

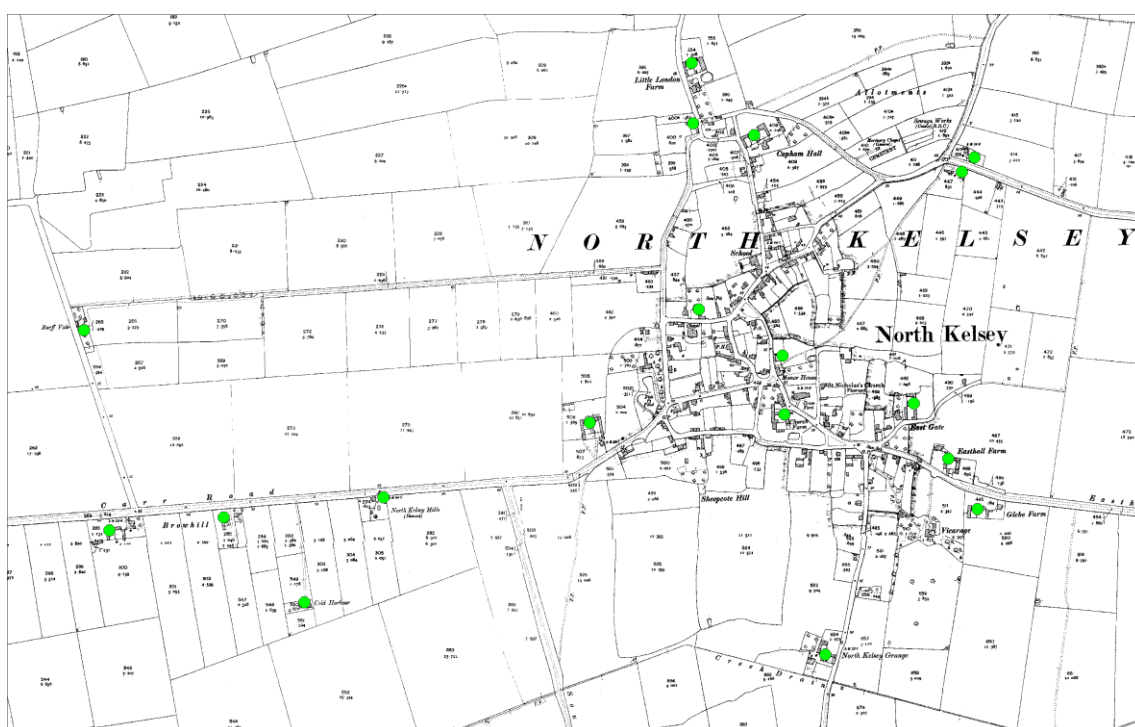


Historic England

GREATER LINCOLNSHIRE FARMSTEAD GUIDANCE

Historic County Mapping Report

A report on the findings of the Greater Lincolnshire Farmstead Mapping Project



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THE GREATER LINCOLNSHIRE FARMSTEADS GUIDANCE

This document supports the Greater Lincolnshire Farmsteads Guidance, which aims to inform the sustainable development of historic farmsteads, including their conservation and enhancement. The guidance, which applies to the area of Greater Lincolnshire, including Lincolnshire, North Lincolnshire and North-East Lincolnshire, is made up of:

THE FARMSTEAD ASSESSMENT FRAMEWORK

A step-by-step approach for owners and applicants considering the re-use and sustainable development of traditional farm buildings based on an understanding of their historic character, significance and potential for change. Annexes include useful information about designation, recording and further research.

GREATER LINCOLNSHIRE FARMSTEADS CHARACTER STATEMENT

Detailed and illustrated guidance that helps identify the character and significance of historic farmsteads including the contribution they make to landscape character. Part 2 includes a full illustrated glossary of farm building types.

LOCAL AUTHORITY SUMMARIES

Short summaries for each local planning authority in Greater Lincolnshire providing an overview of historical development, farmstead character, drivers for change and relevant local planning policies. Helpful to both planners and applicants when developing and scrutinising proposals.

FARMSTEAD AND LANDSCAPE STATEMENTS

Informative statements about ten different areas of the county defined according to their landscape character by Natural England (e.g. The Wolds). Each statement provides information about the historical development of farms in the landscape, landscape character and the types of farmstead found in each area. They are a useful evidence base for decision-making and development in context.

