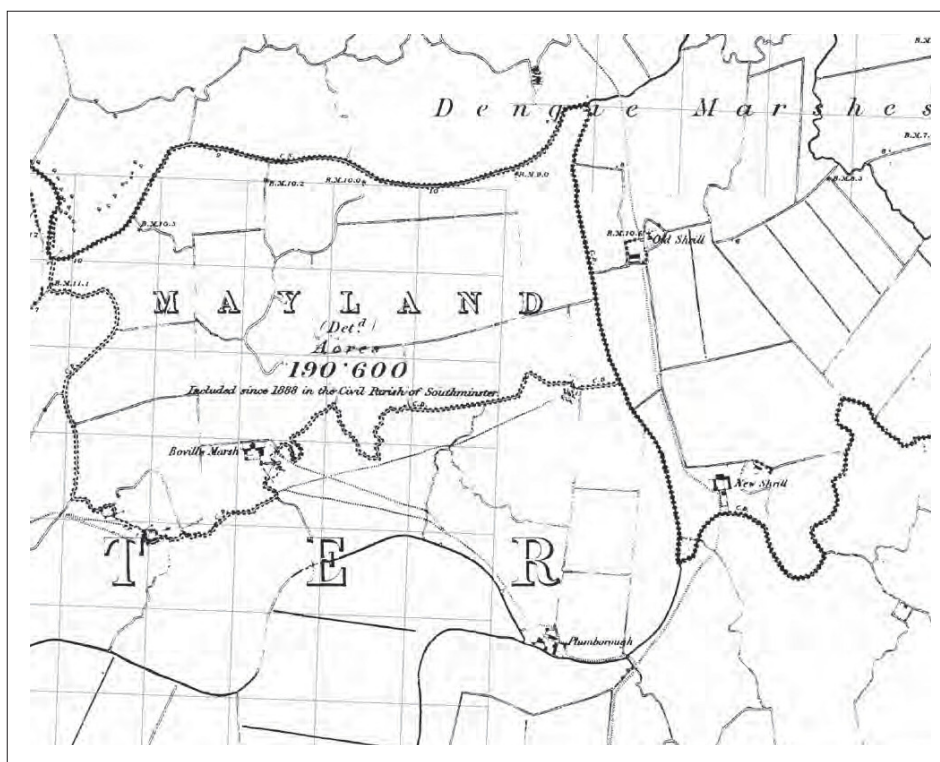




CAMBRIAN
ARCHAEOLOGICAL
PROJECTS

Middlewick Wind Farm Essex

Environmental Impact Assessment



By
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Report No. 543

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Middlewick Wind Farm Essex

Environmental Impact Assessment

Prepared For: John Fairlie

On Behalf of: Engena


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Report No: **543**

Date: **November 2008**

Revised: **July 2009**



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Non Technical Summary

This report results from work undertaken by Cambrian Archaeological Projects Ltd (CAP) for Engena Ltd. The work carried out consisted of a desk based assessment and a field walkover survey in advance of proposed construction of 9 wind turbines at Middlewick on the Dengie Peninsula in Essex. The desk-based assessment appraised the documentary, photographic and cartographic evidence pertaining to the site and its immediate environs whilst the field walkover assessed the area for any visible archaeological remains. This report was drawn up as a revision to an earlier version owing to a change in the proposed turbine layout.

1 Introduction

1.1 Location and scope of work

- 1.1.1 In October/November 2008 Cambrian Archaeological Projects (CAP) carried out a desk based assessment and field walkover survey of land to the north west of Middlewick, Essex (Fig 1), on behalf of their clients Engena Ltd.
- 1.1.2 This work was carried out in respect of a proposed wind farm development on the site. The development concerns the construction of 9 wind turbines on the site with associated access tracks centred on NGR TQ 99865 99493 (See Fig 2).
- 1.1.3 After consultation with Essex County Councils Archaeological representative a 500m search radius from the edge of the development area was agreed.

1.2 Geology and topography

- 1.2.1 The topography of the area of proposed development is largely flat and un-wooded. The landscape is characterised by its flat topographical profile, drainage ditches and small nucleated village settlements.
- 1.2.2 The underlying solid geology of the Middlewick area is mainly composed of London Clay (British Geological Survey, 1979).

1.3 Archaeological and historical background

- 1.3.1 This section provides a brief description of the archaeological and historical background to the area of proposed development.
- 1.3.2 The area of proposed development lies within a larger archaeological landscape dating back to the Neolithic, Bronze and Iron Ages. As part of the Maldon District Historic Environment Characterisation Project the area of the proposed development was subject to assessment. The following are extracts from the aforementioned report:
- 1.3.3 *The Dengie Marshes are an extensive area of present and former salt and grazing marsh. During the Roman period the area was important for salt production. In the medieval and post medieval period the marshes were a valuable resource, providing pasture for sheep, salt making sites, fisheries and hunting grounds related to the settlements on the gravel ridge above the marshes. Finally during the Second World War defences were built into the sea wall to protect the area from German invasion.*

- 1.3.4 *Within the reclaimed marshland the remains of Late Iron Age and Roman salt working sites (Red Hills) are identified as burnt areas visible both from the ground and the air.*
- 1.3.5 *Exploitation of the wildfowl increased in the post medieval period with the construction and use of duck decoy ponds to catch wildfowl. Early examples of duck decoy ponds are thought to date from the 17th century.*
- 1.3.6 *During the Second World War a series of pill boxes were built into the sea wall. Two further WWII defences, a Minefield Control Tower and a Pill box on the southern edge of the area are protected as Scheduled Ancient Monuments.*
- 1.3.7 *The majority of the area originally formed part of the 'Dengie-form' type of coaxial, rectilinear field system, although it becomes increasingly less angular in the south due to the coastal influence. This field type is of considerable antiquity, and may have its origins in the mid-late Saxon period, if not before. However this pattern has largely been obliterated through modern farming techniques leading to boundary loss'.*

2 Aims and Objectives

- 2.1 The main scope and objectives of the archaeological assessment were to reveal by desk-based study, the nature, significance and, where possible, the chronology of the archaeology within the area of the proposed development. The purpose of the desk-based assessment, in accordance with standards and guidance as laid down by the *Institute of Field Archaeologists*, is to gain information about the known or potential archaeological resource within the given area (including presence or absence, character and extent, date, integrity, state of preservation and relative quality of the potential archaeological resource), in order to make an assessment of its merit in context, leading to one or more of the following:
 - The formulation of a strategy to ensure the recording, preservation or management of the resource;
 - The formulation of a strategy for further investigation, whether or not intrusive, where the character and value of the resource is not sufficiently defined to permit a mitigation strategy or other response to be devised;
 - The formulation of a proposal for further archaeological investigation within a programme of research.
- 2.2 With regards the field survey the main objective in accordance with the standards and guidance laid down by the *Institute for Archaeologists* is to gain information about the archaeological resource within a given area or site (including presence or absence, character, extent, date, integrity, state of preservation and quality), in order to make an assessment of its merit in the appropriate context, leading to one or more of the following:
 - The formulation of a strategy to ensure the recording, preservation or management of the resource;
 - The formulation of a strategy to mitigate a threat to the archaeological resource;
 - The formulation of a proposal for further archaeological investigation within a programme of research.

- 2.3 The field study aimed to examine on the ground the land designated for the proposed wind farm and isolate and record any archaeology and historic landscape features that survive within it.

3 Methodology

- 3.1 For the purposes of the archaeological desk based study the following repositories were visited/consulted;

- Regional Historic Environment Record
- Portable Antiquities Scheme (Essex)
- Cambridge Air Photo Unit
- Envirocheck/Landmark Mapping
- County Records Office (Essex)

- 3.2 At these repositories the following sources were consulted:

- All Ordnance Survey Maps
- Tithe Enclosure Award and Parish Maps
- Estate Maps
- Historical documents pertaining to the site
- Archaeological books and journals
- Unpublished reports
- Aerial photographs

- 3.3 As agreed with Essex County Council's Archaeological Advisor, at the Essex Historic Environment Record a 500m search around the edge of the development area was undertaken. This was then supplemented with a similar search of data held by the Archaeology Data Service.

- 3.4 For purposes of the Field Study once all cartographic and archaeological records had been consulted and all relevant material identified, the proposed development areas were subject to a field walkover. A finds sampling strategy was in place during the field study should any surface scatters of pottery sherds or other potential finds warrant it.

- 3.5 The assessment methods used followed that detailed in the DMRB (Design Manual for Roads and Bridges), Volume 11, Section 3, part 2. All sites identified have been categorised following guidelines set out in the DMRB. The allocation of a set value to a site defines the sites archaeological significance. The value categories are described as follows:

- *Very High* – World Heritage sites (including nominated sites), Assets of acknowledged international importance, Assets that can contribute significantly to acknowledged international research objectives.
- *High* – Scheduled Ancient Monuments (including proposed sites), undesignated assets of schedulable quality and importance, Assets that can contribute significantly to acknowledged national research objectives.
- *Medium* – Designated or undesignated assets that contribute to regional research objectives.

