial photographs for this area.	Unknown	646197	264830
LCS 037.	MSF21554	Findspot of a Prehistoric pot boiler flint. (Preh)	Stray find of Prehistoric pot boiler flint.	Undated	645852	264849
LCS 037.	MSF21555	Findspot of Medieval coarseware pottery. (Med)	Medieval coarseware pottery.	Undated	645853	264850
LCS 043.	MSF21562	Medieval artefact scatter of 4 sherds of coarseware pottery. (Med)	Four sherds of Med coarseware pottery found fieldwalking.	Undated	645526	264350

NOT PROTECTIVELY MARKED

Parish Reference.	Monument Number.	Name	HER Summary Description.	Period	Easting	Northing
LCS 043.	MSF21563	Prehistoric artefact scatter of 4 pieces of worked flint and 2 flint flakes. (Preh)	Four pieces of worked flint and two flint flakes found.	Undated	645526	264352
LCS 059.	MSF21588	Multi-period cropmarks of probable field boundaries and enclosures.	Multi-period cropmarks of probable field boundaries and enclosures are visible on aerial photographs. They are undated, but more than one phase is apparent. An Iron Age to Roman date for some of the cropmarks is plausible.	Early Iron Age to Roman.	646548	262591
LCS 063.	MSF21594	Site of Second World War Diver anti-aircraft battery	A Second World War Diver anti-aircraft battery is visible as structures on aerial photographs. The site is now arable and there is no evidence that any elements survive; an evaluation in the area of the site noted large amounts of modern building material.	Post Medieval to Second World War	646186	262545
LCS 073.	MSF21606	Medieval artefact scatter of pottery sherds. (Med)	27 sherds of Med coarseware collected.	Undated	646982	262993
LCS 073.	MSF21607	Prehistoric artefact scatter of burnt flints. (Preh)	251 Burnt flints.	Prehistoric	646982	262993
LCS 088.	MXS19490	World War II anti-tank cubes.	World War II anti-tank cubes stretching along the beach to the east of Minsmere bird reserve.	Second World War.	647781	266884
LCS 089.	MXS19496	World War II bomb craters.	Numerous bomb craters of World War II date close to Minsmere nature reserve.	Second World War.	647535	266683

NOT PROTECTIVELY MARKED

Parish Reference.	Monument Number.	Name	HER Summary Description.	Period	Easting	Northing
LCS 090.	MXS19497	Section of Post Medieval sea bank.	A section of sea bank running along the coast to the east of Minsmere nature reserve, probably of Post Medieval date.	Post Medieval to Second World War.	647745	266582
LCS 091.	MXS19499	World War II coastal defences.	World War II coastal defences just west of the beach to the south-east of Minsmere Level.	Second World War.	647596	265062
LCS 091.	MXS19499	World War II coastal defences.	World War II coastal defences just west of the beach to the south-east of Minsmere Level.	Second World War.	647596	265062
LCS 091.	MXS19499	World War II coastal defences.	World War II coastal defences just west of the beach to the south-east of Minsmere Level.	Second World War.	647596	265062
LCS 091.	MXS19499	World War II coastal defences.	World War II coastal defences just west of the beach to the south-east of Minsmere Level.	Second World War.	647596	265062
LCS 091.	MXS19499	World War II coastal defences.	World War II coastal defences just west of the beach to the south-east of Minsmere Level.	Second World War.	647596	265062
LCS 091.	MXS19499	World War II coastal defences.	World War II coastal defences just west of the beach to the south-east of Minsmere Level.	Second World War.	647596	265062
LCS 092.	MXS19500	Post Medieval sea bank.	Sea bank of post-medieval date at the northern edge of Minsmere New Cut.	Post Medieval to Modern.	646629	266258
LCS 093.	MXS19501	Fragment of Post Medieval sea bank.	Fragment of sea bank on Minsmere level, possibly of post-medieval date, and likely to pre-date MXS19500.	Post Medieval to Modern.	646544	266467

NOT PROTECTIVELY MARKED

Parish Reference.	Monument Number.	Name	HER Summary Description.	Period	Easting	Northing
LCS 094.	MXS19502	Extensive World War II site, consisting of 2 anti-aircraft batteries, buildings and practice trenches.	An extensive World War II site comprising of 2 anti-aircraft batteries, associated buildings and numerous practice trenches, on Goose Hill and in Dunwich Forest.	Second World War.	646283	264982
LCS 095.	MXS19503	World War II anti-tank ditch.	Anti-tank ditch of World War II date to the north of Goose Hill.	Second World War.	647249	265281
LCS 096.	MXS19504	World War II L-shaped section of barbed wire obstruction.	An L-shaped section of barbed wire obstruction south of Sandpytle Plantation.	Second World War.	646229	265637
LCS 097.	MXS19505	Post Medieval sea banks.	Sea banks of possible post-medieval date to the east of Leiston chapel.	Post Medieval to Modern	647587	265628
LCS 098.	MXS19506	Length of Post Medieval sea bank.	Length of sea bank on the south side of Minsmere New Cut, probably of post-medieval date.	Post Medieval to Modern	647048	266110
LCS 099.	MXS19507	World War II features, including bomb craters, pillboxes and barbed wire obstructions.	World War II features, including bomb craters, pillboxes and barbed wire obstructions, at the east end of Minsmere New Cut.	Second World War.	647649	266031
LCS 100.	MXS19508	World War II bombing decoy site.	Bombing decoy site of World War II date close to the medieval ruins of Leiston Chapel.	Second World War.	647348	265995
LCS 101.	MXS19509	World War II practice trenches.	World War II practice trenches north of Goose Hill.	Second World War.	646895	265336

NOT PROTECTIVELY MARKED

Parish Reference.	Monument Number.	Name	HER Summary Description.	Period	Easting	Northing
LCS 102.	MXS19687	Complex of World War II emplacements.	A complex of World War II emplacements in Leiston parish.	Second World War.	647096	264671
LCS 103.	MXS19688	Modern wind pump and World War II pillbox.	A possible modern wind pump and probable World War II pillbox in Leiston parish.	Modern	647393	264495
LCS 104.	MXS19689	World War II bomb craters.	World War II Bomb craters in Leiston parish.	Second World War.	647376	263851
LCS 105.	MXS19690	World War II shooting butts.	World War II shooting butts in Leiston parish.	Modern to Second World War.	647327	263905
LCS 106.	MXS19691	World War II strongpoints and a Light and Heavy Anti-aircraft Artillery site.	Early World War II strongpoints and a late World War II Light and Heavy Anti-aircraft Artillery site at Sizewell in Leiston parish.	Second World War.	647270	263655
LCS 107.	MXS19692	Post Medieval earthwork boundary banks.	Post Medieval earthwork boundary banks at Sizewell, Leiston parish.	Post Medieval to Modern	647202	263303
LCS 108.	MXS19693	Two World War II coastal strongpoints and practice trenches .	Two World War II coastal strongpoints and practice trenches in Leiston parish.	Second World War.	647467	263443
LCS 109.	MXS19694	World War II masts and mast footings of radar stations.	Masts and mast footings of probable World War II radar stations in Leiston parish.	Second World War.	647446	263264
LCS 109.	MXS19694	World War II masts and mast footings of radar stations.	Masts and mast footings of probable World War II radar stations in Leiston parish.	Second World War.	647446	263264

NOT PROTECTIVELY MARKED

Parish Reference.	Monument Number.	Name	HER Summary Description.	Period	Easting	Northing
LCS 110.	MXS19695	World War II strongpoints and barbed wire obstructions.	World War II strongpoints and barbed wire obstructions in Leiston parish.	Second World War.	647334	263115
LCS 111.	MXS19696	World War II pillbox.	A World War II pillbox at Sizewell, Leiston parish.	Second World War.	647508	263246
LCS 112.	MXS19697	World War II command post trench and pillbox.	World War II command post trench and pillbox in Leiston parish.	Second World War.	647115	262794
LCS 113.	MXS19698	World War II anti-tank ditch.	A World War II anti-tank ditch in Leiston and Aldringham cum Thorpe parish.	Second World War.	647301	261915
LCS 114.	MXS19699	Post Medieval boundary bank.	A Post-Medieval boundary bank in Leiston parish.	Post Medieval to Modern	647365	262923
LCS 115.	MXS19700	World War II strongpoint or depot.	A World War II strongpoint or depot at Sizewell village, Leiston parish.	Second World War.	647507	262809
LCS 116.	MXS19701	World War II strongpoint and a possible experimental radar station.	World War II strongpoint and a possible experimental radar station in Leiston parish.	Second World War to Cold War.	647456	262512
LCS 117.	MXS19702	Quarry pit of unknown date.	A quarry pit of unknown date, Leiston.	Unknown	646927	262393
LCS 119.	MXS19837	Extensive World War II beach scaffolding.	Extensive World War II beach scaffolding, running southwards for circa 7km from Leiston parish.	Second World War.	647521	262718
LCS 120.	MXS19840	World War II minefield.	A World War II minefield to the north of Sizewell, Leiston.	Second World War.	647617	264618
LCS 121.	MXS19841	World War II minefield.	A Second World War minefield near Sizewell, Leiston.	Second World War.	647602	264302

NOT PROTECTIVELY MARKED

Parish Reference.	Monument Number.	Name	HER Summary Description.	Period	Easting	Northing
LCS 122.	MXS19842	World War II anti-tank cubes.	World War II anti-tank cubes near Sizewell, Leiston.	Second World War.	647442	264038
LCS 123.	MXS19843	World War II practice trenches.	Probable World War II practice trenches near the beach at Sizewell, Leiston.	Second World War.	647545	264501
LCS 124.	MXS19845	World War II bomb crater.	A World War II bomb crater at Sizewell, Leiston.	Second World War.	647529	264380
LCS 125.	MXS19850	World War II anti-invasion coastal defences.	World War II anti-invasion coastal defences at Sizewell, Leiston.	Second World War.	647551	263771
LCS 126.	MXS19853	World War II anti-tank cubes.	World War II anti-tank cubes near Sizewell, Leiston.	Second World War.	647574	263355
LCS 127.	MXS19855	World War II anti-invasion defence barbed wire .	World War II anti-invasion defence barbed wire on the sea-front at Sizewell, Leiston.	Second World War.	647541	263182
LCS 128.	MXS19856	World War II anti-invasion beach defences.	World War II anti-invasion beach defences near Sizewell village, Leiston.	Second World War.	647587	262847
LCS 129.	MXS19858	World War II anti-invasion coastal defences.	World War II anti-invasion coastal defences from Sizewell village to Sizewell Hall, Leiston.	Second World War.	647594	262192

NOT PROTECTIVELY MARKED

Parish Reference.	Monument Number.	Name	HER Summary Description.	Period	Easting	Northing
LCS 131.	MSF21298	Leiston Abbey Barn.	The footprint for a proposed extension to 'The Barn' at Leiston Abbey was stripped of its overburden with a view to revealing any archaeological deposits. Part of Scheduled Monument.	Medieval	644442	264267
LCS 134.	MSF26879	Roman saltern.	A presumably Roman salt production site visible as a dense scatter of briquetage (and tile?). A brief assessment of the aerial photographs did not reveal a prominent mound in the area of the briquetage finds and some other channels and mounds.	Early Iron Age to Roman.	647390	265072
LCS 139.	MXS20460	Post Medieval slipway, visible as a structure on the beach.	A probable slipway of post medieval date is visible as a structure on the beach at Leiston.	Post Medieval to Modern	647841	266062
LCS 141.	MSF26876	Sizewell Crossing.	Sizewell Crossing and crossing keeper's cottage, built 1859 or 1860. Line closed by 1994 (S2). Cottage extant.	19th century to 20th century.	645568	262494
LCS 144.	MSF22874	Causeway	The earthworks of a causeway linking the 'island' on which Leiston Chapel and Abbey (LCS 002) remains stand and the dry land are visible on the ground and on aerial photographs.	Medieval	646759	266006

NOT PROTECTIVELY MARKED

Parish Reference.	Monument Number.	Name	HER Summary Description.	Period	Easting	Northing
LCS 145.	MSF22875	A fragment of sea bank.	A fragment of sea bank can be seen as an earthwork, more fragmentary than the other banks in the vicinity (S1).	Medieval to IPS: Post Medieval	646492	266553
LCS 147.	MSF26809	Six medieval pennies.	Two silver Henry II pennies found 1994 and in 2006 a further hoard of six Henry II pennies (1163-1167) were found.	12th century.	644916	263696
LCS 148.	MSF29477	Medieval features, Greater Gabbard Wind Farm Onshore Works, Sizewell Wents, Leiston.	Medieval post-holes and possible hearth identified during evaluation, along with a possible post-medieval ditch.	Lower Palaeolithic to IPS: Post Medieval	647060	262630
LCS 150.	MSF29478	Medieval Settlement at Sizewell, Leiston.	Medieval Settlement with evidence of industrial activity on edge of Settlement.	Early Neolithic to Medieval	647115	262670
LCS 153.	MSF26812	Brick works.	Brick works, kilns, pug mill and drying sheds and extraction pit shown on 1880's map.	Post Medieval	644468	263145
LCS 154.	MSF24565	Land near Upper Abbey Farm, Eastbridge Road.	Evaluation revealed in the northern half of the site this was truncated by two large pits, probably post-medieval quarries.	Post Medieval	645188	264938
LCS 154.	MSF24565	Land near Upper Abbey Farm, Eastbridge Road.	Evaluation revealed in the northern half of the site this was truncated by two large pits, probably post-medieval quarries.	Post Medieval	645188	264938

NOT PROTECTIVELY MARKED

Parish Reference.	Monument Number.	Name	HER Summary Description.	Period	Easting	Northing
LCS 155.	MSF24870	EDF Cable Trench, Leiston Abbey.	Monitoring revealed a series of disturbed and re-deposited layers, a bonded flint and mortar wall, capped well and a cobbled surface associated with the farmhouse.	Medieval	644470	264182
LCS 160.	MSF25256	EDF Access, Sizewell Power Station.	Monitoring of test pits revealed evidence of a channel, pond or wet hollow in the south of LCS 160 containing a sherd of medieval pottery, a small quantity of unstratified medieval pottery.	Medieval	647191	262670
LCS 161.	MSF29484	Late Prehistoric and Romano-British agricultural activity at Galloper ffshore Wind Farm.	Features, mostly ditches with some pits, consistent with small scale Late Prehistoric and Romano-British activity probably relating to farming practices.	Roman	646659	262674
LCS 164.	MSF26112	Leiston Auxiliary Unit, Operational Base, Leiston Common.	A Second World War Auxiliary Unit Operational Base has been recorded at this location, from documentary evidence, oral history and investigations on the ground. However, see LCS 184 for an alternative location for this site, on Leiston Common itself.	Second World War.	646389	263174
LCS 165.	MSF26815	Twopenny Bridge, over Minsmere New Cut.	A single arched brick bridge with a date stone of 1842, over Minsmere New Cut.	19th century.	646010	266231

NOT PROTECTIVELY MARKED

Parish Reference.	Monument Number.	Name	HER Summary Description.	Period	Easting	Northing
LCS 166.	MSF26730	Coastguard Lookout Station, Sizewell Gap, Leiston.	Recording of a Listed Building prior to conversion. The building comprised a coastguard lookout station built in the 1820s. Brick built with slate roof.	19th century to Unknown.	647542	262749
LCS 167.	MSF26807	Burnt flint mound.	Extensive scatter of heavily burnt flints adjacent to a small stream.	Unknown	644938	263560
LCS 169.	MSF26814	Area of probable peat cutting.	Area of probable peat cutting, identified on maps as well as pit like features found during woodland survey.	Unknown	646440	264559
LCS 180.	MSF31543	Possible practice trench and undated ditches at Aldhurst Farm.	Possible practice trench and undated ditches identified during evaluation trenching at Aldhurst Farm.	Post Medieval to Modern	644844	263475
LCS 181.	MSF31918	Site of possible Bronze Age round barrow.	A ring ditch, perhaps representing the site of a Bronze Age round barrow, is visible as a cropmark on aerial photographs. On photographs taken in 1946 it may be visible as a slight earthwork.	Bronze Age.	646036	264680
LCS 182.	MSF31919	Site of possible Iron Age to Roman saltern mound or 'Red Hill'.	The site of a possible saltern mound or 'Red Hill', usually thought to date to the Iron Age to Roman period, is visible as a pinkish white soilmark on aerial photographs.	Early Iron Age to Roman.	646200	264831

NOT PROTECTIVELY MARKED

Parish Reference.	Monument Number.	Name	HER Summary Description.	Period	Easting	Northing
LCS 183.	MSF31920	Extensive area of Second World War military training activity.	Evidence of Second World War military training activity is visible on aerial photographs as earthworks and disturbed ground spread across an extensive area of Leiston, including part of Dunwich Forest and Kenton Hills. The activity, which is clearly visible.	First World War to Second World War.	645969	264334
LCS 183.	MSF31920	Extensive area of Second World War military training activity.	Evidence of Second World War military training activity is visible on aerial photographs as earthworks and disturbed ground spread across an extensive area of Leiston, including part of Dunwich Forest and Kenton Hills. The activity, which is clearly visible.	First World War to Second World War.	645969	264334
LCS 184.	MSF31922	Site of Second World War Auxiliary Unit Operational Base, Leiston Common.	The site of a Second World War Auxiliary Unit Operational Base has been recorded on Leiston Common, and is visible as an earthwork on aerial photographs. However, see too LCS 164 for an alternative location for this site.	Second World War.	645825	263502

NOT PROTECTIVELY MARKED

Parish Reference.	Monument Number.	Name	HER Summary Description.	Period	Easting	Northing
LCS 185.	MSF31923	Site of Second World War Diver battery.	The site of a Second World War Diver battery has been recorded on Leiston Common, and is visible on 1940s aerial photographs as surviving and removed structures, a building or hut (since removed) and earthworks (now levelled).	Second World War.	645786	263323
LCS 186.	MSF31925	Site of Second World War (and/or possibly First World War) military training site, Leiston Common.	The site of a Second World War (and/or possibly First World War) military training site on Leiston Common is visible as earthworks and barbed wire on 1940s aerial photographs.	First World War to Second World War.	645850	263442
LCS 187.	MSF33452	World War Two training area.	A small area of Second World War military training is visible on aerial photographs on Cowmarsh Hill and nearby rough ground, consisting mainly of small trench sections and weapons pit types features.	Second World War.	646186	266193
LCS 188.	MSF33489	Possible medieval to post medieval boundaries and/or structural remains.	The slight earthworks and vegetation marks of possible medieval to post medieval boundaries and/or structural remains may be visible on aerial photographs to the rear and south of the Public House at Eastbridge.	Medieval to IPS: Post Medieval	645315	266141

NOT PROTECTIVELY MARKED

Parish Reference.	Monument Number.	Name	HER Summary Description.	Period	Easting	Northing
LCS 189.	MSF33482	Cropmarks of possible medieval common-edge stock enclosures and/or drainage features.	The cropmarks of a series of possible enclosures of potential medieval to post medieval date, are visible on aerial photographs alongside the edge of the marshes; Common Fen on Hodskinson's map of 1783.	Roman to IPS: Post Medieval	646304	265601
LCS 190.	MSF33485	Cropmarks of fragmentary and multi-phase ditches and enclosures.	The cropmarks of fragmentary and multi-phase ditches and enclosures are visible on aerial photographs. The site consists of at least two phases, potentially including Roman and medieval to post medieval features.	Roman to IPS: Post Medieval	646464	265078
LCS 191.	MSF33488	Cropmarks of large pits or hollows.	The cropmarks of a linear group of large pit-like features or hollows of uncertain date and significance have been identified on the aerial photographs, but have only been mapped as an extent of area.	Unknown	645761	266097
LCS 192.	MSF33487	Cropmarks of possible ring ditch of unknown date.	The cropmarks of an incomplete ring ditch or penannular ditch of uncertain date and significance is visible on aerial photographs. This feature is located next to a possible area of medieval common-edge settlement and/or stock enclosures.	Early Bronze Age to Medieval	646229	265695

NOT PROTECTIVELY MARKED

Parish Reference.	Monument Number.	Name	HER Summary Description.	Period	Easting	Northing
LCS 193.	MSF33483	Cropmarks of possible medieval to post medieval enclosure.	The cropmarks of a possible enclosure and associated features of unknown, but potentially of medieval to post medieval date, are visible on aerial photographs. It is possible that this site relates to the nearby linear group of enclosures, tentatively in	Medieval to IPS: Post Medieval	646014	265971
LCS 194.	MSF33484	Cropmarks of fragmentary and multi-phase field boundaries and enclosures.	The cropmarks of fragmentary and multi-phase field boundaries and enclosures are visible on aerial photographs. The site also includes parchmarks suggesting a possible embanked or compacted route into the field.	Medieval to IPS: Post Medieval	645881	265922
LCS 195.	MSF33486	Site of uncertain archaeological significance, possibly a saltern.	An area of 'red 'earth' is visible on colour aerial photographs and could feasibly relate to the site of a Roman salt production site – a red hill. Finds in the area do indicate Roman activity (LCS 032/MSF21534) and salt industry (LCS 134) nearby.	Roman	646473	265307
LCS 196.	MSF33448	Site of one or more Second World War slit trenches.	One or more Second World War slit trenches are visible as earthworks on aerial photographs taken between 1944 and 1946. They were probably outlying defences for Leiston, and perhaps also the Diver anti-aircraft battery (LCS 185).	Second World War.	645612	263110

NOT PROTECTIVELY MARKED

Parish Reference.	Monument Number.	Name	HER Summary Description.	Period	Easting	Northing
LCS 197.	MSF33447	Site of vague cropmarks of unknown date and significance.	Vague and fragmentary cropmarks of unknown date and significance are visible on aerial photographs.	Unknown	644958	263378
LCS 198.	MSF33446	Site of cropmarks of uncertain archaeological significance and unknown date, possibly relating to a prehistoric barrow.	Site of cropmarks visible on aerial photographs of uncertain archaeological significance and unknown date, but comprising a possible oval mound, a ring ditch, a substantial flanking ditch and possible pits.	Early Neolithic to Late Bronze Age.	645054	263655
LCS 199.	MSF33445	Site of possible double ring ditch of uncertain significance and date.	A possible double ring ditch of uncertain archaeological significance and date is visible as a cropmark on aerial photographs.	Bronze Age.	645158	263613
LCS 200.	MSF33444	Site of undated boundary on Leiston Common.	An undated linear bank, probably a former boundary, is visible as an earthwork on Leiston Common on aerial photographs taken in 1946. It has since been levelled.	Medieval to IPS: Post Medieval	645654	263443
LCS 201.	MSF33443	Site of undated boundary on Leiston Common.	An undated linear bank, probably a former boundary, is visible as an earthwork on Leiston Common on aerial photographs and lidar images.	Medieval to IPS: Post Medieval	646206	263499
LCS 202.	MSF33442	Site of two probable First World War pillboxes.	Two probable First World War pillboxes are visible as extant buildings (since levelled) on aerial photographs.	First World War.	645849	262507

NOT PROTECTIVELY MARKED

Parish Reference.	Monument Number.	Name	HER Summary Description.	Period	Easting	Northing
LCS 203.	MSF33440	Second World War training area and/or strong point.	A Second World War training area and/or strong point is visible as earthworks and structures on 1940s aerial photographs. Recent photographs indicate that while much of the site was dismantled before the end of the war, some earthworks probably still survive.	Second World War.	646561	262342
LCS 204.	MSF33454	Second World War 'SOS' Field Artillery position and training area.	The site of a probable Second World War 'SOS' Field Artillery position and an associated area of dispersed military training and is visible on aerial photographs on and around Black Walks, Leiston.	Second World War.	646056	265489
LCS 205.	MSF33439	Site of Second World War military training area and/or defended locality.	A Second World War military site, perhaps used for training and/or as a defended locality, is visible as earthworks and structures on aerial photographs. There is potential for some elements to still survive, as the eastern part of the site – Broom Cover.	Second World War.	646343	262995
LCS 207.	MSF33437	Site of Second World War military activity and structures.	Evidence of Second World War military activity, including earthwork pits and several structures, is visible within plantation woodland on 1940s aerial photographs. The nature of the site is uncertain.	Second World War.	646774	262860

NOT PROTECTIVELY MARKED

Parish Reference.	Monument Number.	Name	HER Summary Description.	Period	Easting	Northing
LCS 208.	MSF33436	Site of fragmentary cropmarks of unknown date and significance.	Faint and fragmentary rectilinear cropmarks, of uncertain date and archaeological significance, are visible on aerial photographs.	Unknown	645489	263012
LCS 209.	MSF33434	Site of fragmentary cropmarks of unknown date and significance.	Fragmentary cropmarks, of uncertain date and archaeological significance, are visible on aerial photographs. They could represent former field boundaries.	Unknown	645765	262325
LCS 210.	MSF33433	Site of fragmentary cropmarks of unknown date and significance.	Fragmentary cropmarks, of uncertain date and archaeological significance, are visible on aerial photographs. They could represent former field boundaries.	Unknown	646065	262292
LCS 211.	MSF33431	Site of fragmentary cropmarks of unknown date and significance.	Fragmentary cropmarks, of uncertain date and archaeological significance, are visible on aerial photographs. They could represent former field boundaries and/or enclosures, and perhaps part of a trackway.	Unknown	646110	262860
LCS 212.	MSF33430	Linear earthwork banks on Broom Covert.	Linear earthwork banks, perhaps post-medieval boundaries, are visible on aerial photographs of heathland at Broom Covert. They are in part followed by modern land divisions depicted on OS maps.	Post Medieval to Modern	646315	263004

NOT PROTECTIVELY MARKED

Parish Reference.	Monument Number.	Name	HER Summary Description.	Period	Easting	Northing
LCS 213.	MSF33429	Site of Second World War Diver anti-aircraft battery.	A Second World War Diver anti-aircraft battery is visible as structures and earthworks on aerial photographs. The site was dismantled at the end of the war but parts of the trackways still survive, as may some of the hardstandings.	Second World War.	646286	262231
LCS 215.	MSF33426	Site of possible Bronze Age round barrow or medieval to post medieval mill mound, The Walks.	The site of a possible Bronze Age round barrow or medieval to post medieval mill mound is visible as a soil and cropmark on aerial photographs.	Early Bronze Age to IPS: Post Medieval	646599	262313
LCS 216.	MSF33424	Earthworks of linear and rectilinear boundaries of unknown date, The Walks, Aldringham Common.	Linear and rectilinear boundaries of unknown date are visible as earthworks on aerial photographs of The Walks, Aldringham Common.	Unknown	646462	262264
LCS 228.	MSF35810	Medieval ditches, Abbey View Lodges, Leiston.	Evaluation identified medieval ditches and a modern pit.	Medieval	644396	263699
LCS Misc.	MSF11320	Leiston Gas Works.(PMed)	Leiston town gas works (S1)(R1).	Post Medieval	644794	262877
THB 008.	MSF16902	Dam Bridge; Eastbridge; Ton Bridge (1783).	Bridge named Ton Bridge, is shown crossing the Minsmere old river at East Bridge on Hodskinson's map (S1).	16th century to 17th century.	645270	266350

NOT PROTECTIVELY MARKED

Parish Reference.	Monument Number.	Name	HER Summary Description.	Period	Easting	Northing
THB 011.	MSF23958	Cropmark of ring ditch, possibly a Bronze Age round barrow.	The cropmarks of a ring ditch, possibly of Bronze Age date, is visible on aerial photographs bisected by Baker's Hill road. The most likely interpretation is that it relates to the remains of a Bronze Age round barrow, although this is not certain.	Early Neolithic to late Bronze Age.	644938	265899
THB 027.	MSF33481	Cropmarks of fragmentary and multi-phase fields and enclosures.	The cropmarks of fragmentary and multi-phase fields and enclosures are visible on aerial photographs. The extent of the site has been extended to the west to include the area of cropmarks identified, but omitted from the mapping due to being wholly outside the area.	Roman to IPS: Post Medieval	645322	265699
THB 028.	MSF33480	Cropmarks of ring ditch of uncertain date and significance.	The cropmarks of a possible incomplete ring ditch may be visible on aerial photographs. The presence of this feature is uncertain and some of the cropmarks may relate to geological cropmarks. Another more convincing and larger ring ditch has been mapped.	Unknown	645243	265894
WLN 028.	MSF15745	Decoy, Minsmere.	Area of irregularly armed small body of water named 'Decoy' in area of Minsmere (WLN 029) on 1:10560 OS maps (S1).	Post Medieval	647150	266501

Parish Reference.	Monument Number.	Name	HER Summary Description.	Period	Easting	Northing
WLN 041.	MXS19498	Sea banks of post-medieval date in Minsmere nature reserve.	Sea banks of post-medieval date in Minsmere nature reserve.	Post Medieval to Second World War.	646920	266564

(Details taken verbatim from Suffolk County Council Archaeological Service (SCCAS) HER entry; Key: Preh – Prehistoric, Neo - Neolithic; Rom – Romano British, Sax – Saxon, Med – Medieval, PMed – PostMedieval; IPS – Ipswich; AP – Aerial Photography; C – century, ? - uncertainty)

Table 1.5: HER event records within study area.

Parish Reference.	Event ID	Name	HER Summary Description.	Easting	Northing
n/a	ESF20015	Leiston Old Abbey Chapel, Building Recording.	As part of a grant aided programme of consolidation works to the building known as Minsmere Chapel, English Heritage required archaeological recording and interpretation to be undertaken. The site that lies within the coastal marshes now occupied by	647323	265982
n/a	ESF21866	Evaluation – Abbey Farm Barn, Leiston.	n/a	644440	264266
n/a	ESF21920	Fieldwalking Survey, Leiston Abbey (first site), Leiston.	n/a	647323	265993
n/a	ESF21921	Evaluation Report, Tutors Rooms, Leiston Abbey.	n/a	644397	264243
n/a	ESF21921	Evaluation Report, Tutors Rooms, Leiston Abbey.	n/a	644397	264243
n/a	ESF21923	Evaluation – Former Coal Yard, Carr Avenue, Leiston.	n/a	644722	262882
n/a	ESF21930	Desk Top Survey, Sizewell Belts SSSI, Sizewell	Documentary and historic study.	645843	263726
n/a	ESF21931	Archaeological survey of woodland areas, at the proposed site of Sizewell C Pressurised Water Reactor (PWR) power station, Suffolk.	n/a	646294	264531
DUN 101.	ESF21144	Tank traps at Minsmere Royal Society for the Protection of Birds (RSPB) reserve.	Eleven anti-tank blocks, part of LCS 088, threatened by flood management scheme, photographic record.	647766	266646

NOT PROTECTIVELY MARKED

Parish Reference.	Event ID	Name	HER Summary Description.	Easting	Northing
LCS 001.	ESF18145	Monitored excavation of two post holes for information board at Leiston Abbey.	n/a	644451	264206
LCS 002.	ESF21919	Geophysical Survey, at Leiston Abbey (first site).	n/a	647272	265988
LCS 148.	ESF20026	Monitoring Test Pits – Leiston Substation 132 kilovolt (kV) cable route.	Archaeological monitoring of test pits and bore hole excavations along a 1km route. Project status: Complete yes, validated yes Previous/Future Work: Previous yes, future yes Associated Identifiers: Sitecode LCS 150; NMR No. 1513988.	647174	262887
LCS 148.	ESF26155	DeskBased Assessment (DBA) – Greater Gabbard Offshore Windfarm Extension.	Wessex Archaeology was commissioned by Airtricity to undertake a DBA of an area of onshore works associated with proposed extension to and cable route for the Greater Gabbard Offshore Windfarm. A 1.5km study area around the site was asse	646956	262517
LCS 148.	ESF26156	Geophysical Survey – Greater Gabbard Wind Farm Onshore Works.	A detailed magnetometer survey was carried out at 0.25m intervals in a 3 - 4 hectare (ha) area with a Bartington Grad601-2 Fluxgate Magnetometer. Two pylons with approx 20m square bases visually dominate the site in the centre of the field and have resulted in very s	646985	262749
LCS 148.	ESF26157	Evaluation – Greater Gabbard Wind Farm Onshore Works, Sizewell Wents, Leiston.	Trial trench evaluation was carried out along the route of a proposed 132kV underground electricity cable and an area of woodland for the proposed site of a sub-station. The archaeological investigation	647021	262712

NOT PROTECTIVELY MARKED

Parish Reference.	Event ID	Name	HER Summary Description.	Easting	Northing
			.covers an area of around 50,000m squared, contained within		
LCS 148.	ESF26159	Excavation – Greater Gabbard Wind Farm Onshore Works, Sizewell Wents.	Excavation, following DBA, geophysical survey and evaluation, was carried out at Rosary Field in advance of the construction of onshore infrastructure for the Greater Gabbard Wind Farm. Two areas were stripped and excavated. The larger area (3700m squared) was	647024	262632
LCS 150.	ESF22801	Excavation – Leiston substation 132kV cable route, Sizewell.	Project details: An open area excavation of 3,700m squared was completed at Sizewell, the once burgeoning medieval market town which has been reduced to a fishing hamlet by erosion and inundations by the sea. The archaeological features represented the pinnac	647117	262640
LCS 152.	ESF20282	Heathland Creation Trials Site, Sizewell, Leiston.	Project details: An excavation was carried out on former agricultural land to the west of the Sizewell B power station. The natural stratum is sand with patches of clay, interpreted as glacio-fluvial drift. It is at an average height of 14.60m AOD. Th	646037	262539
LCS 154.	ESF20234	Land near Upper Abbey Farm, Eastbridge Road.	Project details: An evaluation was carried out in advance of the construction of eight wildlife ponds and associated works. Eight trenches (total area 75.80m squared) were excavated, representing approximately 7% of the area affected by the proposed development.	645152	264770
LCS 155.	ESF20589	EDF Cable Trench, Leiston Abbey.	Project details: Archaeological monitoring of the excavation of a 0.4m deep trench for a new electricity cable revealed a series of disturbed and	644470	264181

NOT PROTECTIVELY MARKED

Parish Reference.	Event ID	Name	HER Summary Description.	Easting	Northing
			re-deposited layers. In the north-south trench running immediately east of the farmhouse, a bonded flint and		
LCS 156.	ESF21279	Monitoring – 81 Abbey Road, Leiston.	n/a	644482	263469
LCS 158, 159 and 160.	ESF21036	Geotechnical Site Investigation, EDF Access, Leiston.	Project details: Monitoring of test pits at Sizewell power station, Leiston was carried out in order to record any archaeological evidence revealed by the groundworks. Three areas were targeted and a total of 36 pits observed. These revealed significant	647020	263692
LCS 161.	ESF25802	Evaluation – Galloper Offshore Wind Farm, Leiston.	Evaluation consisted of 35 machine excavated trial trenches, each measuring 25m x 1.8m identified features consistent with small scale farming practices.	646659	262674
LCS 166.	ESF21864	Building Recording, Coastguard Lookout Station, Sizewell Gap, Leiston.	Recording of a listed building prior to conversion. The building comprised a coast guard lookout station built in the 1820s. Brick built with slate roof. Project status: Complete Yes, validated yes. Previous/future work: previous no, future no associa	647542	262749
LCS 180.	ESF22569	Evaluation – Aldhurst Farm, Leiston.	An archaeological evaluation was carried prior to a proposed development of an area of c.9.8m. A total of seven trenches were excavated across the site. The trenches measured between 27m and 50m long by 1.8m. The trenching revealed undated ditches and mo	644844	263475
LCS 224.	ESF26106	Detailed Documentary Study – Sizewell C: Historic Environment.	Detailed documentary research was conducted for Sizewell C site using all known and accessible primary sources relating to Sizewell from the late	647329	263830

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Parish Reference.	Event ID	Name	HER Summary Description.	Easting	Northing
			13th century until the 1850s have been examined for this study (S1).		
LCS 228.	ESF25501	Evaluation – Abbey View Lodges, Leiston.	Archaeological evaluation in advance of residential development. 9 trenches were excavated.	644396	263699
LCS Misc.	ESF21927	Watching Brief, Valley Road, Sewage Works, Leiston.	n/a	645141	263206
n/a	ESF21922	Monitoring of Cable Trench, Leiston Abbey, Leiston.	n/a	644450	264170
n/a	ESF25018	Evaluation – Sizewell C: Main Site, Leiston.	n/a	645810	264690
LCS 179.	ESF22487	Georchaological boreholes at Aldhurst Farm, Leiston.	n/a	645000	263450
LCS 179.	ESF22735	Evaluation – Aldhurst Farm, Sizewell.	n/a	645000	263450
LCS 217.	ESF23096	Excavation – Leiston Abbey Community Excavations (Digventures), Leiston.	n/a	644395	264255
LCS 219.	ESF23293	Evaluation – Pill Box Field, Leiston.	n/a	647130	262830
LCS 224.	ESF25516	Geophysical Survey – Sizewell, Leiston.	n/a	645759	264629
LCS 227.	ESF25418	Monitoring – Leiston Abbey: Gueston Hall and thatched barn, Leiston.	n/a	644440	264252

(Details taken verbatim from Suffolk County Council Archaeological Service (SCCAS) HER entry)



VOLUME 2, CHAPTER 16, APPENDIX 16B : UPDATED HISTORIC
ENVIRONMENT DESK BASED ASSESSMENT



UK EPR Sizewell C

Main Site: Updated Historic Environment Desk-Based Assessment

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Abbreviations and Acronyms

AMIE	Archives Monuments Information England
BGS	British Geological Society
DIVER	Codeword for 1944-5 heavy anti-aircraft defences commissioned in response to the threat of V1 flying bombs.
Groyne	Man-made barrier built across a beach (perpendicular to the sea) to protect beaches from being swept away by the sea
HER	Suffolk County Historic Environment Record
LiDAR	Light Detection And Ranging
MSF	Prefix for Suffolk County Historic Environment Record reference numbers
SRO	Suffolk County Records Office

Executive Summary

This updated desk-based assessment brings together previous phases of survey and investigation to set out the present understanding of the potential presence and significance of archaeological remains within the proposed Sizewell C main construction site.

A tentative characterisation of these remains has been proposed:

- Evidence for prehistoric occupation is largely contextual and based on extrapolation from sites in analogous landscape contexts elsewhere in the Sandlings. Some prehistoric artefactual material has been recovered and aerial photography has suggested the presence of some prehistoric features, but these interpretations appear speculative.
- There is no direct evidence for Romano-British activity within the site, although some artefactual material has been recovered from the study area near Leiston. Similarly, there is no direct evidence for early-medieval activity. The fact that the principal settlements are recorded in the Domesday survey of 1086, suggests that this area was part of a settled and organised tenurial landscape by the time of the Norman Conquest in 1066.
- Medieval archaeological remains appear likely to be focused on the principal settlements of the study area, although outlying smaller settlements or industrial sites may be present within the site.
- Post medieval and modern remains are likely to comprise elements of the enclosure period agricultural landscape. In addition, archaeological evidence of Second World War defensive features is demonstrably present within the study area and is likely to extend across the eastern part of the site.

With regards to the potential significance of heritage assets, there is not at present any evidence which suggests the presence of non-designated heritage assets of the highest significance, and the majority of archaeological heritage assets present within the site appear likely to be of low to medium significance. This conclusion is, however, based on non-intrusive surveys and desk-based work and needs to be tested with further intrusive fieldwork because there remains a potential that archaeological heritage assets which cannot be predicted from work carried out to date may be present within the site. It is also possible that these heritage assets may be of greater significance than anticipated at present.

Further archaeological investigation will be required to fully understand the potential presence and significance of any archaeological remains within the site. This will establish the need for, and form of, any further mitigation, which will in turn allow for informed planning decisions.

A staged process of investigation is proposed to further evaluate near-surface archaeological remains. This will comprise additional geophysical survey within the enlarged red line boundary (including the site of the proposed campus), followed by trial trenching.

1 Introduction

1.1 Desk-Based Assessment

This updated desk-based assessment (DBA) considers the potential presence and significance of archaeological remains within the site of the proposed Sizewell C power station, comprising the power station site, construction compounds, campus and other near-site associated development (land to the east of Eastlands Industrial Estate, Leiston).

The DBA has been updated to reflect the changed redline boundary of the proposed Sizewell C power station site since the previous study in 2010. This study provides a clear and detailed description of the existing baseline conditions, including additional historic landscape information, which will form the basis for an assessment of effects.

The intention of this report is to collate the various information sources and to understand the specific archaeological potential of the site as a whole. As the site area encompasses a variety of different historic landscape and archaeological contexts, it is also important to understand differences across the site. Consequently, for the purposes of this report, the site has been divided into discrete parcels which correspond roughly with existing field boundaries. These parcels are identified on Figure 1.

Marine archaeology is outwith the scope of this assessment, and is considered in a separate Offshore and Intertidal Historic Environment Desk-Based Assessment (AMEC, 2014).

1.2 Previous Reporting

A desk-based assessment was carried out by AMEC in 2010. This considered the archaeological baseline within a study area of approximately 2-3km radius from the site boundary as defined at that time. This assessment set out the contemporary legislative and policy background before drawing on data from the Suffolk Historic Environment Record and Historic Landscape Characterisation, The National Heritage List and the National Monuments Record (NMR) as well as archival and secondary source material including historic mapping and published sources supported by site visits.

Source material referenced in this report includes:

- Material held in the Suffolk County Historic Environment Record (HER);
- Material held in the Archives Monuments Information England (AMIE), formerly the NMR;
- English Heritage spatial datasets of designated heritage assets (the National Heritage List);
- Archival and cartographic material held at Suffolk County Records Office (SRO); and
- Published secondary historical and archaeological information.

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Other relevant previous archaeological work that has been drawn on within this report includes:

- *Sizewell C PWR Power Station Evaluation* (Richmond 1994);
- *A Geoarchaeological Report on the Geotechnical Ground Investigation at the Sizewell Site, Suffolk* (Bates 2008);
- *Heath Creation Trials at Sizewell B, Sizewell, Leiston, Suffolk* (Suffolk CC 2008a);
- *Sizewell Site: Heathland Creation Trials Geoarchaeological Assessment - Final Report* (University of Wales, Lampeter/Royal Haskoning 2009);
- *Heathland Creation Trials Site, Sizewell, Leiston, Suffolk* (Suffolk CC 2009);
- *Sizewell, Suffolk Nuclear Power Station Proposal: Archaeological and Cultural Heritage Assessment* (Wessex Archaeology 2009);
- *Sizewell C: Historic Environment Desk-based Assessment* (AMEC 2010);
- *Sizewell C: Historic Environment Detailed Documentary Study* (AMEC 2011);
- *Sizewell C: Geophysical Survey* (Stratascan 2010);
- *Sizewell C: Historic Environment Designated Heritage Assets Baseline: Initial Setting Considerations* (AMEC 2012);
- *Sizewell C: Historic Environment - Settings Assessment Scoping Recommendations* (AMEC 2015a); and
 - *Sizewell C: Interim Report on Watching Brief* (AMEC 2015b).

A LiDAR survey of the area immediately around the Sizewell site was commissioned in 2009.

Provisional National Mapping Project (NMP) data for the area was made available by SCC, although the work relating to this, including final interpretation and integration with the HER, is still ongoing.

Significant work has been carried out on the wider archaeological background, historic landscape and historic seascape character of the area, and reference has been made to the following studies:

- *The Archaeology of the Suffolk Coast* (Suffolk County Council 2007);
- *England's Historic Seascapes Pilot Study: Southwold to Clacton Final Project Report* (Oxford Archaeology 2007); and
- *The Suffolk Historic Landscape Characterisation Map* (Suffolk CC 2008b).

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Reference has been made to the published East of England Archaeological Resource Assessment (Glazebrook 1997) and Research Agenda (Brown and Glazebrook 2000). The resource assessment has provided useful context, but the time that has elapsed since publication means that a number of its conclusions, particularly those regarding early prehistory, have been significantly modified by subsequent discoveries and reassessments of existing material. Similarly, the Research Agenda has been used as a starting point for considering the informative potential of archaeological remains as subsequent work would allow the stated research agenda to be refined and new avenues of research proposed. In addition, the present state of knowledge of the archaeological potential of the site is such that it is more appropriate to consider research and informative potential in very broad terms, with more fully developed research aims forming a key element of any mitigation design.

1.3 Methodology

For the purposes of this report, and to achieve a more finely-grained understanding of the archaeological potential of the site across a variety of historic landscape contexts, the site has been divided into parcels, roughly corresponding to individual fields, enclosures or blocks of woodland and plantation.

A renewed search of the Suffolk HER and English Heritage Spatial Datasets was undertaken for all designated and previously recorded assets within a study area agreed with Suffolk County Council (Appendix B – Figures 1-3). Each of the identified heritage assets was given a unique AMEC ID Number (shown in **bold** in the text and shown on figures 2-3) and are included within the Heritage Asset Gazetteer (Appendix B). A review of available cartographic sources (historic mapping), previous archaeological investigations and aerial photographs was also undertaken.