Sustainable Development: The National Planning Policy Framework (2012) presumes in favour of sustainable development, which it defines as ‘positive growth – making economic, environmental and social progress for this and future generations’.

1 Introduction to the Greater Lincolnshire Farmsteads and Landscape Project

1.1 Historic Farmsteads

Farmsteads and associated buildings are key parts of the rural landscape. The history of Greater Lincolnshire is inextricably linked to the ways people have exploited its landscape for agriculture. Consequently, the county has a rich and diverse rural building stock of national and international significance. As one of the most important farming economies in England, changes in farming practice and technology have had significant effects on Greater Lincolnshire's landscapes and the buildings within them, in particular farmsteads.

As the rural landscape continues to adapt and change, owners of historic farmsteads have been under pressure to find new uses for buildings. Many of the county's rural buildings have been lost. Surviving historic farm buildings are under threat from neglect on one hand, and insensitive development on the other. Research led by Historic England, and consultation with a wide range of stakeholders, has highlighted the need for an evidence base and a consistent, structured framework for understanding the historic character, significance and potential for change of farmsteads. Likewise the new National Planning Policy Framework (NPPF) identifies the need for local planning authorities to provide 'up-to-date evidence about the historic environment in their area' (Paragraph 169) and prepare local planning guidance and character assessments that are integrated with assessment of historic landscape character (Paragraph 170).

It is clear, as a result of research and consultation by Historic England that:

- There is limited and inconsistent information to inform the sustainable development of historic farm buildings, including their distribution, character, significance and any impact of development
- There are inadequate tools and methodologies for consistency in development control, site recording and planning policy
- There is uncertainty among owners stemming in part from inadequate information and advice
- There is imprecise targeting of resources, including for the agri-environment schemes.

This and subsequent work has highlighted the need to develop tools for understanding and informing change to farmsteads which:

- Will build advisory capacity to local level
- Provide guidance for the identification of priorities and targeting and monitoring of resources
- Provide a solid foundation on which further more detailed studies of historic farmsteads and landscape can be built.

1.2 Introducing Characterisation

Historic Characterisation seeks to interpret and understand the inherited character of all places, and the evidence for change and continuity in the present environment. It is based on the need to understand and help professionals and communities to manage the present environment as a product of past change and the raw material for future change. It always works at an area-scale, above that of individual sites and features (protected or not) It differs from research and survey, as undertaken in the historic environment sector, by its promotion of broad and generalised approaches to understanding the historic environment.

The key method promoted by Historic England in the rural landscape is Historic Landscape Characterisation (HLC). This is a tool for understanding the processes of change in the historic landscape. It is based upon the identification of discrete areas of land, such as woodland, settlements and farmland, which are grouped into land parcels) and used to identify distinct *character types*. These are defined by a common and/or predominant character that separates them from adjacent parcels. Previous uses are identified from historic maps and recorded as an attribute of each parcel, along with information about related heritage assets, key characteristics, and useful sources.

Greater Lincolnshire has been mapped according to this technique during the Lincolnshire HLC project, completed in 2011 (Lord and MacIntosh, 2011). The project resulted in the definition of areas of historic landscape character, closely based on the National Character Areas, and in the production of 11 HLC character area statements. These have been used to underpin the understanding of landscape change behind the Farmstead and Landscape Statements included below. The Lincolnshire HLC has also formed the backdrop to the analyses of settlement patterns and farmstead types included below.

1.3 Introducing Historic Farmsteads Characterisation

In 2004 EH supported a pilot project 'Historic Farmsteads and Landscape Character in Hampshire' which aimed to examine methods of assessing and describing the relationships between the character of historic farmsteads and landscape character at a variety of levels from NCAs to individual farms. One element of the pilot project was the trial digitisation of farmsteads as point data using a Geographic Information System (GIS) within two pilot areas. The analysis of this method of data collection suggested that there was a correlation between farmsteads and landscape character areas, landscape types and historic landscape character areas.

Subsequently, the mapping of farmsteads across the whole of Hampshire, the High Weald AONB, West Sussex, East Sussex and the remainder of Kent was carried out (Edwards, 2005-12). The whole of the West Midlands region has also been subject to Farmsteads Mapping. This work further demonstrated that the mapping of farmsteads could reveal relationships between farmsteads and landscape character (Lake and Edwards, 2006 and 2007). The mapping focuses on historic farmsteads, i.e. those farmsteads that pre-date the 2nd Edition Ordnance Survey mapping of the late 1890s as this is considered to be close to the end of the development of the traditional farmstead displaying vernacular forms and details and before the large scale introduction of mass-produced sheds.