- *Low* – Designated and undesignated assets of local importance, assets compromised by poor preservation and/or poor survival of contextual associations, assets of limited value, but with potential to contribute to local research objectives
- *Negligible* – Assets with very little or no surviving archaeological interest
- *Unknown* – The importance of the resource has not been ascertained

3.6 The magnitude of change to the cultural heritage has been assessed with regard to the category of the individual site or landscape, based on the following criteria:

- *No Change:* No change
- *Negligible:* Very minor changes to archaeological materials, or setting
- *Minor:* Changes to key archaeological materials, such that the asset is slightly altered. Slight changes to setting
- *Moderate:* Changes to many key archaeological materials, such that the resource is clearly modified. Considerable changes to setting that affect the character of the asset.
- *Major:* Change to most or all key archaeological materials, such that the resource is totally altered. Comprehensive changes to setting.

3.7 Following the allocation of an impact category for each feature identified in the desk based assessment and field walkover, the significance of effects can be assessed. These are expressed in the following scale (Table 1 – Below):

- Very large
- Large
- Moderate
- Slight
- Neutral

VALUE/SENSITIVITY	Very High	Neutral	Slight	Moderate/ Large	Large or Very Large	Very Large
	High	Neutral	Slight	Moderate/ Slight	Moderate/ Large	Large/Very Large
	Medium	Neutral	Neutral/ Slight	Slight	Moderate	Moderate/ Large
	Low	Neutral	Neutral/ Slight	Neutral/ Slight	Slight	Slight/ Moderate
	Negligible	Neutral	Neutral	Neutral/ Slight	Neutral/ Slight	Slight
		No change	Negligible	Minor	Moderate	Major
MAGNITUDE OF IMPACT						

Table 1 – Table showing impact category

4 The Desk-Based Assessment – Search Data

4.1.1 All sites and buildings, as well as their locations, recorded within the study area are shown on Fig 3 and the impact table (Appendix I).

4.2 Palaeolithic

4.2.1 No recorded Palaeolithic finds or activity could be found for this area.

4.3 Mesolithic

4.3.1 No recorded Mesolithic finds or activity could be found for this area.

4.4 Neolithic

4.4.1 No recorded Neolithic finds or activity could be found for this area.

4.5 Bronze Age

4.5.1 No recorded Bronze Age finds or activity could be found for this area.

4.6 Iron Age

4.6.1 A single Iron Age or possible Romano-British site was recorded in the Essex HER as being located within the assessment area. This was an almost complete vessel found at Boville's Marsh NGR TQ 9912 9925 (PRN 11312). This is likely to have been a Saltern and found in association with a Red Hill (Salt production site). It should also be noted that several more such Red Hills are located just outside the assessment area.

4.7 Romano-British period

4.7.1 See Above

4.8 Post Roman/Saxon period

4.8.1 No recorded Post Roman/Saxon finds or activity could be found for this area.

4.9 Medieval

4.9.1 No recorded Medieval finds or activity could be found for this area.

4.10 Post Medieval

4.10.1 A total of five Post Medieval sites were recorded within the assessment area. These were recorded as follows:

4.10.2 PRN 14994 (i) & (ii) (see fig 2) – Line of Post medieval sea defence located to the north of Asheldham Brook from NGR TL 993 001 to TM 000 001.

4.10.3 PRN 2798 – New Shrill, the site of a Post medieval windmill is located at NGR TR 005 994.

4.10.4 PRN 16023 – The site of a former sea defence, most likely Post Medieval in date, is located 500m to the south of Boville's marsh at NGR TQ 997 999.

4.10.5 PRN 14983 – Southminster sea wall, again most likely Post medieval in date, is located at NGR TR 010 994.

4.10.6 PRN 16007 – Site of Post Medieval sea walls to the north west of Brook farm located at NGR TM 0006 0004

4.11 Modern

4.11.1 A total of one modern site was recorded within the assessment area. This was recorded as follows:

4.11.2 PRN 14994 – Probable Second World War bomb crater located at NGR TL 9970 0020.

4.12 Undated/Uncertain

4.12.1 A total of one undated/uncertain site was recorded within the assessment area. This was recorded as follows:

4.12.2 PRN 16026 – Site of possible former sea defence located to the north east of Ray Wick. Consists of earthen bank and ditch earthwork. This is undated and is located at NGR TQ 986 993.

5 Map Regression

5.1.1 The 1777 map is produced at such a scale that not a great deal of detail is visible. The small farms around the assessment area are shown although no details within the assessment area itself are visible. It is worth noting that large tracts of land, including the assessment area, is marked as being marshland.

5.1.2 The assessment area falls into three separate parishes. The parishes of Dengie, Mayland and Southminster. All three tithe maps date to c.1840 for these parishes and all were studied as part of the map regression. The maps available were copies of originals and had been reproduced at a reasonably small scale. Detail was still clear however and was a marked improvement from the 1777 map. Four farmsteads are marked although names are either not present or too small to make out. No further features within the assessment area were noted on the tithe maps. Owing to the poor quality of the reproduced maps they are not presented within the text.

5.1.3 The 1880 1st Edition 6 Inch OS Map shows the development area in reasonably clear detail. Four farmsteads appear to be within the development area. These are marked as Boville Marsh, Old Shril, New Shril and Plumborough. Field boundaries, tracks and apparent waterways (drainage ditches) are also shown in reasonable detail.

5.1.4 The 1897 2nd Edition 6 Inch OS Map shows largely the same detail as that seen on the first edition with very few changes within the proposed area of development. The details contained within the map are shown in slightly better clarity although remain largely the same as shown in 1880. No significant changes were noted.

5.1.5 The 1924-25 Ordnance Survey map again shows a largely unchanged landscape in the area of proposed development. Drainage ditches and field boundaries are shown in clear detail. No changes within the four marked farmsteads are evident. No significant changes were noted.

5.1.6 The 1960-61 Ordnance Survey map again shows a largely unchanged landscape in the area of proposed development. In terms of drainage ditches and field boundaries little appears to have changed since the 1880 1st Edition OS map. The farmstead marked as Plumborough has, however, seemingly fallen into disuse between 1924 and 1960 as it is no longer marked or named on the map. No other significant changes were noted.

5.1.7 The 1974-79 Ordnance Survey map again shows a slightly changed landscape in the area of proposed development. Along with the disappearance of Plumborough between 1924 and 1960, the farmstead named Old Shril also appears to have been removed by this point. No other significant changes were noted. Field boundary change on the

eastern edge of the development area is also evident with larger fields seemingly being opened up. This is no doubt as a result of Old Shrill being disused and its holdings being taken over. Also, a small square enclosure with a central circular feature is now shown as being located approximately 240m to the north of turbine 4.

- 5.1.8 The 2008 Ordnance Survey map shows the landscape of the assessment area as it appears today. More of the smaller and more meandering field boundaries appear to have been removed since the publication of the 1974-79 Ordnance Survey map leaving a landscape of largely open fields and drainage ditches (See Plates 1 - 6). The remaining two farmsteads of Boville Marsh and New Shrill also appear to have been completely removed between 1974 and 2008. The circular feature marked to the north of turbine 4 appears now to be shown as a pond.

5.2 Aerial Photographs

- 5.2.1 The area is generally well covered by aerial photography and various photographs were consulted during the course of the desk top assessment.

- 5.2.2 LF95 – 29th June 1953. This oblique shot is located at grid reference TM 000 005 and covers the areas of Turbines 1 and 4. The detail is reasonably sharp, field boundaries, ditches and tracks are evident. No cropmarks or other features are visible. Owing to the poor quality of the reproduced aerial photograph it is not presented within the text.

- 5.2.3 LF96 – 29th June 1953. This oblique shot is located at grid reference TM 000 007 and covers the areas of Turbines 1 and 4. The detail is reasonably sharp, field boundaries, ditches and tracks are evident. No cropmarks or other features are visible.

- 5.2.4 1970 (a) Aerial Photograph. This vertical shot covers the western half of the assessment area. The locations of Turbines 4 – 9 are shown as well as that of the anemometry mast. A great deal of cropmarks seemingly relating to both defunct linear field boundaries as well as meandering watercourses are shown. Owing to the poor quality of the reproduced aerial photograph it is not presented within the text.

- 5.2.5 1970 (b) Aerial Photograph. This vertical shot covers the remaining eastern half of the assessment area. The locations of Turbines 1 – 4 are shown. Similar cropmarks seemingly relating to both defunct linear field boundaries as well as meandering watercourses are shown although not in the same quantities as the western half of the assessment area. A small square enclosure with a central circular feature is noted to the north of turbine 4. Owing to the poor quality of the reproduced aerial photograph it is not presented within the text.

- 5.2.6 Plate 7 - 2008 Satellite Image. The 2008 satellite image of the assessment area shows each turbine location in a good degree of detail. Cropmarks are particularly prevalent to the south of Turbine 9. These are most likely the result of activity on the site of New Shrill farm. A linear field boundary is also visible running between turbines 8 and 9. This is likely to relate to the track/field boundary marked on early edition OS maps as running between Old and New Shrill farms. It is also worth noting that a possible building is seen to be cropmarked to the north of Turbine 7. This is located just outside the assessment area boundary.