Professional judgement has been used to assign a level of potential for the site to contain below ground archaeological remains as described according to the system described below.

High - Archaeological features and finds of this period can be demonstrated to be represented on the site or are likely to be present.

Medium - Archaeological features and finds of this period may be represented on the site.

Low - Archaeological features and finds of this period are unlikely to be represented on the site. Although small quantities of 'residual' finds may be present.

Where the potential for the presence of heritage assets is rated as medium or high, an assessment of the significance of these assets has been undertaken. This assessment takes into account the potential heritage interests of the assets in addition to their likely preservation and distribution and is based on professional judgement as informed by relevant guidance (English Heritage 2008, Historic England 2015) and NPPF. Significance is rated on the scale below.

High – Asset has significance for an exceptional level of archaeological, architectural, historic and/or artistic interest.

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Medium – Asset has significance for a high level of archaeological, architectural, historic and/or artistic interest.

Low – Asset has significance for elements of archaeological, architectural, historic or artistic interest.

Negligible – Asset is worthy of note but either has minimal significance or no longer survives in any meaningful manner.

Where a general potential for the presence of archaeological features is identified, but there is insufficient information available to make an informed judgement on the likely significance of any features which may be present, a rating of **Unknown** has been used.

The results of this exercise are presented at Section 4. More detailed discussion of the archaeological context and conditions of each parcel is presented at Appendix 1.

2 Legislation, Policy and Guidance

2.1 Legislation

Since the production of the original desk-based assessment, there have been no changes to the fundamental underpinning legislative background relating to historic environment.

2.2 National Planning Policy

National Planning Policy Statements set out the policy context for nationally important infrastructure applications. NPS EN-1 sets out the overarching policy for energy and NPS EN-6 sets out policies for nuclear generation. NPS EN-6 Volume I does not set out any specific policies or provisions for consideration of the historic environment. NPS EN-6 Volume II sets out a high-level understanding of the historic environment baseline for the SZC project as part of the wider sustainability appraisal.

NPS EN-1 discusses the generic impacts on the historic environment associated with the construction, operation and decommissioning of energy infrastructure. The NPS sets out the need to consider the impacts on both designated and non-designated heritage assets. Where non-designated heritage assets are considered to be of equivalent significance to designated heritage assets, they should be subject to the same policy considerations as those that apply to designated heritage assets (NPS EN-1, para 5.8.5). Non-designated heritage assets of lesser significance should also be considered within any decision making (NPS EN-1, para 5.8.6).

In considering the impact of a proposed development on any heritage assets, the decision maker will need to take into account the particular nature of the significance of the heritage assets and the value that they hold for this and future generations (NPS EN-1, para 5.8.12), and it is important that any application contains sufficient information to allow that significance to be understood (NPS EN-1, para 5.8.10). Consequently, further field survey may be required to inform any assessment of significance (NPS EN-1, para 5.8.9).

Development which gives rise to substantial harm to designated heritage assets (or non-designated heritage assets of equivalent significance) should be exceptional, or for heritage assets of the highest significance (i.e. scheduled monuments, grade I and II* listed buildings, historic battlefields and grade I and II* designated parks and gardens) should be wholly exceptional (NPS EN-1, para 5.8.14). Harm of less than substantial magnitude should be weighed against the benefits of the proposal (NPS EN-1, para 5.8.14). Development giving rise to substantial harm to a designated heritage asset should only be permitted where necessary to deliver significant public benefits which outweigh the harm occasioned (NPS EN-1, para 5.8.15).

Provisions for the recording of at-risk heritage assets to mitigate against the loss of evidential interest are set out at NPS EN-1, paras 5.8.19 – 5.8.22.

NPPF Section 12 sets out broadly similar provisions to NPS-EN1 on the consideration of the historic environment in the planning system, particularly with regards to provisions for establishing the significance of heritage assets which may be affected by development and with regards to the acceptability of harm to the significance of designated heritage assets or non-designated assets of equivalent significance.

2.3 Local Planning Policy

The Suffolk Coastal District Local Plan consists of Core Strategy and Development Management Policies, which set out the strategic objective (Objective 11) 'To conserve and enhance the quality of the distinctive natural, historic and built environments'.

Saved policies within the Suffolk Coastal Local Plan will be retained until these are superseded by adopted development plan documents. The only saved policy which may become relevant to this study is AP4 - Parks and Gardens of Historic or Landscape Interest. Policy AP7 - Development of archaeological sites was deleted in 2014 having been superseded by the provisions set out in Section 12 of NPPF.

The Core Strategy sets out that '...Section 12 of the NPPF supports this aim and will be applied rigorously. More generally, decisions on development proposals affecting heritage assets will be informed as appropriate by Conservation Area Appraisals, information from the Historic Environment Record and Archaeological Assessments...'

Leiston Town Council is preparing a Neighbourhood Plan, although no plan documents have been updated at present.

3 Archaeological and Historical Background

The desk-based assessment (AMEC 2010) provides detailed period-based discussions of the archaeological and historic development of the site and its surroundings. A summary of this discussion is presented below with key issues which bear on the archaeological understanding of the site discussed in more detail.

3.1 Geology, Geomorphology and Geoarchaeology

The site comprises a variety of geological and geomorphological contexts. BGS solid geological mapping shows that the whole study area overlies sedimentary bedrock comprising Neogene and Quaternary Rocks, which formed up to 23 million years ago (mya) in shallow seas with mainly siliciclastic sediments deposited as mud, silt, sand and gravel.

Within the site boundary, bedrock is overlain principally by glacial sand and gravel formed up to 3mya in cold periods with Ice Age glaciers scouring the landscape and depositing moraines of till with outwash sand and gravel deposits from seasonal and post-glacial meltwaters (BGS). Higher areas of these sandy soils comprise the distinctive Sandlings landscape. Lower-lying marshland areas to the west and north of Sizewell are primarily alluvial and estuarine deposits.

Geoarchaeological studies of marshland to the south and west of the existing Sizewell A and B sites (Bates 2008, Suffolk CC 2008a, UoW/Royal Haskoning 2009, Suffolk CC 2009) identified a complex depositional sequence of marine inundations and periods of freshwater carr within river valleys. These valleys displayed a high degree of mobility and change as a result of erosive and accretive processes along the shoreline and within a river valley, which is clearly visible on LiDAR plots as low-lying land. This has resulted in the formation of interleaved peat and silt deposits, which potentially seal earlier phases of human activity.

3.2 Prehistoric Period – to c. AD50

There are presently no observations of archaeological material dating from the Palaeolithic period within the Study Area, although the area is thought likely to have been exploited by hominids and humans during this period. Activity dating from the Mesolithic period within the study area is represented by finds of lithics, although the coastal margins are thought likely to have offered favourable conditions for human occupation. Similarly, evidence of Neolithic activity within the study area is limited to finds of lithic objects although previous research suggests that the combination of well-drained Sandlings soils and wetland-edge environments would have been favourable for Neolithic settlement (Glazebrook 1997). It should be noted that the types of settlement and activity associated with earlier prehistory in this area tend not to be readily apparent on aerial photography or geophysical survey.

Confirmed evidence for Bronze-age activity is similarly restricted and comprises funerary activity, including two cinerary urns from Leiston (30). A possible round barrow is recorded at the southern end of the parkland around Theberton House (35), though the height of this feature suggests that it is more likely to represent a folly or prospect mound associated with the parkland.

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There are a large number of rather enigmatic causewayed or pennannular ring-ditches within the study area. These are known from aerial photography and vary in size from approximately 10m diameter to up to around 60m diameter; some are recorded as concentric circles, suggesting either a more complex structure or repeated reuse and extension of existing features. These features are located on the slightly higher gravel soils but close to the edges of the coastal marsh. Their interpretation is uncertain. Ring-ditches would normally be considered elements of the bronze-age funerary landscape, but the pennannular form of these features and the variation in size of these features is not entirely consistent with this interpretation. More recent uses such as peat-stack stands are also potential interpretations, but once again, the variation in scale is difficult to reconcile.

In a few cases, geophysical survey or intrusive evaluation has been undertaken over the sites of these ring ditches; in general, these surveys have cast doubt on the aerial photographic interpretation. A single possible ring-ditch, however, was identified in these surveys (in Parcel 14 – Broom Walk), although this anomaly did not coincide with features plotted from aerial photography, and a possible enclosure was recorded in Parcel 13 (Badgers Burrows) in a location where a possible ring-ditch cropmark had been observed on aerial photographs.

Other fields surveyed where cropmarks of ring-ditches had been observed (Parcels 10 - 10 Acres and 24 – 20 Acres) did not produce any geophysical anomalies which could be clearly related to the plotted cropmarks.

There is also no confirmed evidence of Iron-Age activity within the study area. Some sub-rectangular enclosures (52, 143, 220, 259) observed in aerial photography in the southern part of the study area may relate to this period, but this suggestion cannot be confirmed. Ditches of possible Iron Age date were observed in the excavations and evaluation for the Greater Gabbard substation, located on the southern edge of the SZC site (Atfield *et al.* 2009).

3.3 Romano-British Period – c. AD50 to c. 400

There is very little evidence for this period within the study area, comprising only scatters and chance finds of artefactual material (49, 151) around Leiston. Settlements of this date are usually fairly readily apparent to geophysical survey and aerial photography, and are frequently evidenced by discernible surface scatters of artefactual material in arable land. Consequently, the apparent absence of evidence for such features from the site may reflect a genuine absence of past activity.

3.4 Early-Medieval and Medieval Period – c. 400 to c. 1540

There is no specific evidence for activity dating from the early-medieval period within the study area. Leiston and Theberton are both recorded in the Domesday survey of 1086, which records manorial holdings at the time of the Conquest in 1066. It is clear that a settled manorial geography, which is likely to have provided the basis for the medieval settlement pattern, was established during the early-medieval period.

Early-medieval settlement sites can be difficult to identify without detailed archaeological investigation. In addition, early Anglian sites can be particularly difficult to identify owing to the relative lack of artefactual material.

There is significant observed archaeological evidence for the use of the study area and its immediate surroundings within the medieval period. This is principally focused on five

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specific locations; the two sites of Leiston Abbey and the villages of Sizewell, Leiston and Theberton.

The monastic sites would have comprised relatively small and tightly grouped complexes which did not extend onto the site, although the site presumably includes elements of the wider monastic landholdings. Similarly, the villages of Leiston and Theberton would not have extended onto the site, although elements of associated agricultural landscapes are presumably present, principally in the form of grazing land within the Sandlings heath and the seasonal grazing marshes.

The village of Sizewell was substantially larger in this period than at present, and the full extent of the village and its associated agricultural landscape has been reconstructed through detailed documentary survey (AMEC 2011). This suggested that the extreme southern part of the site occupies fields immediately outside the former village.

The location of the principal settlements outside the proposed site, however, cannot be taken as an indication of the absence of further archaeological remains. Archaeological investigation was undertaken in advance of the Greater Gabbard on-shore development along the southern edge of 'Pill Box Field' and in the adjacent field to the west known as 'Rosery Field'.

These works found the remains of timber buildings, postholes, clay floors, possible animal enclosures and ovens of 12th to 14th century date. The features are believed to relate to an isolated farmstead or agricultural complex, possibly a monastic grange associated with Leiston Abbey.

The remains of a medieval boat, which had probably been broken up between the 12th and 14th centuries, were also discovered. The boat is believed to have been an inshore fishing vessel; parts of the hull were identified as having been re-used for the timber lining of a well (Suffolk CC website, accessed 2010).

The location of this site on the margins of the coastal marshes meant that preservation of organic material was good and that structural woodwork from the well, which included reused ship's timbers, was recovered. Further documented medieval activity within the study area includes flax and hemp processing and peat cutting.

3.5 Post-Medieval Period – c. 1540 to c. 1850

The basic settlement geography established in the medieval period remained through the post-medieval period, with the former monastic site at Leiston becoming a secular manorial centre. The principal change in this period was in terms of the use and demarcation of land, with the steady enclosure and 'improvement' of lands within the Sandlings and marshland to provide more productive land. Heritage assets within the site and study area dating from this period primarily comprise agricultural features and buildings including those associated with the drainage and improvement of the marshes. These include features such as marl pits and enclosure period field boundaries.

3.6 Modern Period – c. 1850 to c. 2000

The majority of the modern period saw a general continuity of land use from the post-medieval period, with no major changes to the established patterns of settlement or land use. There are some observed features of this date, including the Sizewell beach rifle range.

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During the Second World War, extensive defensive works were built at Sizewell, comprising anti-invasion defences, and later anti-aircraft defences.

The anti-invasion defences were part of the 'coastal crust', which was intended to delay any invasion force long enough to allow defensive reinforcements to arrive. It comprised a number of elements, many of which are recorded or are still visible, including prepared defensive positions such as pill-boxes and entrenchments, obstacles including barbed wire entanglements and anti-tank cubes. Natural features such as the marshland at Minsmere could also be allowed to flood to make anti-tank obstacles. Later in the war, the defensive focus changed, and heavy anti-aircraft (DIVER) batteries were built to combat the threat of V1 flying bombs.

Construction work at Sizewell A power station started in 1961, with the station generating from 1966, and at Sizewell B in 1987, which commenced generation from 1995. Sizewell A ceased generation in 2006. Further electrical generation and distribution infrastructure was built from 2008 with the cable connection and substation for the Greater Gabbard offshore wind farm (Atfield *et al.* 2009).

4 Results

4.1 Overview

Within the boundary of the proposed site, a total of 33 parcels were identified; of which 32 were on land and one was within the marine/littoral zone. Of these parcels, 13 were identified as having a **High** potential for the presence of archaeological remains, 9 were identified as of **Medium** potential, 10 as of **Low to Medium** potential and one as of **Low** potential.

Of the 22 parcels rated as of **High** or **Medium** potential, the likely significance of heritage assets thought to be present was rated as **Low** in 7 cases, **Low to Medium** in 8 cases, **Medium** in 5 cases and **High** in 1 case.

The 12 parcels rated as **Low to Medium** potential reflected the absence of sufficient information to assess the potential for the presence or likely significance of any archaeological features present. There is no evidence to suggest any elevated potential for the presence of archaeological features, and it is possible that the absence of existing records of any archaeological features in these areas reflects a genuine absence of archaeological material. It is, however, more likely that this absence reflects the lack of prior work on these parcels and it is not possible to rule out the presence of archaeological remains at this stage. Consequently, the likely significance of any remains in these parcels is rated as **Unknown**.

In general, the areas of highest potential for the survival of archaeological remains can be summarised as:

- Medieval settlement remains associated with settlement at Sizewell within the southern part of the site, particularly around Pillbox field. These are likely to be of **Medium** significance.
- Second World War military features in the northern part of the site around Goose Hill and in the south around Pillbox field. These are likely to be of **Low** significance.
- Deposits of geoarchaeological interest in the low-lying ground to the west of the Sizewell power stations. These are likely to be of **Low to Medium** significance.
- Prehistoric remains in the north of the site around Goose Hill and Upper Abbey/Old Abbey Farms suggested by a sparse scatter of artefactual material and the presence of possible ring-ditches observed in aerial photography. These are likely to be of **Low to Medium** significance.
- Grade II listed buildings at Upper Abbey Farm are of **High** significance. There is also a High potential for associated heritage assets of **Low to Medium** significance associated with earlier arrangements of the farmstead.

NOT PROTECTIVELY MARKED**4.2 Results****Table 1 Summary of Results**

Parcel and Name ¹		Archaeological Interest	Potential	Significance
1		Prehistoric material observed within the vicinity of this parcel.	Medium	Low-Medium
2		Prehistoric material observed within the vicinity of this parcel, cropmarks noted by NMP in north of parcel.	Medium	Low-Medium
3		Prehistoric material observed within the vicinity of this parcel.	Medium	Low-Medium
4	Power Station/Pillbox	Medieval and modern military remains are recorded adjacent to, and within, this parcel. Anomalies of probable archaeological origin have been observed in geophysical survey. Deposits of geoarchaeological interest may be present in the northern part of this parcel.	High	Medium
5	Rosery Cottage	Medieval remains are recorded adjacent to, and within, this parcel. Deposits of geoarchaeological interest may be present across this parcel.	High	Medium
6		Previous disturbance from construction of Sizewell A and B stations will have removed archaeological material but some deeper peat deposits may be present along the northern and western edges of this area.	Low	Low-Medium
7		Deposits of geoarchaeological interest likely to be present within this parcel. Extent of disturbance during construction of Sizewell A and B is uncertain.	High	Low-Medium
8	Hilltop Covert	Deposits of geoarchaeological interest may be present along the southern fringes of this area and in the former stream valley visible on LiDAR imaging, but near surface deposits are likely to have been significantly disturbed by forestry cultivation.	Medium	Low
9	Barn Piece	Potential presence of prehistoric material and recorded former presence of second world war military features. Geophysical survey shows sparse	High	Low-Medium

¹ Parcel names are given where a field name is recorded

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Parcel and Name ¹		Archaeological Interest	Potential	Significance
		scatter of anomalies of potential archaeological origin.		
10	10 Acres	Field contains possible ring-ditch and is adjacent to fields in which prehistoric material has been recovered. Geophysical survey shows sparse scatter of anomalies of potential archaeological origin but no evidence of ring-ditch.	High	Low - Medium
11	Stone Walk North and Stone Walk South	Single find of prehistoric material observed from this field. Geophysical survey shows anomalies of potential archaeological origin.	High	Low-Medium
12	Captain Rye	Prehistoric material and features observed in adjacent fields. Geophysical survey shows potential archaeological features in south of field.	High	Low-Medium
13	Badgers Burrows	Geophysical survey shows potential archaeological features in south of field.	High	Low-Medium
14	Broom Walk	Several possible ring-ditches observed in aerial photography. Geophysical survey shows sparse scatter of anomalies of potential archaeological origin with a possible ring-ditch in the south of the field.	High	Medium
15	White Gate	Geophysical survey of adjacent fields shows extensive but sparsely distributed spread of anomalies of possible archaeological origin across field.	Medium	Low
16	White Gate	Geophysical survey of adjacent fields shows extensive but sparsely distributed spread of anomalies of possible archaeological origin across field.	Medium	Low
17	White Gate	Chance find of Neolithic material recorded from this parcel. Geophysical survey shows extensive but sparsely distributed spread of anomalies of possible archaeological origin across field.	Medium	Low
18		No archaeological features recorded.	Low-Medium	Unknown
19		No archaeological features recorded.	Low-Medium	Unknown

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Parcel and Name ¹		Archaeological Interest	Potential	Significance
20	Red Rails	Geophysical survey shows anomalies of possible archaeological origin in south-west part of field.	High	Low-Medium
21	Red Rails	No archaeological features recorded.	Low	Negligible to Low
22	Red Rails	No archaeological features recorded.	Low-Medium	Unknown
23	Upper Abbey Farm	Contains two Grade II listed buildings (Upper Abbey Farmhouse and associated Barn).	High	High
24	20 Acres	Geophysical survey shows extensive but sparsely distributed spread of anomalies of possible archaeological origin across field but no further evidence of possible ring-ditch recorded in aerial photography.	Medium	Low
25	Old Covey	Spread of medieval pottery observed in field. Geophysical survey shows sparsely distributed anomalies of possible archaeological origin across field.	Medium	Low-Medium
26	12 Acre	No archaeological features recorded.	Low-Medium	Unknown
27	Stack	No archaeological features recorded.	Low-Medium	Unknown
28	Long Walk	No archaeological features recorded.	Low-Medium	Unknown
29		No archaeological features recorded.	Low-Medium	Unknown
30		No archaeological features recorded.	Low-Medium	Unknown
31		No archaeological features recorded.	Low-Medium	Unknown
32		No pre-enclosure archaeological features recorded.	Low-Medium	Unknown
33		Potential presence of buried archaeological landscapes and wrecks.	High	Medium

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4.3 Discussion

The investigative works carried out to date have provided a broad understanding of past activity within the study area and a characterisation of which areas are more or less archaeologically significant.

However, there are still important areas of uncertainty where the potential presence, and significance, of archaeological heritage assets cannot be fully understood. In addition, it is possible that archaeological heritage assets which cannot be predicted on the basis of desk-based assessment or the surveys carried out to date may be present within the site.

In particular, discrepancies between geophysical survey results and aerial photographic interpretation require further consideration. Both investigative methods are dependent on a high degree of interpretive judgement and can be significantly influenced by factors such as ground conditions. Consequently, neither can be taken as definitive proof of the presence, absence or nature of archaeological features.

These works have also provided an opportunity to test earlier interpretations of archaeological features within the site and to make recommendations for building on the present understanding of the archaeological baseline to better understand areas of uncertainty.

4.4 Characterisation of Archaeological Potential

The results of the desk-based assessment suggest six principal areas of archaeological interest within the study area:

- remains deriving from prehistoric occupation of the Sandlings and the fringes of the coastal marshes;
- remains associated with medieval agricultural exploitation of the hinterland of known settlements at Sizewell and Leiston as well as the monastic sites of Leiston Abbey;
- remains associated with the post-medieval agricultural improvement of the Sandlings and Coastal Marshes;
- remains associated with military defensive schemes constructed during the Second World War; and
- deposits of geoarchaeological interest.

4.5 Prehistoric Archaeological Remains

Definite evidence for archaeological remains of this period within the study area remains elusive.

Evidence for cropmark ring-ditches recorded in the Suffolk HER cannot be considered reliable. Where these cropmark features have been tested by geophysical survey, no corresponding anomalies have been recorded. One possible ring ditch detected by geophysical survey was not in a location predicted by reference to aerial photography. Further investigation will be necessary to understand the nature and origin of these “cropmark features”.

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The geophysical survey has not identified any features that can be assigned to this period on morphological grounds other than a possible ring-ditch in Parcel 14.

There are records of prehistoric material having been recovered from the study area, however, and there are a number of areas which have not been surveyed. It is also not clear how responsive the underlying subsoils of the area are to magnetometry survey.

Some elements of earlier prehistory may survive only as artefact scatters, either on the present ground surface or buried beneath alluvial or peat/estuarine deposits. These are considered in more detail within the discussion of geoarchaeological features.

Any prehistoric remains observed within the site would be of significance for archaeological interest, providing new information to understand the prehistoric occupation of this part of the Suffolk Coast, and would fit into a clearly defined regional context (Brown and Glazebrook 2000). Any assessment of significance would depend on the nature, preservation and extent of such features, which cannot be confidently ascertained without further field survey. The evidence considered within this assessment, however, suggests features likely to be observed would be of low to medium significance.

While it appears unlikely that any significant concentrations of prehistoric features or material will be present within the study area, this possibility remains and needs to be tested further before a definitive statement can be made.

4.6 Medieval Agricultural Activity

While the principal known foci of settlement in this period within the study area (Sizewell, Leiston, and the Leiston Abbey sites) are outwith the site boundary, it is clear that the area which comprises the site formed part of a coherent agricultural landscape.

Features associated with this landscape which may be present are not necessarily limited to field boundaries, and wood banks or similar landscape features, but could also include minor settlements or industrial sites such as the barn, well and retting activity observed on the Greater Gabbard substation site (Atfield *et al.* 2009). It is also possible that features associated with documented peat extraction may be observed on the wetland margins. These could include structures and associated features such as stack stands, which are often evidenced only by a shallow circular or penannular gully.

Observed scatters of medieval pottery in the vicinity of post-medieval farmsteads in parcels 15 and 25 may be suggestive of manuring scatters associated with medieval antecedents of these farmsteads, but may also indicate an elevated potential for the presence of coherent archaeological features of this date. Geophysical survey results show anomalies which may represent trackways associated with the medieval settlement at Sizewell or at Greater Gabbard substation in Pillbox field, but elsewhere results were inconclusive.

Features of this date may be present, either surviving as landscape features or as groups of structural remains representing former farmsteads or settlements or associated with existing farmsteads or industrial sites. The nature of these features and their likely distribution suggests that they would be of significance primarily for archaeological interest, informing study of the exploitation of the coastal marshes and Sandlings during the medieval period, particularly where they could be associated with the monastic land holdings of Leiston Abbey. Any assessment of significance depends on the nature, preservation and extent of such features which cannot be confidently ascertained without

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further field survey. The evidence considered within this assessment, however, suggests features likely to be observed would be of low to medium significance.

4.7 Post Medieval Agricultural Improvement

The existing agricultural landscape has its origins in the post-medieval period when the Sandlings and marshes were enclosed and improved to allow for more productive agricultural exploitation.

The existing pattern of farmsteads and settlements appears to have been established by the late 18th-century, and mapping evidence does not suggest the presence of any significant sites other than these farmsteads which are still extant. However, the presence of features such as Walk Barn (west of Parcel 9) shows that some associated structures may have been present and may survive as archaeological features. Other potential heritage assets comprise features such as former and existing field boundaries and marl/quarry pits.

While this theme includes designated heritage assets of high significance, principally the designated farm buildings at Upper Abbey Farm, the majority of archaeological features associated with this period of use are of restricted significance and are likely to be of interest primarily for their contribution to historic landscape character rather than as discrete heritage assets.

4.8 Second World War Military Remains

The East Coast of England was extensively fortified during the Second World War, and there are extensive records of the defensive works and activities undertaken within the study area.

Key sites can be fairly confidently located as they either survive as visible features, or are recorded in aerial photography or documentary records. Many of these sites have been demolished, leaving fairly fragmentary sub-surface remains, while others (particularly entrenchments), will have much more extensive below ground remains surviving. The construction of the Sizewell A and B power stations has also removed a substantial section of the defences, reducing the coherence of these structures as a group of heritage assets.

There is also a possibility for further, poorly documented remains such as ammunition caches, to be observed. These features have a degree of archaeological and historic interest, but are likely to be of low significance.

4.9 Deposits of Geoarchaeological Interest

Previous geoarchaeological work has highlighted the archaeological potential of the wetland and wetland fringes.

The key archaeological issue here is understanding past environmental change which has resulted from episodes of inundation, silting and peat formation as the environment changed from estuarine and salt marsh to peat carr and back again. Taken with the quality of preservation of organic material in the wetland, these deposits offer important opportunities to understand past environments.

Geoarchaeological investigation has also highlighted the importance of the wetland fringes in prehistory and has noted that depositional sequences mean that these luminal

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areas are likely to preserve buried inhabited landscapes of earlier prehistory. Consequently, these areas also have the potential to provide evidence of human activity.

Observations elsewhere on the East Anglian coast provide a context for any further investigation of these deposits and also provide an indication of their archaeological potential.

These deposits are of archaeological interest for their potential to inform studies of past environmental change and prehistoric activity, and are likely to be of medium significance, although the recovery of substantial quantities of prehistoric artefactual material could increase this valuation.

5 Conclusions and Recommendations

5.1 Conclusions

The desk-based and survey work carried out to date suggests the potential presence of archaeological remains of a number of periods within the site boundary. A tentative characterisation of these remains can be proposed, although this has been only partially confirmed by intrusive archaeological investigation.

Evidence for prehistoric occupation of the site is largely contextual and based on extrapolation from sites in analogous landscape contexts elsewhere in the Sandlings. Aerial photography has suggested the presence of some features, but these interpretations appear speculative and some artefactual material has been recovered.

There is no direct evidence for Romano-British activity within the site, although some artefactual material has been recovered from the study area near Leiston. The Domesday survey of 1086 indicates that the principal settlements formed part of a settled and organised tenurial landscape, but there is no recorded archaeological evidence for early medieval activity.

Medieval archaeological remains appear likely to be focused on the principal settlements of the study area, although outlying smaller settlements or industrial sites may be present within the site.

Post medieval and modern remains are likely to comprise elements of the enclosure period agricultural landscape. In addition, archaeological evidence of Second World War defensive features is demonstrably present within the study area and is likely to extend across the eastern part of the site.

With regards to the potential significance of heritage assets, there is not at present any evidence which suggests the presence of non-designated heritage assets of the highest significance, and the majority of archaeological heritage assets present within the site appear likely to be of low to medium significance.

There is, however, a potential that archaeological heritage assets which cannot be predicted on the basis of desk-based assessment or the survey work carried out to date may be present within the site. It is also possible that these heritage assets may be of greater significance than anticipated at present.

5.2 Recommendations

Further archaeological investigation is required to fully understand the potential presence and significance of any archaeological remains within the site, establish the requirement for, and form of, any further mitigation and to allow for informed planning decisions.

A three-stage process of investigation is proposed to evaluate near-surface archaeological remains:

- further non-intrusive survey comprising geophysical survey;

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- targeted evaluation trenching to inform a review of the effectiveness and interpretation of geophysical survey; and
- evaluation trenching targeted on areas of specific potential highlighted by desk-based or survey work.

The potential deposits of geoarchaeological interest identified within the site are comparatively well-understood and clearly located. These deposits have already been investigated through boreholes, resistivity tomography (geophysical) survey and watching brief. Consequently, it is not proposed to carry out any further investigation solely for archaeological purposes. However, archaeological monitoring of any further boreholes or test pitting should be undertaken to ensure that information which may become useful in understanding the significance of these deposits is recovered and recorded appropriately.

6 References and Related Documents

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Suffolk CC 2008b The Suffolk Historic Landscape Characterisation Map

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Ordnance Survey 6" – 1 mile mapping 1903 sheets L. SE and LI. SW

Ordnance Survey 6" – 1 mile mapping 1926 sheets L. SE and LI. SW

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Saxton, C. 1579 *Suffolk*

Speed, J. 1610 *Suffolk*

Kirby, J. 1736 *Suffolk*

Hodskinson, J. 1783 *Map of Suffolk*

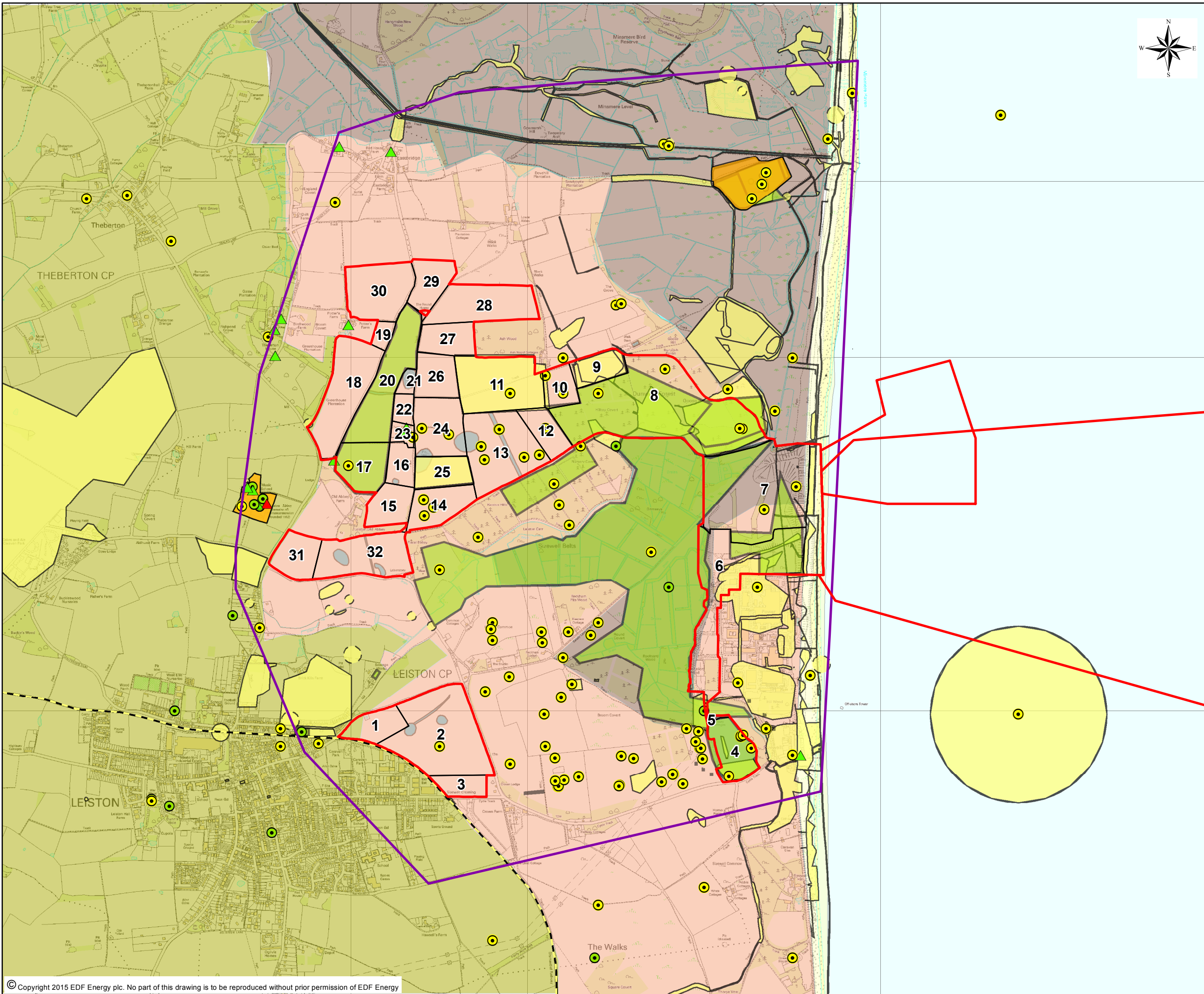
SRO HD 306/1/1 1786 Estate lying in Leiston in Suffolk, in the occupation of Geo. Doughty, gent., and belonging to Wm. Tatnall, esq.", by Isaac Johnson of Woodbridge.

SRO FL595/3/33b Tithe Map for Leiston and Theberton 1842

SRO EF 5/1/2/1 1810-1824 Leiston and Theberton Enclosure Award with map 29 Oct. 1824

SRO HD 78:2671 Leiston Old Abbey Estate (contains misc papers and drawings and estate map of 1909)

Figures



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NOTES:

KEY

- Indicative Site Boundary
- ▲ Listed Building Grade I
- ▲ Listed Building Grade II
- Scheduled Monument
- AMIE/HER point feature
- AMIE/HER line feature
- AMIE/HER polygon feature
- AMIE/HER intervention
- AMIE/HER Intervention
- Feature Identified in Assessment
- Coastline
- Coastal Marshes
- Inland Agricultural
- Sandlings
- Assessment Parcels
- Study Area

REVISION	DATE	DRAWN	CHECKED	REASONS FOR REVISION/COMMENTS	APPROVED



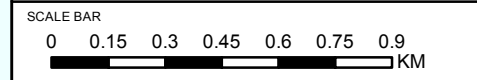
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TECHNICAL SUPPORTING DOCUMENT

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LANDSCAPE CHARACTER ZONES

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FIGURE 1

REVISION:
2.0

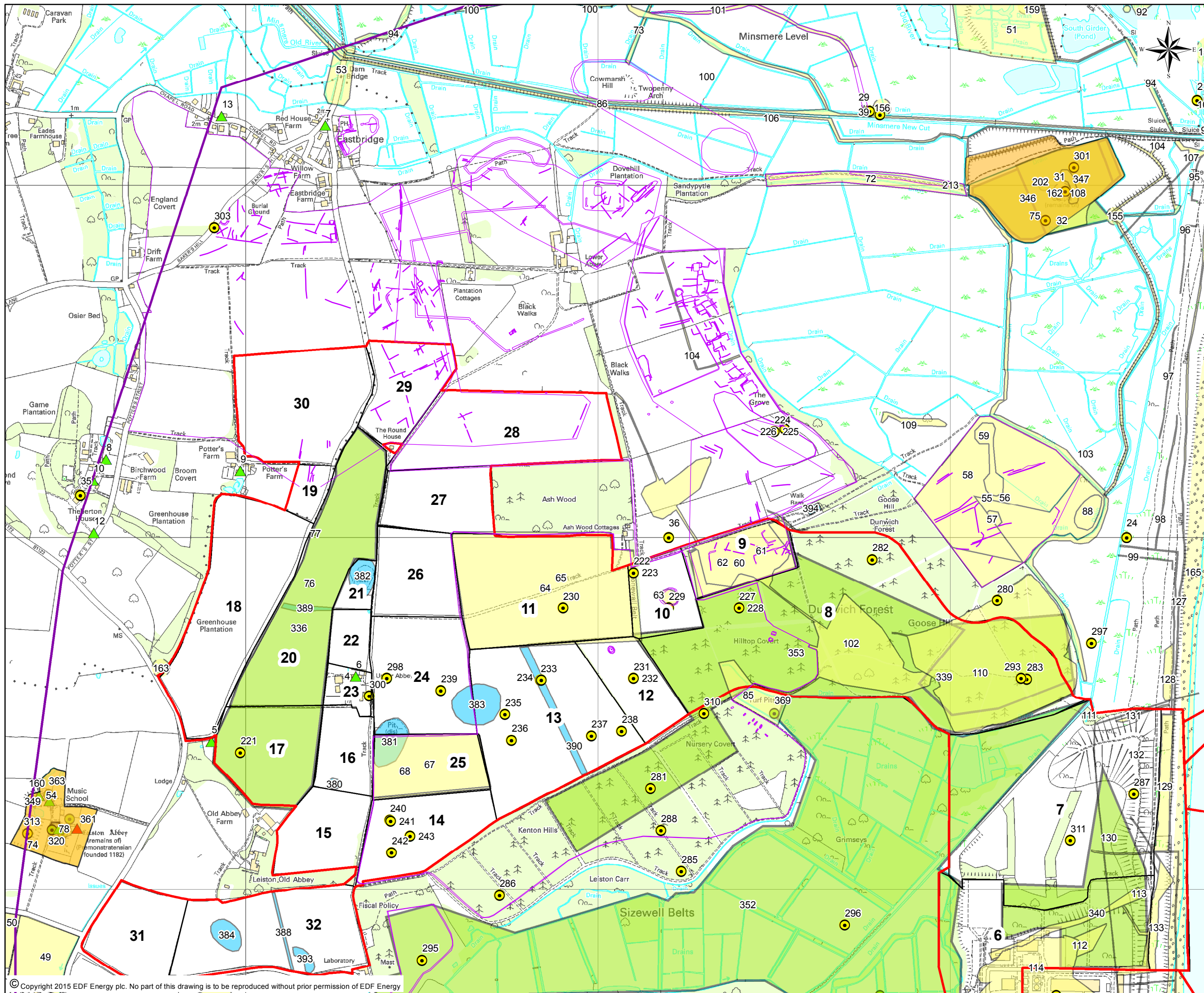
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NOTES:

KEY

- Site Boundary
- Assessment Parcels
- Study Area
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- ▲ Listed Building Grade II
- Scheduled Monument
- AMIE/HER Point Feature
- AMIE/HER Line Feature
- AMIE/HER Polygon Feature
- AMIE/HER Intervention
- AMIE/HER Intervention
- Feature Identified in Assessment
- NMP Cropmarks

REVISION	DATE	DRAWN	CHECKED	REASONS FOR REVISION/COMMENTS	APPROVED

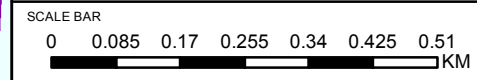


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DRAWING NO: **FIGURE 2** REVISION: **3.0**

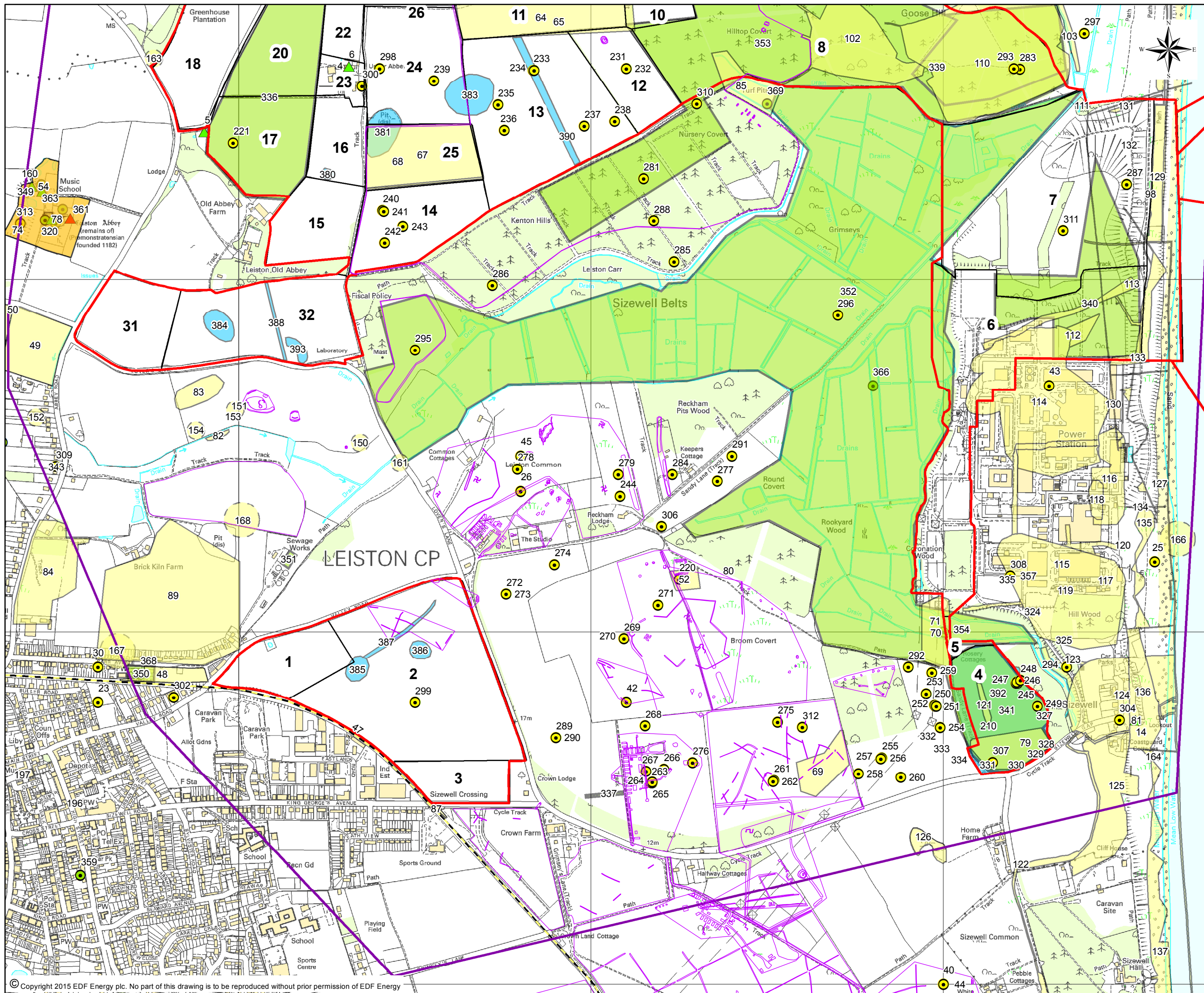
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NOTES:

KEY

- Site Boundary
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- ▲ Listed Building Grade I
- ▲ Listed Building Grade II
- Scheduled Monument
- AMIE/HER Point Feature
- AMIE/HER Line Feature
- AMIE/HER Polygon Feature
- AMIE/HER Intervention
- AMIE/HER Intervention
- Feature Identified in Assessment
- NMP Cropmarks

REVISION	DATE	DRAWN	CHECKED	REASONS FOR REVISION/COMMENTS	APPROVED

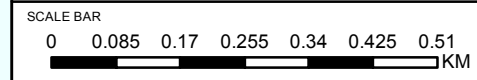


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TECHNICAL SUPPORTING DOCUMENT

DRAWING TITLE:
ARCHAEOLOGICAL DESK-BASED ASSESSMENT UPDATE - SOUTH/EAST

DRAWING NO:
FIGURE 3

DATE: **JULY 2015** DRAWN: **VMP** SCALE: **1:10,000 @A3**



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Appendix A Archaeological Potential

A.1 Parcel 1

- A.1.1 This parcel is assessed as being of **Medium** archaeological potential.
- A.1.2 This parcel is presently under arable cultivation and is located within the Sandlings Historic Landscape Zone (AMEC 2014b). It is likely that any archaeological features will have been disturbed to a degree by intensive ploughing. The free-draining and acid soils of the Sandlings suggest that preservation of organic and faunal material will be relatively poor.
- A.1.3 There are no previously recorded heritage assets within this parcel. The Suffolk HER and the DBA have identified a number of non-designated heritage assets within the vicinity of this parcel, including an undated field system immediately to the west of this parcel (**89**) and post medieval marl pits and a former field boundary to the east (**385, 386, 387**). Chance finds of Roman, medieval (**150, 151, 154**) and prehistoric artefacts (**168**) within the vicinity of this parcel, combined with the recorded presence of prehistoric burials (**30, 167**) are indicative of past activity within the general area.
- A.1.4 There has been no previous archaeological field investigation of this parcel.
- A.1.5 Historic mapping shows no discernible change to this land parcel other than the loss of historic field boundaries since the first edition Ordnance Survey (OS) (1883). Earlier mapping does not identify any specific features of archaeological interest. This parcel appears to form part of an area which had been enclosed by the late-18th century, although some of these earlier enclosure boundaries have subsequently been removed as part of 20th century agricultural intensification.
- A.1.6 It is possible that features relating to prehistoric to medieval occupation of the area may be present within this parcel, although this potential is inferred from the general presence of material of this date observed within the immediate vicinity. Remains associated with prehistoric, Romano-British or medieval activity could be expected to be of **Low** to **Medium** significance depending on their nature and preservation.