An important aspect of this project is the fact that it uses a consistent methodology for mapping farmsteads so that the data can be combined with previously mapped areas to produce a regional picture of farmstead character (Lake and Edwards, 2009).

Landscape Character and Distinctiveness – the National Character Areas

The present-day landscape is a result of the ongoing interaction of natural and human factors. Throughout the county, these factors combine to create areas of distinctive character. This is recognised in the division of Greater Lincolnshire, and indeed the whole country, into “**National Character Areas**”. Defined by Natural England, these areas provide a framework for decision-making on a landscape scale. There are ten National Character Areas either wholly or partly within the historic boundaries of Greater Lincolnshire (image below). They form the basis of the Farmstead and Landscape Statements, which are designed to fit seamlessly with the boundaries of the National Character Areas in Greater Lincolnshire.

The Northern and Southern Lincolnshire Edge

On these open sandy-soiled Heaths, wide open arable fields now predominate, with stone walls a common feature. Regular farmsteads predominate here, reflecting 19th century planned farming.

The Lincolnshire Wolds and the Kesteven Uplands

Chalk and Limestone Plateau areas historically used for sheep farming and warrening. 19th century industrialised farming techniques allowed mixed “high” farming to be employed. These areas are notable for their high survival of traditional farm buildings and their high proportion of listed examples.

Trent and Belvoir Vales and the Central Lincolnshire Vale

Carrland and wet grazing lands were historically found near to rivers such as the Trent and Ancholme. Much of the land was pasture until the advent of steam ploughing and widespread drainage made cultivation more profitable. A mixture of older village farmsteads and 19th century planned farmsteads are found here.

The Fens, the Humberhead Levels and the Lincolnshire Coast and Marshes

Renowned coastal grazing land used extensively from medieval times for fattening sheep and, later, cattle. 19th century improvements have created areas of productive arable land throughout the former marshes. The Fens are home to wide, open arable landscapes in drained and managed former wetlands. Farmsteads are both more numerous in these areas and also generally smaller, including high proportions of smallholdings not necessarily legible in the farmstead mapping.

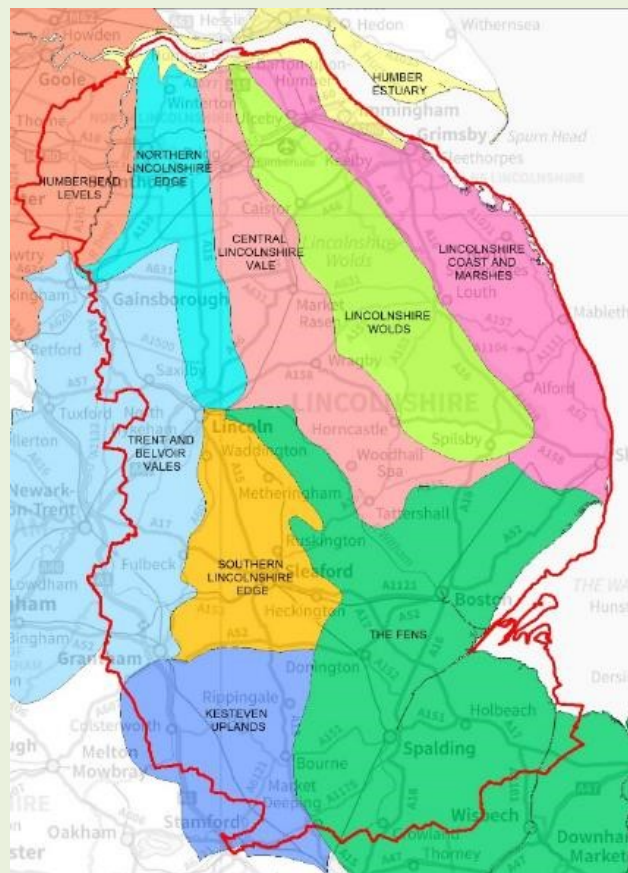


Figure 1 - National Character Areas in Lincolnshire

2 Aims, Objectives & Products

2.1 Aims and Objectives

This project aims to:

1. Inform appropriate levels of protection to historic farmsteads and their buildings
2. Develop and inform understanding of the historic character, significance and pressures for change of traditional farmsteads
3. Set out the historic character, significance and pressures for change affecting traditional farmsteads and their buildings within the framework of England's National Character Areas and in accord with the recommendations of the Natural Environment White Paper
4. Inform decision-making by all those involved in the reuse and development of historic farmsteads, specifically:
 - The sustainable development of historic farm buildings, including their distribution, character, significance and any impact of development
 - The development and application of tools and methodologies for consistency in development control, planning and design
 - The targeting of resources
 - Provision of a solid foundation on which further more detailed studies of historic farmsteads and landscape can be built.