5.3 Portable Antiquities Scheme

- 5.3.1 The Portable Antiquities Scheme database was consulted in order that any recent finds from the assessment area be included in this study. The database search returned no finds from the assessment area.

6 The Field Walkover

- 6.1.1 Turbine 1 – E599333 N199915. The area is flat with no immediately obvious extant archaeological features within the area of the proposed turbine. Fragments of ceramic building material were noted within the topsoil underfoot in the general area of the proposed turbine.
- 6.1.2 Turbine 2 – E599387 N199516. The area appears flat with no immediately obvious extant archaeological features within the area of the proposed turbine. Fragments of ceramic building material were noted within the topsoil underfoot in the general area of the proposed turbine.
- 6.1.3 Turbine 3 – E599463 N199128. The area appears flat with no immediately obvious extant archaeological features within the area of the proposed turbine. Fragments of ceramic building material and modern pottery were noted underfoot in the general area of the proposed turbine.
- 6.1.4 Turbine 4 – E599770 N199956. The area appears flat with no immediately obvious extant archaeological features within the area of the proposed turbine. Somewhat fewer fragments of ceramic building material than observed previously were noted underfoot in the general area of the proposed turbine. The turbine is located between a field boundary and the raised bank of a watercourse to the north.
- 6.1.5 Turbine 5 – E599817 N199532. The area appears flat with no immediately obvious extant archaeological features within the area of the proposed turbine. Fragments of ceramic building material, glass and modern material were noted underfoot in the general area of the proposed turbine.
- 6.1.6 Turbine 6 – E600110 N199182. The area appears flat with no immediately obvious extant archaeological features within the area of the proposed turbine. Fragments of ceramic building material, glass and modern material were noted underfoot in the general area of the proposed turbine.
- 6.1.7 Turbine 7 – E600208 N200041. The area appears flat with no immediately obvious extant archaeological features within the area of the proposed turbine. Somewhat fewer fragments of ceramic building material and modern material than observed previously were noted underfoot in the general area of the proposed turbine.
- 6.1.8 Turbine 8 – E600292 N199671. The area appears flat with no immediately obvious extant archaeological features within the area of the proposed turbine. Fragments of ceramic building material were noted within the topsoil underfoot in the general area of the proposed turbine.
- 6.1.9 Turbine 9 – E600518 N199397. The area appears largely flat with no immediately obvious extant archaeological features within the area of the proposed turbine. Fragments of ceramic building material were noted within the topsoil underfoot in the general area of the proposed turbine.
- 6.1.10 Anemometry Mast – E600105 N199503. The area appears flat with no immediately obvious extant archaeological features within the area of the proposed mast. Fragments of ceramic building material were noted within the topsoil underfoot in the general area of the proposed mast.
- 6.1.11 Whilst the field walkover revealed no finds or extant earthworks within or close to the area of proposed turbine locations in several areas crop marks were noted. These were

not seen to be particularly close to any of the turbine locations but where noted in three areas within the assessment area. Owing to the flat topography of the area these did not photograph well as no elevation could be achieved. Plate 8 shows one such cropmark located 300m to the south west of turbine 6 (TR 00330 99053). All the cropmarks noted appeared to be meandering in their courses and are likely to reflect old watercourses.

- 6.1.12 A visit was made to the small square enclosure with a central circular feature, as noted on both the later Ordnance Survey maps and the 1970's aerial photographs. The square enclosure is no longer visible. It was observed to be a large (30x30m) circular depression with a smaller (13x13m) raised area in the centre. A natural watercourse appears to form the northern edge of the circular depression. All around the edge of the feature the ground is extremely marshy and waterlogged with water being retained in the base of the feature. The HER notes a bomb crater within this field although this is probably located 200m to the east. The circular feature appears on the OS map for the first time in 1974-79 and is not marked on the earlier 1960 edition. This may support its not being the bomb crater as recorded in the HER.

7 Discussion and Interpretation

7.1 Reliability of Field Investigation and Desk Top Assessment

- 7.1.1 The investigation was unhampered by any modern buildings with agricultural activity proving only a small obstacle to the field investigation.

7.2 Overall Interpretation

- 7.2.1 The area of proposed development and 500m beyond appears to contain only a few features and finds from various periods. The majority of these recorded sites represent stretches of defunct sea defence.
- 7.2.2 Combining the evidence gathered from the desk based assessment (i.e. cartographic and photographic sources) and the field walkover the assessment area appears to have been predominantly agricultural since its reclamation and drainage. Map regression has shown the removal of field boundaries and farmsteads over time. The removed field boundaries are still visible in places as linear cropmarks. The removed farmsteads appear to have been almost erased from the landscape as very little trace remains above ground. Cropmarks in the immediate vicinity of turbine 9 may relate to 'New Shrill' farm and Mill (PRN 2798) whilst the farms of Plumborough and Old Shrill have seemingly left no trace.
- 7.2.3 The search of the HER data revealed only 10 recorded sites within the assessment area. Located just beyond the 500m search area however where several 'Red Hills', sites of Iron Age/Roman salt production. Whilst only one such site was recorded within the assessment area it seems highly likely that further unrecorded examples do exist.

7.3 Significance

- 7.3.1 The Field Walkover and Desktop Assessment have highlighted the presence of archaeological features and finds in and around the area of proposed development. Whilst these are predominantly made up of Post medieval sea defences evidence of Iron Age/Roman salt production was also located.

- 7.3.2 The *recorded and known* archaeology within the proposed development area and 500m beyond its boundary appears to be relatively low in significance and of local interest rather than regional or national importance.

8 Predicted impacts

- 8.1.1 All predicated impacts in terms of magnitude on each recorded site are shown on the impact table in Appendix I.
- 8.1.2 A minor impact possibly resulting in a slight change to PRN 16023 may occur with construction of the east – west branch of the turbine 4 access track. This is, however, largely dependent on the construction methods employed.
- 8.1.3 Whilst Turbine 8 is reasonably close to the site of ‘Old Shrill’ as marked on the early series OS maps it appears to be a sufficient distance away that no disturbance is anticipated.
- 8.1.4 Turbine 9 is in very close proximity to the site marked on the historic maps as ‘New Shrill’ and in the regional HER as a Post medieval Mill (PRN 2798). The condition of the below ground remains of ‘New Shrill’ and the Mill is currently not known. The mill has been assigned only a ‘Low’ value. However, as the impact is likely to be major this will likely result in a moderate magnitude of impact.
- 8.1.5 Access tracks running east – west to Turbines 8 and 9 appear to bisect a long linear cropmark. The early edition OS maps show this to be a track/field boundary running between Old and New Shrill farms. This may be impacted upon depending on the access track construction methodology to be employed.

9 Proposals

- 9.1.1 Despite the Desk Based Assessment having located relatively few archaeological features within the area of proposed development it is still felt that further investigatory work be undertaken in the interests of locating any potential unknown archaeology.
- 9.1.2 Recommended forms of further work would include a geophysical survey of each turbine location, mast location and construction compound so as to ascertain the presence of below ground features within the above locations prior to the commencement of groundworks.
- 9.1.3 Should the surveyed locations yield positive results in terms of archaeological features then trial trenching may be undertaken. Where the surveyed areas are blank then trial trenching to test alluvial deposit depth may be considered.

10 Acknowledgements

- 10.1.1 Thanks to the extremely helpful staff at the Essex HER and County Records Office for all their help in collating information.

11 Bibliography and references

British Geological Survey, 1979. Geological Survey Ten Mile Map.

Design Manual for Roads & Bridges, 2007. Volume 11 Environmental Assessments, Section 3 Environmental Topics, Part 2 Cultural Heritage.

Maldon District Historic Environment Characterisation Project. 2008. Essex County Council

Other sources consulted

Essex Historic Environment Record:

Full search of all HER data within a 500m radius of the edge of the proposed development area

Archaeology Data Service sites index:

Full search of sites listed within a 500m radius of the edge of the proposed development area

Envirocheck/Landmark mapping service:

1880	1:10560 Ordnance Survey Map
1897	1:10560 Ordnance Survey Map
1924-5	1:10560 Ordnance Survey Map
1960-1	1:10560 Ordnance Survey Map
1974-79	1:10000 Ordnance Survey Map
2008	1:10000 Ordnance Survey Map

Essex County Records Office:

1777 Map of Essex and the Dengie Peninsula
c.1840 Mayland Parish Tithe Map
c.1840 Dengie Parish Tithe Map
c.1840 Southminster Parish Tithe Map

Portable Antiquities Recording Scheme (Essex):

Portable Antiquities Scheme finds database - <http://www.findsdatabase.org.uk> - accessed 17/10/2008

List of Air Photographs from National Monuments Record (Swindon)

LF95 – 29th June 1953
LF96 – 29th June 1953

ARCHIVE COVER SHEET

Middlewick, Essex

Site Name:	Middlewick Wind Farm
Site Code:	MWF/08/DBA
PRN:	-
NPRN:	-
SAM:	-
Other Ref No:	Report No. 543
NGR:	NGR TQ 99865 99493
Site Type:	Rural/Agricultural
Project Type:	Desk Based Assessment & Walkover
Project Manager:	Chris E Smith
Project Dates:	November 2008
Categories Present:	Multi Period
Location of Original Archive:	CAPLtd
Location of duplicate Archives:	-
Number of Finds Boxes:	None
Location of Finds:	-
Museum Reference:	-
Copyright:	CAPLtd
Restrictions to access:	None