A.2 Parcel 2

- A.2.1 This parcel is assessed as being of **Medium** potential.
- A.2.2 This parcel is presently under arable cultivation and is located within the Sandlings Historic Landscape Zone (AMEC 2014b). It is likely that any archaeological features will have been disturbed to a degree by intensive ploughing. The free-draining and acid soils of the Sandlings suggest that preservation of organic and faunal material will be relatively poor.
- A.2.3 Recorded heritage assets within the parcel comprise two former marl pits or quarries and a former field boundary visible on the LiDAR survey. Aerial photographic interpretation carried out in 1994 identified some curvilinear

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features within this parcel and in the field immediately to the east (Richmond 1994).

- A.2.4 This field boundary, along with others, is shown on the first edition OS (1883). This parcel appears likely to form part of an area which had been enclosed by the late-18th century, although some of these earlier enclosure boundaries have subsequently been removed as part of 20th century agricultural intensification. Recorded heritage assets within the vicinity of this parcel include chance finds of Roman, medieval and prehistoric artefact scatters (**150, 151, 154, 269**) prehistoric burials (**30, 167**) and cropmarks of possible ring-ditches (**274, 266, 267, 278**), and cropmarks of military features (**45, 268**), which are indicative of past activity within the general area.
- A.2.5 Historic mapping shows no discernible change to this land parcel, other than the loss of historic field boundaries, since the first edition OS (1883). Earlier mapping does not identify any specific features of archaeological interest. This parcel appears to form part of an area which had been enclosed by the late-18th century, although some of these earlier enclosure boundaries have subsequently been removed in the late 20th century as part of agricultural intensification. The NMP data records linear crop marks of unknown dates, possibly former field boundaries, within the northern half of the parcel.
- A.2.6 The agricultural features recorded within this parcel are of **Negligible** significance. It is possible that features relating to prehistoric to medieval occupation of the area may be present within this parcel, although this potential is inferred from the general presence of material of this date observed within the immediate vicinity. Remains associated with prehistoric, Romano-British or medieval activity could be expected to be of **Low** to **Medium** significance depending on their nature and preservation.

A.3 Parcel 3

- A.3.1 This parcel is assessed as being of **Medium** potential.
- A.3.2 This parcel is presently under arable cultivation and is located within the Sandlings Historic Landscape Zone (AMEC 2014b). It is likely that any archaeological features will have been disturbed to a degree by intensive ploughing. The free-draining and acid soils of the Sandlings suggest that preservation of organic and faunal material will be relatively poor.
- A.3.3 There are no previously recorded heritage assets within this parcel. The Suffolk HER and the DBA have identified a number of non-designated heritage assets within the vicinity of this parcel, including former marl pits or quarry pits, former field boundaries, prehistoric artefact scatter (**263**), causewayed ring ditch (**267**), medieval pottery sherds (**264**) and military defensive features (**265, 268**).
- A.3.4 Historic mapping shows no discernible change to this land parcel other than the expansion of the town eastwards along King George's Avenue towards the railway line from the first edition OS (1883) onwards.
- A.3.5 It is possible that features relating to prehistoric to post medieval occupation of the area may be present within this parcel, although this potential is inferred from the general presence of material of this date observed within the

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immediate vicinity. Remains associated with prehistoric, Romano-British or medieval activity could be expected to be of **Low** to **Medium** significance depending on their nature and preservation.

A.4 Parcel 4 – Power Station/Pillbox

- A.4.1 This parcel is assessed as being of **High** potential.
- A.4.2 This parcel is presently under arable cultivation and is located within the Sandlings Historic Landscape Zone and is on the fringes of the Coastal Marshes Historic Landscape Zone (AMEC 2014b). Within the Sandlings, it is likely that any archaeological features will have been disturbed to a degree by intensive ploughing. The free-draining and acid soils of the Sandlings suggest that preservation of organic and faunal material will be relatively poor. At the western and northern edges of this parcel, on the wetland fringes, it is likely that preservation of organic material will be very good where waterlogged and peaty deposits are preserved in former marsh and river channels.
- A.4.3 Recorded heritage assets within the parcel comprise a Second World War Pill Box, slit trench, weapons pit (**121**), possible ring ditch and other cropmarks (**249**) and chance finds of; prehistoric (**246**), Roman (**247, 248**) and medieval (**245**) date. Heritage assets within the vicinity of this parcel include cropmarks of possible ring ditches (**253, 254**) – although evaluation of one of these sites by Wessex Archaeology (Atfield *et al.* 2009) did not observe any remains that could be attributed to such a feature – enclosures (**259**), and further Second World War military defensive features (**119, 122, 124, 125**). Prehistoric (**250**), Roman (**251**) and medieval (**252**) chance finds are recorded within the vicinity of the parcel and are indicative of past activity within the general area.
- A.4.4 Previous archaeological investigation of this parcel comprised geophysical survey and monitoring of geotechnical test pits. Geophysical survey identified potential for archaeological features, including an apparent trackway aligned south-east to north-west (Stratascan 2010). Interestingly, cropmarks aligned south-west to north-east had been identified in the 1994 assessment (Richmond 1994). The majority of test pits yielded no archaeological finds or features, but one contained medieval pottery (Suffolk County Council 2010).
- A.4.5 Archaeological trial trenching and subsequent excavation before construction of an electrical substation in the field immediately to the west revealed features consistent with small scale late prehistoric and Romano-British activity probably relating to farming (Atfield *et al.* 2009).
- A.4.6 Historic mapping shows no discernible change within the parcel, other than a small dug feature to the south of Rose Cottage shown on the first edition OS (1883).
- A.4.7 It is possible that features relating to prehistoric to modern occupation of the area may be present within this parcel, although this potential is inferred from the general presence of material of this date observed within the immediate vicinity. The density and potential preservation of these features suggests that they are likely to be of **Medium** significance.

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A.5 Parcel 5 – Rosery Cottage

- A.5.1 This parcel is assessed as being of **High** archaeological potential.
- A.5.2 This parcel is presently under arable cultivation and is located within the Sandlings Historic Landscape Zone (AMEC 2015a). It is occupied by Rosery Cottages and associated ancillary structures. It is likely that any archaeological features will have been disturbed to a degree by the construction of buildings and agricultural activity. The underlying geological conditions of peat and alluvial deposits suggest that preservation of organic and faunal material will be relatively high by comparison to the acidic free draining soils of higher ground within the Zone.
- A.5.3 Heritage assets previously recorded within the parcel by Suffolk HER comprise prehistoric (71) and medieval (70) artefact scatters. Ring ditches (253, 254), enclosures (259), military defensive features (119, 122, 124, 125) and prehistoric (250), Roman (251) and medieval (252) chance finds are recorded within the vicinity of the parcel and are indicative of past activity within the general area.
- A.5.4 There has been no previous archaeological field investigation of this parcel, although fieldwalking of the adjacent field was carried out in 1993 as part of a programme of evaluation which identified two prehistoric sites, a salt-working site of possible Roman date, and four medieval occupation sites (354).
- A.5.5 Historic mapping shows no discernible change within the parcel since the first edition OS (1883).
- A.5.6 It is possible that features relating to prehistoric to post-medieval occupation of the area may be present within this parcel, although this potential is inferred from the general presence of material of this date observed within the immediate vicinity. The character of the assets observed in the immediate vicinity suggests that such features are likely to be of **Medium** importance.

A.6 Parcel 6

- A.6.1 This parcel is assessed as being of **Medium** archaeological potential.
- A.6.2 This parcel is largely within the current industrial landscape. The parcel is located largely within the Sandlings Historic Landscape Zone and on the western edge of the Coastal Marshes Historic Landscape Zone (AMEC 2015a). It is occupied by ancillary infrastructure, facilities and landscaping associated with Sizewell B. It is likely that any archaeological features will have been disturbed to a degree by the construction of these elements. Formerly the area was largely agricultural land with acidic free draining soil, which suggests that preservation of organic and faunal material will be relatively poor. Within the Coastal Marshes Zone the underlying geological conditions of alluvial deposits suggest that preservation of organic and faunal material will be relatively high by comparison.

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- A.6.3 The Suffolk HER and NMR have identified a number of former military coastal defensive features within the site and the immediate vicinity (**43, 113, 114, 133**) and a bomb crater (**112, 132**).
- A.6.4 Historic mapping shows that from the first edition OS (1883), this parcel comprised enclosed rough grassland and heath with features identified as rabbit warrens, Warren House, rifle range, and butts, flagstaff, quarries and sand pits. This area is shown on late 18th and early 19th century mapping of Crown Lands at Leiston (NA MPE 1/371 and MPE 1/952).
- A.6.5 Previous archaeological investigation in this area has involved monitoring of geotechnical test pits. In this parcel the results comprised made ground and modern deposits (Suffolk County Council 2010). It is possible that deposits on the western and southern edges of this parcel may be better preserved.
- A.6.6 There is a demonstrable presence of former modern military activity in the area. Heritage assets associated with these periods are likely to be of **Low** significance. Deposits of Geoarchaeological interest may be of **Medium** significance but in this parcel are likely to have been disturbed and potentially dewatered, resulting in a loss of significance.

A.7 Parcel 7

- A.7.1 This parcel is assessed as being of **Medium** archaeological potential.
- A.7.2 This parcel is presently under arable cultivation and is located largely within the Sandlings Historic Landscape Zone and on the western side the Coastal Marshes Historic Landscape Zone (AMEC 2015a). It is occupied by ancillary infrastructure, facilities and landscaping associated with Sizewell B. It is likely that any archaeological features will have been disturbed to a degree by the construction of these elements. Formerly the area was largely agricultural land with acidic free draining soil, which suggests that preservation of organic and faunal material will be relatively poor. Within the Coastal Marshes Zone the underlying geological conditions of alluvial deposits suggest that preservation of organic and faunal material will be relatively high by comparison.
- A.7.3 Recorded heritage assets within the parcel are cropmarks of a causewayed ring ditch (**287**) and military coastal defence features (**95, 96, 97, 98, 99, 110, 111, 127, 130, 131, 132, 133**). Heritage assets in the vicinity also relate to military defensive features (**103, 110, 128**).
- A.7.4 Previous archaeological investigation in this area has involved monitoring of geotechnical test pits. In this parcel only one test pit was dug and the results comprised made ground and modern deposits (Suffolk County Council 2010). Other work has included monitoring of boreholes and resistivity tomography survey which suggested the presence of more significant peat and alluvial deposits (Bates 2008). A separate Peat Strategy is being prepared to mitigate the effects of construction on these deposits.
- A.7.5 The 1824 enclosure map (SRO EF 5/1/2/1) shows this area in the possession of Lord Huntingfield, with the northern area forming part of the enclosure award and the southern area excluded (presumably as already enclosed). Historic mapping from the first edition OS onwards shows the area as improved

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marshland liable to flood with extensive drainage features, including a pumping station.

- A.7.6 It is possible that features relating to prehistoric to medieval occupation of the area may be present within this parcel. There is a demonstrable presence of former modern military activity in the area. Heritage assets associated with these periods are likely to be of **Low** to **Medium** significance, with well-preserved deposits of geoarchaeological interest being of **Medium** significance.

A.8 Parcel 8 – Hilltop Covert

- A.8.1 This parcel is assessed as being of **low** archaeological potential.
- A.8.2 This parcel is presently under modern forestry plantation and is located within the Sandlings Historic Landscape Zone (AMEC 2015a). It is likely that any archaeological features will have been disturbed by forestry activities. The free-draining and acid soils of the Sandlings suggest that preservation of organic and faunal material will be relatively poor.
- A.8.3 Within this parcel the Suffolk HER records cropmarks of causewayed ring ditches (**282, 283**), chance finds of medieval coarseware pottery (**65**) and military defensive features (**102, 110**). Within the immediate vicinity, heritage assets are of similar character, comprising pennannular and causewayed ring ditches (**59, 282, 287**) and military coastal defences (**103, 104**).
- A.8.4 There has been no archaeological field investigation of this parcel. No potential earthwork or structural survivals of military structures are suggested by the LiDAR survey. Aerial photographic interpretation carried out in 1994 as well as during the NMP suggested the presence of a small number of linear and curvilinear cropmarks (Richmond 1994).
- A.8.5 The first edition OS (1883) shows this parcel as heathland and arable fields, which have subsequently been planted with woodland. This woodland is first shown in the 1928 OS, although the extent of this early planting was limited to the north-western corner of this parcel and appears to have been extended to the south and east after 1946.
- A.8.6 The first edition OS (1883) also shows several tracks crossing this parcel, only some of which are preserved in the existing planting scheme. 'Walk Barn' (**394**) is shown in the northern part of this parcel. The 1786 estate map (SRO HD 306/1/1) shows this parcel as extending across fields named Little Goose Hills, Twenty Acre Walk and Great Goose Hills. This parcel appears to form part of an area which had notionally been enclosed by the late-18th century but which was subject to phases of modification in the early 19th and late-20th century. The presence of large areas of heathland here on late 19th century mapping is suggestive of the documented reduction in the extent of cultivated land as compared to the early-19th century (Wade Martins and Williamson 1999).
- A.8.7 There has been a demonstrable presence of military defensive features and potential for features relating to prehistoric and medieval occupation of the area. Heritage assets associated with these periods, however, are likely to be

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of **low** significance as a result of disturbance by forestry, which is likely to have diminished the potential for archaeological survival within the parcel.

A.9 Parcel 9 – Barn Piece

- A.9.1 This parcel is assessed as being of **High** archaeological potential.
- A.9.2 This parcel comprises a field known as Barn Piece, which is presently under arable cultivation and is located within the Sandlings Historic Landscape Zone (AMEC 2015a). It is likely that any archaeological features will have been disturbed to a degree by intensive ploughing. The free-draining and acid soils of the Sandlings suggest that preservation of organic and faunal material will be relatively poor.
- A.9.3 Recorded heritage assets within the parcel comprise former quarry or marl pits and a former field boundary visible on the LiDAR survey. Further former field boundaries are shown on the first edition OS (1883). Recorded heritage assets within the vicinity of this parcel include chance finds of prehistoric and medieval material (**272**), and cropmarks of ring-ditches. A single flint flake was recovered from this parcel during a watching brief on geotechnical test-pitting (AMEC 2015a). Aerial photographic interpretation carried out in 1994 suggested the presence of two discrete groups of cropmarks – in the western part of this parcel was a substantial square feature, linked to a similar feature in the field to the north by a linear cropmark, while in the east, a less coherent group of linear and curvilinear cropmarks was observed (Richmond 1994).
- A.9.4 In addition to the recorded presence of Second World War defensive features (**102**) within this parcel, prehistoric lithic artefacts have been observed (**60**). Further military defensive features have been recorded to the north and south of this parcel (**36, 102**), as have two ring-ditches, to the east (**282**) and north-east (**226**). Cropmarks to the north of the parcel, along the edge of the marshes reveal a linear group of possible enclosures, of unknown date, extending for over 400m north to south, with possible further associated linear features to the west.
- A.9.5 Geophysical survey identified a sparse scatter of features of possible archaeological origin in the north-west corner of this field and a general spread of ferrous debris, which may derive from military use of the field, but no morphologically distinct features. Anomalies within the western part of this field may reflect the cropmarks noted in 1994, although any archaeological features in the east would have been masked by the spreads of ferrous debris.
- A.9.6 The first edition OS (1883) shows this parcel as comprising part of a larger field, which has subsequently been planted with woodland. This woodland is first shown in the 1928 edition OS. The first edition OS (1883) also shows a track crossing this parcel from north to south. It also shows a 'Walk Barn' immediately to the west of the parcel (**394**), from which it seems likely that this field was named. The 1946 OS shows a number of tracks within this area that may be related to former military uses – these coincide closely with the square cropmark features observed in the western part of this parcel in 1994. The 1786 estate map (SRO HD 306/1/1) shows this parcel as part of Little Goose Hills. The mapping is unclear at this point, and the barn shown on the first

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edition OS (1883) is not labelled, but a symbol which may represent a structure is shown in this location. This parcel appears to form part of an area which had been enclosed by the late-18th century but which was subsequently modified in the early 19th century and through the 20th century.

- A.9.7 There is a demonstrable presence of former modern military activity and artefactual material deriving from prehistoric occupation of the area. Heritage assets associated with these periods are likely to be of **Low** to **Medium** significance.

A.10 Parcel 10 – 10 Acres

- A.10.1 This parcel is assessed as being of **High** archaeological potential.
- A.10.2 This parcel is under arable cultivation at Stonewell Belt and is located within the Sandlings Historic Landscape Zone (AMEC 2015a). It is likely that any archaeological features will have been disturbed to a degree by intensive ploughing. The free-draining and acid soils of the Sandlings suggest that preservation of organic and faunal material will be relatively poor.
- A.10.3 There is one recorded heritage asset within this parcel, the possible cropmarks of a ring ditch (**63**) recorded in the 1994 assessment (Richmond 1994), which also notes a north-east to south-west aligned linear feature in the south-east corner of the field. Recorded heritage assets within the immediate vicinity of the development include; ring ditches (**237, 238**), chance finds of prehistoric (**60**), Roman (**62**) and medieval (**61, 65**) artefact scatters and military defensive features (**102**). Historic mapping and LiDAR have revealed former field boundaries (**11**) and quarries or marl pits (**381, 383**) in adjacent fields.
- A.10.4 Geophysical survey in this parcel suggests a scatter of archaeological features across the field, but no trace of the possible ring-ditch (Stratascan 2010). Possible linear features are visible in the southern part of this field, including a very faint anomaly that may represent the linear cropmark feature observed in 1994.
- A.10.5 Historic mapping shows no discernible change to this land parcel since the first edition OS (1883). The 1786 estate plan (SRO HD 306/1/1) shows this parcel as part of a larger field named Little Goose Hills. While it is part of an area which had demonstrably been enclosed by the late-18th century, this field system was clearly substantially altered during the 19th century.
- A.10.6 It is possible that there is potential for features relating to prehistoric to modern activity. This is inferred from the possible presence of cropmark features and recorded heritage assets in the immediate vicinity of the parcel; these features are likely to be of **low** significance, but could be of greater significance.

A.11 Parcel 11 – Stone Walk

- A.11.1 This parcel is assessed as being of **Medium** archaeological potential.
- A.11.2 This parcel is presently under arable cultivation and is located within the Sandlings Historic Landscape Zone (AMEC 2015a). It is likely that any

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archaeological features will have been disturbed to a degree by intensive ploughing. The free-draining and acid soils of the Sandlings suggest that preservation of organic and faunal material will be relatively poor.

- A.11.3 Recorded heritage assets within this parcel comprise chance finds of prehistoric artefactual material (**64**). In the immediate proximity to the parcel, recorded heritage assets include cropmarks of possible ring ditches (**63, 235, 236, 237, 238, 239**), military defensive features (**102**), prehistoric (**60**) and medieval (**67**) artefact scatters. The 1994 assessment noted possible linear cropmark features in the south-west corner of this field (Richmond 1994).
- A.11.4 Geophysical survey in this parcel suggests a scatter of archaeological features across the field, including possible linear features in the eastern part of the field, but no trace of the linear features observed in 1994 (Stratascan 2010).
- A.11.5 Historic mapping shows no discernible change to this land parcel since the first edition OS (1883). Earlier mapping does not identify any specific features of archaeological interest, but the field is named as Stone Walk on the 1786 estate plan (SRO HD 306/1/1) and is part of an area which had demonstrably been enclosed by the late-18th century.
- A.11.6 It is possible that there is potential for features relating to prehistoric to modern activity. This is inferred from the possible presence of prehistoric artefactual material within the parcel and recorded heritage assets in the immediate vicinity. Heritage assets associated with these periods are likely to be of **Low** to **Medium** significance.

A.12 Parcel 12 – Captain Rye

- A.12.1 This parcel is assessed as being of **Medium** archaeological potential.
- A.12.2 This parcel is presently under arable cultivation and is located within the Sandlings Historic Landscape Zone (AMEC 2015a). It is likely that any archaeological features will have been disturbed to a degree by intensive ploughing. The free-draining and acid soils of the Sandlings suggest that preservation of organic and faunal material will be relatively poor.
- A.12.3 There are no recorded heritage assets within this parcel. In the immediate vicinity recorded heritage assets include cropmarks possibly representing ring ditches (**235, 236, 237, 238, 281, 288**). Prehistoric and medieval chance finds were also recorded in neighbouring parcels (**233, 234**). Historic mapping and LiDAR survey have also identified former field boundaries and quarries or marl pits. The 1994 assessment noted the presence of a linear feature aligned south-west to north-east extending into Parcel 13 and some possible pits (Richmond 1994). The recent NMP data indicates a small circular feature in the northern half of the parcel.
- A.12.4 Geophysical survey of this parcel identified a number of anomalies including a linear feature and a possible curvilinear ditch (Stratascan 2010), which correspond roughly with cropmarks identified in 1994.
- A.12.5 Historic mapping shows no discernible change to this land parcel since the first edition OS (1883). Earlier mapping does not identify any specific features of

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archaeological interest, but the 1786 estate plan (SRO HD 306/1/1) shows this field as comprising the eastern part of a field named Old Covey. It is part of an area which had demonstrably been enclosed by the late-18th century, although this field system has clearly been substantially modified subsequently.

- A.12.6 It is possible that there is potential for features relating to prehistoric to modern activity. This is inferred from the presence of recorded heritage assets in the immediate vicinity of the parcel. Heritage assets associated with these periods are likely to be of **Low** to **Medium** significance.

A.13 Parcel 13 – Badgers Burrows

- A.13.1 This parcel is assessed as being of **High** archaeological potential.
- A.13.2 This parcel is presently under arable cultivation and is located within the Sandlings Historic Landscape Zone (AMEC 2015a). It is likely that any archaeological features will have been disturbed to a degree by intensive ploughing. The free-draining and acid soils of the Sandlings suggest that preservation of organic and faunal material will be relatively poor.
- A.13.3 The Suffolk HER has recorded a series of cropmarks of possible ring ditches in this parcel (**235, 236, 237, 238**) identified in the 1994 assessment, along with prehistoric artefact scatter (**234**) and medieval pottery (**233**). Former quarry pits and field boundaries have been identified during the DBA within the parcel. Recorded heritage assets in the immediate vicinity of the parcel are of the same nature and include ring ditches (**239, 242, 243, 281, 285, 286, 288**) and former quarries or marl pits.
- A.13.4 Historic mapping shows little discernible change in the parcel other than the removal of field boundaries in the latter half of the 20th century.
- A.13.5 Geophysical survey in this parcel has identified potential for archaeological features (Stratascan 2010) including linear anomalies aligned with the existing field system and two possible enclosures. One of these, on the southern boundary of the parcel, coincides with a possible ring-ditch noted in the 1994 assessment, although it appears rectilinear rather than round, and also appears to be associated with a linear anomaly running to the north which may be a former field boundary. The other possible enclosure in the eastern end of the field does not coincide with any features observed in the aerial photography. Further ring ditches and linear features identified in 1994 are not discernible as geophysical anomalies.
- A.13.6 Historic mapping shows no discernible change to this land parcel since the first edition OS (1883). Earlier mapping does not identify any specific features of archaeological interest, but the 1786 estate plan (SRO HD 306/1/1) shows this parcel as comprising smaller fields named Ash Pightle and Badger Burrows and the western part of a field named Old Covey. It is part of an area which had demonstrably been enclosed by the late-18th century, although this field has clearly been significantly altered subsequently.
- A.13.7 There is potential for features relating to prehistoric to modern activity. This is inferred from the possible presence of prehistoric features and artefactual material within the parcel and recorded heritage assets in the immediate

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vicinity. The presence of possible enclosures suggests that the significance of heritage assets in this parcel is likely to be **Medium**.

A.14 Parcel 14 – Broom Walk

- A.14.1 This parcel is assessed as being of **High** archaeological potential.
- A.14.2 This parcel is presently under arable cultivation and is located within the Sandlings Historic Landscape Zone (AMEC 2015a). It is likely that any archaeological features will have been disturbed to a degree by intensive ploughing. The free-draining and acid soils of the Sandlings suggest that preservation of organic and faunal material will be relatively poor.
- A.14.3 Recorded heritage assets within the parcel comprise cropmarks of ring-ditches (**242, 243**) and prehistoric (**240**) and medieval (**241**) artefact scatters. Medieval pottery has also been found in the immediate vicinity (**67**), along with further possible ring-ditch cropmarks (**235, 236, 286**) and former quarries or marl pits.
- A.14.4 Geophysical survey in this parcel has identified potential for archaeological features (Stratascan 2010), including a sub-circular feature which may represent a large ring ditch or small enclosure – although this is not in a location predicted by aerial photography.
- A.14.5 Historic mapping shows no discernible change to this land parcel since the first edition OS (1883). Earlier mapping does not identify any specific features of archaeological interest, but this field is named as Great Broom Field on the 1786 estate map (SRO HD 306/1/1) and forms part of an area which had been enclosed by the late-18th century.
- A.14.6 There is potential for features relating to prehistoric to modern activity. This is inferred from the possible presence of prehistoric features and artefactual material within the parcel and recorded heritage assets in the immediate vicinity. The presence of a potential enclosure suggests that the significance of heritage assets in this parcel is likely to be **Medium**.

A.15 Parcel 15 – White Gate

- A.15.1 This parcel is assessed of being of **Medium** archaeological potential.
- A.15.2 This parcel comprises one enclosure within a group of fields known as White Gate. It is presently under arable cultivation and is within the Sandlings Historic Landscape Zone (AMEC 2015a). It is likely that any archaeological features will have been disturbed to a degree by intensive ploughing. The free-draining and acid soils of the Sandlings suggest that preservation of organic and faunal material will be relatively poor.
- A.15.3 There are no previously recorded heritage assets within this parcel. Immediately to the north is a quarry or marl pit visible on the LiDAR survey (**380**). The field immediately to the east contains a scatter of prehistoric flint (**240**) and cropmarks of possible ring-ditches (**242, 243**) as well as a scatter of medieval pottery (**241**). A Neolithic axehead (**221**) was recovered from the field

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to the west. Some scattered and amorphous possible cropmarks were noted in the field in the 1994 assessment (Richmond 1994).

- A.15.4 No archaeological field investigation of this parcel has taken place.
- A.15.5 The first edition OS (1883) shows this parcel as rough grazing or heathland crossed by a number of paths, presumably associated with the adjacent Old Abbey Farm. These are not shown on the 1902 OS, which also records the planting of a substantial shelter belt along the southern side of this field. No further significant changes are shown on historic mapping.
- A.15.6 Geophysical survey of the adjacent field suggested the potential presence of archaeological remains, although the absence of any morphologically distinct features suggests that any features are less likely to be of archaeological origin. Where these features are of archaeological derivation, they are likely to be widely dispersed. Consequently, the significance of archaeological remains within this parcel is likely to be **Low**.

A.16 Parcel 16 – White Gate

- A.16.1 This parcel is assessed of being of **Medium** archaeological potential.
- A.16.2 This parcel comprises one enclosure within a group of fields known as White Gate. It is presently under arable cultivation and is within the Sandlings Historic Landscape Zone (AMEC 2015a). It is likely that any archaeological features will have been disturbed to a degree by intensive ploughing. The free-draining and acid soils of the Sandlings suggest that preservation of organic and faunal material will be relatively poor.
- A.16.3 A quarry or marl pit visible on the LiDAR survey (**380**) is located on the southern edge of this parcel. A burned stone was recovered from the field immediately to the east and Neolithic axehead (**221**) from the field to the west.
- A.16.4 No archaeological field investigation of this parcel has been undertaken.
- A.16.5 This parcel is shown on the 1786 estate mapping (SRO HD 306/1/1) as Granary Meadow. The first edition OS (1883) shows this parcel crossed by a north to south path, which is not shown on the 1902 OS. No further significant changes are shown on historic mapping.
- A.16.6 The geophysical survey of the adjacent fields suggests the potential presence of archaeological remains, although the relative absence of any morphologically distinct features suggests that any features are less likely to be of archaeological origin. Where these features are of archaeological derivation, they are likely to be widely dispersed and disturbed by previous phases of pitting. Consequently, the significance of archaeological remains within this parcel is likely to be **Low**.

A.17 Parcel 17 – White Gate

- A.17.1 This parcel is assessed of being of **Medium** archaeological potential.

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- A.17.2 This parcel comprises one enclosure within a group of fields known as White Gate. It is presently under arable cultivation and is within the Sandlings Historic Landscape Zone (AMEC 2015a). It is likely that any archaeological features will have been disturbed to a degree by intensive ploughing. The free-draining and acid soils of the Sandlings suggest that preservation of organic and faunal material will be relatively poor.
- A.17.3 A Neolithic axehead (**221**) was recovered from this field. The only recorded archaeological feature in the adjacent fields is the marl pit (380) observed in the field to the east.
- A.17.4 Geophysical survey of this parcel identified a spread of dispersed and morphologically undiagnostic anomalies of potential archaeological origin suggestive of widespread pitting across the field.
- A.17.5 This parcel is shown on the 1786 estate mapping (SRO HD 306/1/1) as Granary Plow. The first edition OS (1883) and subsequent mapping shows no further significant change.
- A.17.6 The geophysical survey suggests the potential presence of archaeological remains, although the absence of any morphologically distinct features suggests that any features are less likely to be of archaeological origin. Where these features are of archaeological derivation, they are likely to be widely dispersed and disturbed by previous phases of pitting. Consequently, the significance of archaeological remains within this parcel is likely to be **Low**.

A.18 Parcel 18

- A.18.1 This parcel is assessed as being of **Low to Medium** archaeological potential.
- A.18.2 The only heritage asset recorded in this area is an earth mound on the boundary of the parkland associated with Theberton House (**35**). While AMIE tentatively suggests that this may have a prehistoric origin, its height is suggestive of a more recent origin as a prospect mound or folly associated with the parkland. No heritage assets are recorded from adjacent fields, although geophysical survey of the field to the south-east identified anomalies of potential archaeological origin. The Grade II listed Potter's Farmhouse is located immediately to the north of this parcel; while it is possible that there may have been earlier antecedents on this site, it is unlikely that such farmsteads would have extended significantly beyond the existing farmstead boundary.
- A.18.3 No archaeological field investigation of this parcel has been undertaken.
- A.18.4 The first edition OS (1883) shows this parcel as two fields; the dividing boundary is not shown on the 1946 OS and was presumably removed during the Second World War as part of a process of agricultural improvement.
- A.18.5 The absence of any pre-modern archaeological features or material recorded within or in the vicinity of this parcel means that it is not possible to make a clear estimation of the likely value of any remains which may be present.

NOT PROTECTIVELY MARKED**A.19 Parcel 19**

- A.19.1 This parcel is assessed as being of **Low to Medium** archaeological potential.
- A.19.2 No heritage assets are recorded from this parcel or from adjacent fields, although geophysical survey of the fields to the south-east identified anomalies of potential archaeological origin. The Grade II listed Potter's Farmhouse is located immediately to the west of this parcel; while it is possible that there may have been earlier antecedents on this site, it is unlikely that such farmsteads would have extended significantly beyond the existing farmstead boundary. The NMP identified a small number of discontinuous linear features running north south in the northern half of the parcel.
- A.19.3 No archaeological field investigation of this parcel has been undertaken.
- A.19.4 Ordnance Survey mapping shows no significant change to this parcel since the first edition OS (1883).
- A.19.5 The absence of any pre-modern archaeological features or material recorded within or in the vicinity of this parcel means that it is impossible to make a clear estimation of the likely value of any remains which may be present.

A.20 Parcel 20 – Red Rails

- A.20.1 This parcel is assessed as being of **High** archaeological potential.
- A.20.2 There are no previously recorded heritage assets within this parcel other than a former field boundary which is visible in the LiDAR imagery (**389**). Features in adjacent fields comprise a substantial marl or quarry pit (**382**), a Neolithic axe head (**221**), the mound at Theberton House (**35**) and the Grade II listed Upper Abbey Farmhouse (**4**) and associated barn (**6**).
- A.20.3 The southern part of this parcel has been investigated by geophysical survey, which identified linear features running parallel with the existing field boundary along the western side of the field and a sparse scatter of pit-like features.
- A.20.4 Historic mapping shows the progressive loss of boundaries within this parcel since the first edition OS (1883) and the substantial marl or quarry pit (**382**) noted from LiDAR survey in Parcel 21. Earlier mapping does not identify any specific features of archaeological interest, but the 1786 estate map (SRO HD 306/1/1) shows this field comprising fields recorded as Barn Piece, Red Rails Piece and Land Belonging to Mr John Hinton. It forms part of an area which had demonstrably been enclosed by the late-18th century and has subsequently been altered during the 20th century.
- A.20.5 The geophysical survey records the potential presence of archaeological remains, although the absence of any morphologically distinct features suggests that any features other than those running parallel to the existing field boundary are likely to be widely dispersed. Consequently, the significance of archaeological remains within this parcel is likely to be **Low to Medium**.

A.21 Parcel 21 – Red Rails

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- A.21.1 This parcel is assessed as of **Low** archaeological potential.
- A.21.2 A substantial marl or quarry pit is recorded within this parcel (**382**). This feature occupies over half of the area of this parcel and is likely to have entirely removed any pre-existing archaeological remains within its extent, with associated activity causing significant disturbance to near surface remains elsewhere in this parcel.
- A.21.3 No archaeological field investigation of this parcel has been undertaken.
- A.21.4 This parcel is shown as part of Red Rails Piece on the 1786 estate map (SRO HD 306/1/1). The substantial marl or quarry pit visible on LiDAR imagery (**382**) is first shown on the first edition OS (1883) and is not shown as a separate enclosure on OS mapping until after 1946.
- A.21.5 Given the likely extent of disturbance through quarrying activity in this parcel, it is likely that any archaeological features which may be present have already been significantly disturbed and are consequently likely to be of **Negligible** to **Low** significance.

A.22 Parcel 22 – Red Rails

- A.22.1 This parcel is assessed as being of **Low** to **Medium** archaeological potential.
- A.22.2 No heritage assets are recorded from this parcel, and the only possible pre-enclosure feature identified is the cropmark of a possible ring ditch (**239**) in the field to the east. Geophysical survey of fields to the east and west identified sparse scatters of anomalies of potential archaeological origin.
- A.22.3 No archaeological field investigation of this parcel has been undertaken.
- A.22.4 This parcel is shown on the 1786 estate mapping (SRO HD 306/1/1) as Barn Meadow. Ordnance Survey mapping shows no significant subsequent changes.
- A.22.5 The absence of any pre-modern archaeological features or material recorded within or in the vicinity of this parcel means that it is not possible to make a clear estimation of the likely value of any remains which may be present.

A.23 Parcel 23 – Upper Abbey Farm

- A.23.1 This parcel is assessed as being of **High** archaeological potential.
- A.23.2 This parcel comprises the farmstead of Upper Abbey Farm. Upper Abbey Farmhouse is listed at Grade II (**4**) and has elements of 17th and 18th century fabric in its construction. One barn within the farmstead is also listed at Grade II (**6**) and is of 18th century date. Other structures within the farmyard comprise more recent or heavily altered elements and are of significance primarily as either curtilage structures or by association with the listed elements of the farmstead. The 1786 estate map (SRO HD 306/1/1) shows this parcel as Mansion, Yards, Garden, etc.

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- A.23.3 Historic mapping shows the use of this farmstead site from at least the late-18th century, although details of the structures present are unclear. The listed structures are demonstrably of **High** significance and associated elements are of **Low** to **Medium** significance.

A.24 Parcel 24 – 20 Acres

- A.24.1 This parcel is assessed as being of **Medium** archaeological potential.
- A.24.2 This parcel comprises a field known as 20 Acres, which is presently under arable cultivation and is located within the Sandlings Historic Landscape Zone (AMEC 2015a). It is likely that any archaeological features will have been disturbed to a degree by intensive ploughing. The free-draining and acid soils of the Sandlings suggest that preservation of organic and faunal material will be relatively poor.
- A.24.3 Recorded heritage assets within this parcel comprise two possible marl pits (**381, 383**) visible on modern Ordnance Survey mapping and the LiDAR survey and a cropmark of a causewayed ring-ditch (**239**) recorded in the 1994 assessment (Richmond 1994). Medieval pottery was recovered from the field to the south (**67**) and further cropmarks of possible ring-ditches are recorded from fields to the east (**235, 236**) and south (**242, 243**).
- A.24.4 Geophysical survey of this parcel observed anomalies of possible archaeological origin in the northern part of the field comprising a number of possible pit-like features. Anomalies in the south of the field were suggestive of quarry/marl pitting but may also have been of archaeological origin. No morphologically distinct features were observed. In particular, no evidence for the causewayed ring-ditch observed in 1994 was apparent.
- A.24.5 Historic mapping shows no discernible change to this land parcel since the first edition OS (1883). Earlier mapping does not identify any specific features of archaeological interest, but the field is named as Twenty Acre on the 1786 estate plan (SRO HD 306/1/1) and is part of an area which had demonstrably been enclosed by the late-18th century.
- A.24.6 The geophysical survey records the potential presence of archaeological remains, although the absence of any morphologically distinct features suggests that any features are less likely to be of archaeological origin. Where these features are of archaeological derivation, they are likely to be widely dispersed and not part of a discrete group. Consequently, the significance of archaeological remains within this parcel is likely to be **Low**.

A.25 Parcel 25 – Old Covey

- A.25.1 This parcel is assessed to be of **High** archaeological potential.
- A.25.2 This parcel comprises a field known as Old Covey, which is presently under arable cultivation and is located within the Sandlings Historic Landscape Zone (AMEC 2015a). It is likely that any archaeological features will have been disturbed to a degree by intensive ploughing. The free-draining and acid soils

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of the Sandlings suggest that preservation of organic and faunal material will be relatively poor.

- A.25.3 Recorded heritage assets within this parcel comprise a scatter of medieval pottery (**67**), and further medieval pottery has been recorded from the field to the south (**241**). It is possible that this pottery derives from manuring scatters associated with a medieval antecedent of Upper Abbey Farm, but it is equally possible that this relates to other medieval occupation or use. Potential prehistoric features within the vicinity of this parcel include cropmarks of possible ring-ditches (**242, 243**) and a scatter of flints in the field to the south (**240**).
- A.25.4 Geophysical survey shows a very sparse group of anomalies of potential archaeological origin across the field. These are not morphologically distinct and further suggest that finds of medieval pottery are related to manuring scatters.
- A.25.5 Historic mapping shows no discernible change to this land parcel since the first edition OS (1883). Earlier mapping does not identify any specific features of archaeological interest, but this field is named as Little Broom Field on the 1786 estate map (SRO HD 306/1/1) and forms part of an area which had been enclosed by the late-18th century.
- A.25.6 The geophysical survey records the potential presence of archaeological remains, although the absence of any morphologically distinct features suggests that any features are less likely to be of archaeological origin. Where these features are of archaeological derivation, they are likely to be widely dispersed and not part of a discrete group. However, in that medieval artefactual material has been recovered, there is a greater potential that these features are of archaeological origin and of potentially greater archaeological significance. Consequently, the significance of archaeological remains within this parcel is likely to be **Low to Medium**.

A.26 Parcel 26 – 12 Acre

- A.26.1 This parcel is assessed to be of **Low to Medium** archaeological potential.
- A.26.2 This parcel comprises a field known as 12 Acre, which is presently under arable cultivation and is located within the Sandlings Historic Landscape Zone (AMEC 2015a). It is likely that any archaeological features will have been disturbed to a degree by intensive ploughing. The free-draining and acid soils of the Sandlings suggest that preservation of organic and faunal material will be relatively poor.
- A.26.3 There are no recorded heritage assets within this parcel. A large marl pit (DBA-03) is visible in LiDAR imagery immediately to the west of the parcel and a burned stone (**64**) was recovered from the field to the east. A possible ring-ditch cropmark has been observed in the field to the south (**239**).
- A.26.4 There has been no previous archaeological field investigation of this parcel and it is outwith the LiDAR coverage.

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- A.26.5 Historic mapping shows no discernible change to this land parcel since the first edition OS (1883). Earlier mapping does not identify any specific features of archaeological interest, but the field is named as Twelve Acre on the 1786 estate plan (SRO HD 306/1/1) and is part of an area which had demonstrably been enclosed by the late-18th century.
- A.26.6 In the absence of any significant recorded archaeological features within the immediate vicinity of this parcel, there is no evidence which suggests an elevated potential for the presence of archaeological remains. Geophysical survey in the adjacent field to the south also did not identify any discernible features which appeared likely to extend into this field. However, the absence of records cannot be taken as necessarily indicative of the absence of any archaeological remains.

A.27 Parcel 27 – Stack

- A.27.1 This parcel is assessed to be of **Low** to **Medium** archaeological potential.
- A.27.2 This parcel comprises a field known as Stack, which is presently under arable cultivation and is located within the Sandlings Historic Landscape Zone (AMEC 2015a). It is likely that any archaeological features will have been disturbed to a degree by intensive ploughing. The free-draining and acid soils of the Sandlings suggest that preservation of organic and faunal material will be relatively poor.
- A.27.3 There are no recorded heritage assets within this parcel, nor indeed within any contiguous fields other than the burned stone recovered from Stone Field to the south-east (**64**).
- A.27.4 There has been no previous archaeological field investigation of this parcel and it is outwith the LiDAR coverage.
- A.27.5 Historic mapping shows no discernible change to this land parcel since the first edition OS (1883). Earlier mapping does not identify any specific features of archaeological interest, but the field is named as Stack Walk on the 1786 estate plan (SRO HD 306/1/1) and is part of an area which had demonstrably been enclosed by the late-18th century.
- A.27.6 In the absence of any significant recorded archaeological features within the immediate vicinity of this parcel, there is no evidence which suggests an elevated potential for the presence of archaeological remains. However, the absence of records cannot be taken as necessarily indicative of the absence of any archaeological remains.

A.28 Parcel 28 – Long Walk

- A.28.1 This parcel is assessed to be of **Low** to **Medium** archaeological potential.
- A.28.2 This parcel comprises a field known as Long Walk, which is presently under arable cultivation and is located within the Sandlings Historic Landscape Zone (AMEC 2015a). It is likely that any archaeological features will have been disturbed to a degree by intensive ploughing. The free-draining and acid soils

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of the Sandlings suggest that preservation of organic and faunal material will be relatively poor.

- A.28.3 There are no recorded heritage assets within this parcel, nor indeed within any contiguous fields other than the Round House, a non designated house dating from before the mid-19th century. However, there is no specific indication that this house is suggestive of any previous occupation. . A small number of discontinuous linear features running north to south, which may be related to agricultural activity, in both the western and eastern parts of the parcel were identified during the NMP. Additionally, the NMP revealed linear group of enclosures of as yet unknown date, 300m to the east of the parcel, with possible associated cropmarks extending closer to the site.
- A.28.4 There has been no previous archaeological field investigation of this parcel and it is outwith the LiDAR coverage.
- A.28.5 Historic mapping shows no discernible change to this land parcel since the first edition OS (1883). Earlier mapping does not identify any specific features of archaeological interest, but the field is named as Long Walk on the 1786 estate plan (SRO HD 306/1/1) and is part of an area which had demonstrably been enclosed by the late-18th century.
- A.28.6 In the absence of any significant recorded archaeological features within the immediate vicinity of this parcel, there is no evidence which suggests an elevated potential for the presence of archaeological remains. However, the absence of records cannot be taken as necessarily indicative of the absence of any archaeological remains.

A.29 Parcel 29

- A.29.1 This parcel is assessed to be of **Low** to **Medium** archaeological potential.
- A.29.2 This parcel comprises a field, which is presently under arable cultivation and is located within the Sandlings Historic Landscape Zone (AMEC 2015a). It is likely that any archaeological features will have been disturbed to a degree by intensive ploughing. The free-draining and acid soils of the Sandlings suggest that preservation of organic and faunal material will be relatively poor.
- A.29.3 There are no recorded heritage assets within this parcel, nor indeed within any contiguous fields other than the Round House, a non-designated house dating from before the mid-19th century. However, there is no specific indication that this house is suggestive of any previous occupation. A number of discontinuous linear features running north to south, and east to west were identified during the NMP and may be evidence of earlier agricultural activity.
- A.29.4 There has been no previous archaeological field investigation of this parcel and it is outwith the LiDAR coverage.
- A.29.5 Historic mapping shows no discernible change to this land parcel since the first edition OS (1883). Earlier mapping does not identify any specific features of archaeological interest. This parcel appears to form part of an area which had been enclosed by the late-18th century.