The objectives of the project were to:

- Contribute to the completion and eventual publication of Farmsteads and Landscapes Statements through providing a body of texts, maps and photographs for the 10 National Character Areas within/partly within the historic county of Greater Lincolnshire as specified in this Project Design
- Provide more detailed evidence on the historic character and survival of farmsteads and buildings in their landscape and settlement context
- Provide a framework to help inform the options for change, guide future projects, survey and community initiatives.

2.2 Products

The project resulted in the creation of the following products:

- **Farmsteads Mapping** – GIS layer of farmsteads as points data with all attached attributes
- **Historic County Mapping Report** (this document) which includes:
 - A brief report on methodology and findings; farmstead typologies
 - Analysis of spatial distribution of key farmstead and building types, time depth, and relationship to character area data
 - analysis of historic farm buildings data
- **Greater Lincolnshire Farmsteads Character Statement**
- **Greater Lincolnshire Farmstead Assessment Framework and Design Guidance**
- **Local Planning Authority Summaries**

3 Methodology

3.1 Historic Farmsteads Mapping

The principal aspect of the project is the mapping of historic farmsteads and the recording of a number of attributes reflecting their character and extent of change. The mapping used MapInfo 12 GIS software to create a point data set (MapInfo Table Format).

Farmstead identification

Using the 2nd Edition Ordnance Survey 25" mapping of c.1905 the following sites were recorded using GIS:

- Farmsteads
- Outfarm complexes or field barns were differentiated, where possible, from homestead complexes.

Farmstead Plan Form

Using the 2nd Edition OS map of c.1905 map as the data source plan form for each farmstead was recorded. Plan form was divided into the following principal groups (see figure below.):

- **Linear and L-shaped plans** - The house and working buildings are attached to each other in a single line or an L-shape. These are typically the smallest farmsteads in an area, and often have early origins.
- **Row plans** - The main range of working buildings are attached in-line and form a long row. In these farmsteads the house is detached.
- **Dispersed plans** - The buildings and yards are set within an open area with no clear focal yard. Range in size from small farmhouses with detached buildings to large multi-yard complexes. Some farmsteads of this type are oriented along routeways, and may relate to historic cattle droving.
- **Loose Courtyard plans** - The farmstead and its mostly detached buildings are arranged around a single yard. Loose courtyard farmsteads have typically developed over time with the incremental addition of buildings as required. Although many of these farmsteads are small in scale, larger examples, with three or four sides of the yard enclosed, can be found throughout Greater Lincolnshire and often resemble more planned and regular types very strongly.
- **Regular Courtyard plans** – The working ranges of the farm are linked to each other in regular geometric layouts and arranged around at least one yard. In many cases, regular courtyard farms are examples of planned farmsteads, and typify the scientific and technological farming advances of the 19th century. In other cases, they are the result of gradual development, with an older core having been added to in order to take advantage of these methods.