Appendix 1								
Middlewick Wind Farm, Essex								
Impact Table								
Site PRN	NGR	Site Type	Source	Period	Value	Impact	Impact Magnitude	In Development Area
2798	TR 005 994	Windmill location	HER	Post Med	Low	Major	Moderate	Yes
11312	TQ 9912 9925	Findspot - Ceramic Vessel	HER	Iron Age/Roman	Low	No Change	Neutral	No
14983	TR 010 994	Sea Wall	HER	Post Med	Low	No Change	Neutral	No
14994	TL 9970 0020	Bomb Crater	HER	Modern	Low	No Change	Neutral	No
14994 (i) & (ii)	TL 993 001 to	Sea Wall	HER	Post Med	Low	No Change	Neutral	No
	TM 000 001							
16007	TM 0006 0004	Sea Wall	HER	Post Med	Low	No Change	Neutral	No
16023	TQ 997 999	Sea Wall	HER	Post Med	Low	Minor	Slight	Yes
16026	TQ 986 993	Sea Wall	HER	Undated	Low	No Change	Neutral	No

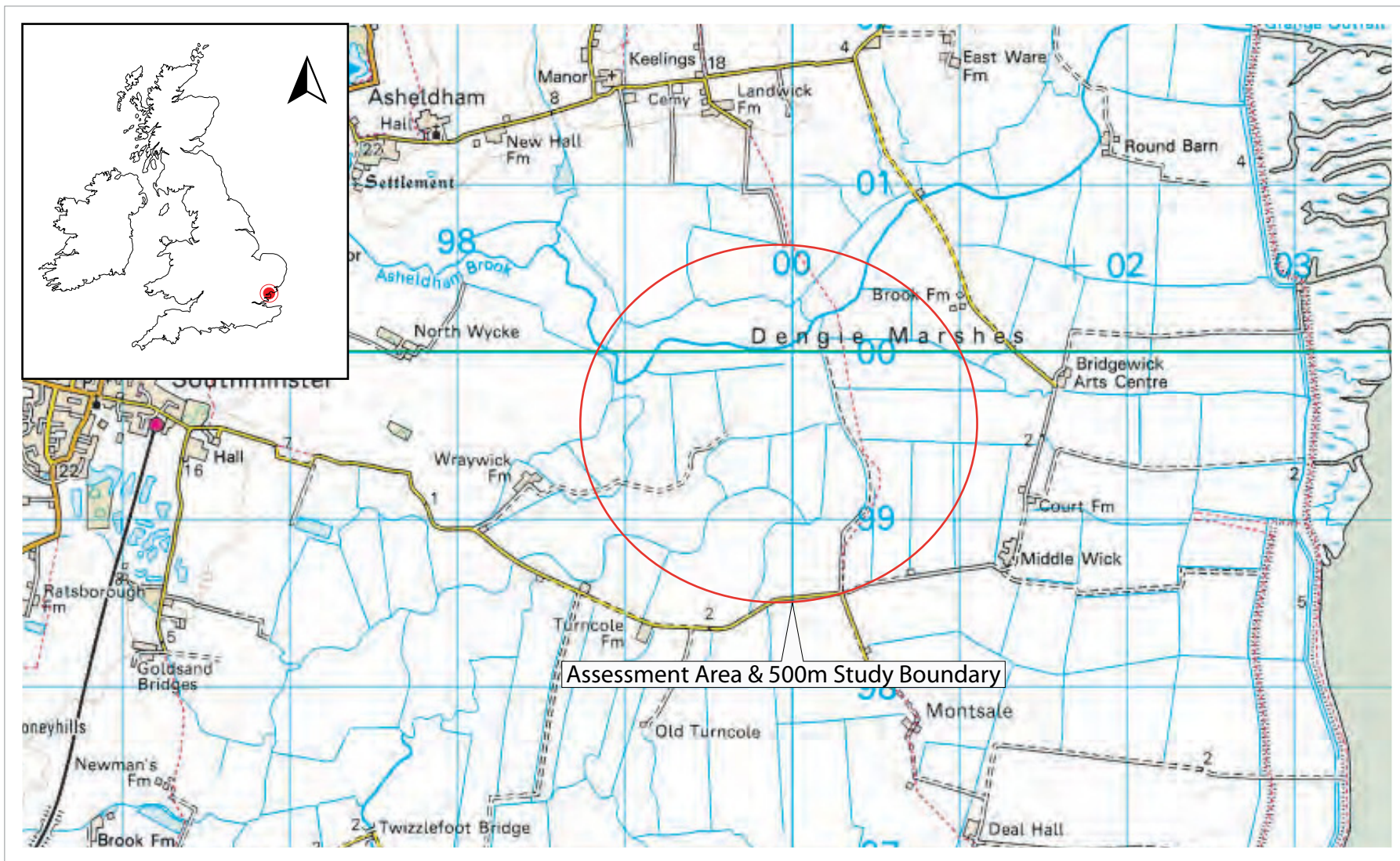
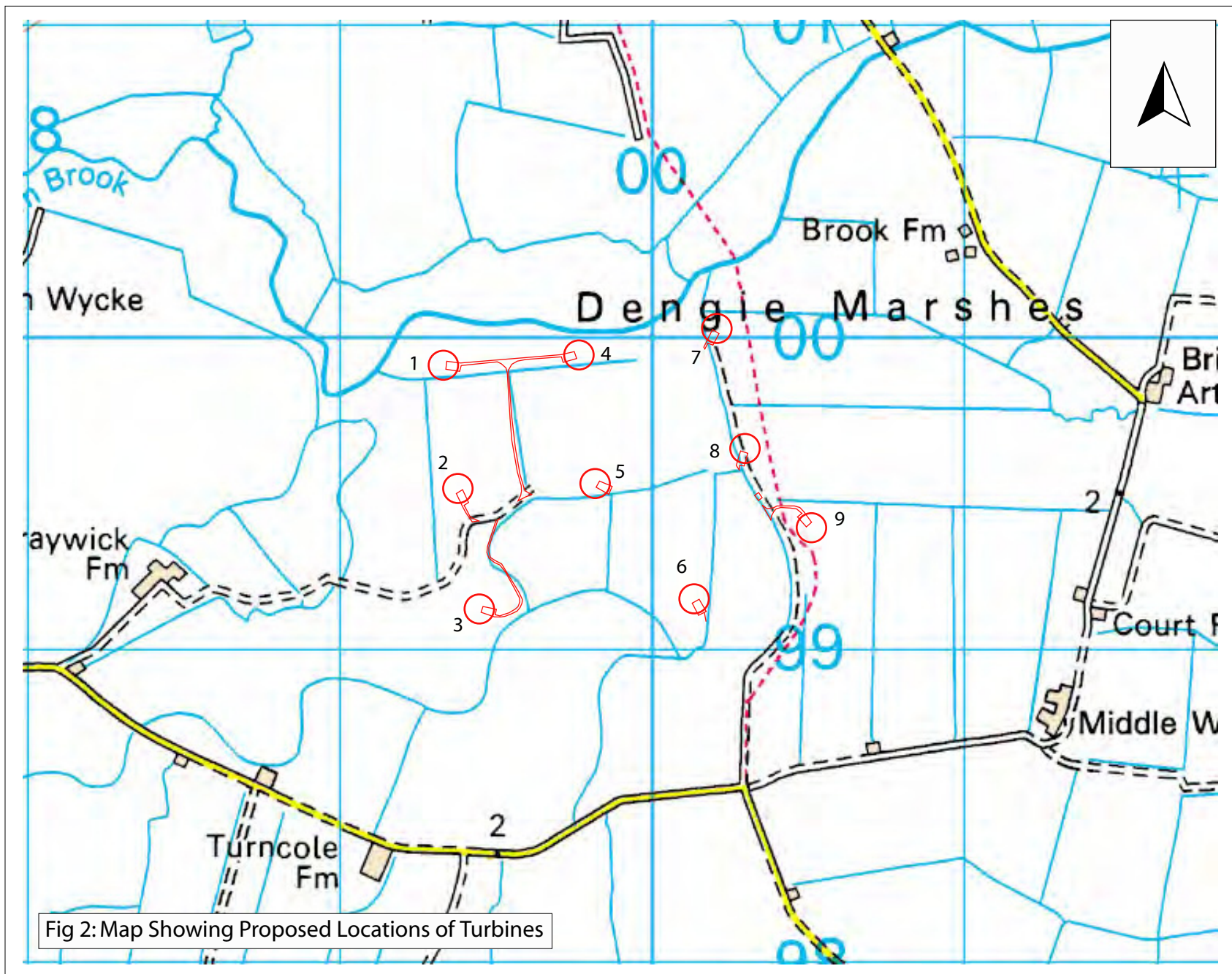