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- A.29.6 In the absence of any significant recorded archaeological features within the immediate vicinity of this parcel, there is no evidence which suggests an elevated potential for the presence of archaeological remains. However, the absence of records cannot be taken as necessarily indicative of the absence of any archaeological remains.

A.30 Parcel 30

- A.30.1 This parcel is assessed to be of **Low** to **Medium** archaeological potential.
- A.30.2 This parcel comprises a field, which is presently under arable cultivation and is located within the Sandlings Historic Landscape Zone (AMEC 2015a). It is likely that any archaeological features will have been disturbed to a degree by intensive ploughing. The free-draining and acid soils of the Sandlings suggest that preservation of organic and faunal material will be relatively poor.
- A.30.3 There are no recorded heritage assets within this parcel, nor indeed within any contiguous fields other than Potter's Farm House (9), a Grade II listed farmhouse with some 17th-century fabric, located immediately to the south of this parcel. It is possible that this farmhouse is suggestive of the presence of earlier occupation of the site, although it is by no means certain that any such occupation would have extended into this parcel.
- A.30.4 There has been no previous archaeological field investigation of this parcel and it is outwith the LiDAR coverage.
- A.30.5 Historic mapping shows no discernible change to this land parcel since the first edition OS (1883). Earlier mapping does not identify any specific features of archaeological interest. This parcel appears to form part of an area which had been enclosed by the late-18th century. Cropmarks of a small number of short, discontinuous linear features running approximately north to south were identified during the NMP, but have not as yet been interpreted.
- A.30.6 In the absence of any significant recorded archaeological features within the immediate vicinity of this parcel, there is no evidence which suggests an elevated potential for the presence of archaeological remains. However, the absence of records cannot be taken as necessarily indicative of the absence of any archaeological remains.

A.31 Parcel 31

- A.31.1 This parcel is assessed to be of **Low** to **Medium** archaeological potential.
- A.31.2 This parcel comprises a field, which is presently under arable cultivation and is located within the Sandlings Historic Landscape Zone (AMEC 2015a). It is likely that any archaeological features will have been disturbed to a degree by intensive ploughing. The free-draining and acid soils of the Sandlings suggest that preservation of organic and faunal material will be relatively poor.
- A.31.3 There are no recorded heritage assets within this parcel. Marl pits (384, 393) and a possible former field boundary (388) can be seen in the adjacent field on the LiDAR survey. The field to the south-west on the opposite side of the

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B1122 contains a scatter of red tile (**49**). The scheduled monument at Leiston Abbey (**15**) is located 125m to the north-west of this parcel.

- A.31.4 There has been no previous archaeological field investigation of this parcel.
- A.31.5 Historic mapping shows no discernible change to this land parcel since the first edition OS (1883). Earlier mapping does not identify any specific features of archaeological interest. This parcel appears to form part of an area which had been enclosed by the late-18th century.
- A.31.6 In the absence of any significant recorded archaeological features within the immediate vicinity of this parcel, there is no evidence which suggests an elevated potential for the presence of archaeological remains. However, the absence of records cannot be taken as necessarily indicative of the absence of any archaeological remains.

A.32 Parcel 32

- A.32.1 This parcel is assessed to be of **Low** to **Medium** archaeological potential.
- A.32.2 This parcel comprises a field, which is presently under arable cultivation and is located within the Sandlings Historic Landscape Zone (AMEC 2015a). It is likely that any archaeological features will have been disturbed to a degree by intensive ploughing. The free-draining and acid soils of the Sandlings suggest that preservation of organic and faunal material will be relatively poor.
- A.32.3 Marl pits (**384**) and a possible former field boundary (**388**) can be seen in this field on the LiDAR survey, and the first edition Ordnance Survey identifies an area of 'Old Sand Pits (**393**). The field immediately to the south contains scatters of medieval artefactual material (**150, 151, 154**).
- A.32.4 There has been no previous archaeological field investigation of this parcel.
- A.32.5 Historic mapping shows no discernible change to this land parcel since the first edition OS (1883), suggesting that the boundary visible on LiDAR imagery had been removed by this time. Earlier mapping does not identify any specific features of archaeological interest. This parcel appears to form part of an area which had been enclosed by the late-18th century.
- A.32.6 In the absence of any significant recorded archaeological features within the immediate vicinity of this parcel, there is no evidence which suggests an elevated potential for the presence of archaeological remains. However, the absence of records cannot be taken as necessarily indicative of the absence of any archaeological remains.

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Appendix B Gazetteer of Heritage Assets and Archaeological records within the Study Area

Designated Heritage Assets

Ref	List ID	Asset Type	Description	Location
1	1215753	LB I	St Mary's Abbey	TM 44521 64174
2	1215754	LB II	Retreat House	TM 44468 64172
3	1216380	LB II	Barn at Abbey Farm	TM 44442 64252
4	1216394	LB II	Upper Abbey Farmhouse	TM 45295 64573
5	1216395	LB II	Cottage 450 metres south west of Upper Abbey Farmhouse	TM 44902 64420
6	1216655	LB II	Barn 40 metres north of upper Abbey Farmhouse	TM 45312 64606
7	1227936	LB II	The Old Thatched Cottage	TM 45225 66170
8	1228266	LB II	Bob's Cottage	TM 44603 65222
9	1228267	LB II	Potter's Farmhouse	TM 44984 65188
10	1228268	LB II	Theberton House Stables	TM 44566 65162
11	1268290	LB II	The Guesten Hall at Abbey Farm	TM 44412 64266
12	1287237	LB II	Gate and gate piers 105 metres south east of main entrance to Theberton House	TM 44568 65013
13	1287530	LB II	Sweet Briar Cottage	TM 44931 66196
14	1391360	LB II	The Watch-House	TM 47545 62750
15	1014520	SM	Leiston Abbey (second site) and moated site	TM 44454 64215
16	1015687	SM	Leiston Abbey (first site) with later chapel and pill box	TM 47267 65997

Features Recorded by AMIE/SCC Historic Environment Record

Ref	ID	Description	Location
20	879929	Net fastener.	TM 4868 6637
21	391999	The ruinous remains of a smock mill built in the early 19th century. It ceased work in 1935.	TM 4770 6624
22	1478522	Site of a Second World War heavy anti-aircraft (Diver) battery in the Diver Strip at The Walks, Leiston. It was armed with four 3.7-inch Mark IIc guns equipped with	TM 4640 6190

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Ref	ID	Description	Location
		Predictor BTL, and Radar AA No.3 Mark V.	
23	500006	The reported site of a post medieval windmill.	TM 4460 6280
24	1478625	Site of a Second World War heavy anti-aircraft (Diver) battery in the Diver Strip on Leiston Common. It was armed with four 3.7-inch Mark IIc guns equipped with Predictor BTL, and Radar AA No.3 Mark V.	TM 4750 6500
25	392029	A Neolithic flaked flint axe, slightly rolled, was found on Sizewell beach. It is now in Ipswich Museum (Accession Number 966-31).	TM 4760 6320
26	1478624	Site of a Second World War heavy anti-aircraft (Diver) battery in the Diver Strip on Leiston Common. It was armed with four 3.7-inch Mark IIc guns equipped with Predictor BTL, and Radar AA No.3 Mark V.	TM 4580 6340
27	392010	Early Bronze Age cinerary urn.	TM 4350 6590
28	392015	The ruinous remains of a tower mill moved from Little Glemham in Suffolk in circa 1730. It was in operation until about 1920 and was largely demolished by 1930. The ruinous base of the building remains.	TM 4398 6566
29	392000	A small smock mill built in the mid-19th century.	TM 4677 6621
30	392044	Early Bronze Age cinerary urn.	TM 4460 6290
31	1420941	Pillbox, scheduled with the abbey ruins into which it is built. At Minsmere Chapel, Old Leiston Abbey. North of Sizewell Power Station - on road between Dunwich and Sizewell.	TM 4732 6598
32	392001	The remains of a small smock mill built in the mid-19th century.	TM 4727 6590
33	869221	Round towered church with nave, chancel, South aisle, South porch and North vestry. The nave, chancel and tower are at least 12th century. The chancel was extended Eastwards circa 1300, at which time the belfry was added.	TM 4373 6592
34	1489920	The site of Leiston Very High Frequency (VHF) Fixer Station. This was one of a network of 57 stations established in England by the Royal Air Force. It was built by 1951 as part of the Rotor programme to modernise the United Kingdom's radar	TM 4580 6170

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Ref	ID	Description	Location
		defences.	
35	962899	Theberton House, 18th century core, altered early-19th century.	TM 4453 6512
36	1478641	Site of a World War II heavy anti-aircraft (Diver) battery in the Diver Strip east of Ash Wood. It was armed with four 3.7-inch Mark IIc guns equipped with Predictor BTL, and Radar AA No.3 Mark V when it was deployed here on 24th November 1944.	TM 4620 6500
37	1490998	1915 wreck of Scottish cargo vessel which foundered east of the Sizewell Bank after being torpedoed en route from Bilbao for West Hartlepool with iron ore. Constructed of steel in 1889, she was a steam-driven vessel.	TM 4878 6298
38	1420942	World War II anti-tank blocks on beach. At Minsmere Haven, running along beach North-South from Dunwich to Sizewell.	TM 4784 6650
39	500751	Windmill.	TM 4680 6620
40	1478677	Site of a World War II light anti-aircraft (Diver) battery in the Diver Strip north at Sizewell Common. It was manned by 450 Battery of 135 Anti-Aircraft Artillery Regiment on 10th October 1944. The armament is not stated.	TM 4700 6200
41	1428805	Site of World War II gun emplacement at Dower House, Sizewell, near Leiston, Suffolk.	TM 4750 6160
42	1478633	Site of a World War II heavy anti-aircraft (Diver) battery in the Diver Strip west of Broom Covert. It was armed with four 3.7-inch Mark IIc guns equipped with Predictor BTL, and Radar AA No.3 Mark V.	TM 4610 6280
43	1478634	Site of a World War II heavy anti-aircraft (Diver) battery in the Diver Strip at Leiston Power Station. It was armed with four 3.7-inch Mark IIc guns equipped with Predictor BTL, and Radar AA No.3 Mark V.	TM 4730 6370
44	1478561	Site of a World War II heavy anti-aircraft (Diver) battery in the Diver Strip south-east of Prettyman's Whin. It was armed with four 3.7-inch Mark IIc guns equipped with Predictor BTL, and Radar AA No.3 Mark V.	TM 4700 6200
45	1420651	Site of a World War II auxiliary Unit 'hide', Leiston Common.	TM 4580 6350

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Ref	ID	Description	Location
46	962902	Church of St Margaret, mainly rebuilt in 19th century.	TM 4387 6249
47	1368257	The Leiston Branch Railway.	TM 4496 6284
48	MSF11320	Leiston town gas works (S1), (R1).	TM 4478 6287
49	MSF11525	Scatter of red tile over most of field surface (S1).	TM 4445 6385
50	MSF11526	Scatter of metalwork found by farmer, includes groat and cut halfpenny and 'many Nuremberg tokens' (S1).	TM 4425 6385
51	MSF15745	Area of irregularly shaped small body of water named 'Decoy' in area of Minsmere (WLN 029) on 1:10560 OS maps (S1).	TM 4716 6651
52	MSF16197	Subrectangular enclosure earthwork/cropmark, circa 70m by 50m+, on open heathland.	TM 4625 6315
53	MSF16902	Bridge named Ton Bridge, is shown crossing the Minsmere old river at East Bridge on Hodkinson's map (S1).	TM 4527 6635
54	MSF21298	The footprint for a proposed extension to 'The Barn' at Leiston Abbey was stripped of its overburden with a view to revealing any archaeological deposits.	TM 4444 6426
55	MSF21534	Six sherds of Romano-British pottery.	TM 4711 6492
56	MSF21535	553 medieval coarseware pottery sherds.	TM 4711 6492
57	MSF21536	Circa 90 worked flint artefacts found.	TM 4711 6493
58	MSF21537	A number of cropmarks including field boundaries visible on APs.	TM 4711 6493
59	MSF21538	One large (c.35m) and two smaller 'pennanular' ring ditches (c.18m).	TM 4716 6510
60	MSF21544	Five pieces of worked flint found.	TM 4640 6494
61	MSF21545	Seven sherds of medieval coarseware pottery found.	TM 4640 6494
62	MSF21546	One Romano-British pottery sherd found.	TM 4640 6494
63	MSF21553	Ring ditch visible from SCC APs, approximately 50m diameter.	TM 4619 6483
64	MSF21554	Stray find of prehistoric pot boiler flint.	TM 4585 6484
65	MSF21555	Medieval coarseware pottery.	TM 4585 6485
67	MSF21562	Four sherds of medieval coarseware pottery found fieldwalking.	TM 4552 6435

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Ref	ID	Description	Location
68	MSF21563	Four pieces of worked flint and two flint flakes found.	TM 4552 6435
69	MSF21588	Three possible enclosures, two possible tracks and other cropmarks.	TM 4665 6262
70	MSF21606	27 sherds of medieval coarseware pottery collected.	TM 4698 6299
71	MSF21607	251 burnt flints.	TM 4698 6299
72	MSF22874	Causeway linking the island on which the chapel and abbey remains stand and the dry land (S1).	TM 4651 6600
73	MSF22875	A fragment of sea bank can be seen as an earthwork, more fragmentary than the other banks in the vicinity (S1).	TM 4649 6655
74	MSF2340	Listed Building and Scheduled Monument. Founded 1182 on a site about 2 miles away nearer the sea (see LCS 002) as a Premonstratensian house, dedicated to the Blessed Virgin, by Ranulf de Glanville, Henry II's chief Justicier.	TM 4445 6420
75	MSF2341	Site of the first Premonstratensian abbey at Leiston, founded in 1182 and moved to its present site in 1363 (see LCS 001). Scheduled Monument.	TM 4727 6598
76	MSF24565	Evaluation revealed that the northern half of the site was truncated by two large pits, probably post-medieval quarries.	TM 4518 6493
77	MSF24565	Evaluation revealed in the northern half of the site this was truncated by two large pits, probably post-medieval quarries.	TM 4518 6493
78	MSF24870	Monitoring revealed a series of disturbed and re-deposited layers, a bonded flint and mortar wall, capped well and a cobbled surface associated with the farmhouse.	TM 4447 6418
79	MSF25256	Monitoring of test pits revealed evidence of a channel, pond or wet hollow in the south of LCS 160 containing a sherd of medieval pottery and a small quantity of unstratified medieval pottery.	TM 4719 6267
80	MSF26112	Leiston Auxiliary Unit, Operational Base, Leiston Common.	TM 4638 6317
81	MSF26730	Recording of a listed building prior to conversion. The building comprised a coastguard lookout station built in the 1820s. Brick built with slate roof.	TM 4754 6274

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Ref	ID	Description	Location
82	MSF26807	Extensive scatter of heavily burnt flints adjacent to a small stream.	TM 4493 6356
83	MSF26809	Two silver Henry II pennies found 1994 and in 2006 a further hoard of six Henry II pennies (1163-1167) were found.	TM 4491 6369
84	MSF26812	Brick works, kilns, pug mill, drying sheds and extraction pit shown on 1880's map.	TM 4446 6314
85	MSF26814	Area of probable peat cutting, identified on maps as well as pit like features found during woodland survey.	TM 4644 6455
86	MSF26815	A single arched brick bridge with a date stone of 1842, over Minsmere New Cut.	TM 4601 6623
87	MSF26876	Sizewell Crossing and crossing keeper's cottage, built 1859 or 1860. Line closed by 1994 (S2). Cottage extant.	TM 4556 6249
88	MSF26879	A presumably Romano-British salt production site visible as a dense scatter of briquetage (and tile?).	TM 4739 6507
89	MSF4001	Complex pattern of field boundaries (S1).	TM 4475 6289
90	MXS19490	World War II anti-tank cubes stretching along the beach to the east of Minsmere bird reserve.	TM 4778 6688
91	MXS19495	World War II coastal defences on the beach to the east of Minsmere bird reserve.	TM 4784 6705
92	MXS19496	Numerous bomb craters of World War II date close to Minsmere nature reserve.	TM 4753 6668
93	MXS19497	A section of sea bank running along the coast to the east of Minsmere nature reserve, probably of post-medieval date.	TM 4774 6658
94	MXS19498	Sea banks of post-medieval date in Minsmere nature reserve.	TM 4692 6656
95	MXS19499	World War II coastal defences just west of the beach to the south-east of Minsmere Level.	TM 4769 6601
96	MXS19499	World War II coastal defences just west of the beach to the south-east of Minsmere Level.	TM 4769 6601
97	MXS19499	World War II coastal defences just west of the beach to the south-east of Minsmere Level.	TM 4769 6601
98	MXS19499	World War II coastal defences just west of the beach to the south-east of Minsmere	TM 4769 6601

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Ref	ID	Description	Location
		Level.	
99	MXS19499	World War II coastal defences just west of the beach to the south-east of Minsmere Level.	TM 4769 6601
100	MXS19500	Sea bank of post-medieval date at the northern edge of Minsmere New Cut.	TM 4662 6625
101	MXS19501	Fragment of sea bank on Minsmere level, possibly of post-medieval date, and likely to pre-date XS19500.	TM 4664 6642
102	MXS19502	An extensive World War II site comprising two anti-aircraft batteries, associated buildings and numerous practice trenches, on Goose Hill and in Dunwich Forest.	TM 4628 6498
103	MXS19503	Anti-tank ditch of World War II date to the north of Goose Hill.	TM 4724 6528
104	MXS19504	An L-shaped section of barbed wire obstruction south of Sandpytle Plantation.	TM 4622 6563
104	MXS19505	Sea banks of possible post-medieval date to the east of Leiston chapel.	TM 4758 6562
106	MXS19506	Length of sea bank on the south side of Minsmere New Cut, probably of post-medieval date.	TM 4704 6611
107	MXS19507	World War II features, including bomb craters, pillboxes and barbed wire obstructions, at the east end of Minsmere New Cut.	TM 4764 6603
108	MXS19508	Bombing decoy site of World War II date close to the medieval ruins of Leiston Chapel.	TM 4734 6599
109	MXS19509	World War II practice trenches north of Goose Hill.	TM 4689 6533
110	MXS19687	A complex of World War II emplacements in Leiston parish.	TM 4709 6467
111	MXS19688	A possible modern wind pump and probable World War II pillbox in Leiston parish.	TM 4739 6449
112	MXS19689	World War II bomb craters in Leiston parish.	TM 4737 6385
113	MXS19690	World War II shooting butts in Leiston parish.	TM 4732 6390
114	MXS19691	Early World War II strongpoints and a late World War II Light and Heavy Anti-aircraft Artillery site at Sizewell in Leiston parish.	TM 4727 6365
115	MXS19692	Post-medieval earthwork boundary banks at	TM 4720 6330

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Ref	ID	Description	Location
		Sizewell, Leiston parish.	
116	MXS19693	Two World War II coastal strongpoints and practice trenches in Leiston parish.	TM 4746 6344
117	MXS19694	Masts and mast footings of probable World War II radar stations in Leiston parish.	TM 4743 6337
118	MXS19694	Masts and mast footings of probable World War II radar stations in Leiston parish.	TM 4743 6337
119	MXS19695	World War II strongpoints and barbed wire obstructions in Leiston parish.	TM 4733 6311
120	MXS19696	A World War II pillbox at Sizewell, Leiston parish.	TM 4750 6324
121	MXS19697	World War II command post trench and pillbox in Leiston parish.	TM 4711 6279
122	MXS19698	A World War II anti-tank ditch in Leiston and Aldringham cum Thorpe parish.	TM 4730 6191
123	MXS19699	A post-medieval boundary bank in Leiston parish.	TM 4736 6292
124	MXS19700	A World War II strongpoint or depot at Sizewell village, Leiston parish.	TM 4750 6280
125	MXS19701	World War II strongpoint and a possible experimental radar station in Leiston parish. Summary from record LCS: Suffolk square pillbox.	TM 4745 6251
126	MXS19702	A quarry pit of unknown date, Leiston.	TM 4692 6239
127	MXS19837	Extensive World War II beach scaffolding, running southwards for circa 7km from Leiston parish.	TM 4752 6271
128	MXS19840	A World War II minefield to the north of Sizewell, Leiston.	TM 4761 6461
129	MXS19841	A World War II minefield near Sizewell, Leiston.	TM 4760 6430
130	MXS19842	World War II anti-tank cubes near Sizewell, Leiston.	TM 4744 6404
131	MXS19843	Probable World War II practice trenches near the beach at Sizewell, Leiston.	TM 4754 6450
132	MXS19845	A World War II bomb crater at Sizewell, Leiston.	TM 4752 6438
133	MXS19850	World War II anti-invasion coastal defences at Sizewell, Leiston.	TM 4755 6377
134	MXS19853	World War II anti-tank cubes near Sizewell, Leiston.	TM 4757 6335

NOT PROTECTIVELY MARKED

Ref	ID	Description	Location
135	MXS19855	World War II anti-invasion defence barbed wire on the sea-front at Sizewell, Leiston.	TM 4754 6318
136	MXS19856	World War II anti-invasion beach defences near Sizewell village, Leiston.	TM 4758 6284
137	MXS19858	World War II anti-invasion coastal defences from Sizewell village to Sizewell Hall, Leiston.	TM 4759 6219
138	MXS20460	A probable slipway of post medieval date is visible as a structure on the beach at Leiston.	TM 4784 6606
139	MSF11320	Allocated Number (find or feature reported to HER but not yet fully catalogued)	
140	MSF11525	Allocated Number	
141	MSF11526	Allocated Number	
142	MSF15745	Allocated Number	
143	MSF16197	Allocated Number	
144	MSF16902	Allocated Number	
145	MSF21298	Allocated Number	
146	MSF21534	Allocated Number	
147	MSF21535	Allocated Number	
148	MSF21536	Allocated Number	
149	MSF21537	Allocated Number	
150	MSF11523	'Masses' of dark pottery (possibly medieval), much of it heavily burnt.	TM 4534 6353
151	MSF11524	Scatter of medieval and Romano-British pottery found on field surface by farmer (S1) (S2).	TM 4498 6362
152	MSF11527	Two bronze coins (1 st century AD <i>sestertii</i>) found in area washed by storm water from drain pipes (S1).	TM 4441 6360
153	MSF12096	Finds scatter of medieval and Romano-British pottery found by farmer during ploughing and subsequent walking.	TM 4498 6362
154	MSF12097	Finds scatter identified whilst farming, and subsequent random walking.	TM 4485 6355
155	MSF12606	Mill - wind pump.	TM 4755 6595
156	MSF12607	Mill - wind pump, site of.	TM 4680 6621
157	MSF12608	Sea Wall Mill.	TM 4775 6635

NOT PROTECTIVELY MARKED

Ref	ID	Description	Location
158	MSF15745	Area of irregularly armed small body of water named 'Decoy' in area of Minsmere (WLN 029) on 1:10560 OS maps (S1).	TM 4716 6651
159	MSF15746	Minsmere peat cuttings, of at least 12th century date.	TM 4721 6650
160	MSF16786	Small ring ditch cropmark, circa 10m diameter.	TM 4439 6430
161	MSF16889	Bridge shown crossing a small stream on Hodkinson's map (S1).	TM 4545 6348
162	MSF17052	Scheduled World War II Pill Box (within medieval Abbey chapel). Summary from record LCS: Pillbox, scheduled with the abbey ruins into which it is built.	TM 4737 6603
163	MSF2061	Barrow, or 18 th /19 th century landscaping feature? Circa 15 feet high, 25 feet in diameter, beside road in corner of wood.	TM 4476 6462
164	MSF21392	Old ship's mast mounted in metal sheath. Metal footholds set into mast to aid climbing. Sited near old huts and boat winches of fisherman. Lookout?	TM 4759 6264
165	MSF21393	Metal and timber remains buried in shingle – (possible wreck or groyne). Timber appears to be sawn through although much of it eroded by wave action. Metal sheathing bent and buckled and rusty but in fairly good condition. No other groynes visible on beach.	TM 4769 6490
166	MSF2342	Chipped flint axe, slightly rolled, length four and three quarter inches, found on Sizewell beach (about quarter of a mile from 1966 car park) about April 1966 by Master Kevin Hobbs, Alma Cottage, Ashbocking, who presented it to Ipswich Museum.	TM 4765 6325
167	MSF2343	Two cinerary urns, found when digging trench for a gas main in Carr Road, near the Gas works, Leiston.	TM 4465 6295
168	MSF806	Two Mesolithic maceheads one with hole not completely bored through.	TM 4498 6330
169	1316300	William and Ann - English sloop, 1853.	TM 4878 6298
170	1339135	A Mesolithic pebble macehead, said to have been associated with a Neolithic polished axe, found at West Farm, Leiston. The macehead (and possibly also the axe) is now in Ipswich Museum.	TM 4350 6250

NOT PROTECTIVELY MARKED

Ref	ID	Description	Location
171	1341188	John - English brig, 1852.	TM 4878 6298
172	1236522	Clarissa - English brig, 1889.	TM 4878 6298
173	1495881	Hound - 1829 wreck of English brig which stranded on the Sizewell Bank; a wooden sailing vessel.	TM 4878 6298
174	544199	Trafalgar - 1812 wreck of English cargo vessel which stranded in Sizewell Bay en route from Shields to London with coal; a wooden sailing vessel.	TM 4878 6298
175	1243043	Hector - British craft, 1830.	TM 4878 6298
176	1339163	Neptune - English craft, 1820.	TM 4878 6298
177	914518	Hoppet - Norwegian barque, 1888.	TM 4878 6298
178	913698	A Neolithic polished flint axe was found on Minsmere beach.	TM 4750 6650
179	391993	Florence - English schooner, 1884.	TM 4878 6298
180	913694	Thomas - British craft, 1830.	TM 4878 6298
181	1321541	Peter - Danish brig, 1876.	TM 4878 6298
182	392033	Henry Morton - English snow, 1859.	TM 4878 6298
183	1347240	Speedwell - English ketch, 1899.	TM 4878 6298
184	913872	Choice - 1783 wreck of English cargo vessel which stranded on Sizewell Bank en route from St. Petersburg to London; a wooden sailing vessel.	TM 4878 6298
185	913994	Sally - 1771 wreck of craft, probably British, which stranded "on the English coast" on her passage from Zealand to London, indicating a probable area of loss between Norfolk to the north and the Thames to the south.	TM 4878 6298
186	913697	Agatha - English snow, 1891.	TM 4878 6298
187	1429616	Palestine - English barque, 1881.	TM 4878 6298
188	913840	Flora - Russian barque, 1888.	TM 4878 6298
189	1352057	Pallas - English snow, 1860.	TM 4878 6298
190	1394867	Site of railway station on the Leiston Branch Railway, opened in 1860 and closed in 1966.	TM 4426 6287
191	913969	Richard White - English snow, 1853.	TM 4878 6298
192	1339958	Hope - Craft, 1841.	TM 4878 6298
193	1495882	Caroline - English dandy, 1893.	TM 4878 6298

NOT PROTECTIVELY MARKED

Ref	ID	Description	Location
194	1246090	Woodman - 1809 wreck of English cargo vessel which stranded at Sizewell en route from Newhaven to Newcastle-upon-Tyne with timber; a wooden sailing vessel.	TM 4878 6298
195	1401968	Ann and Mary - English snow, 1852.	TM 4878 6298
196	1337612	Congregational chapel built in the High Street in 1866. Red brick with gault brick dressings. Gabled front with arched heads of red and blue brick to doorway and windows.	TM 4453 6251
197	1316300	The Long Shop - built as a workshop in 1853 for the manufacture of portable steam engines, now under restoration as a museum. It is made of red brick with yellow brick dressings and has a pantile roof with three louvred ventilators at ridge level.	TM 4438 6259
198	1339135	Vine - 1827 wreck of English brig which foundered after a collision off the upper end of Sizewell Bank; a wooden sailing vessel.	TM 4878 6298
199	1341188	Saint Louis - French brig, 1893.	TM 4878 6298
200	1236522	Sly Boots - English brigantine, 1897.	TM 4878 6298
201	1495881	Victory - English schooner, 1852.	TM 4878 6298
202	544199	The original site of Leiston Abbey, from which the community was removed in 1363 to a new site 3.37km to the south west. It suffered badly from both the Black Death and flooding. It remained in use as a cell of New Leiston, until 1537.	TM 4726 6600
203	1243043	London - 1852 wreck of English brig which stranded on the Sizewell Bank following a collision, while en route from Hartlepool to Rochester with coal. Constructed of wood with iron bolts, she was a sailing vessel.	TM 4878 6298
204	1339163	Margaret - English schooner, 1878.	TM 4878 6298
205	914518	The second site of Leiston Abbey circa 3km south west of the site of its original foundation in the coastal marshes south of Minsmere. The monument includes most of the standing and buried remains of the monastic church and conventual buildings.	TM 4449 6416
206	913698	Jane - 1820 wreck of English cargo vessel which stranded on Sizewell Beach en route from London to South Shields; a wooden sailing vessel.	TM 4878 6298

NOT PROTECTIVELY MARKED

Ref	ID	Description	Location
207	391993	Leader - English cutter, 1881.	TM 4878 6298
208	913694	Peidentia - Norwegian barque, 1888.	TM 4878 6298
209	1321541	Brig, 1852.	TM 4878 6298
210	392033	Second World War square pillbox. Near Sizewell, East of Leiston.	TM 4712 6273
211	1347240	Belle - English brig, 1869.	TM 4878 6298
212	913872	Diligence - British cargo vessel, 1824.	TM 4878 6298
213	913994	A survey of defence works on the Suffolk coast in 1587 noted that the early Tudor entrenchments at Minsmere were ruinous and recommended rebuilding them. Their precise location is unknown.	TM 4700 6600
214	913697	Magnet - Scottish brig, 1886.	TM 4878 6298
215	1429616	Carmenta - English brigantine, 1916.	TM 4878 6298
216	913840	Friends Meeting House built in 1860. Red brick with rusticated quoins and window surrounds in yellow brick; slate roof. Single-storey. 3 window range, tall sashes with glazing bars. Segmental heads with stone coping and ornamental keystones.	TM 4429 6260
217	1352057	Caldecot Castle - 1833 wreck of British cargo vessel which was beached on Sizewell Beach after grounding on Sizewell Bank. En route from Newcastle-upon-Tyne to London, probably with coal, she was a wooden sailing vessel.	TM 4878 6298
218	1394867	Leiston Airfield - A World War Two airfield opened in 1943. During World War Two it was used by the United States Army 8th Air Force 358th and 357th Fighter Groups. Their main duties were escorting bomber aircraft.	TM 4281 6435
219	913969	Content - English snow, 1861.	TM 4878 6298
220	MSF16197	Subrectangular enclosure earthwork/cropmark, circa 70m by 50m+, on open heath(?) land.	TM 4625 6315
221	MSF19738	Partially polished flint axehead - recently disturbed?	TM 4498 6438
222	MSF21539	Four flint flakes found on a casual basis.	TM 4610 6490
223	MSF21540	Four medieval coarseware sherds found on a casual basis.	TM 4610 6490

NOT PROTECTIVELY MARKED

Ref	ID	Description	Location
224	MSF21541	Cropmarks visible from APs.	TM 4650 6530
225	MSF21542	Series of military cropmarks visible from SCC APs.	TM 4650 6530
226	MSF21543	Causeway ring ditch visible from AP, approximately 50m wide.	TM 4653 6530
227	MSF21547	A series of military cropmarks.	TM 4640 6480
228	MSF21548	Cropmarks visible from APs.	TM 4640 6480
229	MSF21549	Pot boiler flint found.	TM 4620 6480
230	MSF21550	Cropmarks visible by AP.	TM 4590 6480
231	MSF21551	Two lots of cropmarks visible from APs.	TM 4610 6460
232	MSF21552	Very few sherds, two flakes, one blade and two burnt flints of prehistoric period.	TM 4610 6460
233	MSF21556	A number of medieval coarseware sherds found.	TM 4583 6459
234	MSF21557	A number of worked flints, including two scrapers and one pot boiler flint.	TM 4583 6459
235	MSF21558	A large causeway ring ditch approximately 50m diameter visible from APs.	TM 4573 6449
236	MSF21559	A ring ditch visible from APs approximately 10m in diameter.	TM 4575 6442
237	MSF21560	A large causeway ring ditch approximately 40m in diameter, visible from APs.	TM 4598 6443
238	MSF21561	A causeway ring ditch approximately 10m in diameter, visible from APs.	TM 4606 6445
239	MSF21564	A large causewayed ring ditch visible from APs, approximately 45m in diameter.	TM 4555 6456
240	MSF21565	Three pieces of worked flint.	TM 4540 6419
241	MSF21566	13th/14th century medieval coarseware pottery.	TM 4541 6419
242	MSF21567	Causewayed ring ditch visible from APs approximately 30m diameter.	TM 4541 6410
243	MSF21568	A concentric ring ditch approximately 30m in diameter, visible from APs.	TM 4546 6415
244	MSF21569	A causewayed ring ditch visible on APs.	TM 4608 6338
245	MSF21570	Three possible Thetford ware type pottery sherds (9th-12 th century), medieval coarseware pottery sherds (12th-14 th century) and five glazed medieval sherds.	TM 4721 6285
246	MSF	Several pieces of worked flint plus flint	TM 4720 6285

NOT PROTECTIVELY MARKED

Ref	ID	Description	Location
		gritted sherd found.	
247	MSF21572	One Romano-British pottery sherd found.	TM 4720 6285
248	MSF21573	One jet bead found.	TM 4721 6286
249	MSF21574	Possible track in south end of field, plus possible part of ring ditch and other cropmarks.	TM 4726 6278
250	MSF21575	Several pieces of worked flint including pot boiler flints and scrapers plus a prehistoric pottery sherd.	TM 4697 6279
251	MSF21576	Romano-British pottery sherds and possible Romano-British tile fragment found.	TM 4697 6278
252	MSF21577	Majority of sherds found were medieval coarseware of 13th/14th century date with possible 12 th century presence.	TM 4698 6278
253	MSF21578	Ring ditch approximately 10m diameter, plus other cropmarks, possibly field boundaries and tracks.	TM 4695 6282
254	MSF21579	Ring ditch approximately 20m in diameter visible from APs.	TM 4699 6272
255	MSF21580	13th/14th century coarseware pottery sherds.	TM 4682 6264
256	MSF21581	Several flint flakes and others were found, including some pot boiler flints and scrapers.	TM 4682 6264
257	MSF21582	One glass bead found, date unknown.	TM 4682 6264
258	MSF21583	A causewayed ring ditch approximately 8m in diameter plus a series of other cropmarks, possibly field boundaries.	TM 4675 6259
259	MSF21584	An enclosure approximately 50m x 30m, visible from APs.	TM 4696 6288
260	MSF21585	Large causewayed ring ditch approximately 50m diameter, incomplete.	TM 4688 6259
261	MSF21586	Medieval coarseware pottery found.	TM 4652 6257
262	MSF21587	Several pot boiler flints and other worked flints found.	TM 4651 6257
263	MSF21589	Prehistoric worked flint including pot boiler flints and scrapers.	TM 4617 6257
264	MSF21590	One Thetford-type ware pottery sherd and medieval coarseware found.	TM 4617 6257
265	MSF21591	Large amount of modern building debris noted on this field, probably World War II.	TM 4617 6257

NOT PROTECTIVELY MARKED

Ref	ID	Description	Location
266	MSF21592	Causewayed ring ditch approximately 20m diameter, incomplete.	TM 4620 6261
267	MSF21593	Causewayed ring ditch, incomplete, approximately 20m in diameter.	TM 4615 6260
268	MSF21594	Military, probably World War II, rectangular and linear cropmarks, possibly enclosures.	TM 4615 6273
269	MSF21595	A number of worked flints including two pot boiler flints and scrapers.	TM 4609 6298
270	MSF21596	Majority of pottery found was medieval coarseware, there was one stray find of a Romano-British pottery sherd.	TM 4609 6298
271	MSF21597	A series of linear markings show possible enclosure, also possible ring ditches in south east of field and possible tracks.	TM 4619 6307
272	MSF21598	Fifteen medieval coarseware pottery sherds found.	TM 4575 6310
273	MSF21599	Thirteen post-medieval pottery sherds found (S1)(S2).	TM 4575 6310
274	MSF21600	Causewayed ring ditch, approximately 30m in diameter and other cropmarks, possibly tracks.	TM 4589 6319
275	MSF21601	Concentric semi-circular cropmark possible ring ditch, approximately 20m diameter.	TM 4653 6274
276	MSF21602	A semicircular ring ditch visible from APs, approximately 30m diameter.	TM 4628 6262
277	MSF21603	Two small (10m diameter) ring ditches together, visible from APs.	TM 4635 6342
278	MSF21604	Causewayed ring ditch approximately 10m diameter, surrounded by oval boundary.	TM 4579 6346
279	MSF21605	Causewayed ring ditch visible from APs.	TM 4607 6344
280	MSF21608	Ring ditch visible from APs.	TM 4713 6482
281	MSF21609	Causewayed ring ditch, approximately 60m diameter.	TM 4614 6428
282	MSF21610	Causewayed ring ditch approximately 10m diameter, visible from APs.	TM 4677 6493
283	MSF21611	Circa half ring ditch visible from APs.	TM 4721 6459
284	MSF21612	Causewayed ring ditch approximately 10m in diameter, visible from APs.	TM 4623 6344
285	MSF21613	Causewayed ring ditch approximately 10m diameter visible from APs.	TM 4623 6405

NOT PROTECTIVELY MARKED

Ref	ID	Description	Location
286	MSF21614	A penannular ring ditch approximately 40m in diameter, visible on APs.	TM 4572 6398
287	MSF21615	A small causewayed ring ditch approximately 10m diameter, penannular, visible on APs.	TM 4752 6427
288	MSF21616	A causewayed ring ditch approximately 40m in diameter, visible on APs.	TM 4617 6416
289	MSF21618	Linear cropmarks at most 100m long - possible field boundaries.	TM 4590 6270
290	MSF21619	Medieval coarseware pottery, plus one possible prehistoric flint gritted pottery sherd.	TM 4590 6270
291	MSF21623	Possible enclosures visible on APs.	TM 4640 6350
292	MSF21624	Two cropmarks, linear, visible on APs.	TM 4690 6290
293	MSF21625	Linear boundaries, approximately 200m in length, visible from APs.	TM 4720 6460
294	MSF21626	Set of two curved lines, possible track, visible from APs.	TM 4735 6290
295	MSF21627	A series of linear cropmarks, possible tracks, visible on APs.	TM 4550 6380
296	MSF21628	Large curved cropmarks visible on APs.	TM 4670 6390
297	MSF21629	Series of curved cropmarks visible on APs.	TM 4740 6470
298	MSF21630	Linear cropmarks visible on APs.	TM 4540 6460
299	MSF21631	Series of linear cropmarks visible from APs, possible field boundaries.	TM 4550 6280
300	MSF2346	Polished grey flint axe, six and half inches long.	TM 4535 6455
301	MSF2347	Axe found at TM 473 660? "50 years ago" that is about 1917.	TM 4735 6605
302	MSF2350	Short cross penny John (1199 - 1216) probably Class 5c.	TM 4481 6281
303	MSF23958	Cropmark indicating part (semi-circle) of ring ditch (S1).	TM 4491 6588
304	MSF23995	Former town/township of Sizewell. A market was recorded in Sizewell in 1237.	TM 4750 6275
305	MSF26332	WWII anti-tank blocks on beach.	TM 4784 6650
306	MSF26813	Small scatter of medieval and post medieval pottery.	TM 4620 6330
307	MSF29477	Allocated Number	

NOT PROTECTIVELY MARKED

Ref	ID	Description	Location
308	MSF29478	Allocated Number	
309	MSF29480	Allocated Number	
310	MSF29482	Allocated Number	
311	MSF29483	Allocated Number	
312	MSF29484	Allocated Number	
313	MSF29489	Allocated Number	

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED***Archaeological Interventions recorded by AMIE and SCC Historic Environment Record***

Ref	ID	Description	Location
320	ESF21922	Monitoring of cable trench, Leiston Abbey, Leiston	TM 4445 6417
321	ESF18145	Monitored excavation of two post holes for information board at Leiston Abbey	TM 4445 6420
322	ESF18145	Monitored excavation of two post holes for information board at Leiston Abbey	TM 4445 6420
323	ESF20015	Leiston Old Abbey Chapel, Building Recording	TM 4732 6598
324	ESF20026	Leiston Substation 132kV Cable Route	TM 4717 6288
325	ESF20026	Leiston Substation 132kV Cable Route	TM 4717 6288
326	ESF20026	Leiston Substation 132kV Cable Route	TM 4717 6288
327	ESF20026	Leiston Substation 132kV Cable Route	TM 4717 6288
328	ESF20026	Leiston Substation 132kV Cable Route	TM 4717 6288
329	ESF20026	Leiston Substation 132kV Cable Route	TM 4717 6288
330	ESF20026	Leiston Substation 132kV Cable Route	TM 4717 6288
331	ESF20026	Leiston Substation 132kV Cable Route	TM 4717 6288
332	ESF20026	Leiston Substation 132kV Cable Route	TM 4717 6288
333	ESF20026	Leiston Substation 132kV Cable Route	TM 4717 6288
334	ESF20026	Leiston Substation 132kV Cable Route	TM 4717 6288
335	ESF20026	Leiston Substation 132kV Cable Route	TM 4717 6288
336	ESF20234	Land near Upper Abbey Farm, Eastbridge Road	TM 4515 6477
337	ESF20282	Heathland Creation Trials Site, Sizewell, Leiston	TM 4603 6253
338	ESF20589	EDF Cable Trench, Leiston Abbey	TM 4447 6418
339	ESF21036	Geotechnical Site Investigation, EDF Access, Leiston	TM 4702 6369
340	ESF21036	Geotechnical Site Investigation, EDF Access, Leiston	TM 4702 6369
341	ESF21036	Geotechnical Site Investigation, EDF Access, Leiston	TM 4702 6369
342	ESF21144	Tank traps at Minsmere RSPB reserve	TM 4776 6664
343	ESF21279	81 Abbey Road, Leiston	TM 4448 6346
344	ESF21864	Building Recording, Coastguard Lookout	TM 4754 6274

NOT PROTECTIVELY MARKED

Ref	ID	Description	Location
		Station, Sizewell Gap, Leiston	
345	ESF21866	Evaluation, Abbey Farm Barn, Leiston	TM 4444 6426
346	ESF21919	Geophysical Survey, at Leiston Abbey (first site)	TM 4727 6598
347	ESF21920	Fieldwalking Survey, Leiston Abbey (first site), Leiston	TM 4732 6599
348	ESF21921	Evaluation Report, Tutors Rooms, Leiston Abbey	TM 4439 6424
349	ESF21921	Evaluation Report, Tutors Rooms, Leiston Abbey	TM 4439 6424
350	ESF21923	Evaluation, Former Coal Yard, Carr Avenue, Leiston	TM 4472 6288
351	ESF21927	Watching Brief, Valley Road, Sewage Works, Leiston	TM 4514 6320
352	ESF21930	Desk Top Survey, Sizewell Belts SSSI, Sizewell	TM 4584 6372
353	ESF21931	Archaeological survey of woodland areas, at the proposed site of Sizewell C PWR Power Station, Suffolk	TM 4629 6453
354	1249704	Sizewell C Reactor	TM 4700 6300
355	660692	Leiston Abbey Guesten Hall	TM 4450 6420
356	1404975	Land at 91 Abbey Road	TM 4432 6353
357	1513988	Leiston Substation 132kv Route	TM 4719 6316
358	646871	Leiston Abbey Guesten Hall	TM 4448 6416
359	1511272	Smyth House Residential Home, 106 High Street	TM 4455 6231
360	1435795	St Margaret's Church, Leiston	TM 4387 6250
361	1051428	Leiston Abbey	TM 4450 6420
362	1482745	Land Off Church Road	TM 4397 6246
363	1478552	Leiston Abbey Barn	TM 4444 6427
364	1317914	Leiston Hall Farm, Waterloo Avenue	TM 4400 6300
365	646870	Leiston Abbey	TM 4448 6416
366	1191649	Sizewell Belts SSSI	TM 4680 6370
367	1448511	Land Off Grimseys Lane	TM 4638 6160
368	1367932	Former Coal Yard, Carr Avenue	TM 4472 6288
369	1327383	Sizewell C Power Station	TM 4650 6450
370	646872	Leiston Abbey	TM 4448 6416

NOT PROTECTIVELY MARKED

Ref	ID	Description	Location
371	1066960	Leiston Abbey	TM 4450 6420
372	1311582	Leiston Hall Farm, Waterloo Avenue	TM 4400 6300

Features Noted in Assessment

Ref	DBA	Description	Location
380	DBA-01	Quarry/Marl Pit	TM 4878 6298
381	DBA-02	Quarry/Marl Pit	TM 4350 6250
382	DBA-03	Quarry/Marl Pit	TM 4878 6298
383	DBA-04	Quarry/Marl Pit	TM 4878 6298
384	DBA-05	Quarry/Marl Pit	TM 4878 6298
385	DBA-06	Quarry/Marl Pit	TM 4878 6298
386	DBA-07	Quarry/Marl Pit	TM 4878 6298
387	DBA-08	Field Boundary	TM 4878 6298
388	DBA-09	Field Boundary	TM 4878 6298
389	DBA-10	Field Boundary	TM 4750 6650
390	DBA-11	Field Boundary	TM 4878 6298
391	DBA-13	Ballocks Bridge	TM 4878 6298
392	DBA-12	'Broke's Field' and 'Close'	TM 4878 6298
393	DBA-14	Old Sand Pits	TM 4878 6298
394	DBA-15	Walk Barn	TM 4878 6298



VOLUME 2, CHAPTER 16, APPENDIX 16C : GEOPHYSICAL SURVEY
REPORTS

Geophysical Survey Report

Sizewell, Suffolk

for

EDF Energy

July 2010 to January 2011

Job ref: J2744

Bryony Marsh BA and Melanie Biggs BSc (Hons)



Document Title: Geophysical Survey Report
Sizewell, Suffolk

Client: EDF Energy

Stratascan Job No: J2744

Techniques: Detailed magnetic survey (gradiometry)

National Grid Ref: TM 457 643



Plate 1: View of Pillbox and Sizewell A and B in the distance looking NE across Area 1

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1 SUMMARY OF RESULTS

A detailed gradiometry survey was conducted over approximately 100 hectares of a mixture of pasture and farmland surrounding the Sizewell Nuclear Power Station sites in Sizewell, Suffolk. The data collected has identified numerous positive and negative anomalies which are indicative of former cut and banked features respectively and are likely to be of archaeological origin.