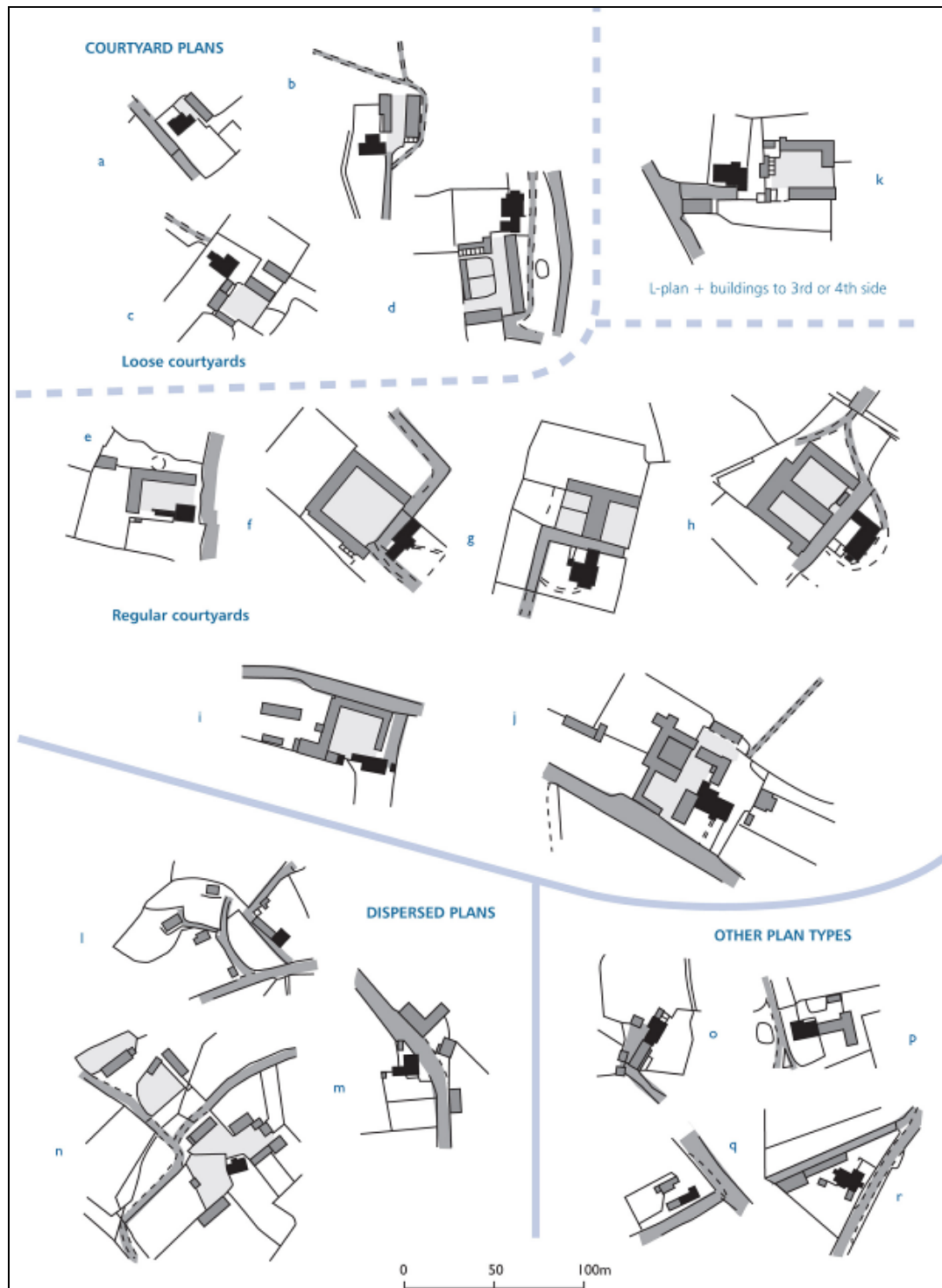


Figure 2 - Farmstead Plan Types: (a – d) Loose courtyards with working buildings 1, 2, 3 and 4 sides; (e) Regular L-plan; (f) Regular U-plan; (g) Regular H-plan; (h) Regular E-plan; (i) Full regular courtyard; (j) Regular multi-yard; (k) L-plan with building to 3rd side; (l) Dispersed cluster; (m) Dispersed driftway; (n) Dispersed multi-yard; (o) Linear; (p) L-plan house attached; (q) Parallel plan; (r) Row plan.

These classifications were used to record the principal attribute of the plan. Secondary attributes were also recorded allowing, for example, the distinction between a U-plan regular courtyard and an E-plan regular courtyard. Other secondary attributes included, for example, where a loose courtyard plan was the principal plan form but there were some detached or dispersed building elements whilst some farmsteads clearly have two yards. The plan form attribute list is presented in Appendix 1.

In some farmsteads there are additional elements (beyond the primary and secondary attributes) that also warrant recording, for example, covered yards or particular courtyard arrangements such as a regular L-plan within a multi-yard farmstead. Such additional features were recorded within a Tertiary Element field.