Fig 01: Map Showing Location of Assessment Area & 500 Metre Study Boundary



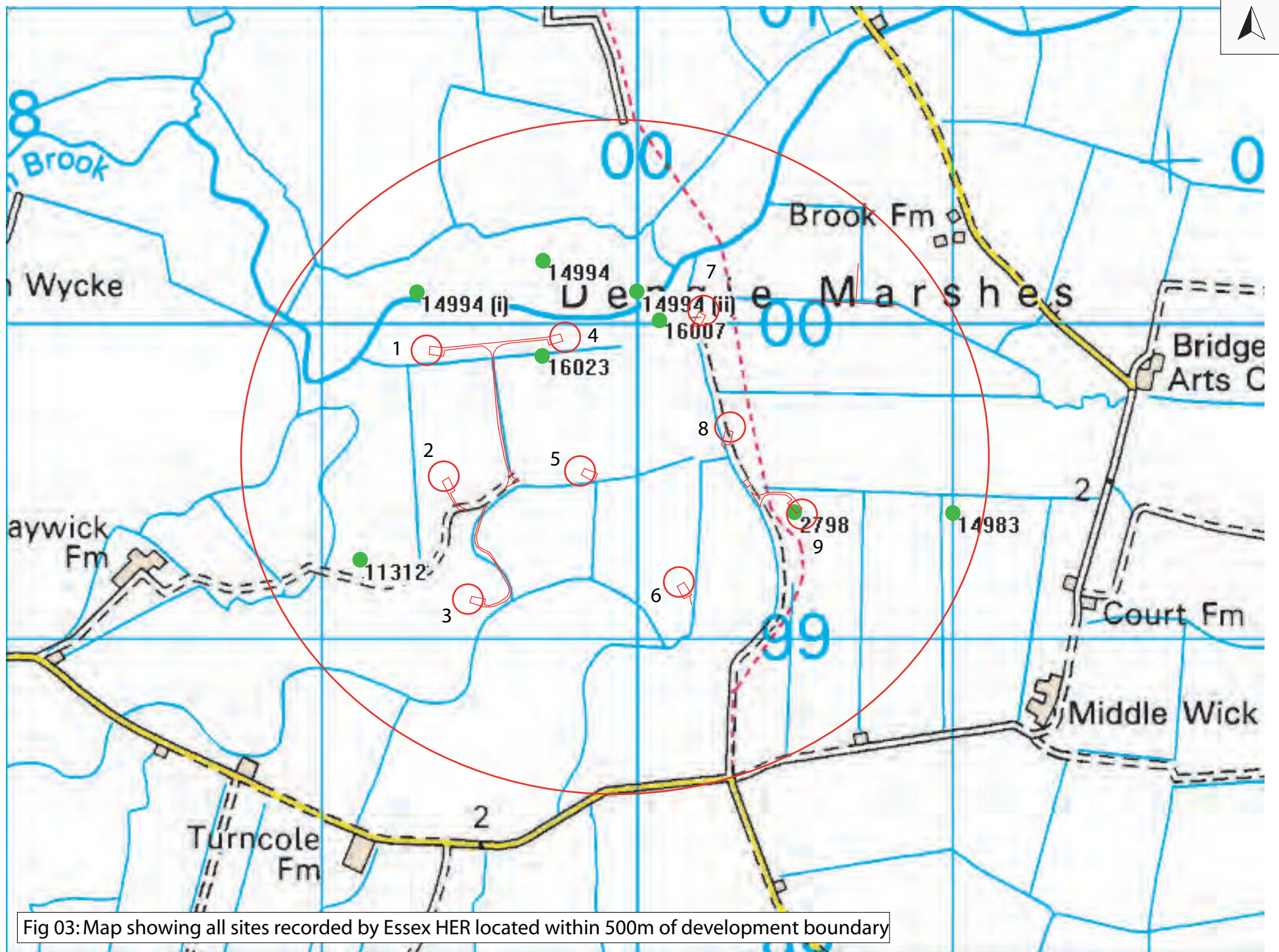


Fig 03: Map showing all sites recorded by Essex HER located within 500m of development boundary

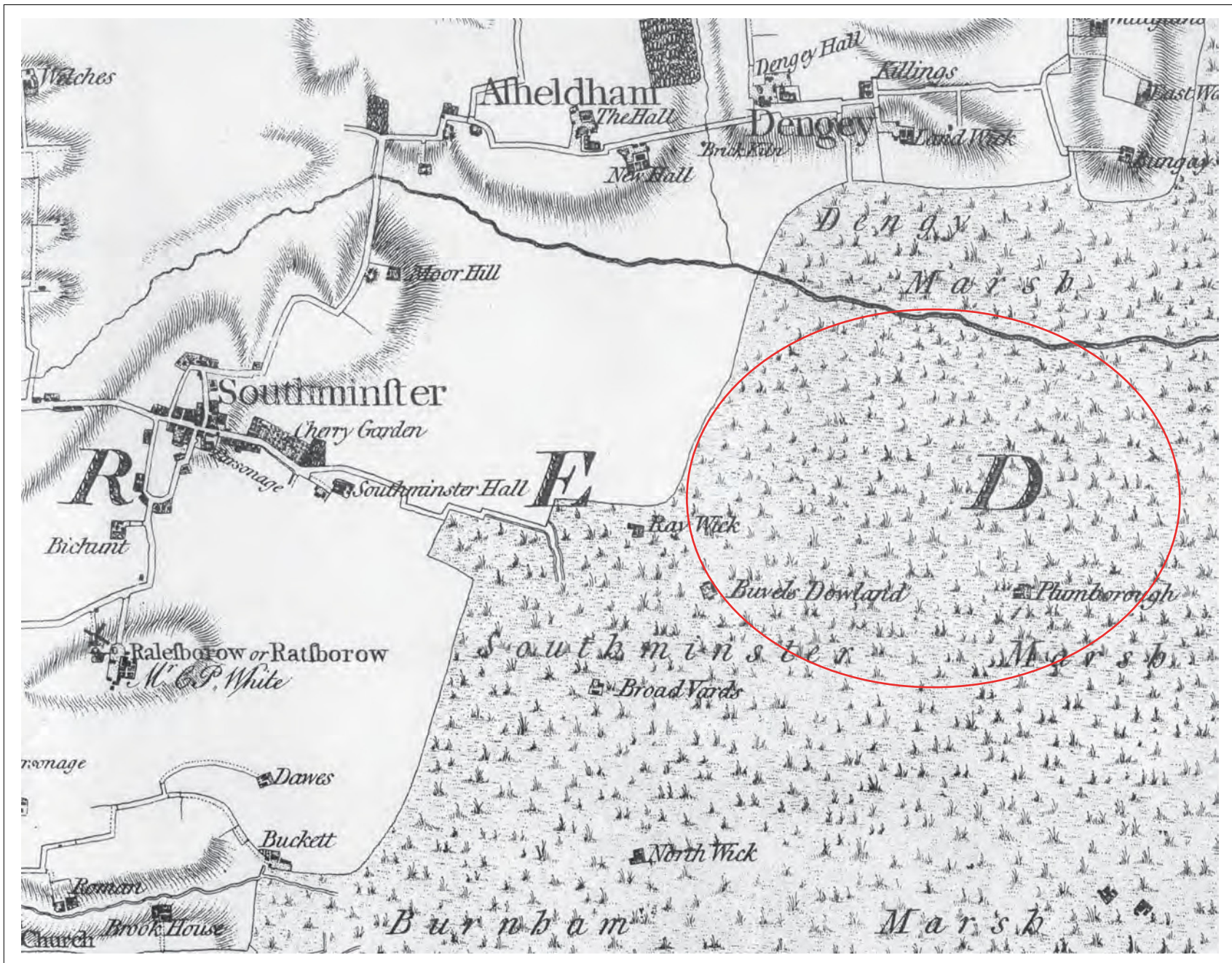
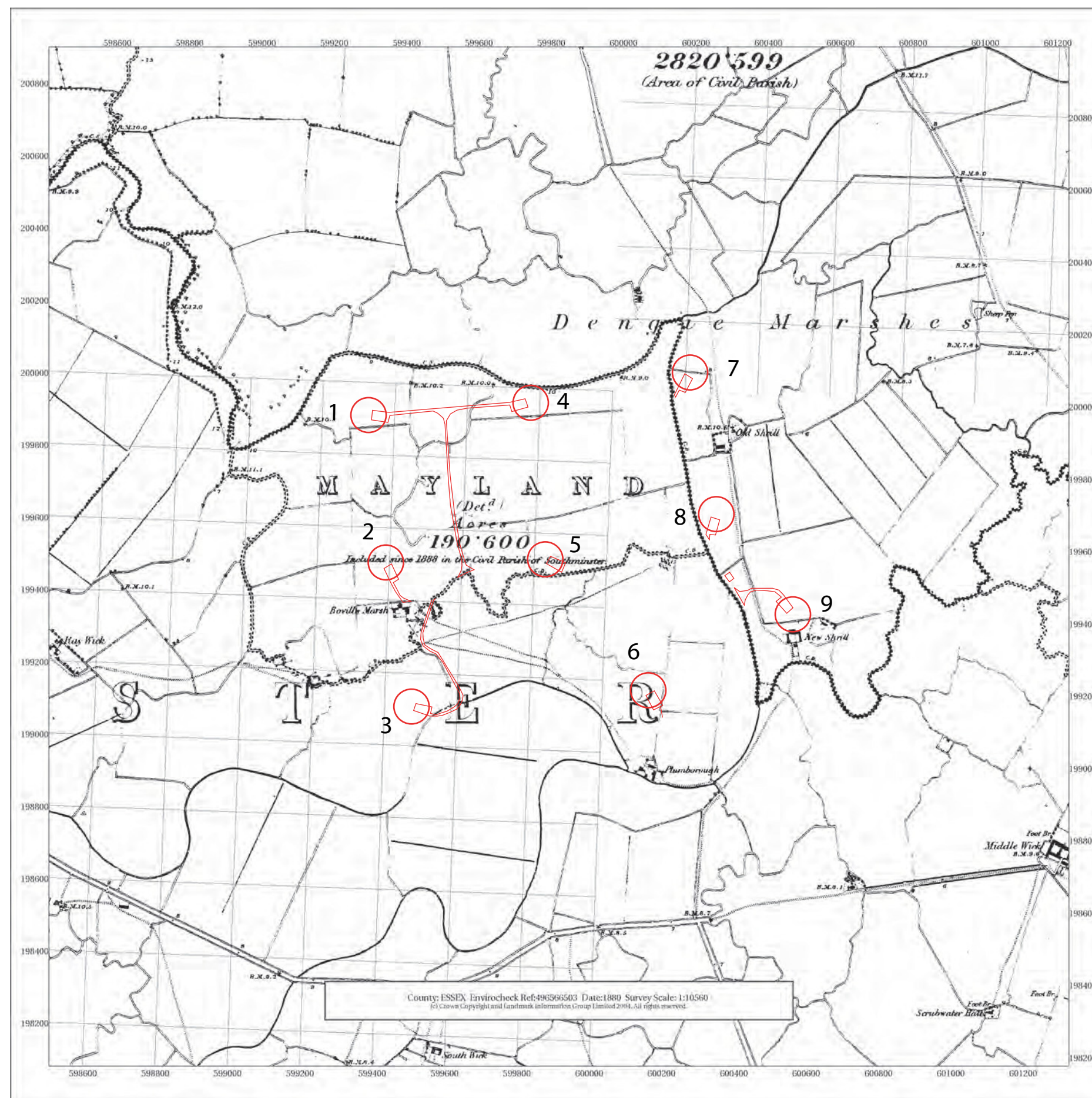