Numerous area anomalies consisting of positive responses with a negative halo are seen across the site but with characteristics which differ from those identified as cut and banked features of archaeological origin. The cause of these anomalies is uncertain, however previous human activity such as small scale sand quarrying or former small ponds would be a possible explanation.

2 INTRODUCTION

2.1 Background synopsis

Stratascan were commissioned to undertake a geophysical survey of an area outlined for development. This survey forms part of an archaeological investigation being undertaken by EDF energy.

2.2 Site location

The site is located near Sizewell in Suffolk at OS ref. TM 457 643.

2.3 Description of site

2.3.1 Area 1 – ‘Pillbox Field’ and ‘Greater Gabbard’



Plate 2: Obstructions. Left – view N from SE corner of Gabbard. Right – view SE from NW corner of Pillbox.

The survey area is approximately 7.2 hectares of weed covered scrubland. The Pillbox itself stands on a mound centrally to the main area. The topography slopes off in all directions from this mound, more dramatically to the south west and south-east corners of site. In the north-west corner near the residences was a patch of overgrown weeds containing various disused vehicles (see Plate 2, right). A row of telegraph poles cuts across site from the north-west to the south-east corner.

The Greater Gabbard area of site stood behind a row of metal fencing at the time of surveying. This area was flat with metal construction debris strewn across the eastern side of site (See Plate 2, left).

2.3.2 Area 2 - 'Barn Piece'



Plate 3: View S along the western boundary of Area 2

The survey area is approximately 4.1 hectares of loose sandy soil where the potato crop had been newly harvested. The topography of site is flat with no obstructions.

2.3.3 Area 3 - '10 Acres'



Plate 4: View from the NE corner looking diagonally across Area 3 to the SW corner

The survey area is approximately 3.3 hectares of bare sandy soil directly west of Area 2. Potatoes had just been harvested and some lay stranded on the surface. The site slopes downhill towards the south-west corner.

2.3.4 Area 4 – ‘Stone Walk South’



Plate 5: View N along the eastern boundary of Area 4

The survey area is approximately 6.8 hectares of sandy soil directly west of Area 3. The field had just been harvested for potatoes. The site is flat with no obstructions.

2.3.5 Area 5 – ‘Front Meadow’



Plate 6: View S across the length of Area 5

The survey area is approximately 3.4 hectares of flat pasture directly south of Upper Abbey Farm. The field is bordered by hedges and trees behind barbed wire fences on all four sides, with metal gates on the north and south boundary.

2.3.6 Area 6 – ‘East Lawn’



*Plate 7: Obstructions. Left – looking NE along the eastern boundary of site across the nettle overgrowth.
Right – looking NW across site towards the tree cluster which is central to this field.*

The survey area is approximately 5.2 hectares of pasture directly south of Area 5. The site sloped gently downhill to the south. All boundaries apart from the northern boundary were overgrown with weeds and overhanging trees which made them inaccessible for surveying. In the middle of the site is a cluster of large mature trees and overgrown nettles. Metal animal feeders are placed around the field and a drinking trough stands by the gate in the north-west corner of the field.

2.3.7 Area 7 – ‘Old Covey’



Plate 8: Left – looking W along the northern boundary of Area 7 at the sudden bulge in topography. Right – view E across the entire length of site; the rest of which is flat.

The survey area is approximately 5.2 hectares directly south of Area 8. At the time the survey was conducted the field had just been harvested of its wheat crop and had been left as a stubble field, clear of bales. The left image in Plate 8 shows how the topography in the north-west corner of site dips and rises suddenly; the rest of site is flat. The headland was overgrown on all boundaries and a non-ferrous pipe ran north to south along the length of the eastern field boundary.

2.3.8 Area 8 – '20 Acres'



Plate 9: View E along the northern boundary of site.

The survey area is approximately 9.5 hectares of stubble field directly east of Upper Abbey Farm. The majority of site is flat with the exception of the south-eastern corner where a sudden large curved ditched feature occurs in the topography; a suspected former pond. A fenced off area to the south-west of site made this area inaccessible for surveying. A farm access track runs along the northern boundary (seen in Plate 9).

2.3.9 Area 9 – 'Lovers'



Plate 10: Left – looking SE across the central portion of site. Right – looking SW along the western boundary at the straw bale stack obstructing the NW corner of site.

The survey area is approximately 1.7 hectares of stubble field. The site is flat with just the straw bale stack obstructing a small area in the north-west of site (see Plate 10).

2.3.10 Area 10 – ‘Badgers Burrows’



Plate 11: View facing N across Area 10 from the SW corner

The survey area is approximately 15.9 hectares of freshly cut wheat stubble. The site is flat with a sudden dip in the mid-western section of field which matches up with the dip in Area 9 across the western boundary.

2.3.11 Area 11 – ‘Broom Walk’



Plate 12: Looking E across site at the pile of soil and spoiled onions

The survey area is approximately 6.7 hectares of compacted sandy soil where tractors had driven over the entire site harvesting the onion crop. The topography of site slopes downhill from the north-east to the south-west corner.

2.3.12 Area 12 – ‘Red Rails’



Plate 13: SE view across site. Patches of protected saplings planted around site, as shown.

The survey area is approximately 14.2 hectares in total of flat pasture. The field was surveyed in two separate phases: the southside before the northside. Patches of saplings were planted around the field, mainly running alongside the field boundaries.

2.3.13 Area 13 – ‘White Gate’



Plate 14: Looking S down the length of the eastern boundary of site. Saplings planted as in Red Rails.

The survey area is approximately 7.3 hectares in total of flat pasture. As in Red Rails, Patches of saplings were planted around the field, mainly running alongside the field boundaries.

2.3.14 Area 14 – ‘Stone Walk North’



*Plate 15: (Left) Looking W across the length of the survey area. A dusting of snow lays on the ground.
(Right) Looking E across site at the pond in the NW corner*

The survey area lies to the north of Stone Walk South and consists of approximately 18.1 hectares of farmland. The field had been left as stubble at the time of surveying after a cereal crop had been harvested. A pond stood in the far north-western corner of the field. The field slopes gently downhill from the north-western corner down to the south-eastern corner.

2.3.15 Area 15 – ‘12 Acre’



Plate 16: Looking NE across site. The ploughed field was frozen underfoot.

The survey area is approximately 11.7 hectares of ploughed farmland (at time of survey), just north-east of Upper Abbey farm. The topography sloped gently downhill from the north to the south. A telegraph line ran east to west across the northern boundary between '12 Acre' and 'Stack'.

2.3.16 Area 16 – 'Captain Rye'



Plate 17: Looking SE along the length of the eastern boundary of site. The field had been recently harvested of its turnip crop.

The survey area is approximately 4.4 hectares of sandy, ploughed field; post turnip harvest (at time of survey). The topography slopes downhill slightly to the south east. A high electric, pest-proof fence enclosed the field.

2.4 Geology and soils

The underlying geology is made up of the Crag Group – Norwich Crag, Red Crag and Chillesford Clay (British Geological Survey South Sheet, Fourth Edition Solid, 2001). The drift geology is made up of crag, sand and gravel of uncertain age or origin and alluvial traits (British Geological Survey South Sheet, First Edition Quaternary, 1977).

The overlying soils are mainly made up of Newport 4 which are typical brown sands. These consist of deep, well drained soils which may be very acidic in places with bleached subsurface features, especially in woodland (Soil Survey of England and Wales, Sheet 4 Eastern England). There are also smaller areas of Mendham soils which are typical earthy sulphuric peat soils. These consist of deep peat soils associated with clayey over sandy soils

which are in part very acidic. High groundwater levels would be found in these areas, with a risk of flooding (Soil Survey of England and Wales, Sheet 4 Eastern England).

2.5 Site history and archaeological potential

The information below relates to Area 1 and was provided in a WSI by AMEC dated May 2010:

A desk-based assessment conducted in accordance to proposals for the Greater Gabbard Windfarm (Maritime Archaeology Ltd 2006) identified six sites or findspots that relate to the survey area:

- A WWII command post trench and pillbox
- Several pieces of prehistoric worked flint plus a flint gritted pottery sherd
- Medieval pottery comprising possible Thetford ware sherds of 9th – 12th century, courseware sherds of 12th – 15th century date and glazed medieval sherds
- A Roman pottery sherd
- A jet bead of unknown date
- A possible track (in the south end of the field) part of a ring ditch and other cropmarks of unknown date

Archaeological excavations in Rosery Field and other adjacent areas to the west uncovered the remains of timber buildings, postholes, clay floors, possible animal enclosures and ovens of 12th to 14th century date. The features are believed to relate to an isolated farmstead, possibly a monastic grange associated with Leiston Abbey.

A second phase of investigation for the Greater Gabbard development found the remains of an early medieval boat of which some of the timbers had been re-used to line a well. Other finds include a wide range of 12th – 14th century pottery, a wooden platter, animal bone and various personal items.

From the archaeological background information there is high potential for archaeological deposits – particularly of prehistoric and medieval date – within the survey area.

2.6 Survey objectives

The objective of the survey was to locate any features of possible archaeological significance in order that they may be assessed prior to development of the Sizewell C plant and associated access routes.

2.7 Survey methods

Detailed magnetic survey (gradiometry) was used as an efficient and effective method of locating archaeological anomalies. More information regarding this technique is included in the Methodology section below.

3 METHODOLOGY

3.1 Date of fieldwork

The fieldwork was carried out between July 2010 and January 2011. Weather conditions during the survey varied from hot and sunny with the odd thundery wet day during July and August, to cold and wet conditions in October through to January with some snow occurring.

3.2 Grid locations

The location of the survey grids has been plotted in Figure 2 together with the referencing information. Grids in Areas 4-7 and 16 were set out using a Leica 705auto Total Station and referenced to suitable topographic features around the perimeter of the site

Grids in Areas 1 to 3, 8 to 11 and 12 to 15 were set out using a Leica Smart Rover RTK GPS.

An RTK GPS (Real-time Kinematic Global Positioning System) can locate a point on the ground to a far greater accuracy than a standard GPS unit. A standard GPS suffers from errors created by satellite orbit errors, clock errors and atmospheric interference, resulting in an accuracy of 5m-10m. An RTK system uses a single base station receiver and a number of mobile units. The base station re-broadcasts the phase of the carrier it measured, and the mobile units compare their own phase measurements with those they received from the base station. A SmartNet RTK GPS uses Ordnance Survey's network of over 100 fixed base stations to give an accuracy of around 0.01m.

3.3 Survey equipment and gradiometer configuration

Although the changes in the magnetic field resulting from differing features in the soil are usually weak, changes as small as 0.2 nanoTesla (nT) in an overall field strength of 48,000nT, can be accurately detected using an appropriate instrument.

The mapping of the anomaly in a systematic manner will allow an estimate of the type of material present beneath the surface. Strong magnetic anomalies will be generated by buried iron-based objects or by kilns or hearths. More subtle anomalies such as pits and ditches can be seen if they contain more humic material which is normally rich in magnetic iron oxides when compared with the subsoil.

To illustrate this point, the cutting and subsequent silting or backfilling of a ditch may result in a larger volume of weakly magnetic material being accumulated in the trench compared to the undisturbed subsoil. A weak magnetic anomaly should therefore appear in plan along the line of the ditch.

The magnetic survey was carried out using a dual sensor Grad601-2 Magnetic Gradiometer manufactured by Bartington Instruments Ltd. The instrument consists of two fluxgates very accurately aligned to nullify the effects of the Earth's magnetic field. Readings relate to the difference in localised magnetic anomalies compared with the general magnetic background.

The Grad601-2 consists of two high stability fluxgate gradiometers suspended on a single frame. Each gradiometer has a 1m separation between the sensing elements so enhancing the response to weak anomalies.

3.4 Sampling interval, depth of scan, resolution and data capture

3.4.1 Sampling interval

Readings were taken at 0.25m centres along traverses 1m apart. This equates to 3600 sampling points in a full 30m x 30m grid.

3.4.2 Depth of scan and resolution

The Grad 601 has a typical depth of penetration of 0.5m to 1.0m. This would be increased if strongly magnetic objects have been buried in the site. The collection of data at 1m centres provides an optimum methodology for the task balancing cost and time with resolution.

3.4.3 Data capture

The readings are logged consecutively into the data logger which in turn is daily downloaded into a portable computer whilst on site. At the end of each job, data is transferred to the office for processing and presentation.

3.5 Processing, presentation of results and interpretation

3.5.1 Processing

Processing is performed using specialist software known as *Geoplot 3*. This can emphasise various aspects contained within the data but which are often not easily seen in the raw data. Basic processing of the magnetic data involves 'flattening' the background levels with respect to adjacent traverses and adjacent grids. 'Despiking' is also performed to remove the anomalies resulting from small iron objects often found on agricultural land. Once the basic processing has flattened the background it is then possible to carry out further processing which may include low pass filtering to reduce 'noise' in the data and hence emphasise the archaeological or man-made anomalies.

The following schedule shows the basic processing carried out on all processed gradiometer data used in this report:

1. *Despike* (useful for display and allows further processing functions to be carried out more effectively by removing extreme data values)

Geoplot parameters:

X radius = 1, y radius = 1, threshold = 3 std. dev.
Spike replacement = mean

2. *Zero mean traverse* (sets the background mean of each traverse within a grid to zero and is useful for removing striping effects)

Geoplot parameters:

Least mean square fit = off

3.5.2 Presentation of results and interpretation

The presentation of the data for each site involves a print-out of the minimally processed data both as a greyscale plot (Figures 6 - 9) and a colour plot showing extreme magnetic values (Figures 10 - 13), together with a greyscale plot of the processed data (Figures 14 - 17). Magnetic anomalies have been identified and plotted onto the 'Abstraction and Interpretation of Anomalies' drawing for the site (Figures 18 - 21).

4 RESULTS

The abstracted anomalies have been divided into varying types. The types have then been tabulated and assessed as to the level of activity in each area according to the following table. Anomalies likely to be of archaeological origin have been highlighted in blue.

Level of activity	
-	None
*	Minimal
**	Moderate
***	Significant

Anomaly Type	Description	Area 1	Area 2	Area 3	Area 4	Area 5	Area 6	Area 7	Area 8	Area 9	Area 10	Area 11
1	Discrete positive anomaly – possible pit	***	*	*	**	***	**	**	***	*	*	*
2	Positive anomaly with associated negative response – ferrous object	*	**	**	*	*	**	*	*	*	*	*
3	Magnetic disturbance – associated with pipe/cable	***	-	-	-	-	-	-	-	-	-	-
4	Positive linear anomaly – agricultural mark	*	*	-	*	-	*	**	*	*	*	*
5	Linear debris – unknown origin	**	-	-	-	-	-	-	-	-	-	-
6	Positive linear anomaly – cut feature of possible archaeological origin	***	-	*	**	-	*	**	-	-	***	*
7	Negative Linear anomaly – possible bank or earthwork of archaeological origin	-	-	-	-	-	*	*	-	*	-	*
8	Linear anomaly – possibly related to land drains	-	-	-	-	-	-	-	-	-	-	-

Anomaly Type	Description	Area 1	Area 2	Area 3	Area 4	Area 5	Area 6	Area 7	Area 8	Area 9	Area 10	Area 11
9	Positive area anomaly – cut feature of possible archaeological origin	***	**	*	*	*	*	*	**	***	***	***
10	Negative area anomaly – possible bank or earthwork of archaeological origin	**	*	-	-	-	-	-	-	**	**	**
11	Weak positive area anomaly	*	-	**	**	***	**	-	-	**	*	***
12	Weak negative area anomaly	*	-	-	**	***	**	*	-	**	**	*
13	Magnetic disturbance associated with nearby service or field boundary	***	*	*	*	**	*	*	*	*	*	*
14	Magnetic disturbance associated with nearby metallic objects	**	-	-	-	-	**	-	*	-	-	-
15	Magnetic debris	**	***	-	*	-	**	-	**	-	*	*
16	Area of magnetic variation – possibly associated with former pond or sandpit	**	-	-	-	**	*	**	***	**	***	-
17	Area of weak complex anomalies – of possible archaeological origin	-	-	-	-	-	-	-	-	-	-	-

Anomaly Type	Description	Area 12	Area 13	Area 14	Area 15	Area 16
1	Discrete positive anomaly – possible pit	**	***	**	***	**
2	Positive anomaly with associated negative response – ferrous object	*	*	*	*	*
3	Magnetic disturbance – associated with pipe/cable	-	-	-	-	-
4	Positive linear anomaly –	**	*	*	*	***

	agricultural mark					
5	Linear debris – unknown origin	-	-	-	-	-
6	Positive linear anomaly – cut feature of possible archaeological origin	**	*	***	-	*
7	Negative Linear anomaly – possible bank or earthwork of archaeological origin	**	-	**	-	-
8	Linear anomaly – possibly related to land drains	-	-	-	-	-
9	Positive area anomaly – cut feature of possible archaeological origin	**	***	***	**	**
10	Negative area anomaly – possible bank or earthwork of archaeological origin	**	*	***	*	**
11	Weak positive area anomaly	-	**	*	*	**
12	Weak negative area anomaly	-	*	*	-	-
13	Magnetic disturbance associated with nearby service or field boundary	**	-	**	-	-
14	Magnetic disturbance associated with nearby metallic objects	-	-	**	*	*
15	Magnetic debris	*	-	**	-	-
16	Area of magnetic variation – possibly associated with former pond or sandpit	-	-	-	***	-
17	Area of weak complex anomalies – of possible archaeological origin	-	-	***	-	-

5 DISCUSSION

The gradiometer data collected from Sizewell has identified numerous areas of magnetic anomalies which are consistent with being of archaeological origin. The detailed analysis of anomalies seen in each of the survey areas can be seen in the table above, however the areas of possible archaeological significance are discussed in greater detail below.

Area 1:

The gradiometer data collected from Area 1 has identified a significant number of positive and negative area and linear anomalies which are indicative of former cut and banked features respectively and are likely to be of archaeological origin. These responses are seen in concentration in the south of the site, where they appear to take the form of a group of linear and curvilinear anomalies. A complex arrangement of positive linear and area responses are also identified in the centre of the field which appear to indicate further ditches and possible large pits. Discrete anomalies are identified across the area and are interpreted as possible pits.

In the north of the area, two further anomalies are seen consisting of both positive and negative values. The characteristics of these responses differ to those identified as cut and banked features of archaeological origin and the cause of them is uncertain. However, we believe that the small scale sand quarrying or the location of former ponds would be viable explanations.

Area 9:

The data collected from Area 9 has identified a number of positive linear anomalies indicative of former cut features such as ditches. Some of these anomalies appear to form a possible enclosure surrounding a further former pond or sandpit seen in the centre of the area. Negative responses are also present in correlation with the positive anomalies and are likely to be banked features associated with the ditches. Discrete anomalies associated with possible pits can also be seen across the area.

Area 10:

A significant grouping of positive and negative area anomalies have been identified close to the southern boundary of Area 10 and appear in a roughly rectilinear form. These anomalies are likely to be of archaeological origin, as are the positive linear anomalies identified to the north and south-east of the area.

Numerous positive and negative anomalies are seen in high concentration to the west of the field and are again interpreted as relating to possible former ponds or sandpits. These anomalies can be seen extending across the field boundary into Area 8.

Area 11:

A positive circular anomaly and associated area responses have been identified in close proximity to the southern boundary of Area 11. Further anomalies with similar characteristics

have also been identified in the centre of the field and are likely to be of archaeological interest. A few discrete anomalies have also been seen scattered across the site, which are possibly associated with former pits.

Area 13:

Positive linear anomalies are present in the west of Area 13 which are possibly associated with former ditches of archaeological origin. Further positive area responses are seen predominantly to the centre of the field which may indicate the presence of large pits or other former cut features, however these responses do not appear to take on a structured form and may therefore be of a natural origin. A large scattering of discrete anomalies are also seen across this area, also indicating former pits of possible archaeological origin.

Area 14:

An area of complex responses consisting of both positive and negative anomalies is present in the east of Area 14 and is interpreted as a large feature consisting of former banked and cut anomalies. This response is seen in close proximity to a number of linear and curvilinear anomalies probably associated with former ditches. This data has also indicated three areas in the north of the field which show very weak complex responses which may also be of archaeological interest. Further discrete anomalies associated with former pits are also present.

Area 16:

A positive linear anomaly previously identified in Area 10 is seen to continue into Area 16 where a positive curvilinear anomaly with associated negative responses can be seen. A positive linear anomaly probably indicative of a former ditch is also present along with a scattering of discrete anomalies probably associated with in-filled pits.

6 CONCLUSION

The gradiometer data collected from Sizewell has identified numerous anomalies which are likely to be of archaeological origin. The survey has indicated concentrations of positive and negative area anomalies indicative of former cut and banked features including a circular former cut feature identified in Area 11. Positive linear responses have also been seen across the site which are interpreted as former ditches. Discrete anomalies probably associated with former pits are evident throughout the site.

Numerous positive and negative area anomalies have been identified across the site and have been interpreted as probably relating to former sandpits or ponds.

7 REFERENCES

British Geological Survey, 2001. *Geological Survey Ten Mile Map, South Sheet, Fourth Edition (Solid)*. British Geological Society.

Soil Survey of England and Wales, 1983. *Soils of England and Wales, Sheet 4 Eastern England*.

British Geological Survey South Sheet, 1977. *Geological Survey Ten Mile Map, South Sheet First Edition (Quaternary)*. Institute of Geological Sciences.

APPENDIX A – Basic principles of magnetic survey

Detailed magnetic survey can be used to effectively define areas of past human activity by mapping spatial variation and contrast in the magnetic properties of soil, subsoil and bedrock.

Weakly magnetic iron minerals are always present within the soil and areas of enhancement relate to increases in *magnetic susceptibility* and permanently magnetised *thermoremanent* material.

Magnetic susceptibility relates to the induced magnetism of a material when in the presence of a magnetic field. This magnetism can be considered as effectively permanent as it exists within the Earth's magnetic field. Magnetic susceptibility can become enhanced due to burning and complex biological or fermentation processes.

Thermoremanence is a permanent magnetism acquired by iron minerals that, after heating to a specific temperature known as the Curie Point, are effectively demagnetised followed by re-magnetisation by the Earth's magnetic field on cooling. Thermoremanent archaeological features can include hearths and kilns and material such as brick and tile may be magnetised through the same process.

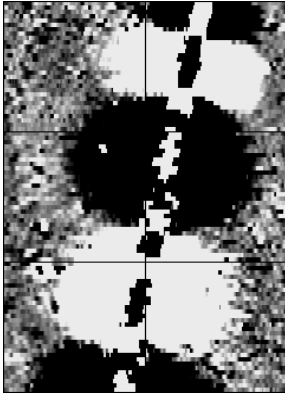
Silting and deliberate infilling of ditches and pits with magnetically enhanced soil creates a relative contrast against the much lower levels of magnetism within the subsoil into which the feature is cut. Systematic mapping of magnetic anomalies will produce linear and discrete areas of enhancement allowing assessment and characterisation of subsurface features. Material such as subsoil and non-magnetic bedrock used to create former earthworks and walls may be mapped as areas of lower enhancement compared to surrounding soils.

Magnetic survey is carried out using a fluxgate gradiometer which is a passive instrument consisting of two sensors mounted vertically either 0.5 or 1m apart. The instrument is carried about 30cm above the ground surface and the top sensor measures the Earth's magnetic field whilst the lower sensor measures the same field but is also more affected by any localised buried field. The difference between the two sensors will relate to the strength of a magnetic field created by a buried feature, if no field is present the difference will be close to zero as the magnetic field measured by both sensors will be the same.

Factors affecting the magnetic survey may include soil type, local geology, previous human activity, disturbance from modern services etc.

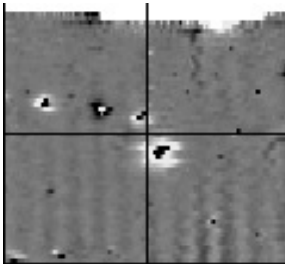
APPENDIX B – Glossary of magnetic anomalies

Bipolar



A bipolar anomaly is one that is composed of both a positive response and a negative response. It can be made up of any number of positive responses and negative responses. For example a pipeline consisting of alternating positive and negative anomalies is said to be bipolar. See also dipolar which has only one area of each polarity. The interpretation of the anomaly will depend on the magnitude of the magnetic field strength. A weak response may be caused by a clay field drain while a strong response will probably be caused by a metallic service.

Dipolar

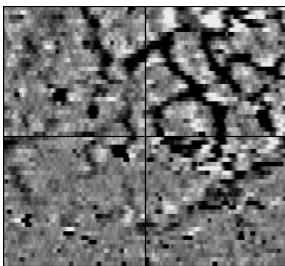


This consists of a single positive anomaly with an associated negative response. There should be no separation between the two polarities of response. These responses will be created by a single feature. The interpretation of the anomaly will depend on the magnitude of the magnetic measurements. A very strong anomaly is likely to be caused by a ferrous object.

Positive anomaly with associated negative response

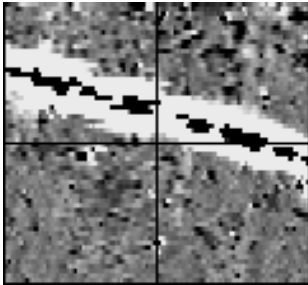
See bipolar and dipolar.

Positive linear



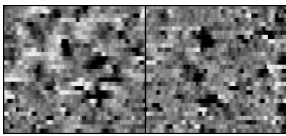
A linear response which is entirely positive in polarity. These are usually related to infilled cut features where the fill material is magnetically enhanced compared to the surrounding matrix. They can be caused by ditches of an archaeological origin, but also former field boundaries, ploughing activity and some may even have a natural origin.

Positive linear anomaly with associated negative response



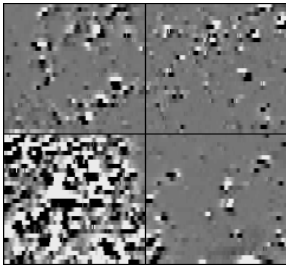
A positive linear anomaly which has a negative anomaly located adjacently. This will be caused by a single feature. In the example shown this is likely to be a single length of wire/cable probably relating to a modern service. Magnetically weaker responses may relate to earthwork style features and field boundaries.

Positive point/area



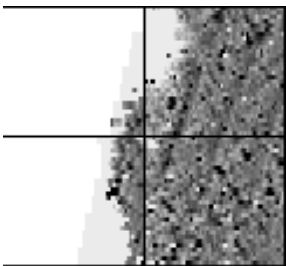
These are generally spatially small responses, perhaps covering just 3 or 4 reading nodes. They are entirely positive in polarity. Similar to positive linear anomalies they are generally caused by infilled cut features. These include pits of an archaeological origin, possible tree bowls or other naturally occurring depressions in the ground.

Magnetic debris



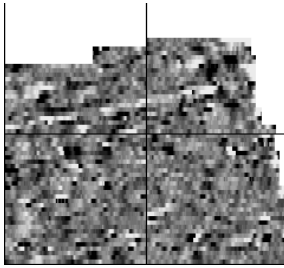
Magnetic debris consists of numerous dipolar responses spread over an area. If the amplitude of response is low ($\pm 3\text{nT}$) then the origin is likely to represent general ground disturbance with no clear cause, it may be related to something as simple as an area of dug or mixed earth. A stronger anomaly ($\pm 250\text{nT}$) is more indicative of a spread of ferrous debris. Moderately strong anomalies may be the result of a spread of thermoremanent material such as bricks or ash.

Magnetic disturbance



Magnetic disturbance is high amplitude and can be composed of either a bipolar anomaly, or a single polarity response. It is essentially associated with magnetic interference from modern ferrous structures such as fencing, vehicles or buildings, and as a result is commonly found around the perimeter of a site near to boundary fences.

Negative linear

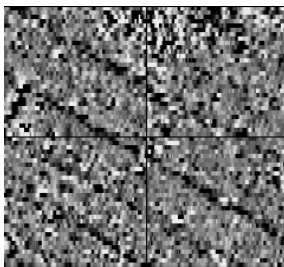


A linear response which is entirely negative in polarity. These are generally caused by earthen banks where material with a lower magnetic magnitude relative the background top soil is built up. See also ploughing activity.

Negative point/area

Opposite to positive point anomalies these responses may be caused by raised areas or earthen banks. These could be of an archaeological origin or may have a natural origin.

Ploughing activity



Ploughing activity can often be visualised by a series of parallel linear anomalies. These can be of either positive polarity or negative polarity depending on site specifics. It can be difficult to distinguish between ancient ploughing and more modern ploughing, clues such as the separation of each linear, straightness, strength of response and cross cutting relationships can be used to aid this, although none of these can be guaranteed to differentiate between different phases of activity.

Polarity

Term used to describe the measurement of the magnetic response. An anomaly can have a positive polarity (values above 0nT) and/or a negative polarity (values below 0nT).

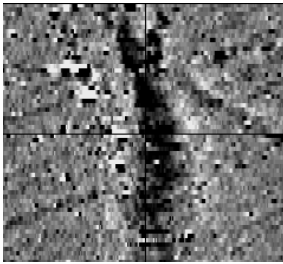
Strength of response

The amplitude of a magnetic response is an important factor in assigning an interpretation to a particular anomaly. For example a positive anomaly covering a 10m² area may have values up to around 3000nT, in which case it is likely to be caused by modern magnetic interference. However, the same size and shaped anomaly but with values up to only 4nT may have a natural origin.

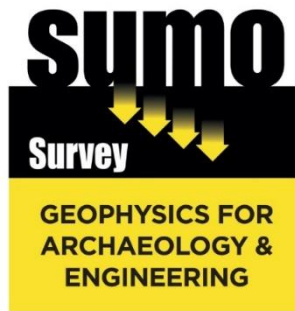
Thermoremanent response

A feature which has been subject to heat may result in it acquiring a magnetic field. This can be anything up to approximately +/-100 nT in value. These features include clay fired drains, brick, bonfires, kilns, hearths and even pottery. If the heat application has occurred insitu (e.g. a kiln) then the response is likely to be bipolar compared to if the heated objects have been disturbed and moved relative to each other, in which case they are more likely to take an irregular form and may display a debris style response (e.g. ash).

Weak background variations



Weakly magnetic wide scale variations within the data can sometimes be seen within sites. These usually have no specific structure but can often appear curvy and sinuous in form. They are likely to be the result of natural features, such as soil creep, dried up (or seasonal) streams. They can also be caused by changes in the underlying geology or soil type which may contain unpredictable distributions of magnetic minerals, and are usually apparent in several locations across a site.



GEOPHYSICAL SURVEY REPORT

Main Site, Sizewell, Suffolk

Client

Cotswold Archaeology

For

EDF Energy

Survey Report

14282E

Date

July 2019



Survey Report 14282E: Main Site, Sizewell, Suffolk

Survey dates	21 - 24 January 2019 13 - 14 February 2019
Field co-ordinator	Haydn Evans BA Joe Perry BA
Field Team	Amy Dunn BA Matthew Jackson BA MSc Nicole Burton BA MSc James Lorimer BA
Report Date	5 July 2019
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Appendix C OASIS Data Collection Form

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Figure 09	1:2500	Minimally Processed Data - Greyscale Plot [Area 4]

2. SURVEY TECHNIQUE

Detailed magnetic survey (magnetometry) was chosen as the most efficient and effective method of locating the type of archaeological anomalies which might be expected at this site.

Bartington Grad 601-2

Traverse Interval 1.0m

Sample Interval 0.25m

3 SUMMARY OF RESULTS

3.1 The survey has revealed a pattern of ditch-type anomalies and trends which suggest former field systems and enclosures. Numerous anomalies of uncertain origin were also detected, whilst some may have an archaeological provenance, modern, agricultural and natural factors may also be applicable. A service pipe was located.

4 INTRODUCTION

4.1 **SUMO Geophysics Ltd** were commissioned to undertake a geophysical survey of an area outlined for development. This survey forms part of an archaeological investigation being undertaken by **Cotswold Archaeology** on behalf of **EDF Energy**.

4.2 Site details

NGR / Postcode	Area 1: TM 450 638 / IP16 4UP. Area 2 & 3: TM 457 654 / IP16 4SJ. Area 4: TM 470 650 / IP16 4SR.		
Location	The survey areas are located north-east of the village of Leiston.		
HER	Suffolk		
HER Code	sumogeop1-339765		
OASIS Ref.	LCS 275, LCS 276, LCS 277 & LCS 284		
District	East Suffolk		
Parish	Leiston		
Topography	Relatively flat		
Current Land Use	Farmland / Heathland		
Geology (BGS 2019)	Bedrock: Crag group – sand. Superficial: Lowestoft formation - sand and gravel Superficial: Lowestoft formation - diamicton / Lowestoft formation - sand and gravel.		
Soils (CU 2019)	Soilscape 7: Freely draining slightly acid but base-rich soils. Soilscape 10: Freely draining slightly acid sandy soils.		
Archaeology (AMEC 2015)	Within the study area surrounding landscape lies:		
	49	MSF11525	Scatter of red tile over most of field surface (S1) (TM 444 638).
	82	MSF26807	Extensive scatter of heavily burnt flints adjacent to a small stream (TM 449 635).
	83	MSF26809	Two silver Henry II pennies found 1994 and in 2006 a further hoard of six Henry II pennies (1163-1167) were found (TM 449 636).
	150	MSF11523	`Masses' of dark pottery (possibly medieval), much of it heavily burnt (TM 453 635).
	151	MSF11524	Scatter of medieval and Romano-British pottery found on field surface by farmer (S1) (S2) (TM 449 636).
	153	MSF12096	Finds scatter of medieval and Romano-British pottery found by farmer during ploughing and subsequent walking (TM 449 636).
	154	MSF12097	Finds scatter identified whilst farming, and subsequent random walking (TM 448 635).
	240	MSF21565	Three pieces of worked flint (TM 454 641).
	241	MSF21566	13th/14th century medieval coarseware pottery (TM 454 641).

242	MSF21567	Causewayed ring ditch visible from APs approximately 30m diameter (TM 454 641).
243	MSF21568	A concentric ring ditch approximately 30m in diameter, visible from APs (TM 454 641).
295	MSF21627	A series of linear cropmarks, possible tracks, visible on APs (TM 455 638).
384	DBA-05	Quarry/Marl Pit (TM 487 629).
393	DBA-14	Old Sand Pits (TM 487 629).

Survey Methods Magnetometer survey (fluxgate gradiometer)

Study Area 32 ha

4.3 **Aims and Objectives**

To locate and characterise any anomalies of possible archaeological interest within the study area.

5 RESULTS

The survey has been divided into four survey areas (Areas 1-4).

5.1 **Possible Archaeology**

5.1.1 A number of linear and curvilinear trends were recorded in Area 1 which appear to form a possible enclosure and field boundaries; the forms could indicate an archaeological origin, but the magnetic responses are too weak to fully interpret with any degree of confidence.

5.1.2 Several anomalies of possible archaeological interest have been detected in Area 2. These are primarily ditch-type in form; some are badly truncated or relatively weak and these are classified as trends. The overall pattern, although incomplete, suggests former field / enclosure systems connected by possible trackways.

5.1.3 Linear responses in the north-east of Area 4 correlate with HER cropmarks; the anomalies appear to form part of a linear feature. It is difficult to give a clear interpretation as background noise (possibly natural or modern in origin) has partially masked the data.

5.3 **Uncertain**

5.3.1 Pit-type anomalies and trends have been identified in Area 2; most of these form no obvious patterns that would suggest any archaeological significance and they are attributed to a combination of agricultural, natural and modern factors. However, their proximity to possible archaeological remains cannot be ignored.

5.3.2 Several weak trends and discrete anomalies have been identified in Area 4. It is possible some of the features represents an uncharted field division, though magnetic disturbance has made a clear interpretation problematic. Anomalies associated with cropmarks (categorised as *Possible Archaeology*) are also present in the survey area, meaning an archaeological context cannot be ruled out.

5.4 **Former Field Division**

5.4.1 A crop division in Area 1 on a north-east south-west alignment can be seen on aerial photography on Magic Maps (<https://magic.defra.gov.uk/>).

5.5 **Agricultural – Ploughing / Land Drains**

5.5.1 Magnetically weak, closely spaced narrow anomalies in Areas 1 and 2 are due to relatively recent ploughing.

5.6 **Pipe / Service**

5.6.1 A service pipe was recorded in the north-eastern extent of Area 3.

5.7 **Ferrous / Magnetic Disturbance**

5.7.1 A zone of magnetic disturbance recorded in Area 1 correlates to old pond recorded in the DBA

5.7.2 A band of strong ferrous in the south extents of Area 1 is associated with an old sand pit seen on 1884 OS mapping.

- 5.7.3 Dense concentrations of ferrous and strong responses (*Magnetic Disturbance*) are present in Area 3. The precise origin of the anomalies is unclear, but they are all likely to be modern in origin.
- 5.7.4 Area 4 is dominated by enhanced magnetic responses; the site lies in an area prone to flooding, which may suggest that the results reflect alluvial deposits and /or other natural processes. It is also possible that green waste has been spread on the field which causes similar results.
- 5.7.5 Ferrous responses close to boundaries are due to adjacent fences and gates. Smaller scale ferrous anomalies ("iron spikes") are present throughout the data and are characteristic of small pieces of ferrous debris (or brick / tile) in the topsoil; they are commonly assigned a modern origin. Only the most prominent of these are highlighted on the interpretation diagram.

6 DATA APPRAISAL & CONFIDENCE ASSESSMENT

- 6.1 Historic England guidelines (EH 2008) Table 4 states that the typical magnetic response on the local soils / geology is poor. The results from this survey indicate the presence of ditch-like features; as a consequence, there is no *a priori* reason why archaeology would not be detected.

7 CONCLUSION

- 7.1 A number of ditch-type and pit-like anomalies of possible archaeological interest have been identified in Areas 1 and 2 which appear to form a series of enclosures and field systems / boundaries / trackways. Other ditch-like anomalies and trends are classified as *Uncertain Origin*, and whilst an archaeological provenance cannot be wholly dismissed an agricultural, natural or modern origin is also likely. Responses associated with former agriculture and the infill of a pond have been detected.