Farmstead Date

Dating information extracted from the descriptions of listed buildings and accessed through the National Heritage List for England was added where relevant. The date information was recorded by century except from pre-1600 buildings, which were recorded as 'MED'. Whilst some listed buildings have date ranges that appear to be more accurate, for example, 'early 18th century', in some areas many listed buildings will only be dated to a century. Additionally, the dating of agricultural buildings, particularly those earlier than the 19th century, is often imprecise. Farmsteads identified only from the OS 2nd Edition 25" mapping were assigned a 19th century date which indicates a latest possible date of creation. The date for farmhouses and working buildings were recorded separately.

Farmstead Location

The location of the farmstead in relation to other settlement was recorded. This allows the opportunity to examine the distribution of, for example, farmsteads in villages, hamlets, loose farmstead groups and those that are in isolated positions and compare these distributions against other attributes and landscape character.

Farmhouse Position

The position of the farmhouse in relation to the yard or whether it was attached to one of the working buildings was also recorded.

Farmstead Survival

By comparing the c.1905 OS maps and the modern OS Mastermap the degree of survival of the late 19th century farmstead plan was assessed.

Modern Sheds

The presence of modern sheds was also recorded, noting where sheds were either in the site of the historic farmstead or to the side. In either case, the presence of large sheds is a useful indicator that the farmstead may remain in agricultural use.

Outfarms

Outfarms are small agricultural buildings or complexes set away from the main farmstead. They were intended to enable more efficient livestock management and harvesting by providing shelter, storage and processing facilities within the farming landscape. They are particularly associated with village-based farming for this reason. They are distinguished from farmsteads by the lack of a farmhouse, clearly indicating an agricultural rather than domestic use.

The recording of the plan form of outfarms and field barns followed that of farmsteads, having a primary attribute, for example, Loose Courtyard or Regular Courtyard, and a secondary attribute

recording the form. Where a field barn stands within a field with no yard it was recorded as Single building.

Smallholdings

The farmstead mapping project was intended to capture records of all traditional farm complexes according to the methodology defined in the Farmsteads Mapping Handbook. This method is not suited to identifying very small farmsteads and smallholdings, and these were not recorded as part of the project. They are nonetheless an important component of Greater Lincolnshire's agricultural history, especially in highly productive areas such as the Fens, the Coastal Marshes, and the Humberhead Levels. The presence of smallholdings was noted in the Farmstead and Landscape Statements for relevant National Character Areas, and in the wider Greater Lincolnshire Farmstead Statement.

Smallholdings are typically defined by a single house with a large attached plot of land. Smallholders were typically employed in other professions, with home-grown produce supplementing their income. Some smallholdings were established by local authorities in the early 20th century, in line with prevailing social movements towards providing access to land for the "common man" (Brook, 1994, p92). Although short lived, this movement led to the establishment of many new small farm holdings in Greater Lincolnshire, especially in the Fens.

4 Farmsteads: Historical Context

The development of farmsteads in Greater Lincolnshire has responded to factors both regional and national in scope. The following section provides a brief overview of these factors using local sources as well as the Preliminary Regional Character Statements produced by Historic England to illustrate farmstead development in a broader context.

4.1 National Background

Agricultural development in England from the medieval period – the date of the earliest surviving agricultural buildings and farmhouses – can be divided into the following major periods:

Up to 1750

Economic boom in the 12th and 13th centuries, which included the development of large farms on monastic and secular estates, was followed by contraction of settlement and the leasing out of estates after the famines and plagues of the 14th century. The period from the 15th century was characterised by a general increase in agricultural incomes and productivity and the emergence – particularly from 1660 – of increasingly market-based and specialised regional economies. Substantially complete farm buildings of this period are rare, and provide the first evidence for the development and strengthening of regional traditions and building types. Many surviving farmsteads in upland areas, with farm buildings attached to their farmhouse, survive from the later 17th and 18th centuries. It is otherwise very rare for farmsteads to have more than a house and barn dating from this period.

1750-1880

This is the most important period of farm building development, the production of farmyard manure by cattle playing a major role in increasing agricultural productivity. The increased output of this period was encouraged by rising grain prices and the demands of an increasingly urban population, and was enabled by the expansion of the cultivated area (especially during the wars with France between 1792 and 1815), the continued reorganisation and enlargement of holdings and the final phase of the enclosure of open fields – concentrated in the Midland counties. Substantial improvements in animal husbandry were made with the development of improved breeds and a greater awareness of the importance of the need for housing, particularly for cattle, which also improved the quality and efficient redistribution of farmyard manure (Brown, 2005, p92-3). The high-input/high-output systems of the ‘High Farming’ years of the 1840s to 1870s were based on the availability of imported artificial fertilisers, manures and feeds.