Fig 4: 1777 Map Southminster & Asheldham Map showing approximate location of assessment area



Job Title: Middlewick Wind Farm

Drawing Title: 1880 OS

Date: 23/11/2008

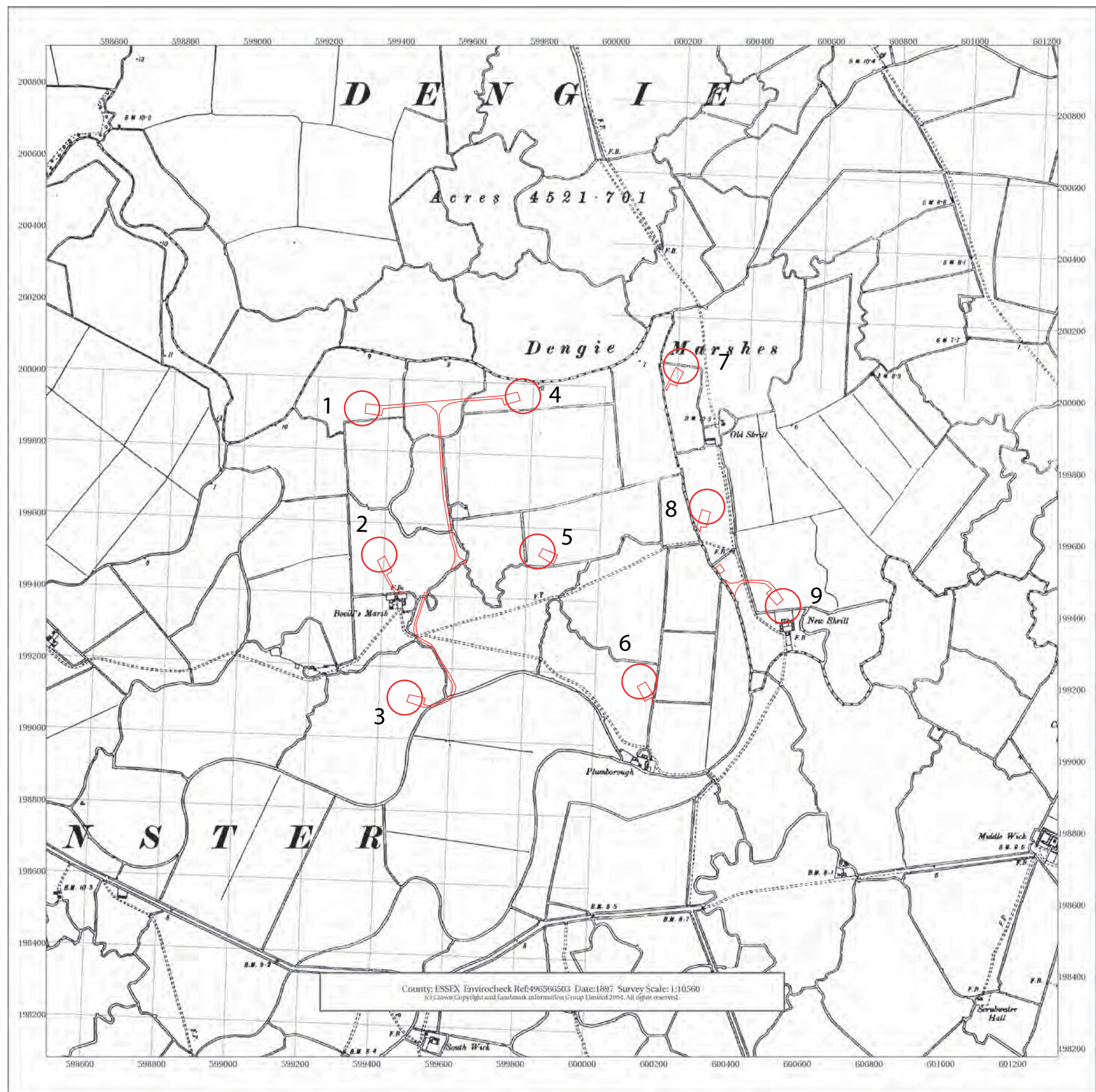
Drawn By: C E Smith

Scale: -

Figure 05:

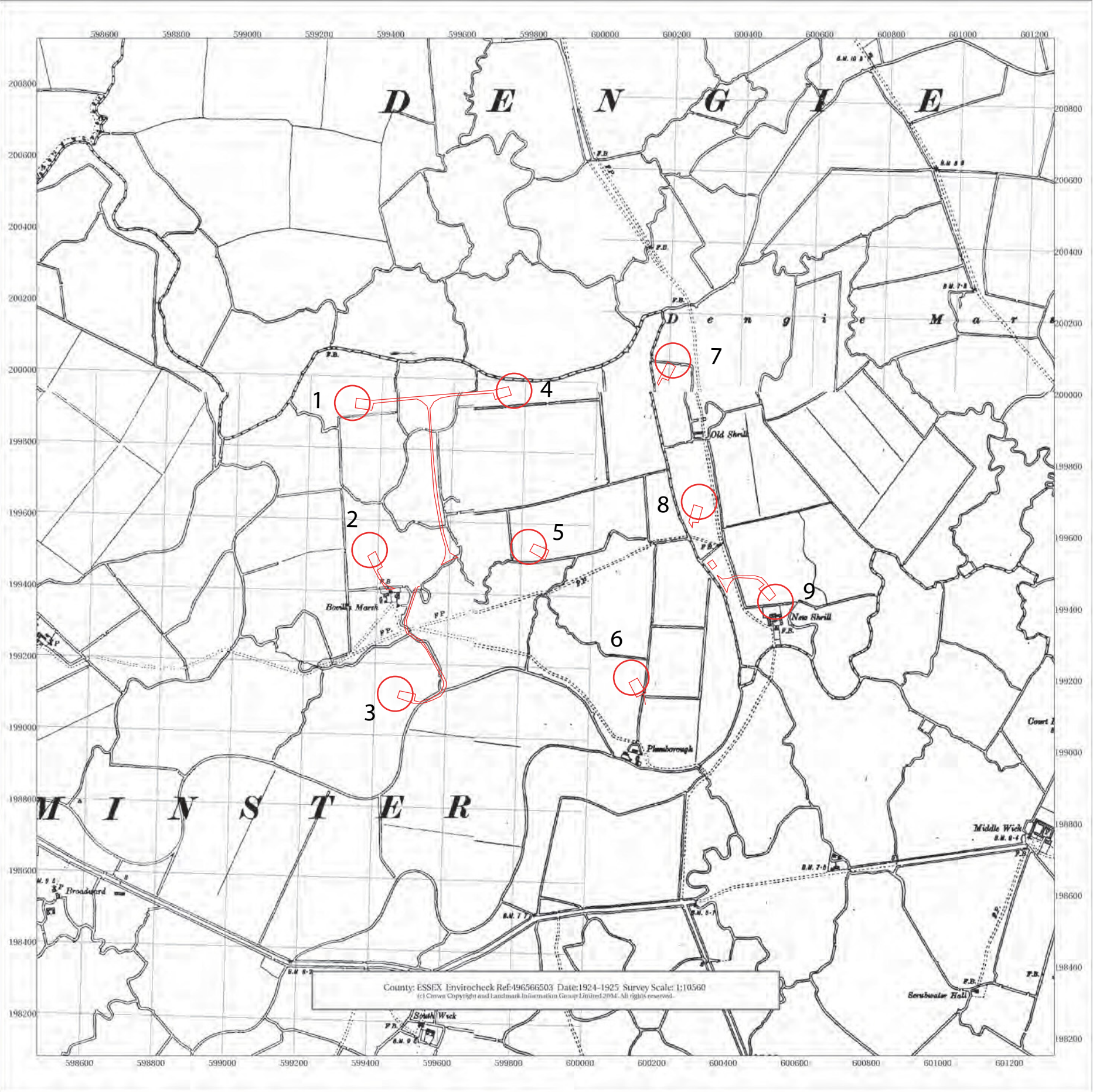
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Job Title:	Middlewick Wind Farm
Drawing Title:	1897 OS
Date:	23/11/2008
Drawn By:	C E Smith
Scale:	-
Figure 06:	