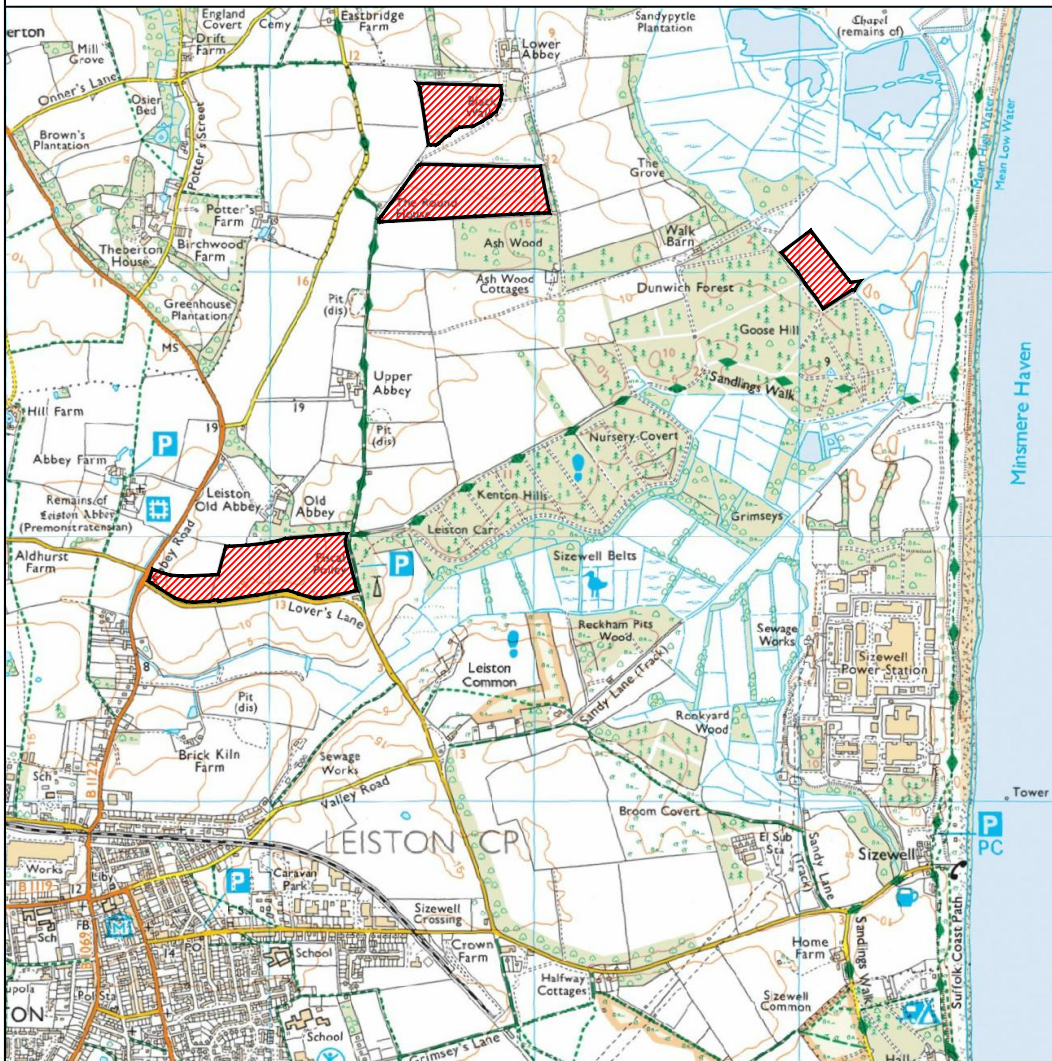
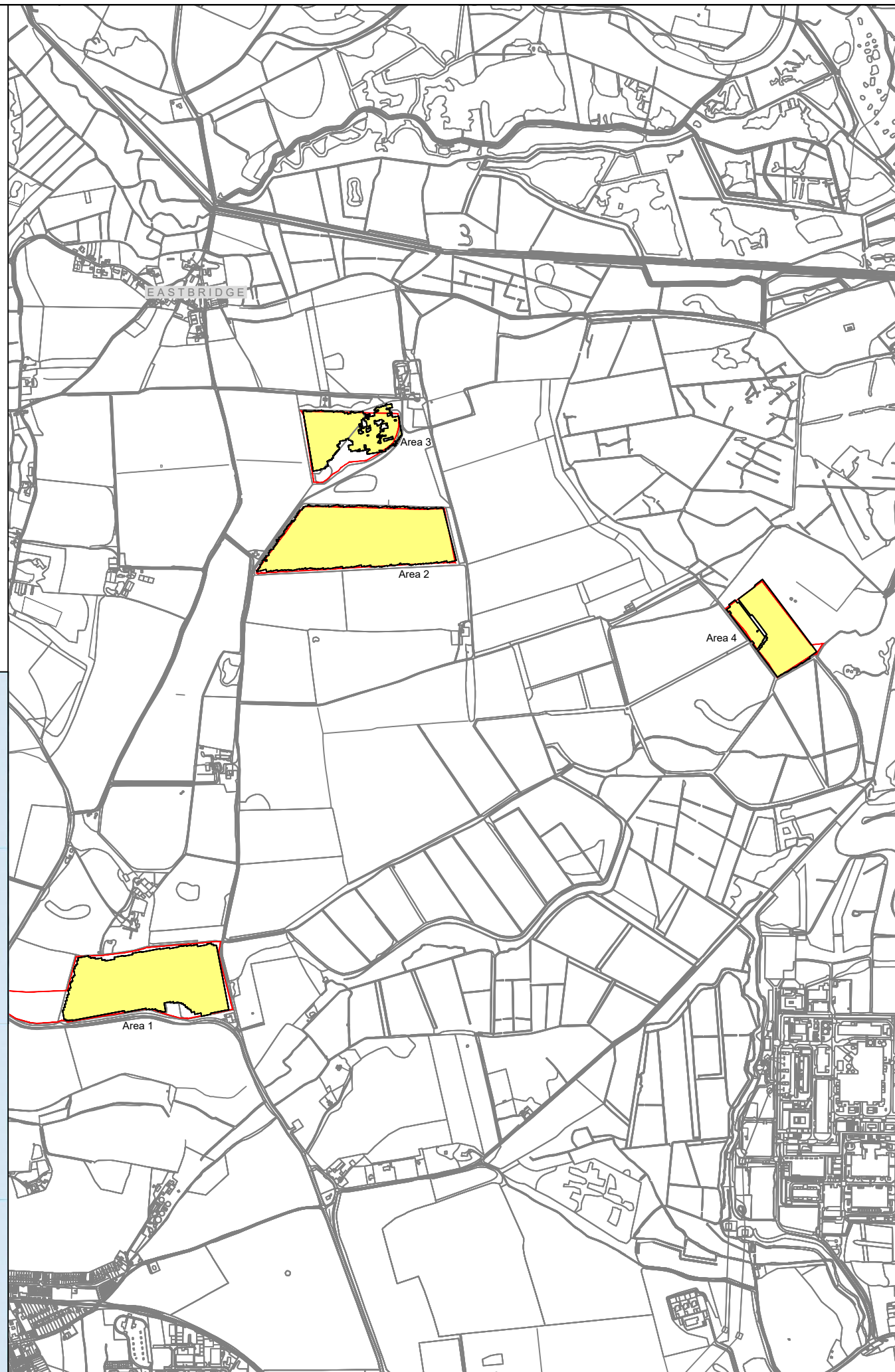
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EH 2008 *Geophysical Survey in Archaeological Field Evaluation*. English Heritage, Swindon
<https://content.historicengland.org.uk/images-books/publications/geophysical-survey-in-archaeological-field-evaluation/geophysics-guidelines.pdf/>

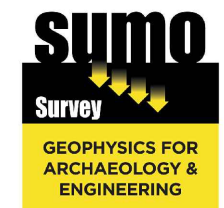


Survey Area

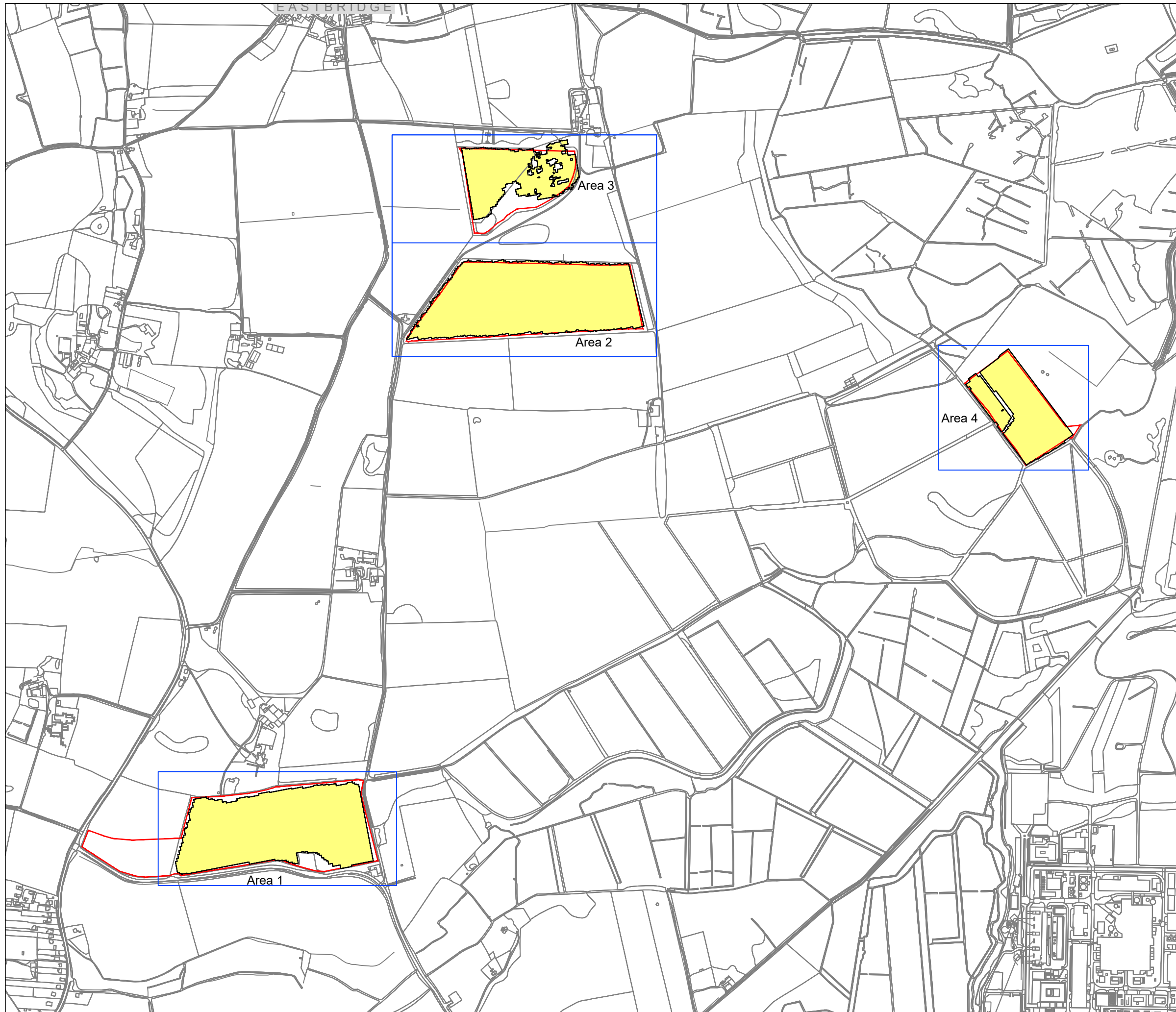


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	Site Location
	Magnetometer Survey



Title:	Site Location
Client:	Cotswold Archaeology
Project:	14282E Main Site, Sizewell, Suffolk
	not to scale
	Fig No: 01



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 Site Location



Title: Magnetometer Survey Viewports

Client: Cotswold Archaeology

Project: 14282E Main Site, Sizewell, Suffolk

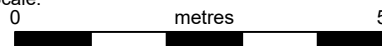
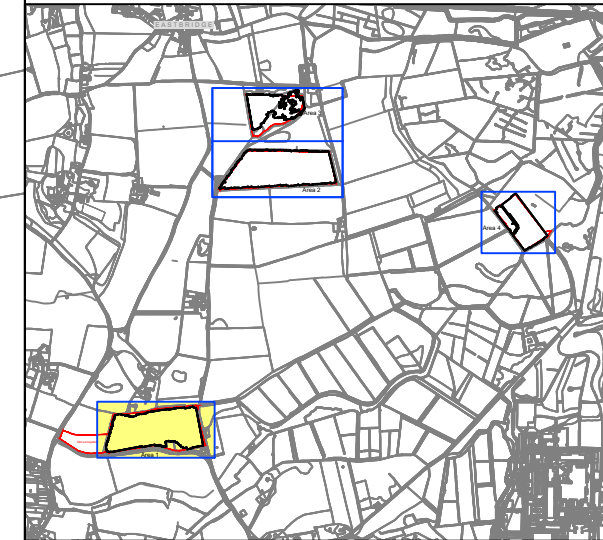
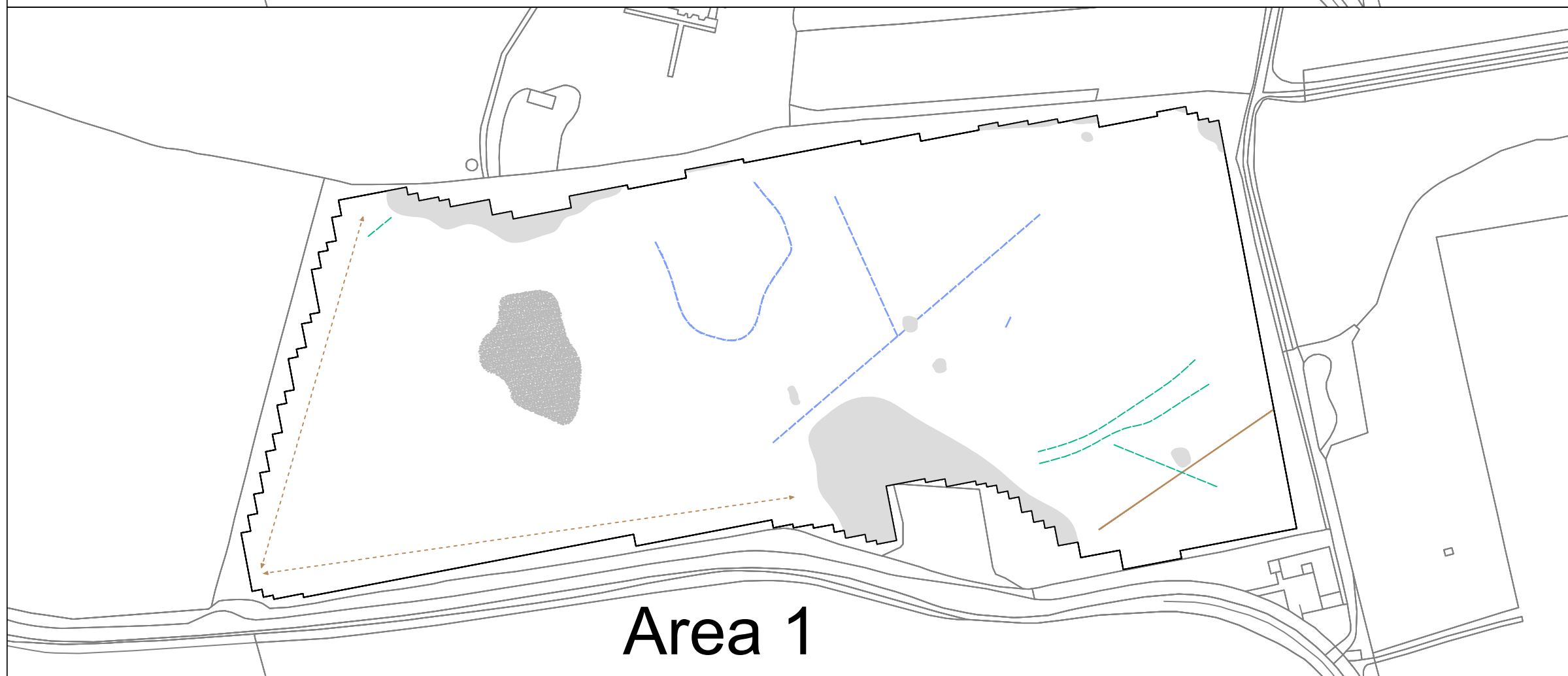
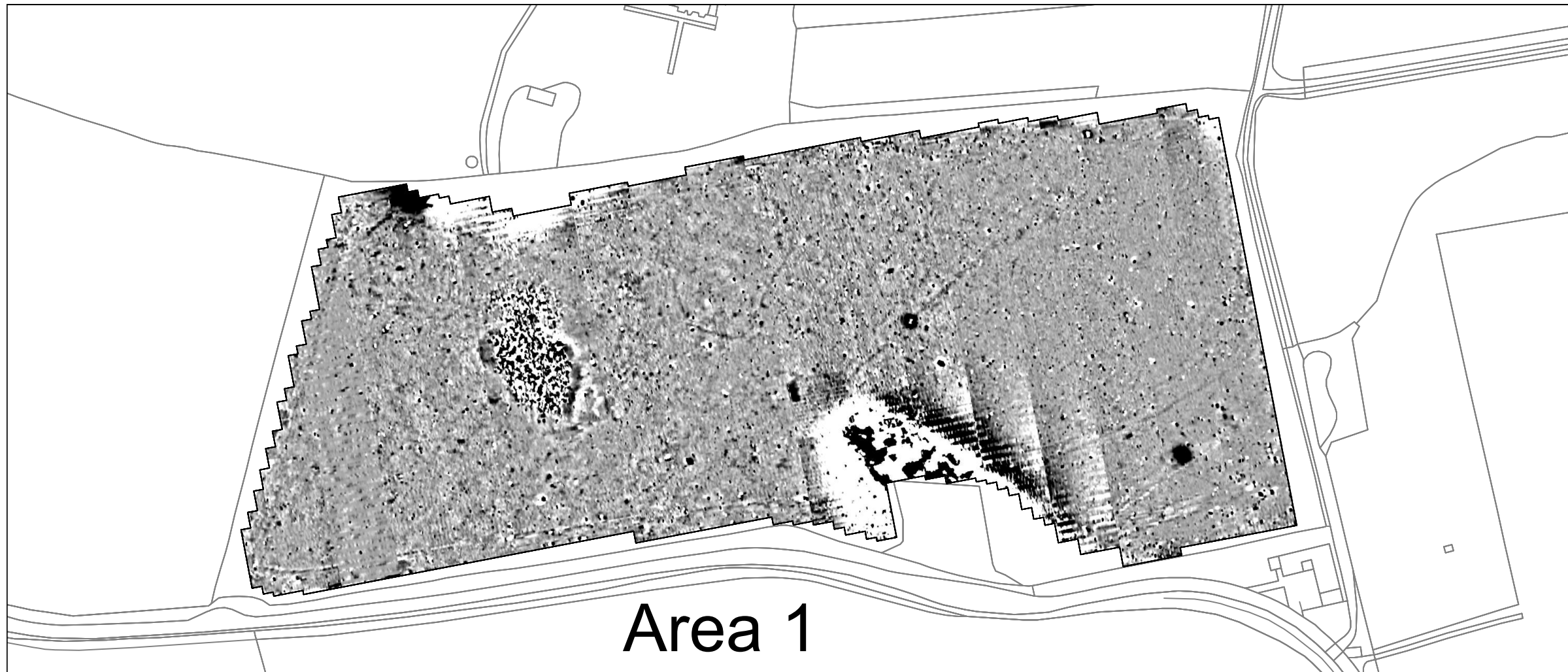
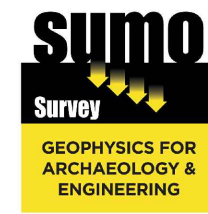
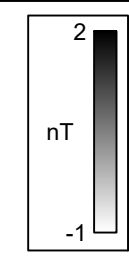
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Fig No: 02



KEY

	Possible Archaeology (discrete anomaly / trend)
	Uncertain Origin (area of increased response / trend)
	Field Division
	Plough
	Pipe / Service
	Ferrous / Magnetic Disturbance

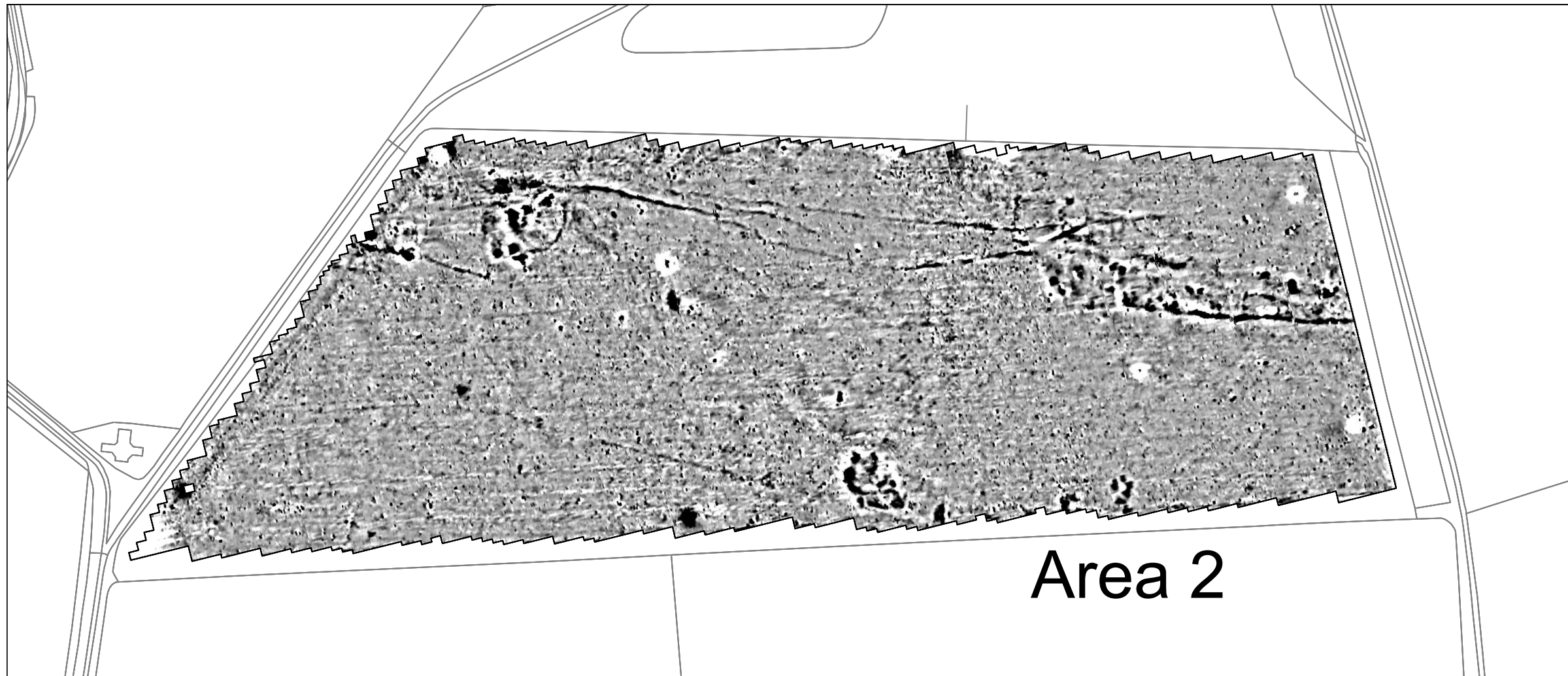


Title: Magnetometer Survey [Area 1]
Greyscale Plot / Interpretation

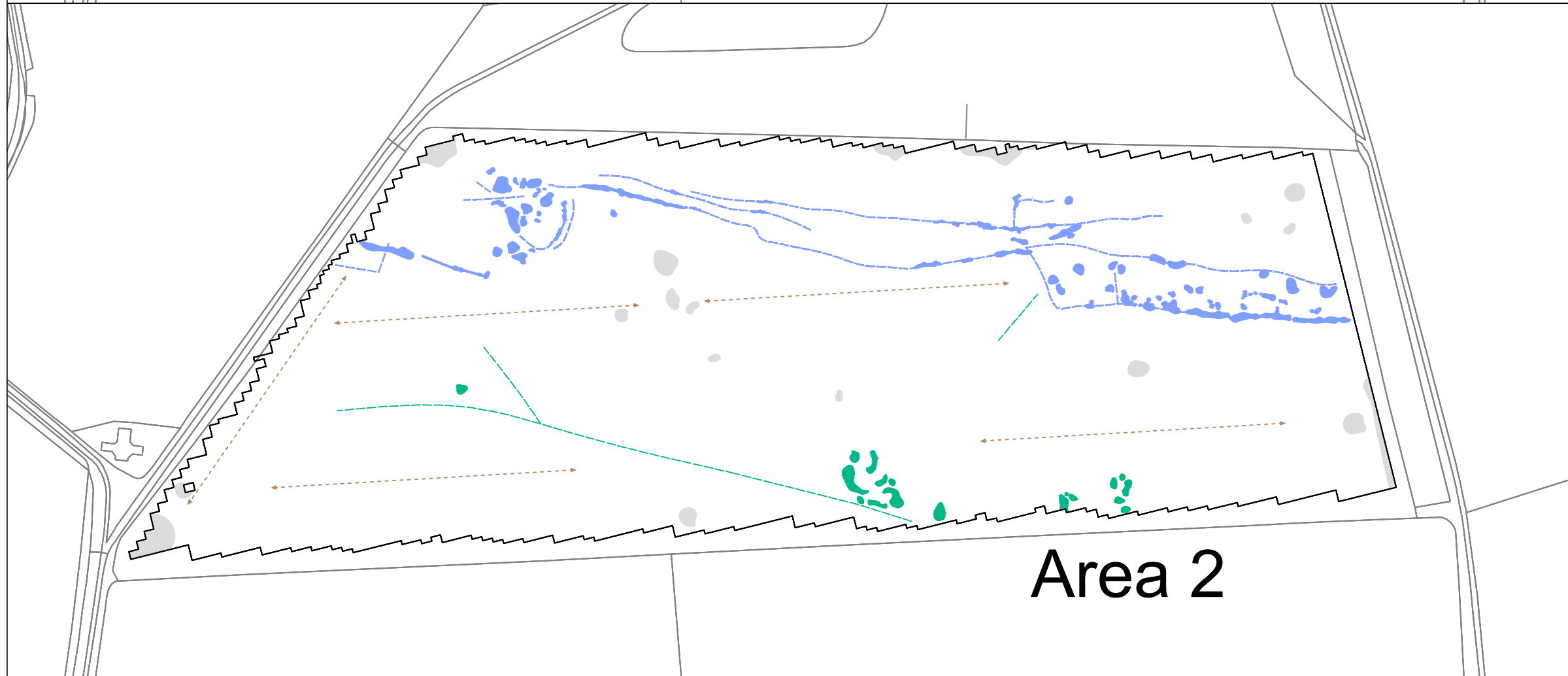
Client: Cotswold Archaeology

Project: 14282E Main Site, Sizewell, Suffolk

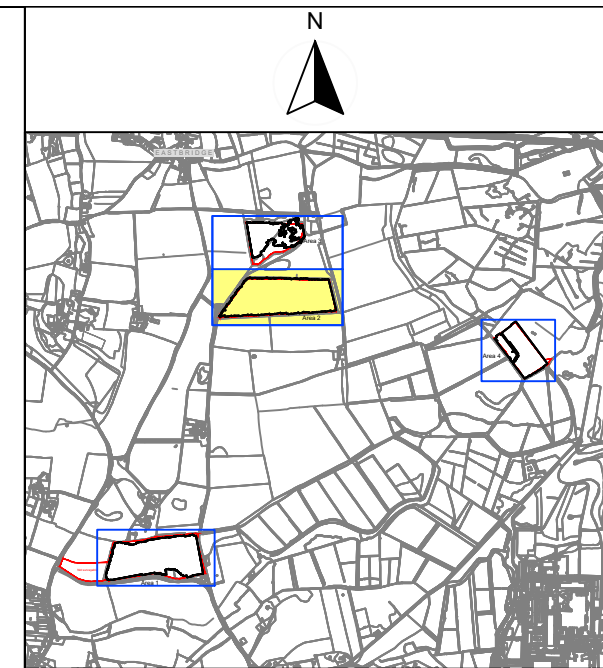
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Area 2

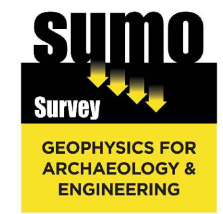
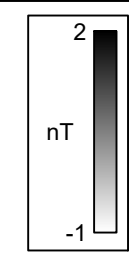


Area 2



KEY

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	Uncertain Origin (area of increased response / trend)
	Field Division
	Plough
	Pipe / Service
	Ferrous / Magnetic Disturbance



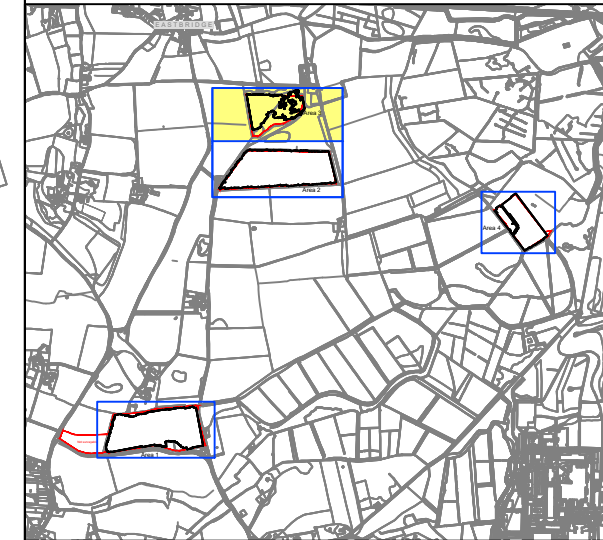
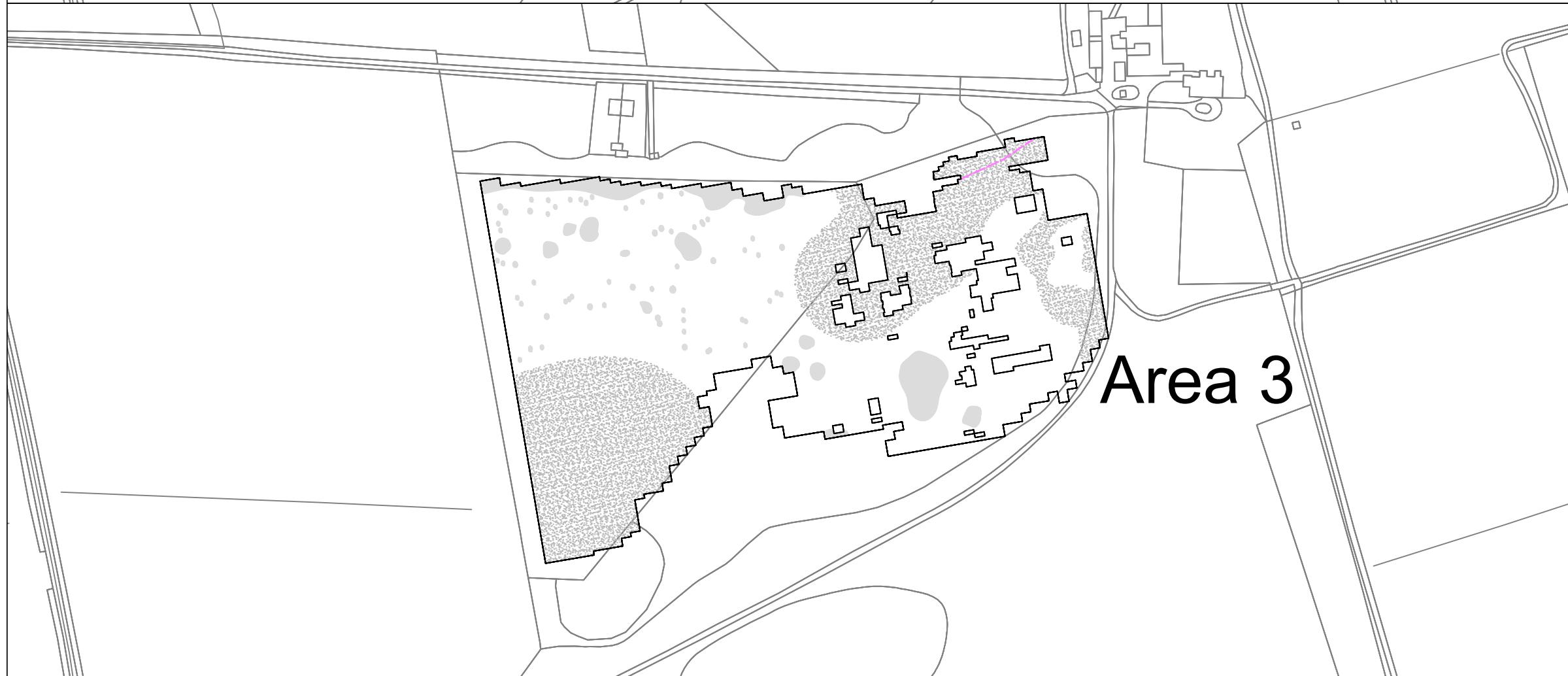
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Greyscale Plot / Interpretation

Client: Cotswold Archaeology

Project: 14282E Main Site, Sizewell, Suffolk

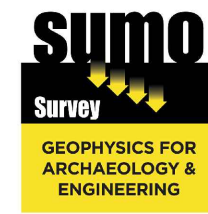
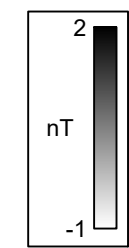
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Fig No: 04



KEY

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	Field Division
	Plough
	Pipe / Service
	Ferrous / Magnetic Disturbance

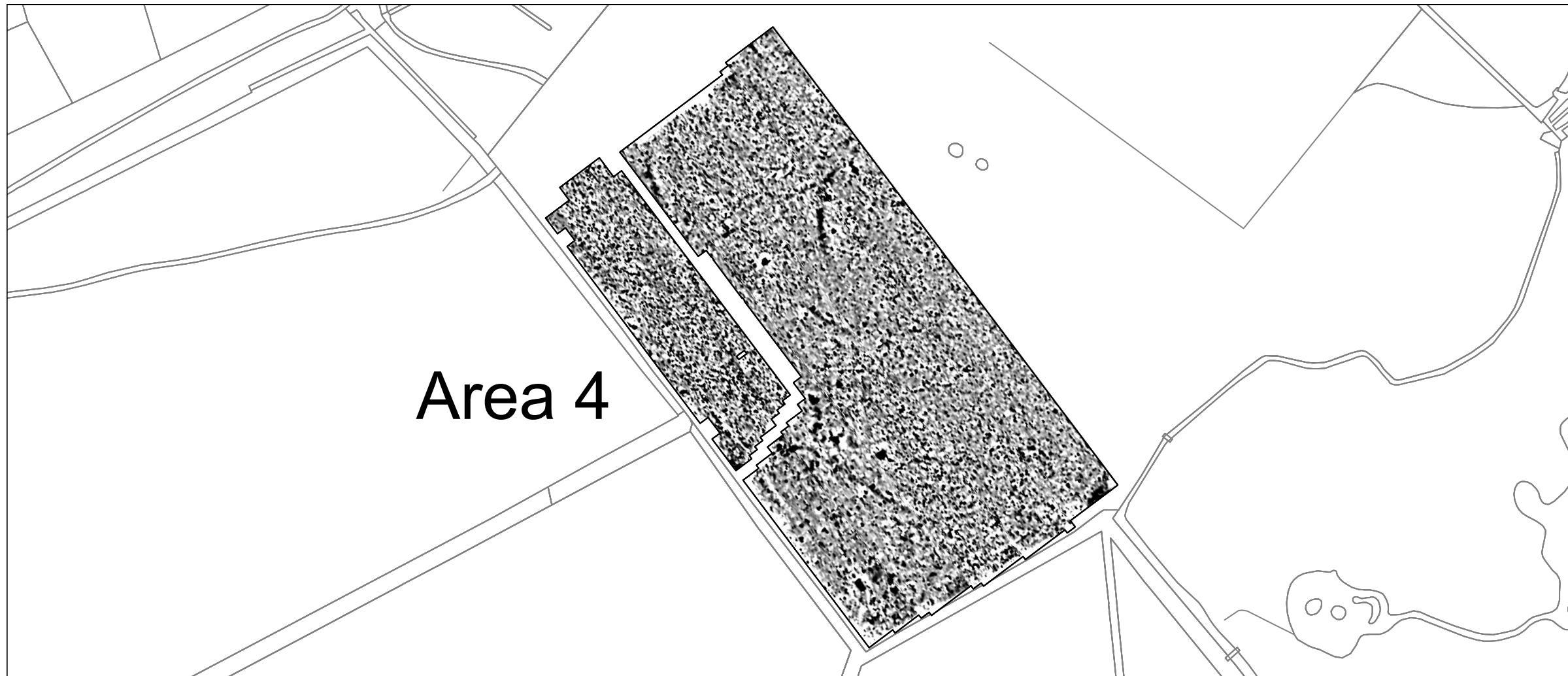


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Greyscale Plot / Interpretation

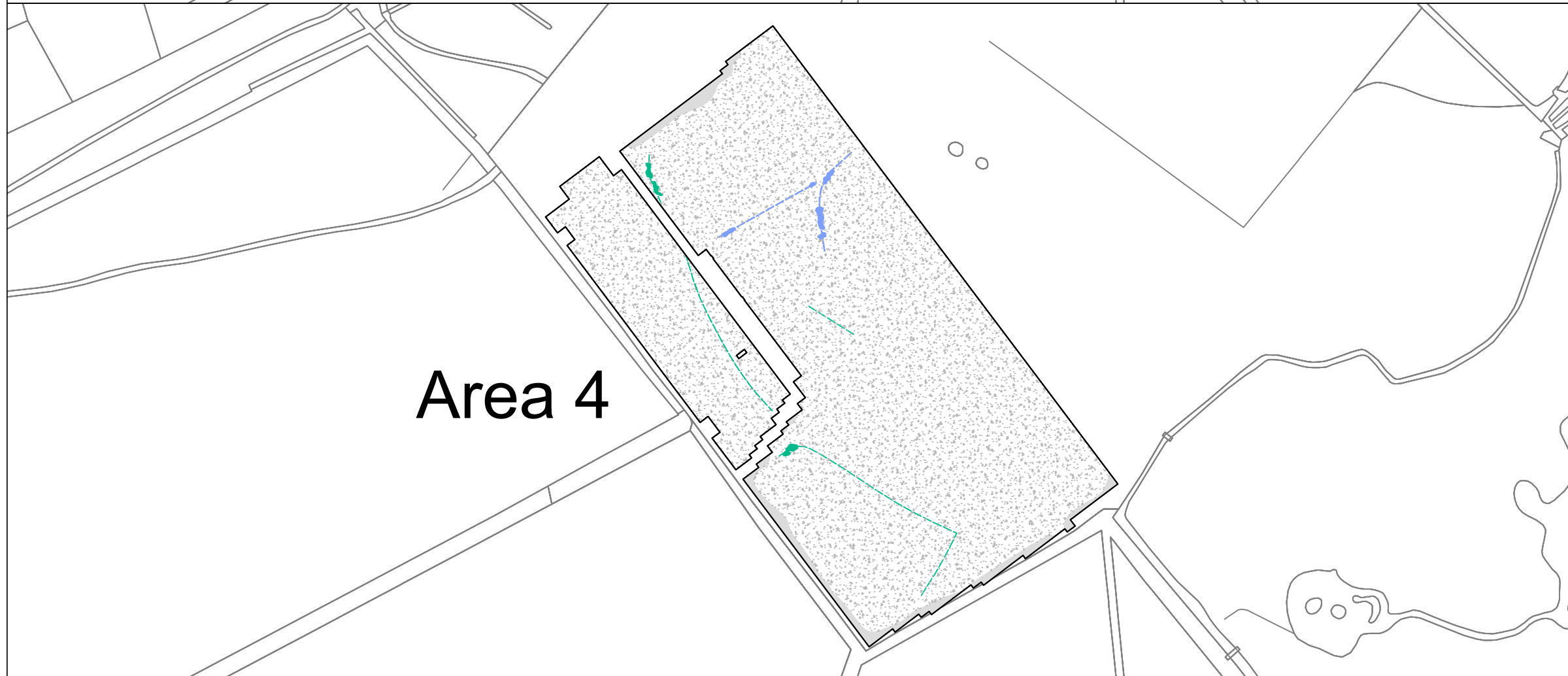
Client: Cotswold Archaeology

Project: 14282E Main Site, Sizewell, Suffolk

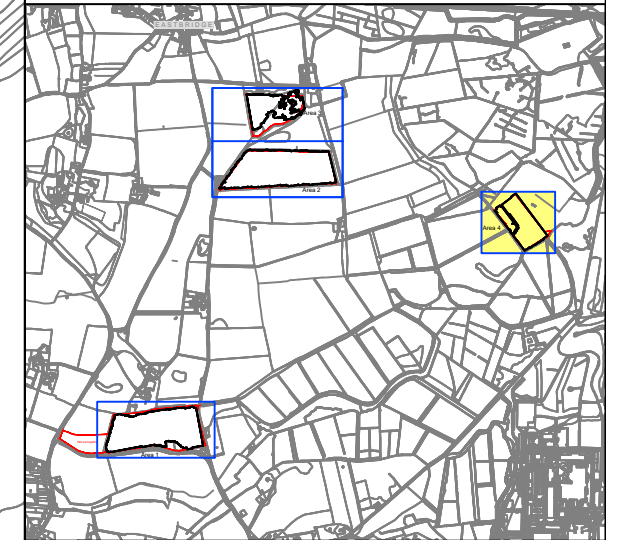
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Area 4

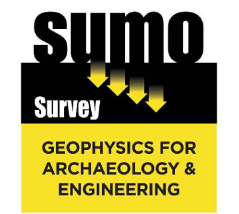
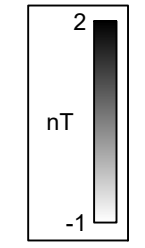


Area 4



KEY

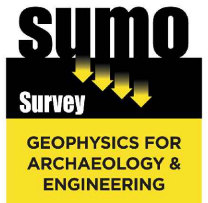
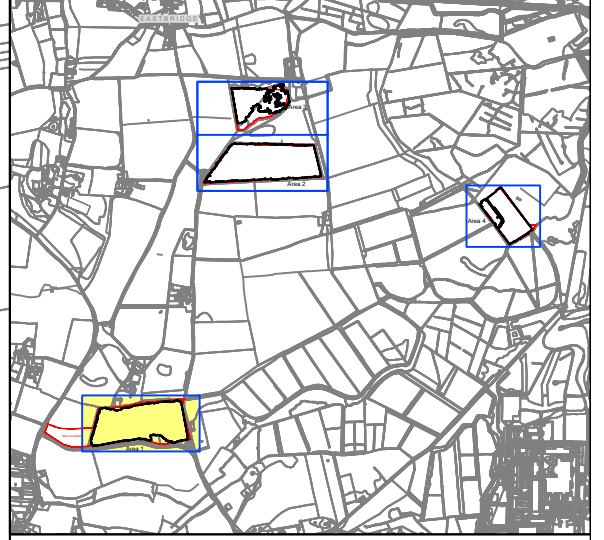
	Possible Archaeology (discrete anomaly / trend)
	Uncertain Origin (area of increased response / trend)
	Field Division
	Plough
	Pipe / Service
	Ferrous / Magnetic Disturbance



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Client:	Cotswold Archaeology	
Project:	14282E Main Site, Sizewell, Suffolk	
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Area 1

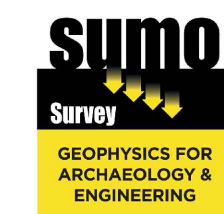
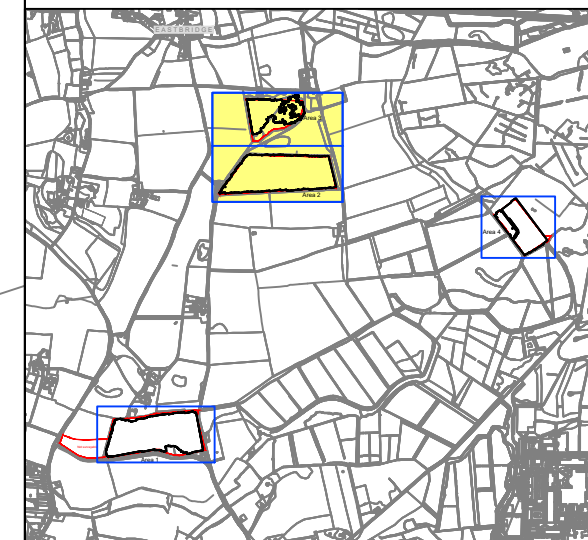


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Client: Cotswold Archaeology

Project: 14282E Main Site, Sizewell, Suffolk

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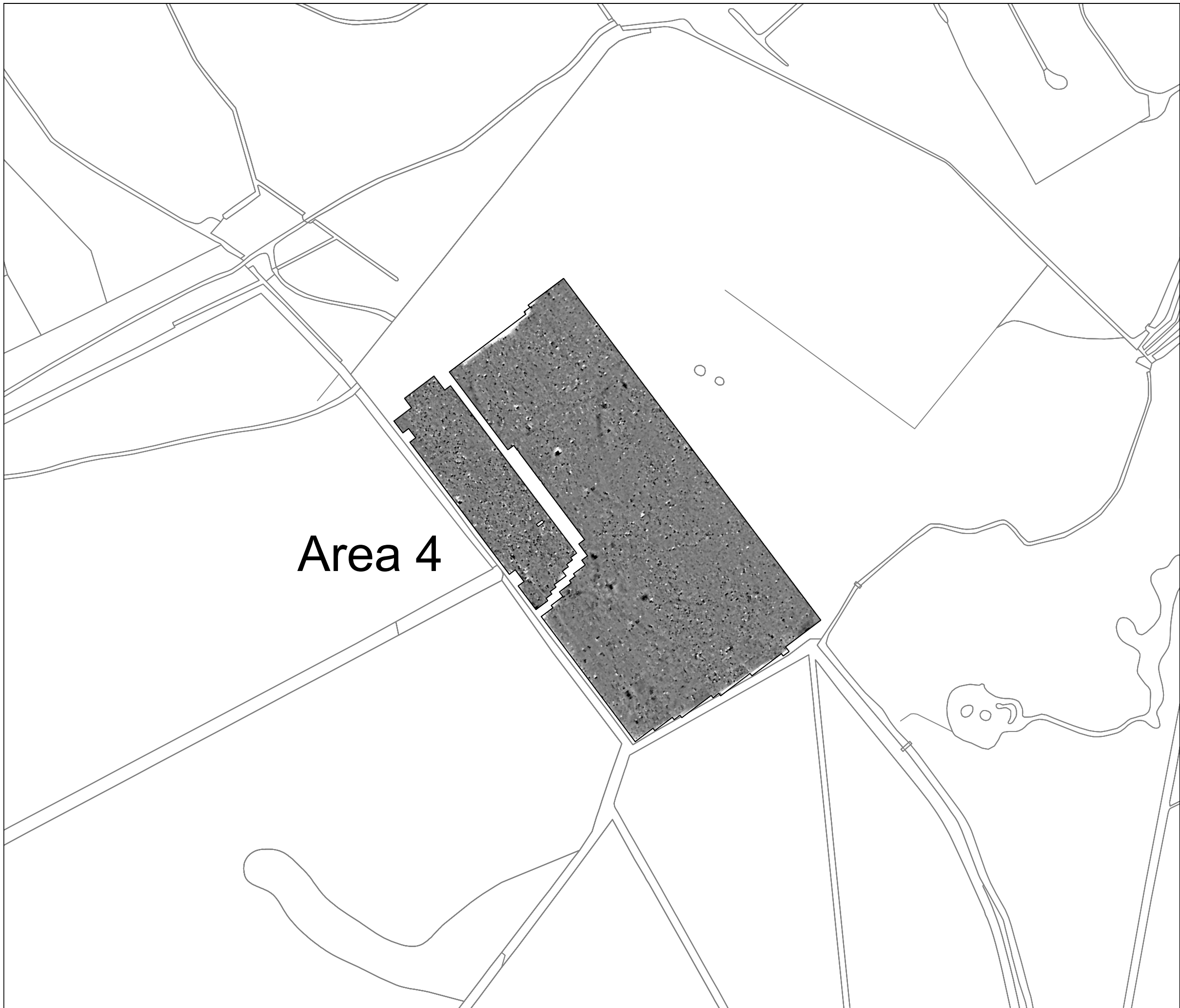


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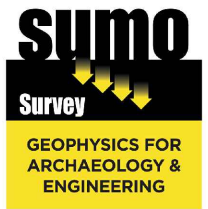
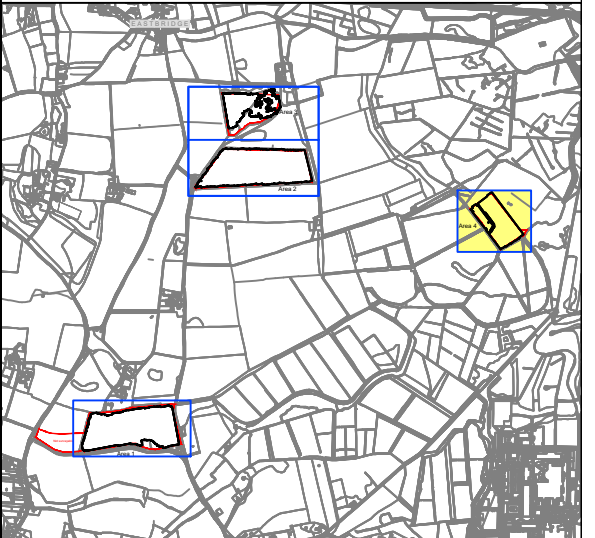
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Project: 14282E Main Site, Sizewell, Suffolk

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Area 4



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Client: Cotswold Archaeology

Project: 14282E Main Site, Sizewell, Suffolk

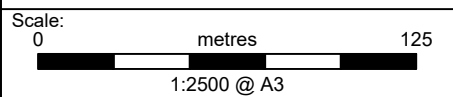


Fig No: 09

Standards & Guidance

This report and all fieldwork have been conducted in accordance with the latest guidance documents issued by Historic England (EH 2008) (then English Heritage), the Chartered Institute for Archaeologists (CIfA 2014) and the European Archaeological Council (EAC 2016).

Grid Positioning

For hand held gradiometers the location of the survey grids has been plotted together with the referencing information. Grids were set out using a Trimble R8 Real Time Kinematic (RTK) VRS Now GNSS GPS system.

An RTK GPS (Real-time Kinematic Global Positioning System) can locate a point on the ground to a far greater accuracy than a standard GPS unit. A standard GPS suffers from errors created by satellite orbit errors, clock errors and atmospheric interference, resulting in an accuracy of 5m-10m. An RTK system uses a single base station receiver and a number of mobile units. The base station re-broadcasts the phase of the carrier it measured, and the mobile units compare their own phase measurements with those they received from the base station. This results in an accuracy of around 0.01m.

Technique	Instrument	Traverse Interval	Sample Interval
Magnetometer	Bartington Grad 601-2	1m	0.25m

Instrumentation: **Bartington Grad 601-2**

Bartington instruments operate in a gradiometer configuration which comprises fluxgate sensors mounted vertically, set 1.0m apart. The fluxgate gradiometer suppresses any diurnal or regional effects. The instruments are carried, or cart mounted, with the bottom sensor approximately 0.1-0.3m from the ground surface. At each survey station, the difference in the magnetic field between the two fluxgates is measured in nanoTesla (nT). The sensitivity of the instrument can be adjusted; for most archaeological surveys the most sensitive range (0.1nT) is used. Generally, features up to 1m deep may be detected by this method, though strongly magnetic objects may be visible at greater depths. The Bartington instrument can collect two lines of data per traverse with gradiometer units mounted laterally with a separation of 1.0m. The readings are logged consecutively into the data logger which in turn is daily down-loaded into a portable computer whilst on site. At the end of each site survey, data is transferred to the office for processing and presentation.

Data Processing

Zero Mean	This process sets the background mean of each traverse within each grid to zero.
Traverse	The operation removes striping effects and edge discontinuities over the whole of the data set.
Step Correction (De-stagger)	When gradiometer data are collected in 'zig-zag' fashion, stepping errors can sometimes arise. These occur because of a slight difference in the speed of walking on the forward and reverse traverses. The result is a staggered effect in the data, which is particularly noticeable on linear anomalies. This process corrects these errors.

Display

Greyscale/ Colourscale Plot	This format divides a given range of readings into a set number of classes. Each class is represented by a specific shade of grey, the intensity increasing with value. All values above the given range are allocated the same shade (maximum intensity); similarly, all values below the given range are represented by the minimum intensity shade. Similar plots can be produced in colour, either using a wide range of colours or by selecting two or three colours to represent positive and negative values. The assigned range (plotting levels) can be adjusted to emphasise different anomalies in the data-set.
--------------------------------	---

Presentation of results and interpretation

The presentation of the results includes a 'minimally processed data' and a 'processed data' greyscale plot. Magnetic anomalies are identified, interpreted and plotted onto the 'Interpretation' drawings.

When interpreting the results, several factors are taken into consideration, including the nature of archaeological features being investigated and the local conditions at the site (geology, pedology, topography etc.). Anomalies are categorised by their potential origin. Where responses can be related to other existing evidence, the anomalies will be given specific categories, such as: Abbey Wall or Roman Road. Where the interpretation is based largely on the geophysical data, levels of confidence are implied, for example: Probable, or Possible Archaeology. The former is used for a confident interpretation, based on anomaly definition and/or other corroborative data such as cropmarks. Poor anomaly definition, a lack of clear patterns to the responses and an absence of other supporting data reduces confidence, hence the classification Possible.

Interpretation Categories

In certain circumstances (usually when there is corroborative evidence from desk-based or excavation data) very specific interpretations can be assigned to magnetic anomalies (for example, *Roman Road, Wall, etc.*) and where appropriate, such interpretations will be applied. The list below outlines the generic categories commonly used in the interpretation of the results.

<i>Archaeology / Probable Archaeology</i>	This term is used when the form, nature and pattern of the responses are clearly or very probably archaeological and /or if corroborative evidence is available. These anomalies, whilst considered anthropogenic, could be of any age.
<i>Possible Archaeology</i>	These anomalies exhibit either weak signal strength and / or poor definition, or form incomplete archaeological patterns, thereby reducing the level of confidence in the interpretation. Although the archaeological interpretation is favoured, they may be the result of variable soil depth, plough damage or even aliasing as a result of data collection orientation.
<i>Industrial / Burnt-Fired</i>	Strong magnetic anomalies that, due to their shape and form or the context in which they are found, suggest the presence of kilns, ovens, corn dryers, metal-working areas or hearths. It should be noted that in many instances modern ferrous material can produce similar magnetic anomalies.
<i>Former Field Boundary (probable & possible)</i>	Anomalies that correspond to former boundaries indicated on historic mapping, or which are clearly a continuation of existing land divisions. Possible denotes less confidence where the anomaly may not be shown on historic mapping but nevertheless the anomaly displays all the characteristics of a field boundary.
<i>Ridge & Furrow</i>	Parallel linear anomalies whose broad spacing suggests ridge and furrow cultivation. In some cases, the response may be the result of more recent agricultural activity.
<i>Agriculture (ploughing)</i>	Parallel linear anomalies or trends with a narrower spacing, sometimes aligned with existing boundaries, indicating more recent cultivation regimes.
<i>Land Drain</i>	Weakly magnetic linear anomalies, quite often appearing in series forming parallel and herringbone patterns. Smaller drains may lead and empty into larger diameter pipes, which in turn usually lead to local streams and ponds. These are indicative of clay fired land drains.
<i>Natural</i>	These responses form clear patterns in geographical zones where natural variations are known to produce significant magnetic distortions.
<i>Magnetic Disturbance</i>	Broad zones of strong dipolar anomalies, commonly found in places where modern ferrous or fired materials (e.g. brick rubble) are present.
<i>Service</i>	Magnetically strong anomalies, usually forming linear features are indicative of ferrous pipes/cables. Sometimes other materials (e.g. pvc) or the fill of the trench can cause weaker magnetic responses which can be identified from their uniform linearity.
<i>Ferrous</i>	This type of response is associated with ferrous material and may result from small items in the topsoil, larger buried objects such as pipes, or above ground features such as fence lines or pylons. Ferrous responses are usually regarded as modern. Individual burnt stones, fired bricks or igneous rocks can produce responses similar to ferrous material.
<i>Uncertain Origin</i>	Anomalies which stand out from the background magnetic variation, yet whose form and lack of patterning gives little clue as to their origin. Often the characteristics and distribution of the responses straddle the categories of <i>Possible Archaeology / Natural</i> or (in the case of linear responses) <i>Possible Archaeology / Agriculture</i> ; occasionally they are simply of an unusual form.

Where appropriate some anomalies will be further classified according to their form (positive or negative) and relative strength and coherence (trend: weak and poorly defined).

Appendix B - Technical Information: Magnetic Theory

Detailed magnetic survey can be used to effectively define areas of past human activity by mapping spatial variation and contrast in the magnetic properties of soil, subsoil and bedrock. Although the changes in the magnetic field resulting from differing features in the soil are usually weak, changes as small as 0.1 nanoTeslas (nT) in an overall field strength of 48,000 (nT), can be accurately detected.

Weakly magnetic iron minerals are always present within the soil and areas of enhancement relate to increases in *magnetic susceptibility* and permanently magnetised *thermoremanent* material.

Magnetic susceptibility relates to the induced magnetism of a material when in the presence of a magnetic field. This magnetism can be considered as effectively permanent as it exists within the Earth's magnetic field. Magnetic susceptibility can become enhanced due to burning and complex biological or fermentation processes.

Thermoremanence is a permanent magnetism acquired by iron minerals that, after heating to a specific temperature known as the Curie Point, are effectively demagnetised followed by re-magnetisation by the Earth's magnetic field on cooling. Thermoremanent archaeological features can include hearths and kilns; material such as brick and tile may be magnetised through the same process.

Silting and deliberate infilling of ditches and pits with magnetically enhanced soil creates a relative contrast against the much lower levels of magnetism within the subsoil into which the feature is cut. Systematic mapping of magnetic anomalies will produce linear and discrete areas of enhancement allowing assessment and characterisation of subsurface features. Material such as subsoil and non-magnetic bedrock used to create former earthworks and walls may be mapped as areas of lower enhancement compared to surrounding soils.

Magnetic survey is carried out using a fluxgate gradiometer which is a passive instrument consisting of two sensors mounted vertically 1m apart. The instrument is carried about 30cm above the ground surface and the top sensor measures the Earth's magnetic field whilst the lower sensor measures the same field but is also more affected by any localised buried feature. The difference between the two sensors will relate to the strength of a magnetic field created by this feature, if no field is present the difference will be close to zero as the magnetic field measured by both sensors will be the same.

Factors affecting the magnetic survey may include soil type, local geology, previous human activity and disturbance from modern services.

OASIS DATA COLLECTION FORM: England

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OASIS ID: sumogeop1-339765

Project details

Project name	Sizewell C
Short description of the project	Geophysical (magnetometer) survey
Project dates	Start: 14-01-2019 End: 15-02-2019
Previous/future work	Not known / Not known
Any associated project reference codes	14282 - Contracting Unit No.
Type of project	Field evaluation
Site status	None
Current Land use	Cultivated Land 3 - Operations to a depth more than 0.25m
Monument type	NONE None
Monument type	NONE None
Significant Finds	NONE None
Significant Finds	NONE None
Methods & techniques	"Geophysical Survey"
Development type	Not recorded
Prompt	National Planning Policy Framework - NPPF
Position in the planning process	Not known / Not recorded
Solid geology	CAMBRIAN
Solid geology (other)	Crag Group sand, Chillesford Church Sand Member
Drift geology (other)	Lowestoft Formation sand and gravel; peat; Diamicton
Techniques	Magnetometry

Project location

Country	England
Site location	SUFFOLK SUFFOLK COASTAL LEISTON Sizewell C
Postcode	IP164RH
Study area	72.9 Hectares
Site coordinates	TM 47 65 52.227096080424 1.617227187207 52 13 37 N 001 37 02 E Point
Site coordinates	TM 45 63 52.210048758979 1.586552405854 52 12 36 N 001 35 11 E Point
Site coordinates	TM 39 68 52.257574264664 1.502432494564 52 15 27 N 001 30 08 E Point

Site coordinates	TM 46 63 52.209600059274 1.601160164043 52 12 34 N 001 36 04 E Point
Site coordinates	TM 45 62 52.201075150762 1.585829018313 52 12 03 N 001 35 08 E Point
Site coordinates	TM 40 60 52.185341524777 1.51138288496 52 11 07 N 001 30 40 E Point
Site coordinates	TM 42 62 52.202409742143 1.542012269371 52 12 08 N 001 32 31 E Point
Site coordinates	TM 46 62 52.200626597374 1.60043384569 52 12 02 N 001 36 01 E Point
Site coordinates	TM 44 63 52.210495613125 1.571944268582 52 12 37 N 001 34 19 E Point
Site coordinates	TM 45 65 52.227995912477 1.588000319552 52 13 40 N 001 35 16 E Point

Project creators

Name of Organisation	Sumo Geophysics
Project brief originator	Cotswold Archaeology
Project design originator	Sumo Geophysics
Project director/manager	Sumo Geophysics
Project supervisor	Sumo Geophysics
Type of sponsor/funding body	Developer
Name of sponsor/funding body	Not known

Project archives

Physical Archive Exists?	No
Digital Archive recipient	Suffolk HER
Digital Contents	"Survey"
Digital Media available	"Geophysics"
Paper Archive recipient	Suffolk HER
Paper Contents	"Survey"
Paper Media available	"Drawing", "Report", "Survey "

Entered by	Sumo Services Ltd (Bradford) (info@gsbsumo.com)
Entered on	12 July 2019

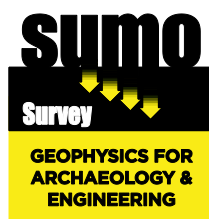
OASIS:

Please e-mail [Historic England](mailto:info@gsbsumo.com) for OASIS help and advice

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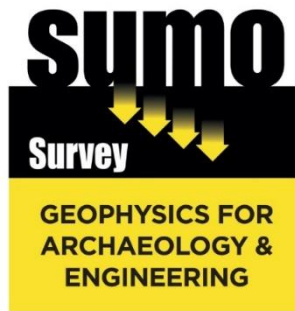
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GEOPHYSICAL SURVEY REPORT

Sandy Lane, Sizewell, Suffolk

Client

Cotswold Archaeology

For

EDF Energy

Survey Report

14282H

Date

July 2019



Survey Report 14282H: Sandy Lane, Sizewell, Suffolk

Survey dates	7 - 8 February 2019
Field co-ordinator	Joe Perry BA
Field Team	Amy Dunn BA James Lorimer BA
Report Date	2 July 2019
CAD Illustrations	Joe Perry BA
Report Author	Joe Perry BA
Project Manager	Thomas Cockcroft MSc
Report approved	Dr John Gater BSc DSc(Hon) MCifA FSA

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Appendix B Technical Information: Magnetic Theory

Appendix C OASIS Data Collection Form

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Figure 12	1: 3500	Minimally Processed Data – Greyscale Plots [All Areas]

2. SURVEY TECHNIQUE

Detailed magnetic survey (magnetometry) was chosen as the most efficient and effective method of locating the type of archaeological anomalies which might be expected at this site.

Bartington Grad 601-2

Traverse Interval 1.0m

Sample Interval 0.25m

3 SUMMARY OF RESULTS

- 3.1 A geophysical survey at Sandy Lane, Sizewell, Suffolk, identified numerous archaeological features, some of which coincide with HER entries. Uncertain anomalies are scattered throughout the survey areas. Modern agricultural regimes have also been detected, along with an area of magnetic disturbance. Magnetic responses relating to ferrous pipes / services are also present.

4 INTRODUCTION

- 4.1 **SUMO Geophysics Ltd** were commissioned to undertake a geophysical survey of an area outlined for development. This survey forms part of an archaeological investigation being undertaken by **Cotswold Archaeology** on behalf of **EDF Energy**.

4.2 Site details

NGR / Postcode	TM 461 631 / IP16 4UN		
Location	The site is located less than one-kilometre south-west from Sizewell power station near the town of Leiston. The site is bounded by Sandy Lane, farmland and woodland.		
HER	Suffolk		
HER Code	sumogeop1-339765		
OASIS Ref.	LCS 281		
District	East Suffolk		
Parish	Leiston		
Topography	Relatively flat in Areas 1, 2 and 3; slight slope in Areas 4 and 5		
Current Land Use	Farmland / Scrubland.		
Geology (BGS 2019)	Bedrock: Crag group - sand. Superficial: Lowestoft formation - sand and gravel.		
Soils (CU 2019)	Soilscape 10: Freely draining slightly acid sandy soils.		
Archaeology (AMEC 2015)	Within the survey area lies:		
	274	MSF21600	Causewayed ring ditch, approximately 30m in diameter and other cropmarks, possibly tracks (TM 458 631).
	52/220	MSF16197	Subrectangular enclosure earthwork/cropmark, 70m by 50m+, on open heathland.
	273/273	MSF21598/9	Post Medieval pottery (TM 457 631).
	271	MSF21597	A series of linear markings show possible enclosure, also possible ring ditches in south east of field and possible tracks (TM 461 630).
	275	MSF21601	Concentric semi-circular cropmark possible ring ditch, approximately 20m diameter (TM 465 627).
	306	MSF26813	Small scatter of medieval and post medieval pottery (TM 462 633).
Survey Methods	Magnetometer survey (fluxgate gradiometer)		
Study Area	8.6 ha		

4.3 **Aims and Objectives**

To locate and characterise any anomalies of possible archaeological interest within the study area.

5 **RESULTS**

The survey has been divided into five survey areas (Areas 1-5).

5.1 **Probable / Possible Archaeology**

5.1.1 The survey has identified a group of trends and linear anomalies indicative of ditches in Area 1; the features appear to form part of a small settlement / farmstead. The results coincide with the recorded position of a causewayed ring ditch (274 / MSF21600), which is slightly perplexing. It is also possible that archaeological anomalies continue into Area 2 though the responses are not as coherent as those in Area 1 (and therefore classified as *Possible Archaeology*). A large area of magnetic disturbance masks the results; the presence of trees and overgrown vegetation restricted the survey.

5.1.2 Numerous trends and discrete linear responses have been identified in the south-east of Area 4 and the north-west of Area 5. Although the magnetic anomalies are not that clear, they may be of archaeological interest, given the HER entries 52/220 nearby.

5.2 **Uncertain**

5.2.1 An area of strong magnetic responses in Area 2 has been classified as having an uncertain origin. The cause of the disturbance is possibly related to the service pipes (e.g. enhanced magnetic material being spread as consolidation material as a result of the services construction); however, due to their proximity to archaeological features within the survey, an archaeological origin cannot be ruled out.

5.2.2 Bands of marginally increased responses in Area 4 have a mottled appearance which is often associated with localised natural soil variations. However, they are located near anomalies of possible archaeological interest (see 5.1.2).

5.3 **Agricultural – Ploughing**

5.3.1 Magnetically weak, barely visible, closely spaced narrow anomalies in Area 1 are due to relatively recent ploughing.

5.4 **Service / Pipes**

5.4.1 Two service pipes on different alignments were recorded traversing Area 2.

5.5 **Ferrous / Magnetic Disturbance**

5.5.1 An area of disturbance located in Area 5 is attributed to landscaping / land management, due to the construction of a power sub-station directly south of the survey area.

5.5.2 Ferrous responses close to boundaries are due to adjacent fences and gates. Smaller scale ferrous anomalies ("iron spikes") are present throughout the data and are characteristic of small pieces of ferrous debris (or brick / tile) in the topsoil; they are commonly assigned a

modern origin. Only the most prominent of these are highlighted on the interpretation diagram.

6 DATA APPRAISAL & CONFIDENCE ASSESSMENT

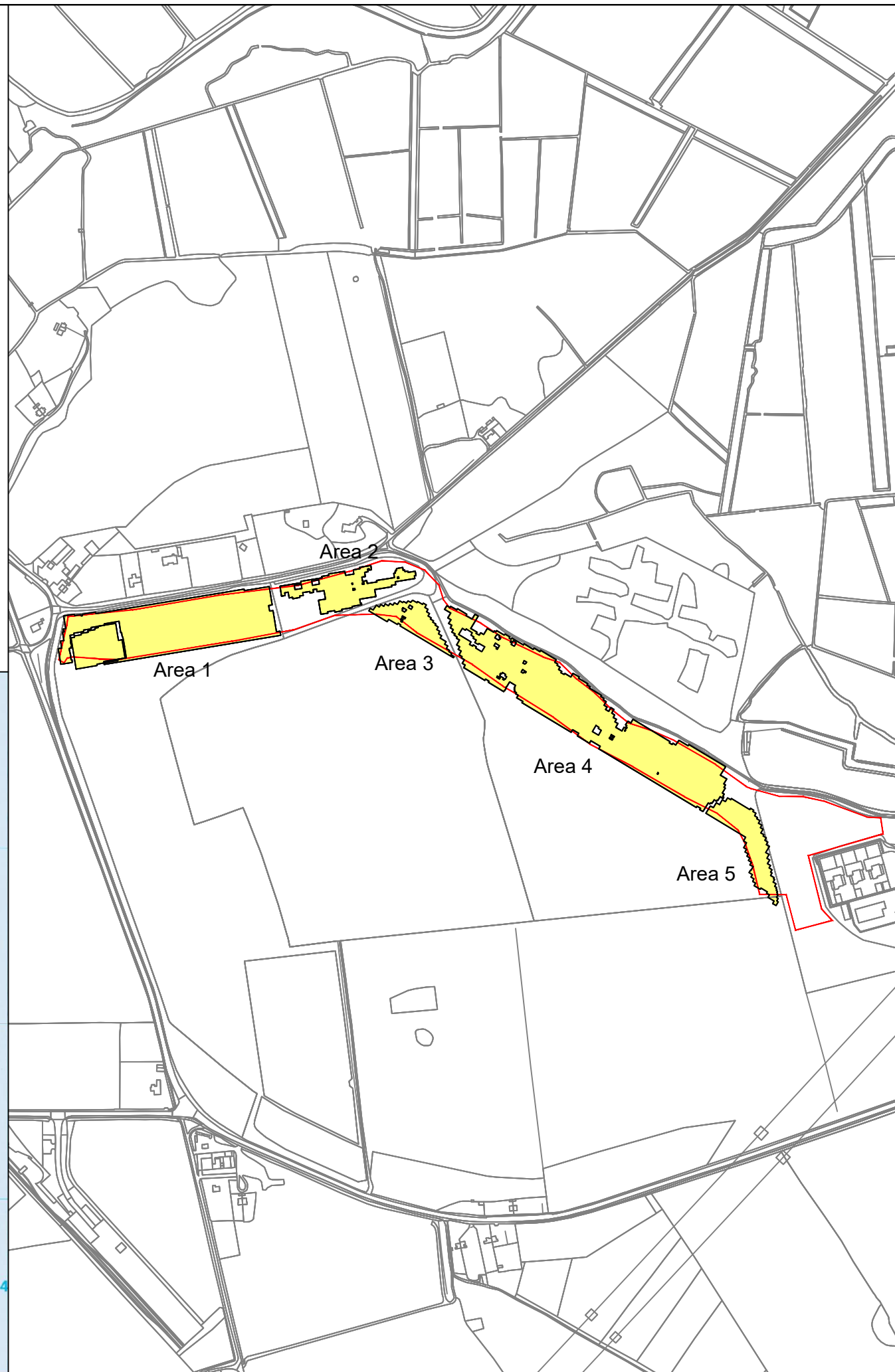
- 6.1 Historic England guidelines (EH 2008) Table 4 states that the typical magnetic response on the local soils / geology is poor. The results from this survey indicate the presence of ditch-like features; as a consequence, the technique is deemed to have worked well.
- 6.2 A section of the survey area to the south-east of Area 5 was unsurveyable due to an area of woodland; elsewhere gaps in the data coincide with overgrown vegetation.

7 CONCLUSION



- 7.1 A complex of archaeological features has been detected in Area 1 and possibly continues into Area 2. The magnetic results appear to indicate a possible settlement, yet the HER entry refers to a causewayed enclosure. Further response of interest are present in Areas 4 and 5. Modern cultivation regimes as well as service pipes have been identified. An area of magnetic disturbance was noted.

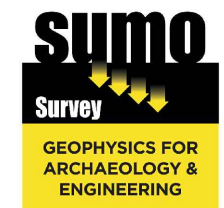
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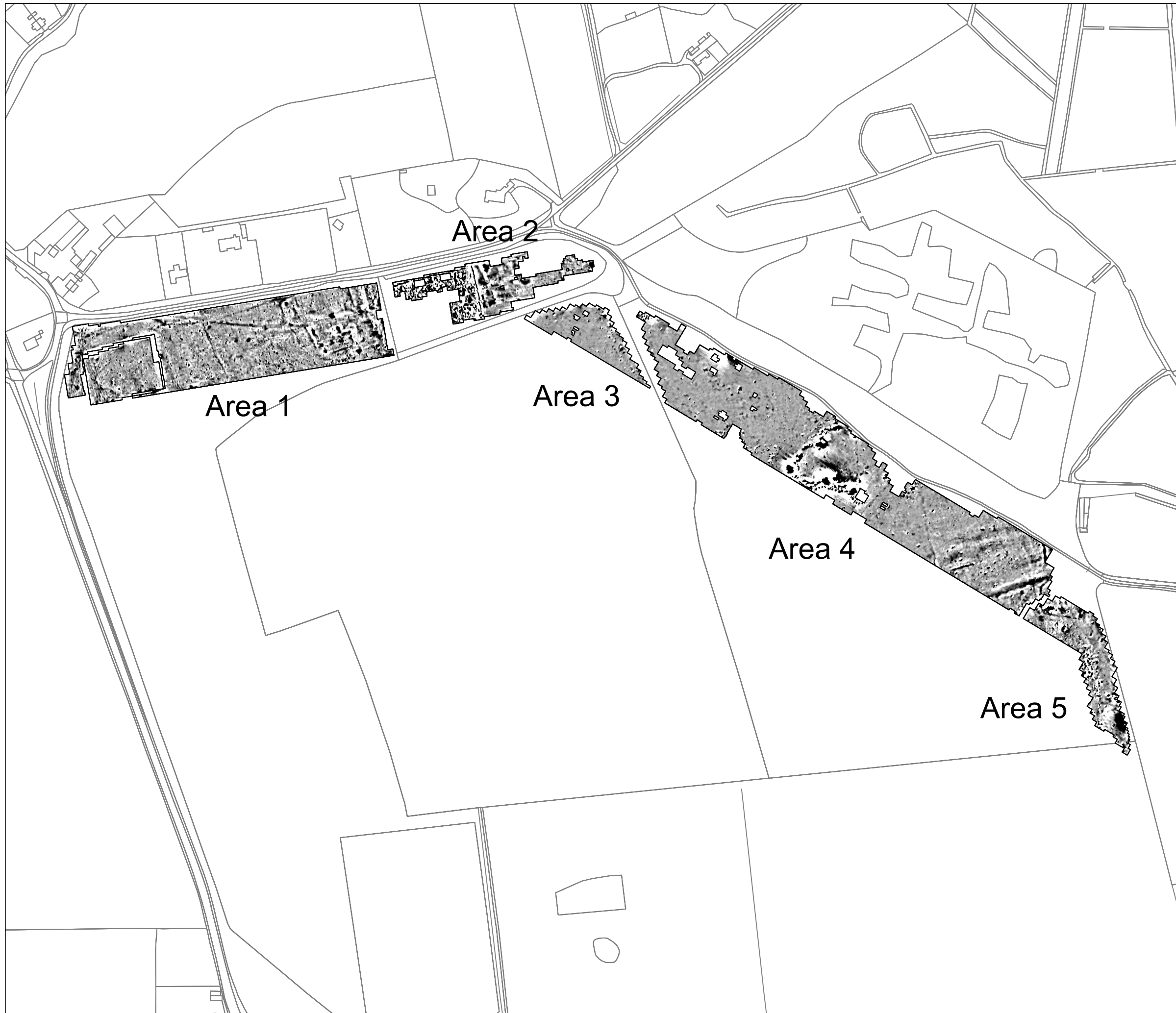


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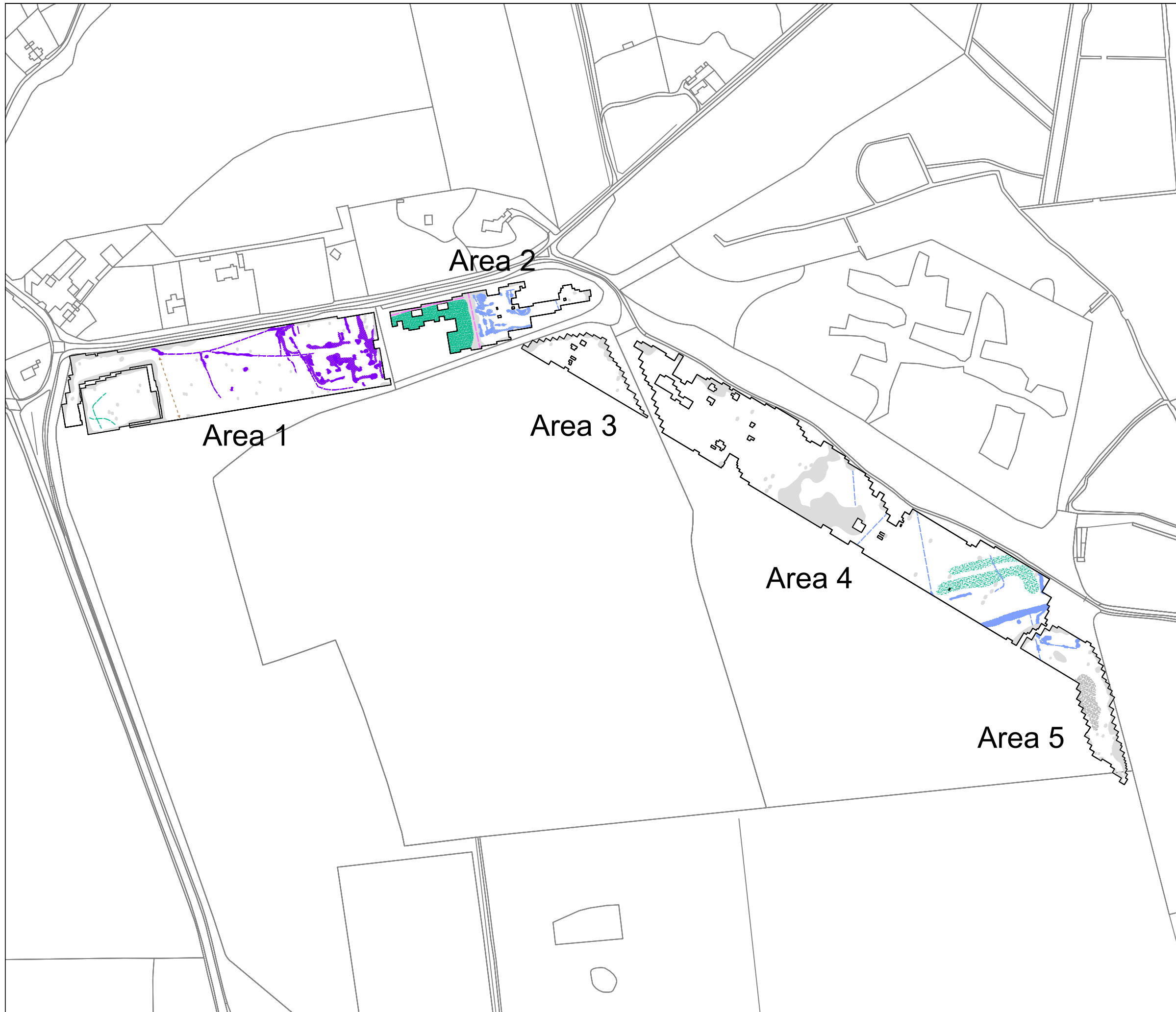
	Site Location
	Magnetometer Survey



Title:	Site Location	
Client:	Cotswold Archaeology	
Project:	14282H Sandy Lane, Sizewell, Suffolk	
	not to scale	Fig No: 01



Title:	Magnetometer Survey Greyscale Plots [All Areas]
Client:	Cotswold Archaeology
Project:	14282H Sandy Lane, Sizewell, Suffolk
Scale:	0 metres 175 1:3500 @ A3
Fig No:	02



KEY

	Probable archaeology (discrete anomaly / trend / negative)
	Possible archaeology (discrete anomaly / trend / negative / area of increased response)
	Uncertain Origin (area of increased response)
	Plough
	Natural (zone)
	Ferrous / Magnetic Disturbance



Title: Magnetometer Survey Interpretation [All Areas]

Client: Cotswold Archaeology

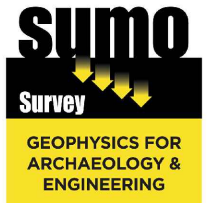
Project: 14282H Sandy Lane, Sizewell, Suffolk

Scale: 0 metres 175
1:3500 @ A3

Fig No: 03



Area 1



Title: Magnetometer Survey
Greyscale Plots [Area 1]

Client: Cotswold Archaeology

Project: 14282H Sandy Lane, Sizewell, Suffolk

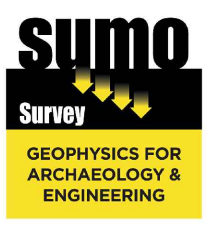
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Fig No: 04



KEY

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	Uncertain Origin (area of increased response)
	Plough
	Natural (zone)
	Ferrous / Magnetic Disturbance



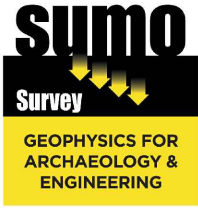
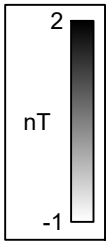
Area 1

Title:	Magnetometer Survey Interpretation [Area 1]	
Client:	Cotswold Archaeology	
Project:	14282H Sandy Lane, Sizewell, Suffolk	
Scale:		Fig No: 05



Area 2

Area 3



Title: Magnetometer Survey
Greyscale Plots [Areas 2 & 3]

Client: Cotswold Archaeology

Project: 14282H Sandy Lane, Sizewell, Suffolk

Scale: 0 metres 62.5
1:1250 @ A3 Fig No: 06



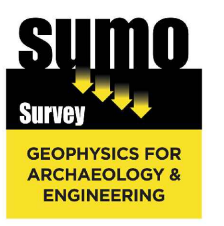
Area 2

Area 3



KEY

	Probable archaeology (discrete anomaly / trend / negative)
	Possible archaeology (discrete anomaly / trend / negative / area of increased response)
	Uncertain Origin (area of increased response)
	Plough
	Natural (zone)
	Ferrous / Magnetic Disturbance



Title: Magnetometer Survey Interpretation [Areas 2 & 3]
 Client: Cotswold Archaeology
 Project: 14282H Sandy Lane, Sizewell, Suffolk

Scale: 0 metres 62.5
 1:1250 @ A3
 Fig No: 07



Area 4



Title: Magnetometer Survey
Greyscale Plots [Area 4]

Client: Cotswold Archaeology

Project: 14282H Sandy Lane, Sizewell, Suffolk

Scale: 0 metres 62.5
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




Fig No: 08

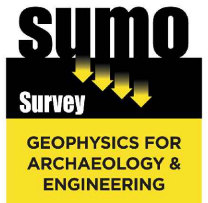


Area 4



KEY

	Probable archaeology (discrete anomaly / trend / negative)
	Possible archaeology (discrete anomaly / trend / negative / area of increased response)
	Uncertain Origin (area of increased response)
	Plough
	Natural (zone)
	Ferrous / Magnetic Disturbance

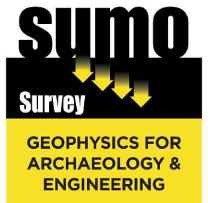


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Client:	Cotswold Archaeology
Project:	14282H Sandy Lane, Sizewell, Suffolk

Scale:	0 metres 62.5	Fig No:	09
1:1250 @ A3			



Area 5



Title: Magnetometer Survey
Greyscale Plots [Area 5]

Client: Cotswold Archaeology

Project: 14282H Sandy Lane, Sizewell, Suffolk

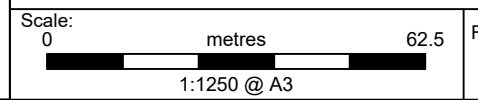






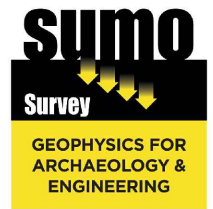


Fig No:
10



KEY

	Probable archaeology (discrete anomaly / trend / negative)
	Possible archaeology (discrete anomaly / trend / negative / area of increased response)
	Uncertain Origin (area of increased response)
	Plough
	Natural (zone)
	Ferrous / Magnetic Disturbance



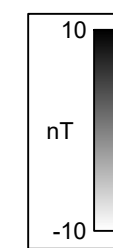
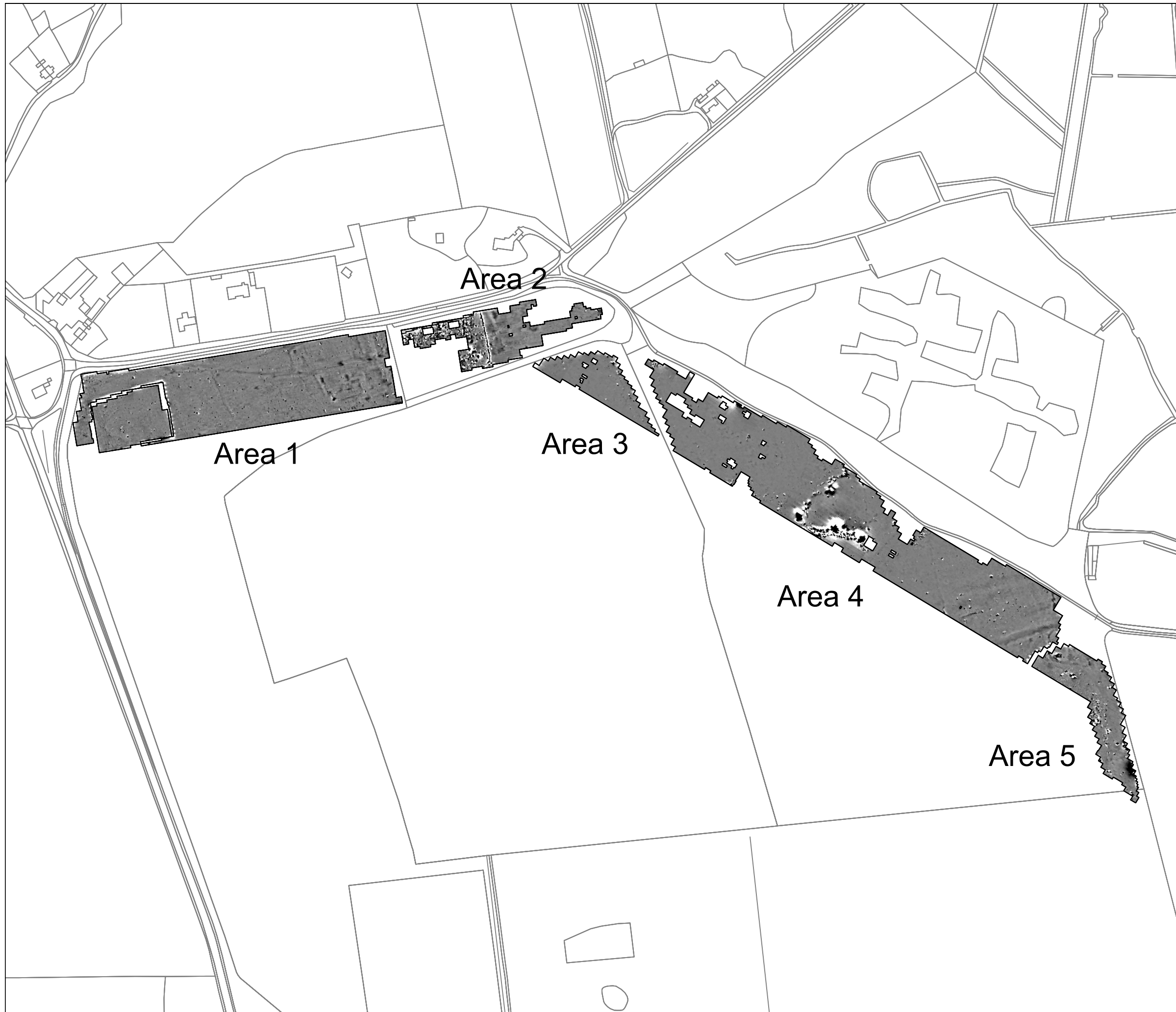
Title: Magnetometer Survey Interpretation [Area 5]

Client: Cotswold Archaeology

Project: 14282H Sandy Lane, Sizewell, Suffolk

Scale: 0 metres 62.5
1:1250 @ A3

Fig No: 11



Title: Magnetometer Survey [Minimally Processed Data] - Greyscale Plots [All Areas]

Client: Cotswold Archaeology

Project: 14282H Sandy Lane, Sizewell, Suffolk

Scale: 0 metres 175
1:3500 @ A3

Fig No: 12

Standards & Guidance

This report and all fieldwork have been conducted in accordance with the latest guidance documents issued by Historic England (EH 2008) (then English Heritage), the Chartered Institute for Archaeologists (CIfA 2014) and the European Archaeological Council (EAC 2016).

Grid Positioning

For hand held gradiometers the location of the survey grids has been plotted together with the referencing information. Grids were set out using a Trimble R8 Real Time Kinematic (RTK) VRS Now GNSS GPS system.

An RTK GPS (Real-time Kinematic Global Positioning System) can locate a point on the ground to a far greater accuracy than a standard GPS unit. A standard GPS suffers from errors created by satellite orbit errors, clock errors and atmospheric interference, resulting in an accuracy of 5m-10m. An RTK system uses a single base station receiver and a number of mobile units. The base station re-broadcasts the phase of the carrier it measured, and the mobile units compare their own phase measurements with those they received from the base station. This results in an accuracy of around 0.01m.

Technique	Instrument	Traverse Interval	Sample Interval
Magnetometer	Bartington Grad 601-2	1m	0.25m

Instrumentation: **Bartington Grad 601-2**

Bartington instruments operate in a gradiometer configuration which comprises fluxgate sensors mounted vertically, set 1.0m apart. The fluxgate gradiometer suppresses any diurnal or regional effects. The instruments are carried, or cart mounted, with the bottom sensor approximately 0.1-0.3m from the ground surface. At each survey station, the difference in the magnetic field between the two fluxgates is measured in nanoTesla (nT). The sensitivity of the instrument can be adjusted; for most archaeological surveys the most sensitive range (0.1nT) is used. Generally, features up to 1m deep may be detected by this method, though strongly magnetic objects may be visible at greater depths. The Bartington instrument can collect two lines of data per traverse with gradiometer units mounted laterally with a separation of 1.0m. The readings are logged consecutively into the data logger which in turn is daily down-loaded into a portable computer whilst on site. At the end of each site survey, data is transferred to the office for processing and presentation.

Data Processing

Zero Mean	This process sets the background mean of each traverse within each grid to zero.
Traverse	The operation removes striping effects and edge discontinuities over the whole of the data set.
Step Correction (De-stagger)	When gradiometer data are collected in 'zig-zag' fashion, stepping errors can sometimes arise. These occur because of a slight difference in the speed of walking on the forward and reverse traverses. The result is a staggered effect in the data, which is particularly noticeable on linear anomalies. This process corrects these errors.

Display

Greyscale/ Colourscale Plot	This format divides a given range of readings into a set number of classes. Each class is represented by a specific shade of grey, the intensity increasing with value. All values above the given range are allocated the same shade (maximum intensity); similarly, all values below the given range are represented by the minimum intensity shade. Similar plots can be produced in colour, either using a wide range of colours or by selecting two or three colours to represent positive and negative values. The assigned range (plotting levels) can be adjusted to emphasise different anomalies in the data-set.
--------------------------------	---

Presentation of results and interpretation

The presentation of the results includes a 'minimally processed data' and a 'processed data' greyscale plot. Magnetic anomalies are identified, interpreted and plotted onto the 'Interpretation' drawings.

When interpreting the results, several factors are taken into consideration, including the nature of archaeological features being investigated and the local conditions at the site (geology, pedology, topography etc.). Anomalies are categorised by their potential origin. Where responses can be related to other existing evidence, the anomalies will be given specific categories, such as: Abbey Wall or Roman Road. Where the interpretation is based largely on the geophysical data, levels of confidence are implied, for example: Probable, or Possible Archaeology. The former is used for a confident interpretation, based on anomaly definition and/or other corroborative data such as cropmarks. Poor anomaly definition, a lack of clear patterns to the responses and an absence of other supporting data reduces confidence, hence the classification Possible.