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Job Title: Middlewick Wind Farm

Drawing Title: 1924-5 OS

Date: 23/11/2008

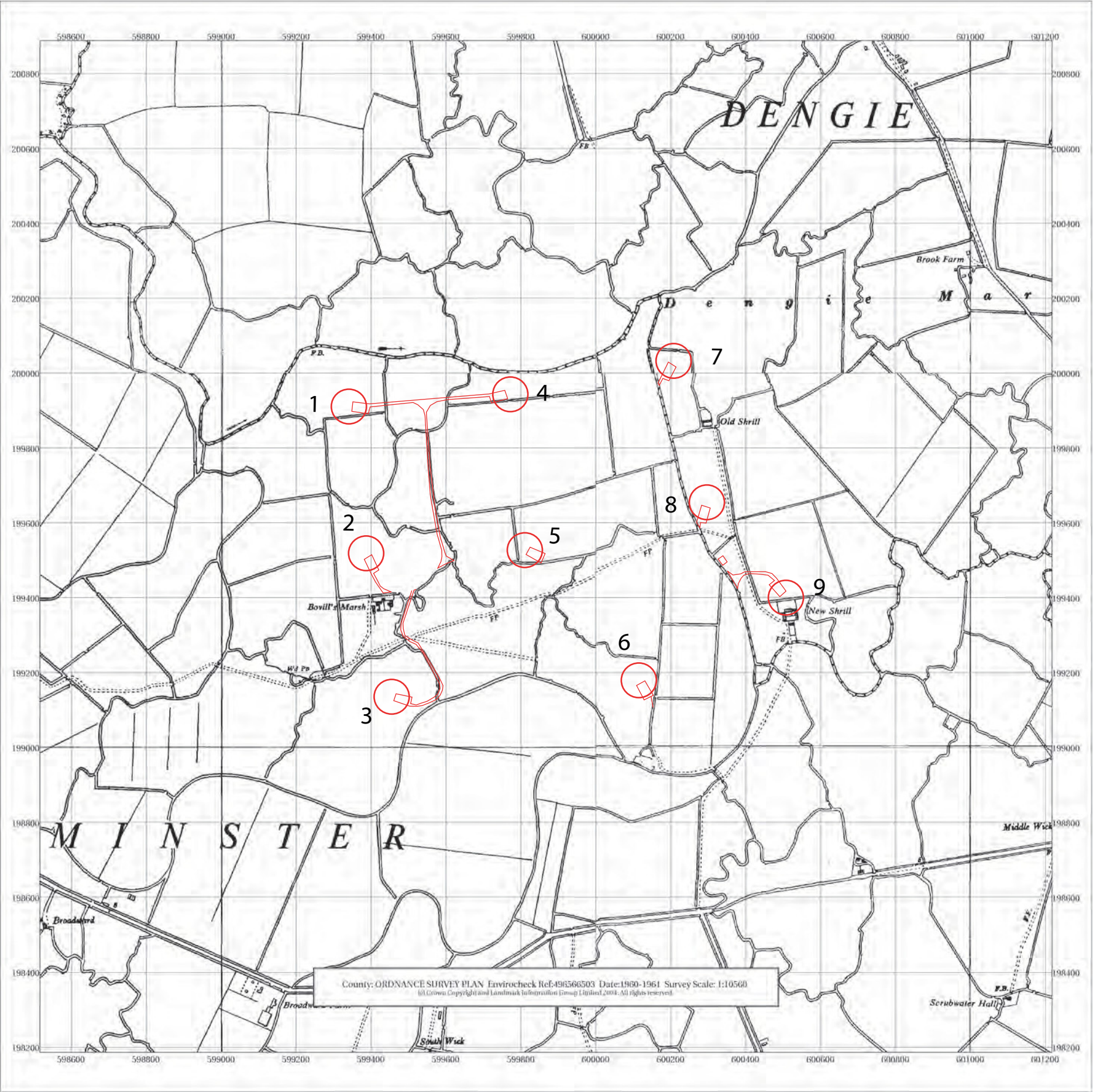
Drawn By: C E Smith

Scale: -

Figure 07:

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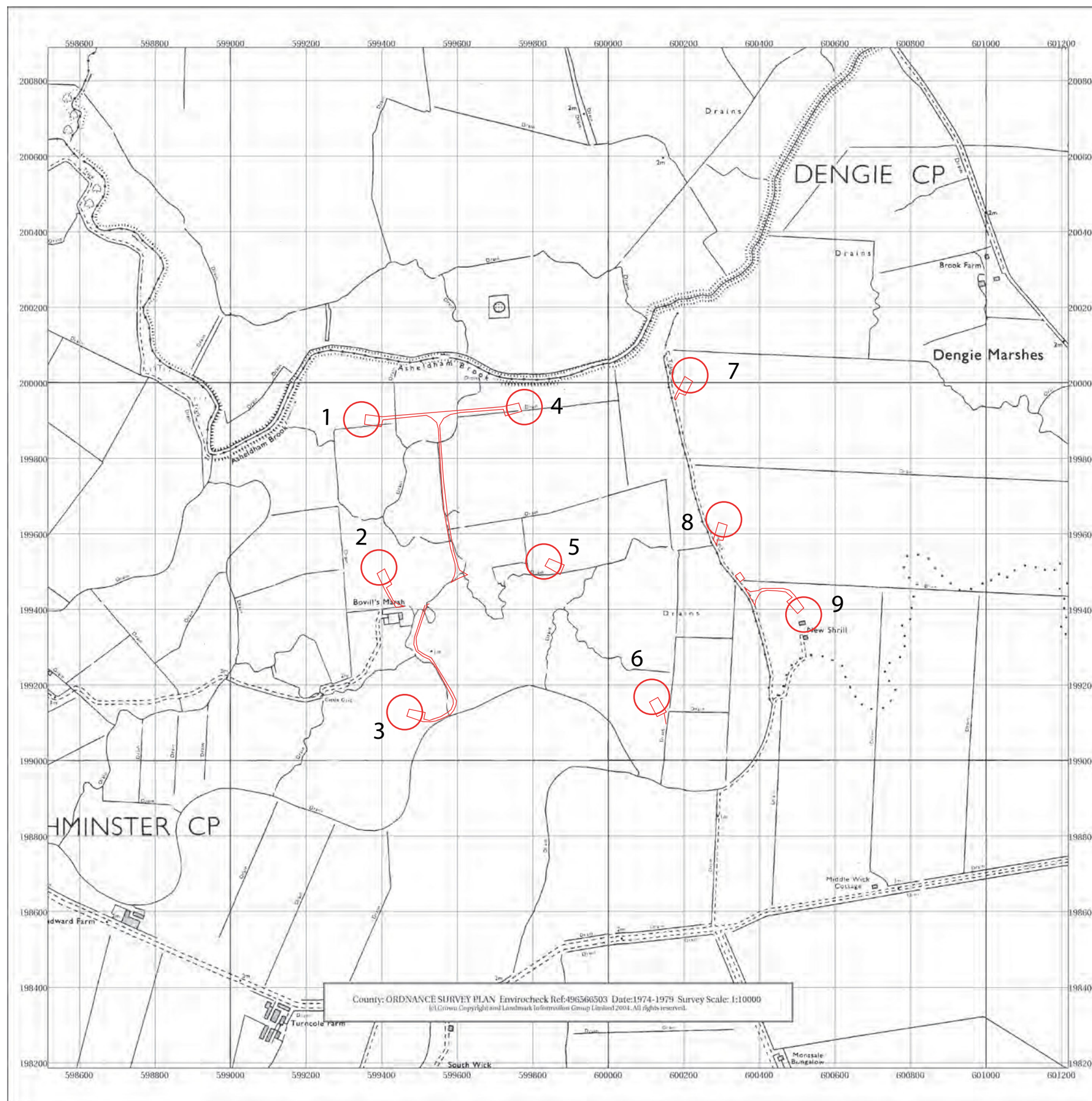