Interpretation Categories

In certain circumstances (usually when there is corroborative evidence from desk-based or excavation data) very specific interpretations can be assigned to magnetic anomalies (for example, *Roman Road, Wall, etc.*) and where appropriate, such interpretations will be applied. The list below outlines the generic categories commonly used in the interpretation of the results.

<i>Archaeology / Probable Archaeology</i>	This term is used when the form, nature and pattern of the responses are clearly or very probably archaeological and /or if corroborative evidence is available. These anomalies, whilst considered anthropogenic, could be of any age.
<i>Possible Archaeology</i>	These anomalies exhibit either weak signal strength and / or poor definition, or form incomplete archaeological patterns, thereby reducing the level of confidence in the interpretation. Although the archaeological interpretation is favoured, they may be the result of variable soil depth, plough damage or even aliasing as a result of data collection orientation.
<i>Industrial / Burnt-Fired</i>	Strong magnetic anomalies that, due to their shape and form or the context in which they are found, suggest the presence of kilns, ovens, corn dryers, metal-working areas or hearths. It should be noted that in many instances modern ferrous material can produce similar magnetic anomalies.
<i>Former Field Boundary (probable & possible)</i>	Anomalies that correspond to former boundaries indicated on historic mapping, or which are clearly a continuation of existing land divisions. Possible denotes less confidence where the anomaly may not be shown on historic mapping but nevertheless the anomaly displays all the characteristics of a field boundary.
<i>Ridge & Furrow</i>	Parallel linear anomalies whose broad spacing suggests ridge and furrow cultivation. In some cases, the response may be the result of more recent agricultural activity.
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<i>Land Drain</i>	Weakly magnetic linear anomalies, quite often appearing in series forming parallel and herringbone patterns. Smaller drains may lead and empty into larger diameter pipes, which in turn usually lead to local streams and ponds. These are indicative of clay fired land drains.
<i>Natural</i>	These responses form clear patterns in geographical zones where natural variations are known to produce significant magnetic distortions.
<i>Magnetic Disturbance</i>	Broad zones of strong dipolar anomalies, commonly found in places where modern ferrous or fired materials (e.g. brick rubble) are present.
<i>Service</i>	Magnetically strong anomalies, usually forming linear features are indicative of ferrous pipes/cables. Sometimes other materials (e.g. pvc) or the fill of the trench can cause weaker magnetic responses which can be identified from their uniform linearity.
<i>Ferrous</i>	This type of response is associated with ferrous material and may result from small items in the topsoil, larger buried objects such as pipes, or above ground features such as fence lines or pylons. Ferrous responses are usually regarded as modern. Individual burnt stones, fired bricks or igneous rocks can produce responses similar to ferrous material.
<i>Uncertain Origin</i>	Anomalies which stand out from the background magnetic variation, yet whose form and lack of patterning gives little clue as to their origin. Often the characteristics and distribution of the responses straddle the categories of <i>Possible Archaeology / Natural</i> or (in the case of linear responses) <i>Possible Archaeology / Agriculture</i> ; occasionally they are simply of an unusual form.

Where appropriate some anomalies will be further classified according to their form (positive or negative) and relative strength and coherence (trend: weak and poorly defined).

Appendix B - Technical Information: Magnetic Theory

Detailed magnetic survey can be used to effectively define areas of past human activity by mapping spatial variation and contrast in the magnetic properties of soil, subsoil and bedrock. Although the changes in the magnetic field resulting from differing features in the soil are usually weak, changes as small as 0.1 nanoTeslas (nT) in an overall field strength of 48,000 (nT), can be accurately detected.

Weakly magnetic iron minerals are always present within the soil and areas of enhancement relate to increases in *magnetic susceptibility* and permanently magnetised *thermoremanent* material.

Magnetic susceptibility relates to the induced magnetism of a material when in the presence of a magnetic field. This magnetism can be considered as effectively permanent as it exists within the Earth's magnetic field. Magnetic susceptibility can become enhanced due to burning and complex biological or fermentation processes.

Thermoremanence is a permanent magnetism acquired by iron minerals that, after heating to a specific temperature known as the Curie Point, are effectively demagnetised followed by re-magnetisation by the Earth's magnetic field on cooling. Thermoremanent archaeological features can include hearths and kilns; material such as brick and tile may be magnetised through the same process.

Silting and deliberate infilling of ditches and pits with magnetically enhanced soil creates a relative contrast against the much lower levels of magnetism within the subsoil into which the feature is cut. Systematic mapping of magnetic anomalies will produce linear and discrete areas of enhancement allowing assessment and characterisation of subsurface features. Material such as subsoil and non-magnetic bedrock used to create former earthworks and walls may be mapped as areas of lower enhancement compared to surrounding soils.

Magnetic survey is carried out using a fluxgate gradiometer which is a passive instrument consisting of two sensors mounted vertically 1m apart. The instrument is carried about 30cm above the ground surface and the top sensor measures the Earth's magnetic field whilst the lower sensor measures the same field but is also more affected by any localised buried feature. The difference between the two sensors will relate to the strength of a magnetic field created by this feature, if no field is present the difference will be close to zero as the magnetic field measured by both sensors will be the same.

Factors affecting the magnetic survey may include soil type, local geology, previous human activity and disturbance from modern services.

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OASIS ID: sumogeop1-339765

Project details

Project name	Sizewell C
Short description of the project	Geophysical (magnetometer) survey
Project dates	Start: 14-01-2019 End: 15-02-2019
Previous/future work	Not known / Not known
Any associated project reference codes	14282 - Contracting Unit No.
Type of project	Field evaluation
Site status	None
Current Land use	Cultivated Land 3 - Operations to a depth more than 0.25m
Monument type	NONE None
Monument type	NONE None
Significant Finds	NONE None
Significant Finds	NONE None
Methods & techniques	"Geophysical Survey"
Development type	Not recorded
Prompt	National Planning Policy Framework - NPPF
Position in the planning process	Not known / Not recorded
Solid geology	CAMBRIAN
Solid geology (other)	Crag Group sand, Chillesford Church Sand Member
Drift geology (other)	Lowestoft Formation sand and gravel; peat; Diamicton
Techniques	Magnetometry

Project location

Country	England
Site location	SUFFOLK SUFFOLK COASTAL LEISTON Sizewell C
Postcode	IP164RH
Study area	72.9 Hectares
Site coordinates	TM 47 65 52.227096080424 1.617227187207 52 13 37 N 001 37 02 E Point
Site coordinates	TM 45 63 52.210048758979 1.586552405854 52 12 36 N 001 35 11 E Point
Site coordinates	TM 39 68 52.257574264664 1.502432494564 52 15 27 N 001 30 08 E Point

Site coordinates	TM 46 63 52.209600059274 1.601160164043 52 12 34 N 001 36 04 E Point
Site coordinates	TM 45 62 52.201075150762 1.585829018313 52 12 03 N 001 35 08 E Point
Site coordinates	TM 40 60 52.185341524777 1.51138288496 52 11 07 N 001 30 40 E Point
Site coordinates	TM 42 62 52.202409742143 1.542012269371 52 12 08 N 001 32 31 E Point
Site coordinates	TM 46 62 52.200626597374 1.60043384569 52 12 02 N 001 36 01 E Point
Site coordinates	TM 44 63 52.210495613125 1.571944268582 52 12 37 N 001 34 19 E Point
Site coordinates	TM 45 65 52.227995912477 1.588000319552 52 13 40 N 001 35 16 E Point

Project creators

Name of Organisation	Sumo Geophysics
Project brief originator	Cotswold Archaeology
Project design originator	Sumo Geophysics
Project director/manager	Sumo Geophysics
Project supervisor	Sumo Geophysics
Type of sponsor/funding body	Developer
Name of sponsor/funding body	Not known

Project archives

Physical Archive Exists?	No
Digital Archive recipient	Suffolk HER
Digital Contents	"Survey"
Digital Media available	"Geophysics"
Paper Archive recipient	Suffolk HER
Paper Contents	"Survey"
Paper Media available	"Drawing", "Report", "Survey "

Entered by	Sumo Services Ltd (Bradford) (info@gsbsumo.com)
Entered on	12 July 2019

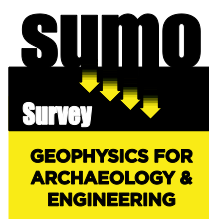
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Please e-mail [Historic England](mailto:info@gsbsumo.com) for OASIS help and advice

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GEOPHYSICAL SURVEY REPORT

STRATASCAN™



Project name:
Sizewell

Client:
Amec Foster Wheeler

Job ref:
J10571

December 2016

GEOPHYSICAL SURVEY REPORT

Project name: Sizewell Client: Amec Foster Wheeler	Job ref: J10571
Survey date: 14-23 November 2016	Report date: December 2016
Field team: Lukasz Krawec BSc Samuel Wood Paul Bracken	Project Manager: Simon Haddrell BEng(Hons) AMBCS PCIfA
Report written by: Dr John Gater MCifA FSA	Report approved by: Simon Haddrell BEng(Hons) AMBCS PCIfA
CAD illustrations by: Rebecca Davies BSc (Hons)	Site Director: Dr John Gater MCifA FSA
Version number and issue date: V1 15/12/16	Amendments:



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1 SUMMARY OF RESULTS

Although the geophysical data indicate that part of an enclosure may have been identified, aerial photographs dating from 1945 suggest the magnetic responses may be a result of a former sand quarry. A second comparable feature visible on the aerial imagery coincides with more amorphous magnetic responses which appear natural in origin. Other similar natural responses are visible throughout the data, especially in the northern field. Former field boundaries and past ploughing has been recorded.

2 INTRODUCTION

2.1 Background synopsis

Stratascan were commissioned to undertake a geophysical survey of an area outlined for development. This survey forms part of an archaeological investigation being undertaken by Amec Foster Wheeler.

2.2 Site Details

NGR / Postcode	TM 450 654 / IP16 4RJ
Location	The site under investigation lies almost midway between Southwold and Aldeburgh on the east coast of Suffolk. The two fields surveyed lie approximately 2.5km north of Leiston.
HER/SMR	Suffolk
District	Suffolk Coastal
Parish	Theberton CP
Topography	Flat
Current Land Use	Arable
Weather Conditions	Overcast, occasional showers
Soils	The overlying soils are known as Newport 4 which are typical brown sands. These consist of well drained sandy soils (Soil Survey of England and Wales, Sheet 4 Eastern England).
Geology	The underlying geology comprises sand of the Crag Group. The drift geology comprises diamicton and sand and gravel of Lowestoft Formation (British Geological Survey website).
Archaeology	None known within the area under survey. Leiston Abbey, a scheduled ancient monument, lies to the south of the site.
Survey Methods	Magnetic – fluxgate gradiometer.

Study Area	17 hectares surveyed – a further 13 hectares could not be surveyed due to maize, beet crop and scrub.
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2.3 Aims and objectives

To locate and characterise any anomalies of possible archaeological interest within the study area.

3 METHODS, PROCESSING & PRESENTATION

3.1 Standards & Guidance

This report and all fieldwork have been conducted in accordance with the latest guidance documents issued by Historic England (2008) and the Chartered Institute for Archaeologists (2002 & 2014).

Stratascan Ltd are a Registered Organisation with the CIfA and are committed to upholding its policies and standards.

3.2 Survey methods

Detailed magnetic survey was used as an efficient and effective method of locating archaeological anomalies.

More information regarding this technique is included in Appendix A.

3.3 Processing

The following schedule shows the basic processing carried out on the data used in this report:

1. *De-stripe*
2. *De-stagger*

3.4 Presentation of results and interpretation

The presentation of the data for each site involves a plot of the minimally processed data as a greyscale plot and a colour plot showing extreme magnetic values. Magnetic anomalies have been identified and plotted onto the 'Interpretation of Anomalies' drawing.

When interpreting the results several factors are taken into consideration, including the nature of archaeological features being investigated and the local conditions at the site (geology, pedology, topography etc.). Anomalies are categorised by their potential origin. Where responses can be related to very specific known features documented in other sources, this is done (for example: Abbey Wall, Roman Road). For the generic categories levels of confidence are indicated, for example: probable, or possible archaeology. The former is used for a confident interpretation, based on anomaly definition and/or other corroborative data such as cropmarks. Poor anomaly definition, a lack of clear patterns to the responses and an absence of other supporting data reduces confidence, hence the classification "possible".

4 RESULTS

The detailed magnetic gradiometer survey conducted at Sizewell has identified one anomaly which has been characterised as being of *possible* archaeological origin. The following list of anomalies refers to numerical labels on the interpretation plots.

4.1 Probable Archaeology

No probable archaeology has been identified within the survey area.

4.2 Possible Archaeology

- 1** A linear response **[1]** which appears to have a turn at its western end; the eastern end is confused by a cluster of other magnetic responses. As they stand, the results would seem to indicate the presence of a ditched feature which might have once been part of an enclosure and hence of potential archaeological interest. However, analysis of Google imagery shows a distinct soil mark at this location. In fact, the feature is visible over a number of decades and the 1945 imagery suggests that there may have been a sand quarry at this location. Therefore, the anomaly could be simply marking the edge of the backfilled deposits with the natural subsoil. As such an archaeological interpretation is only tentative.

4.3 Medieval/Post-Medieval Agriculture

- 2 & 3** Two linear anomalies indicate the courses of former field boundaries; **[2]** is marked on old maps up to 1938 while **[3]** partially corresponds with a second boundary also mapped up to 1938.
- 4** Linear anomaly **[4]** is parallel to the northern field division and would seem to indicate another field boundary, but there is no supporting evidence on old maps. The same interpretation applies to linear response **[5]** in the southern field.
- 6** Parallel anomalies **[6]** mark plough lines aligned east-west in the northern field, while similar responses in the southern field run south-west to north-east.

4.4 Other Anomalies

- 7 & 8** A curvilinear anomaly, a shorter response and a trend in the data **[7]** are probably agricultural, but doubt is cast on the interpretation because of the tentative archaeological anomaly **[1]**. Similar trends **[8]** in the southern field are marked because they are on a different alignment to the plough lines; but their significance, if any, remains uncertain.
- 9 & 10** A large number of amorphous anomalies are visible in the data, particularly, but not exclusively, in the northern field. Many of the responses are visible as soil marks and it is likely that most of these are due to natural magnetic variations in the sands. However, anomaly **[10]** also reflects a former feature visible on 1945 aerial photographs (as mentioned in Paragraph 4.2) and as such may be a man-made feature.

Smaller ferrous anomalies, or 'magnetic spikes' indicate small ferrous metal objects and are likely to be modern rubbish. Ferrous disturbance along the field boundaries are the result of nearby metal fences. There appears to be a spread of modern material along the north eastern survey boundary.

5 DATA APPRAISAL & CONFIDENCE ASSESSMENT

Sand geologies generally provide a variable response for magnetic survey, though in parts of East Anglia the sands are often good for survey (EH 2008). In this instance, former field boundaries, ploughing trends and natural responses indicate that the technique is working well.

6 CONCLUSION

The results have highlighted one anomaly which appears to indicate a ditch of possible archaeological interest. However, aerial photographs dating from 1944 cast doubt on this interpretation as a feature – possibly a sand pit - is clearly visible at this location. A second possible pit is also showing on the photographs and in this instance the magnetic responses correlate well with such a feature; there are no indications of a ditch.

Natural magnetic responses dominate the results, especially in the northern field. In addition, a couple of field boundaries have been identified along with evidence for ploughing. A few trends have an uncertain origin.

7 REFERENCES

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Appendix A - Technical Information: Magnetometer Survey Method

Grid Positioning

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<i>Natural</i>	These responses form clear patterns in geographical zones where natural variations are known to produce significant magnetic distortions.
<i>Magnetic Disturbance</i>	Broad zones of strong dipolar anomalies, commonly found in places where modern ferrous or fired materials (e.g. brick rubble) are present. They are presumed to be modern.
<i>Service</i>	Magnetically strong anomalies usually forming linear features indicative of ferrous pipes/cables. Sometimes other materials (e.g. pvc) cause weaker magnetic responses and can be identified from their uniform linearity crossing large expanses.
<i>Ferrous</i>	This type of response is associated with ferrous material and may result from small items in the topsoil, larger buried objects such as pipes, or above ground features such as fence lines or pylons. Ferrous responses are usually regarded as modern. Individual burnt stones, fired bricks or igneous rocks can produce responses similar to ferrous material.
<i>Uncertain Origin</i>	Anomalies which stand out from the background magnetic variation, yet whose form and lack of patterning gives little clue as to their origin. Often the characteristics and distribution of the responses straddle the categories of <i>Possible Archaeology</i> and <i>Possible Natural</i> or (in the case of linear responses) <i>Possible Archaeology</i> and <i>Possible Agriculture</i> ; occasionally they are simply of an unusual form.

Where appropriate some anomalies will be further classified according to their form (positive or negative) and relative strength and coherence (trend: weak and poorly defined).

Appendix B - Technical Information: Magnetic Theory

Detailed magnetic survey can be used to effectively define areas of past human activity by mapping spatial variation and contrast in the magnetic properties of soil, subsoil and bedrock. Although the changes in the magnetic field resulting from differing features in the soil are usually weak, changes as small as 0.2 nanoTeslas (nT) in an overall field strength of 48,000nT, can be accurately detected.

Weakly magnetic iron minerals are always present within the soil and areas of enhancement relate to increases in *magnetic susceptibility* and permanently magnetised *thermoremanent* material.

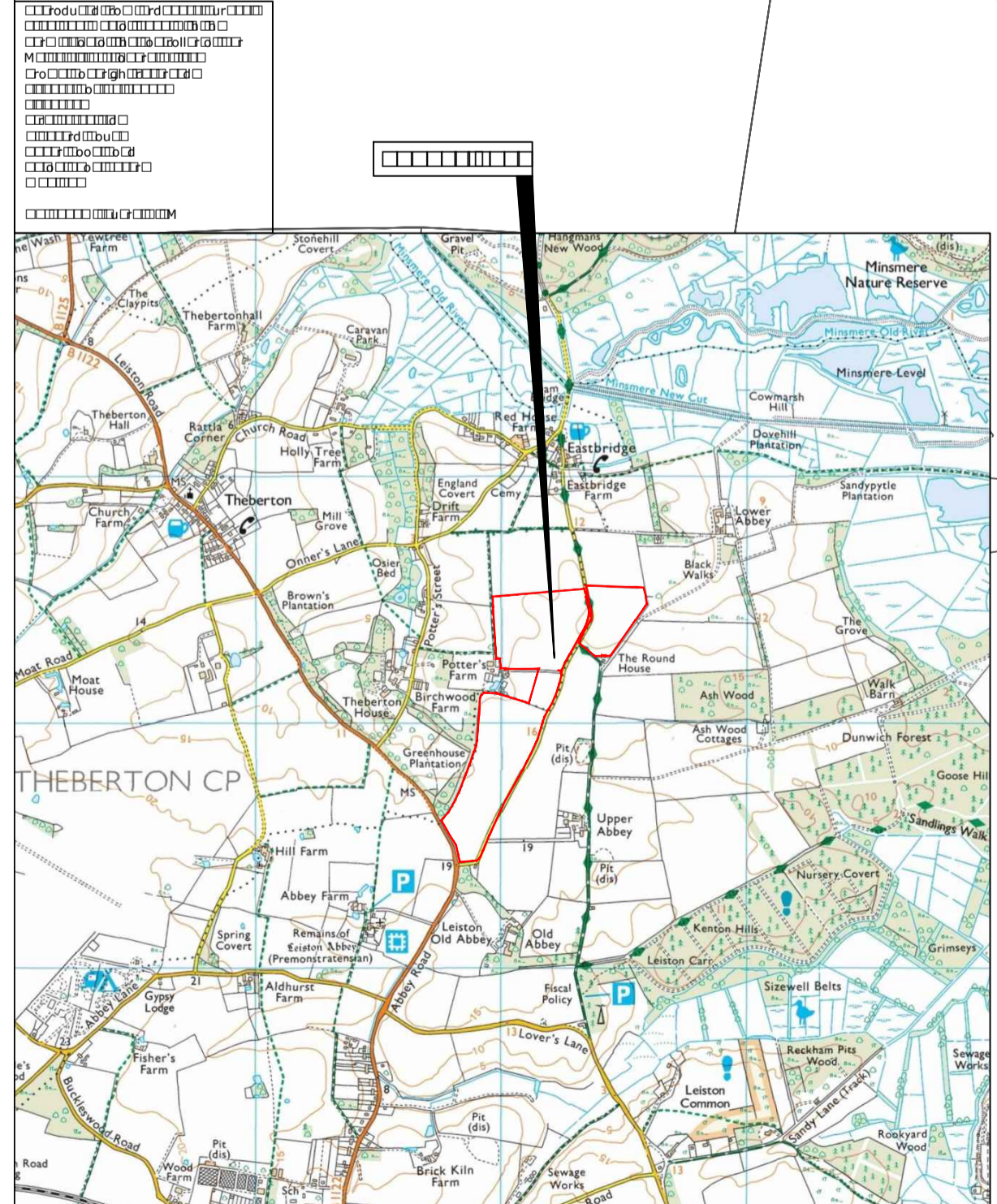
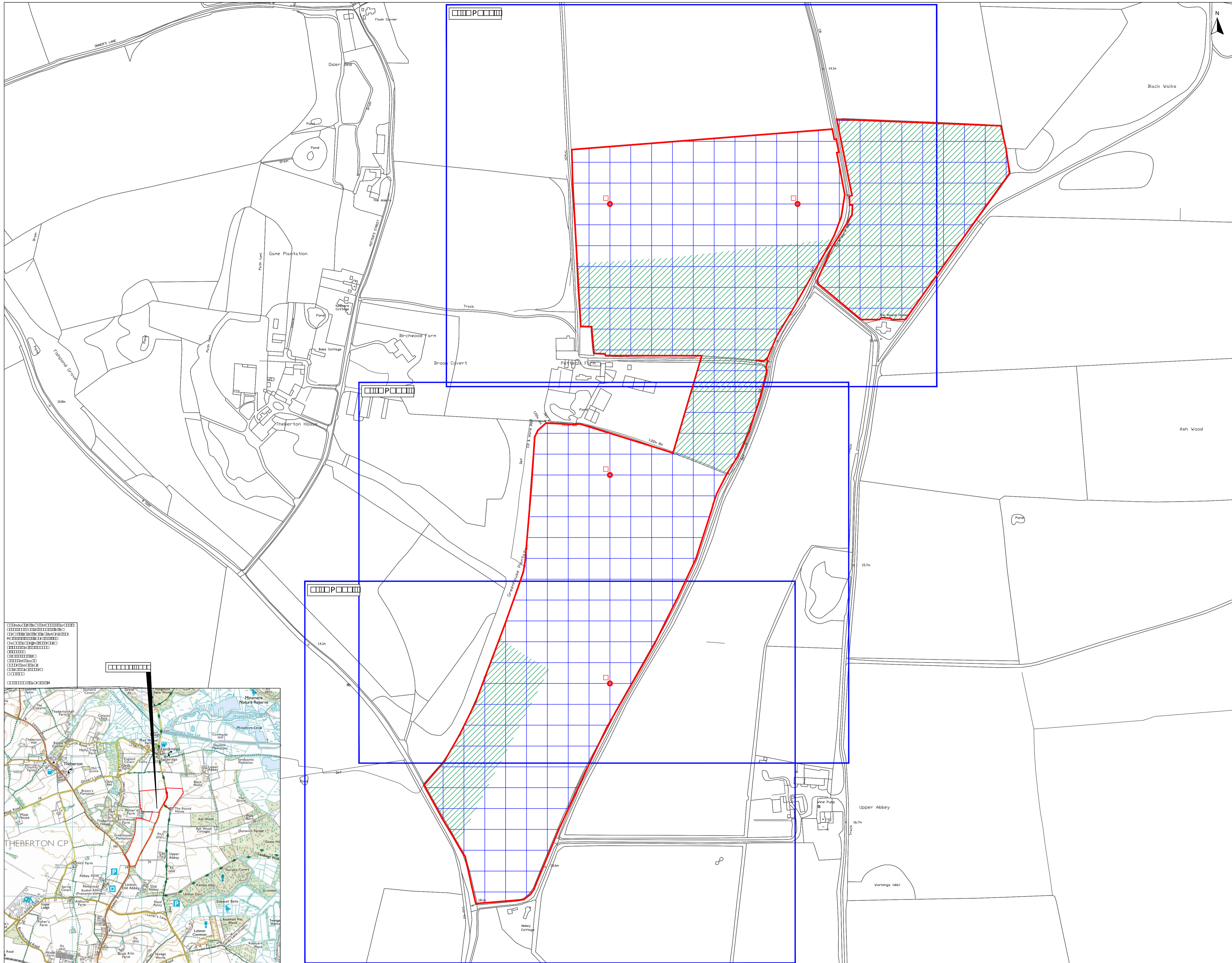
Magnetic susceptibility relates to the induced magnetism of a material when in the presence of a magnetic field. This magnetism can be considered as effectively permanent as it exists within the Earth's magnetic field. Magnetic susceptibility can become enhanced due to burning and complex biological or fermentation processes.

Thermoremanence is a permanent magnetism acquired by iron minerals that, after heating to a specific temperature known as the Curie Point, are effectively demagnetised followed by re-magnetisation by the Earth's magnetic field on cooling. Thermoremanent archaeological features can include hearths and kilns and material such as brick and tile may be magnetised through the same process.

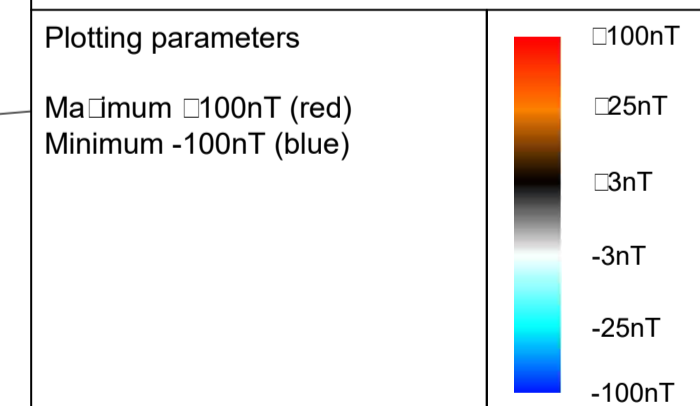
Silting and deliberate infilling of ditches and pits with magnetically enhanced soil creates a relative contrast against the much lower levels of magnetism within the subsoil into which the feature is cut. Systematic mapping of magnetic anomalies will produce linear and discrete areas of enhancement allowing assessment and characterisation of subsurface features. Material such as subsoil and non-magnetic bedrock used to create former earthworks and walls may be mapped as areas of lower enhancement compared to surrounding soils.

Magnetic survey is carried out using a fluxgate gradiometer which is a passive instrument consisting of two sensors mounted vertically 1m apart. The instrument is carried about 30cm above the ground surface and the top sensor measures the Earth's magnetic field whilst the lower sensor measures the same field but is also more affected by any localised buried field. The difference between the two sensors will relate to the strength of a magnetic field created by a buried feature, if no field is present the difference will be close to zero as the magnetic field measured by both sensors will be the same.

Factors affecting the magnetic survey may include soil type, local geology, previous human activity, disturbance from modern services etc.



	Unsurveyable
OS GRID REFERENCES	
	645020.87, 265435.18
	645290.87, 265435.18
	645020.87, 265045.18
	645020.87, 264745.18
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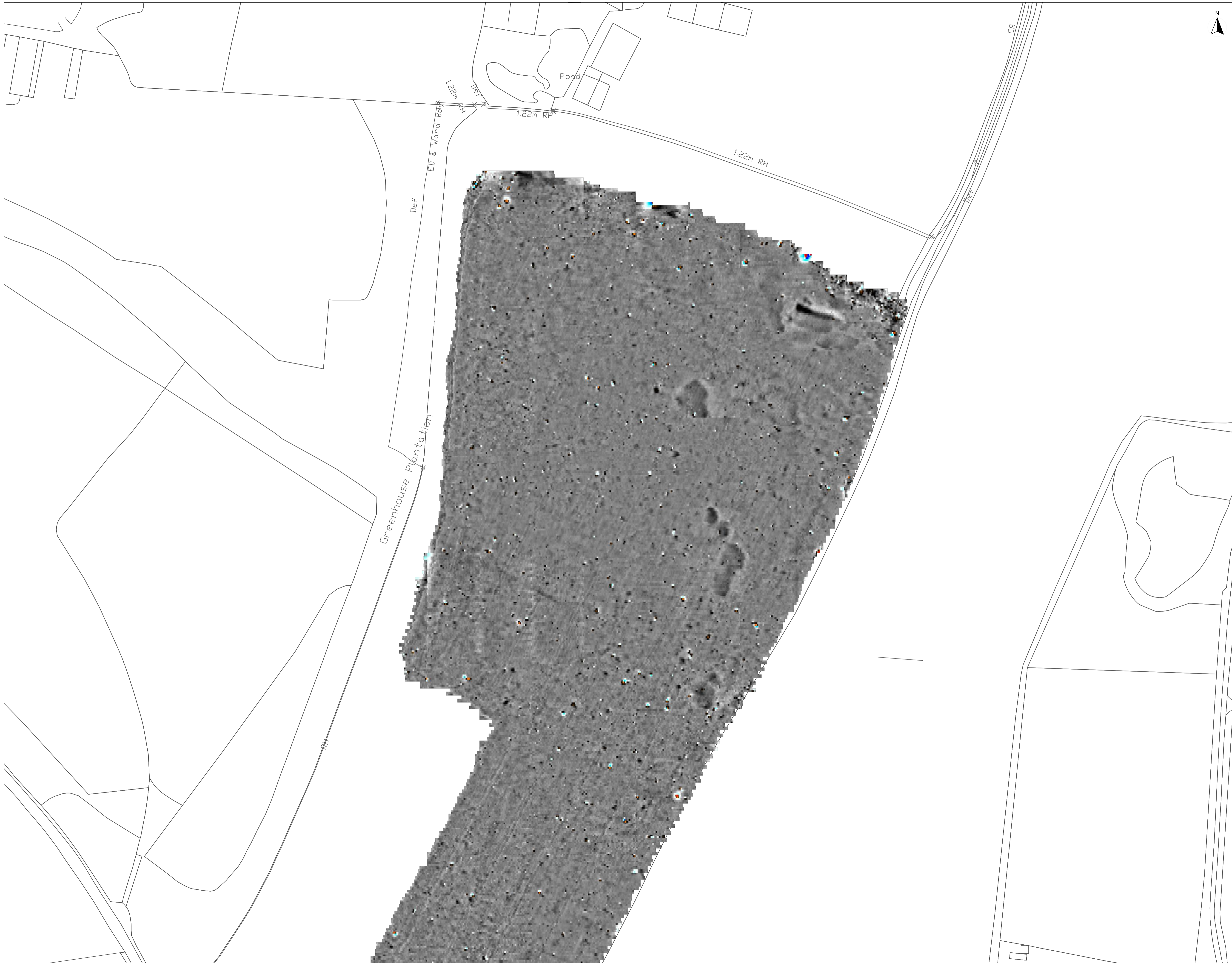
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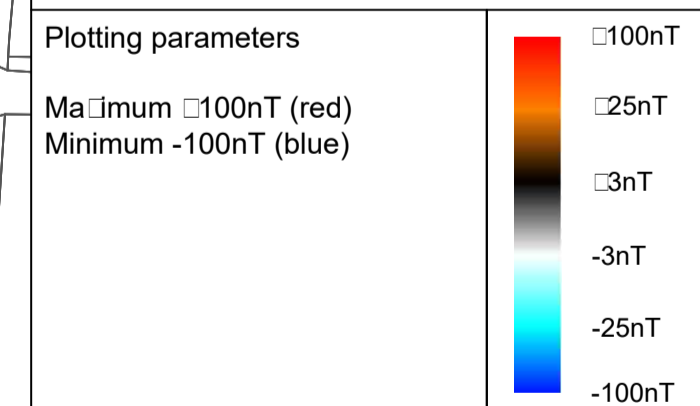
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Scale: 1:2500 @ A1

Fig No: 02



Track

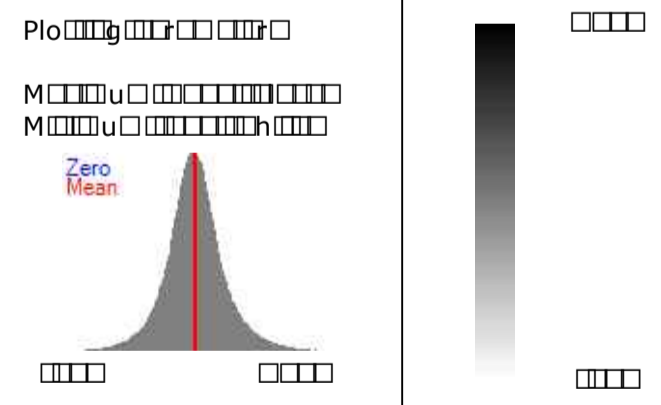


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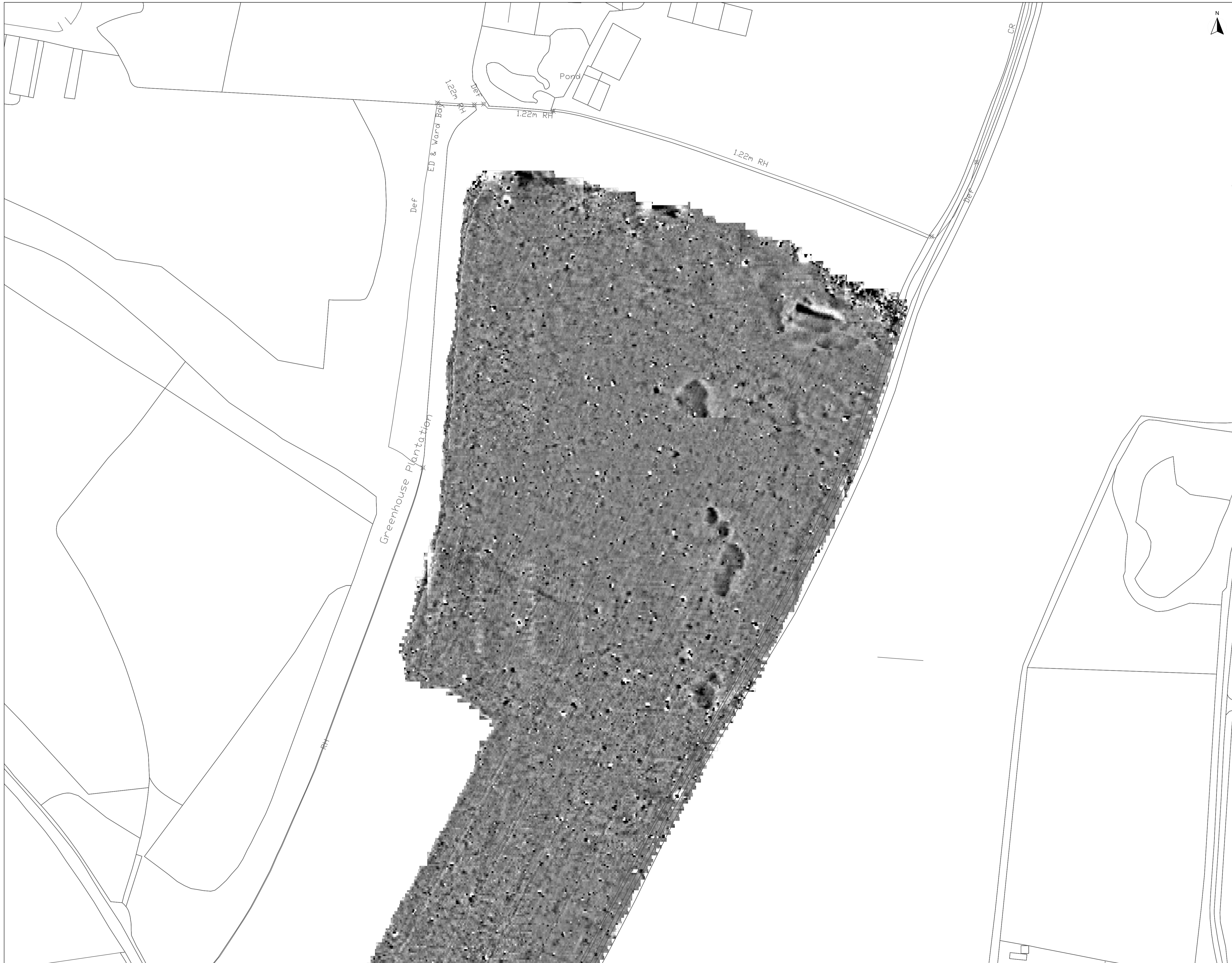
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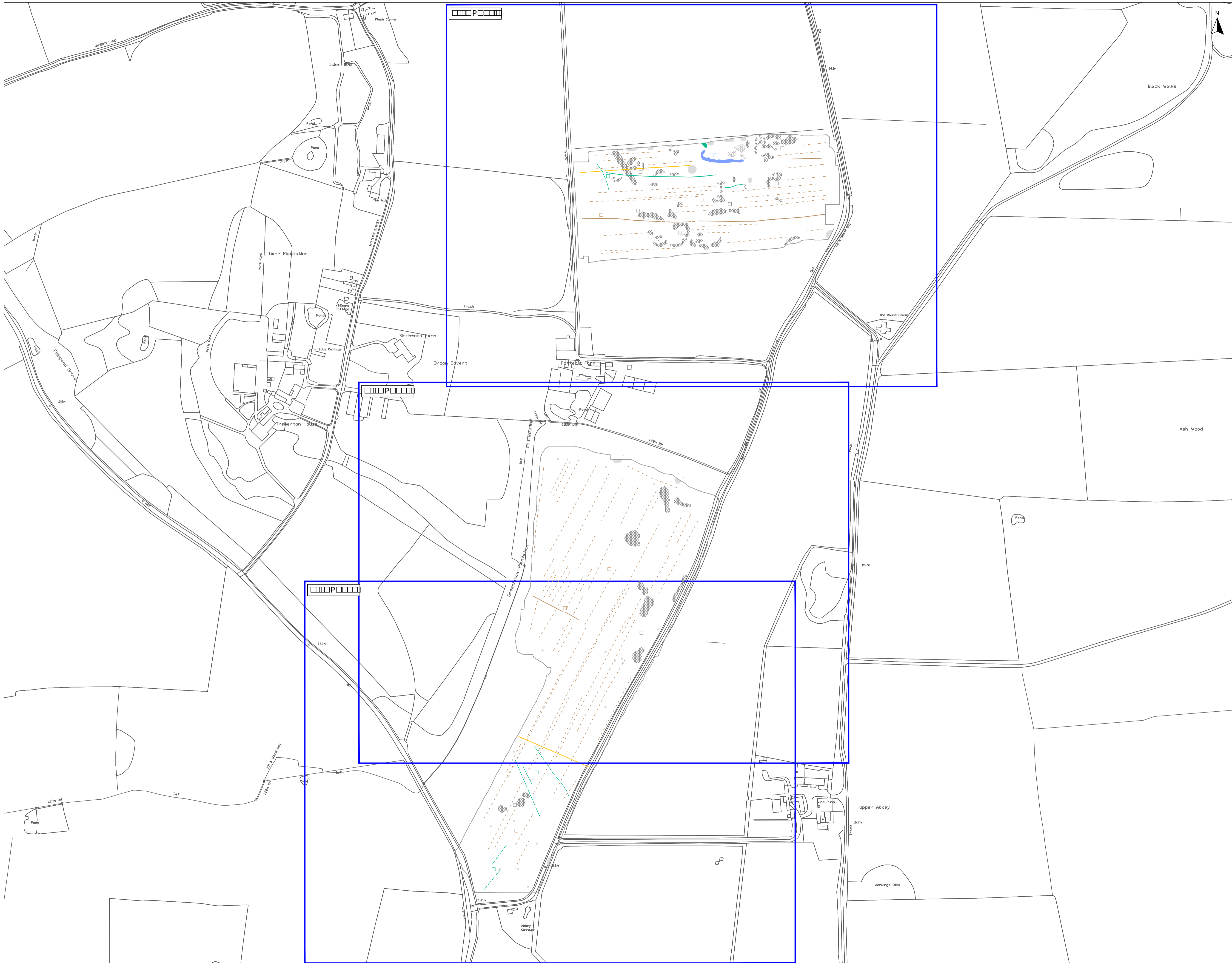
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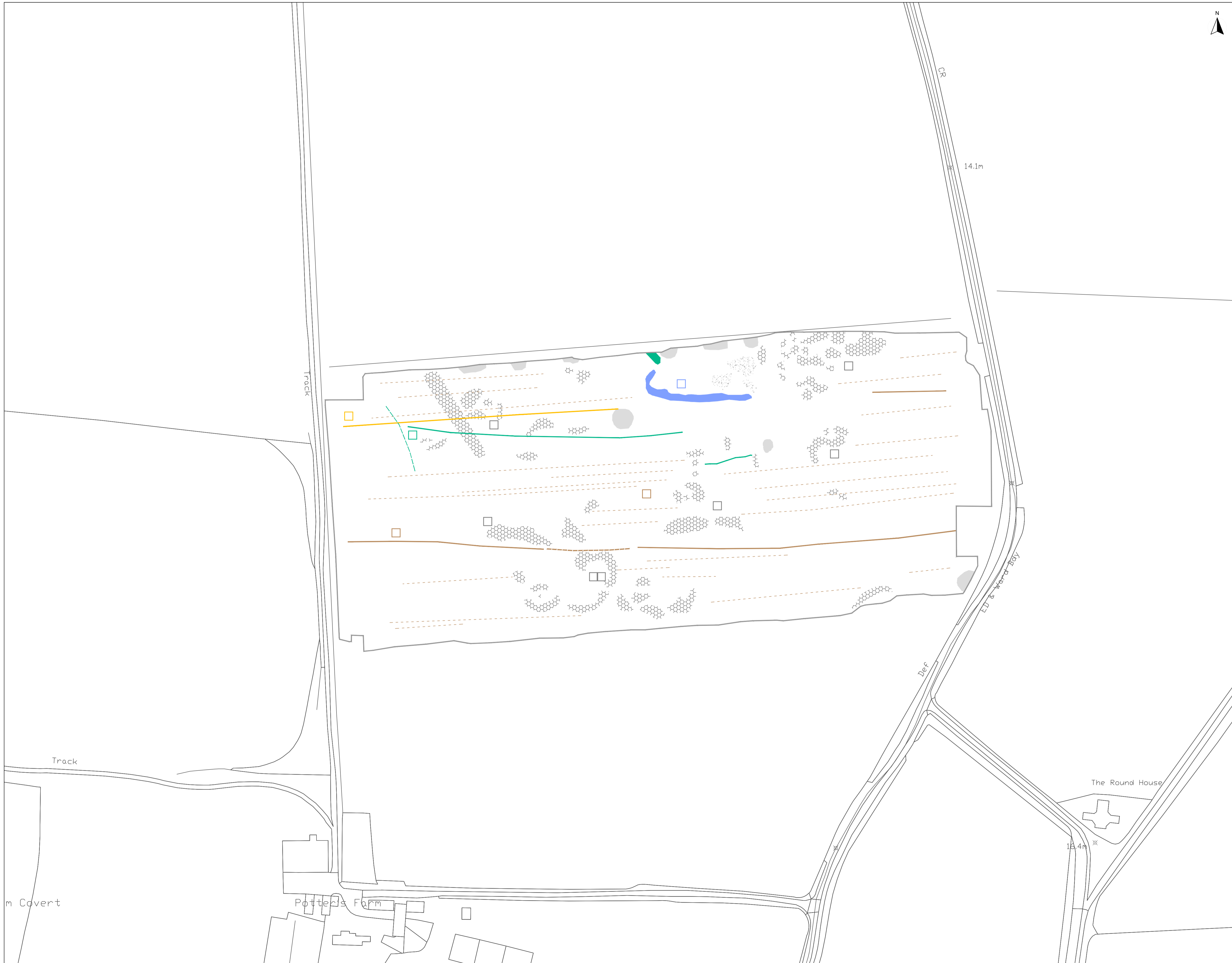
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Project: **J10571 - SIZEWELL**

Scale: 1:1000 @ A1 Fig No: **08**



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	Feature 3
	Feature 4
	Feature 5
	Feature 6
	Feature 7
	Feature 8
	Feature 9
	Feature 10
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	Feature 1
	Feature 2
	Feature 3
	Feature 4
	Feature 5
	Feature 6

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Fig No: **11**



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	Point
	Structure
	Structure
	Structure
	Structure
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	Structure

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	Point
	Point
	Point
	Line
	Area
	Area
	Area

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