Job Title:	Middlewick Wind Farm
Drawing Title:	1960-1 OS
Date:	23/11/2008
Drawn By:	C E Smith
Scale:	-

Figure 08:

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Job Title: Middlewick Wind Farm

Drawing Title: 1974-9 OS

Date: 23/11/2008

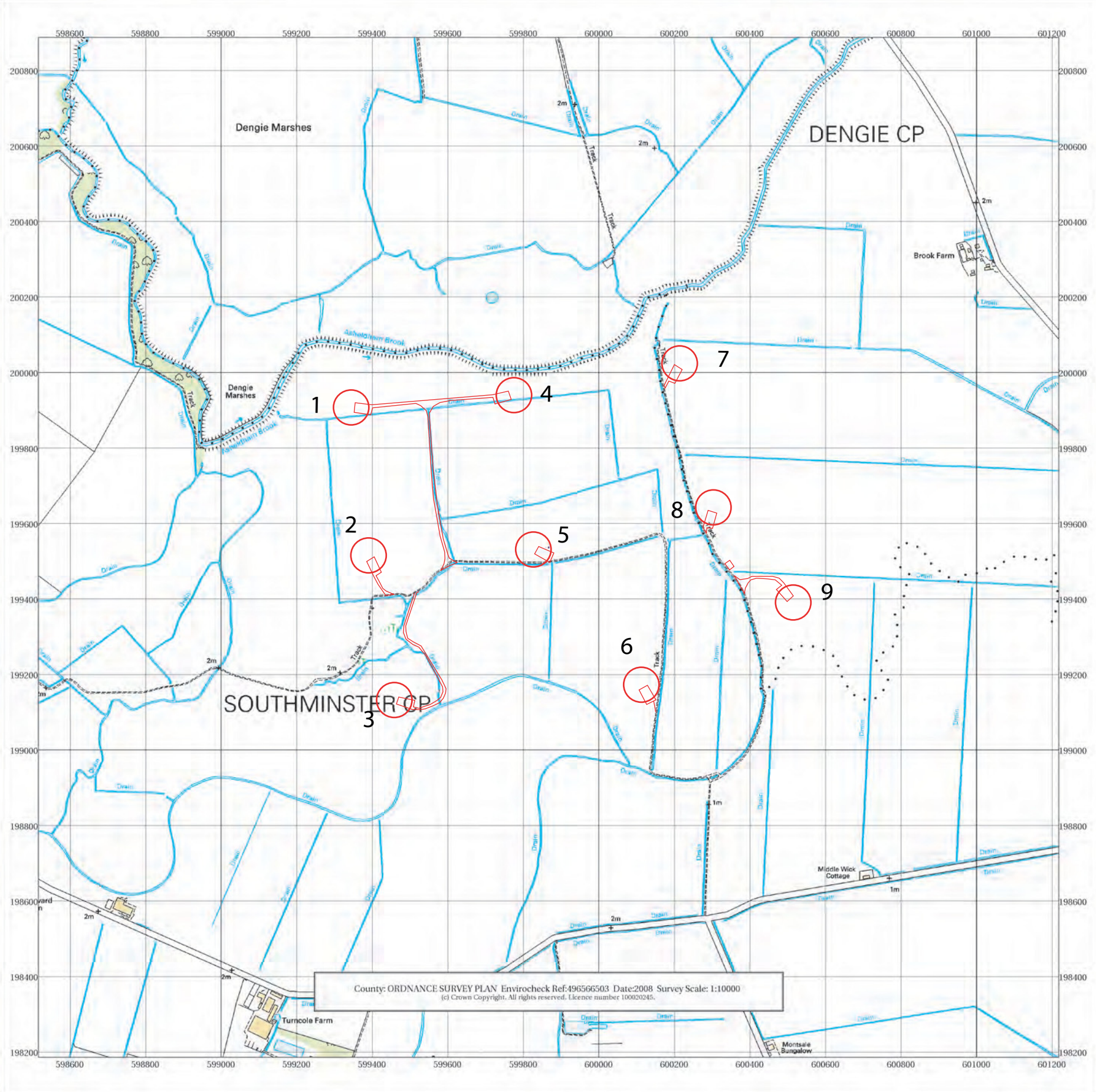
Drawn By: C E Smith

Scale: -

Figure 09:

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Job Title:	Middlewick Wind Farm
Drawing Title:	2008 OS
Date:	23/11/2008
Drawn By:	C E Smith
Scale:	-
Figure 10:	

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Plate 1: View of Locations of Turbines 1 & 4 from South East



Plate 2: View of Turbine 5 Location, Looking West



Plate 3: View of Turbine 6 Location, Looking North



Plate 4: View of Turbine 7 Location, Looking North



Plate 5: View of Turbine 8 and Associated Access Track Location, Looking West



Plate 6: View of Turbine 9 and Associated Access Track Location, Looking West

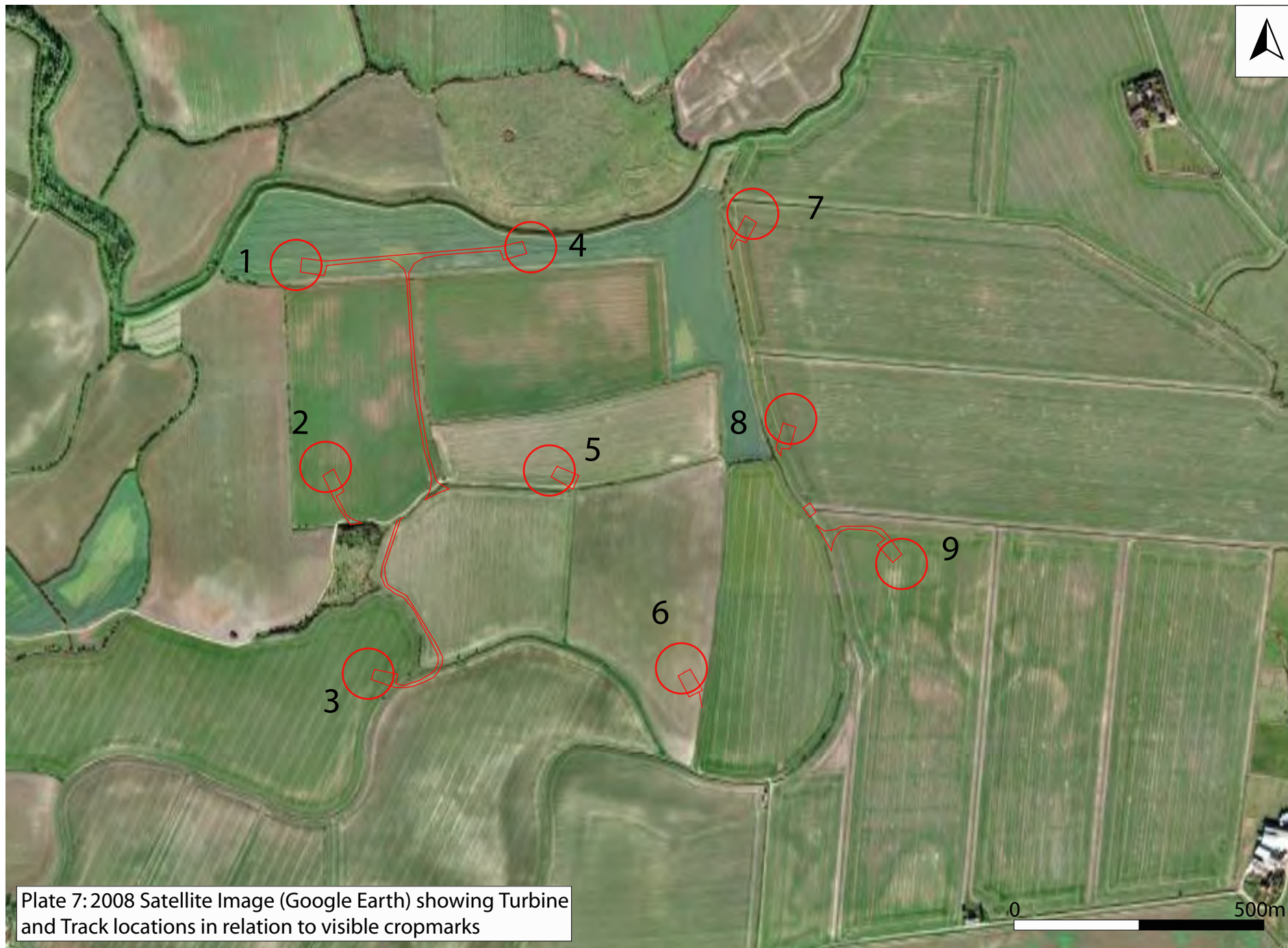


Plate 7: 2008 Satellite Image (Google Earth) showing Turbine and Track locations in relation to visible cropmarks



Plate 8: View of meandering cropmark to south east of Turbine 6
Looking North West



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