1880-1940

The last phase of investment in traditional farmstead buildings falls at the end of the 19th century. The rising costs of labour, feeds and other inputs, combined with the decline in prices and rising levels of imports, ensured that little was invested in fixed capital in the period up to the Second World War, although the rates of investment were subject to regional variation. Arrears in rent characterised the period, even in years of relative recovery (such as after 1936 in arable areas). As a consequence there was little fresh investment in farm buildings other than repair and modification, and any buildings constructed tended to be of the cheapest materials. Many, such as Dutch barns, were prefabricated, and concrete and corrugated iron or asbestos sheet were being increasingly used for the refitting of cow and dairy units and the repair of traditional roofs. National and local surveys, such as the 1910 Land Tax Survey, attest to the growing levels of disrepair, especially of pre-improvement farm buildings using traditional materials such as thatch and timber. Hygiene regulations in the inter-war period resulted in new forms of cow house and with concrete floors and

stalls and metal roofs and fittings. New forms of housing for the intensive farming of pigs and poultry were also developed.

County Councils entered the scene as a builder of new farmsteads, built in mass-produced materials but in traditional form, in response to the Government's encouragement to create smallholdings of up to 50 acres (20 hectares).

1940 to present

The 1937 Agriculture Act anticipated the need to increase self-sufficiency, and the Second World War witnessed a 60% rise in productivity, the result of the growth in livestock numbers, increasing scientific and government control and guidance, more specialised systems of management and the conversion of permanent pasture to arable. The Agriculture Act of 1947 heralded the intensification and increased specialisation of farming in the post-war period, accompanied by the development of government and industry research and guidance. From the mid-1950s, strongly influenced by American models, there emerged a growing body of trade and advisory literature. The Government provided grants to cover the capital cost of new building under the Farm Improvement Scheme (introduced 1957). The introduction of wide-span multi-purpose sheds in concrete, steel and asbestos met increasing requirements for machinery and for the environmental control of livestock and on-farm production, particularly of milk. The national stock of farm buildings grew by a quarter between 1945 and 1960 alone. The Agricultural Research Council's *Farm Buildings Survey of England* (published 1967) estimated that the average farmstead contained 6 pre-1914 buildings, 2.4 from 1918–45 and 2.5 built since 1945.

4.2 Greater Lincolnshire

The historic county of Greater Lincolnshire includes a surprising variety of different physical, historical and agricultural landscapes. Greater Lincolnshire's natural landscapes, as shown by the NCAs, follow the underlying physical make-up very closely, and there is a clear north-south grain that can be seen in maps of the county's geology. To the west is the River Trent and its flood plain. In the centre of the county is a spine of limestone, known locally as the Cliff, which rises precipitously from the Trent Vale and falls gradually to the east, towards the central clay valleys of the Ancholme and the Witham. The landscape then rises sharply once more into the rolling chalk uplands of the Wolds, before falling once more towards the coastal marshes and the sea. Areas of drained fenland are found to the south east of the county, and these provide another distinctive landscape governed by the underlying shape of the earth.

The Lincolnshire Historic Landscape Characterisation project (Lord and MacIntosh, 2011) has mapped the present day landscape of the county in terms of the historical processes and landscapes that underlie its modern character.

Historical Development

Greater Lincolnshire is predominantly a rural county, and it is only relatively recently that large settlements, such as Grimsby and Scunthorpe, have grown up outside of the historic county town of Lincoln. Some of Greater Lincolnshire's population centres have Roman origins, including Lincoln itself, Caistor, Horncastle and Ancaster. These are the exceptions however, as most of Greater Lincolnshire's villages are the result of settlement by Saxon and Scandinavian settlers in the early medieval period.

Some key elements of Greater Lincolnshire's infrastructure date from the Roman period. These include the long straight roads of Ermine Street and the Fosse Way, and possibly some features associated with the drainage and reclamation of fens and marshland. Subsequent settlement by Saxon and Scandinavian peoples followed these patterns in part, perhaps most clearly seen in the string of villages that were founded parallel to Roman Roads.

The pattern of parishes seen within Greater Lincolnshire today has developed over a prolonged period of time. Many of them demonstrate clear evidence of planning in their medieval layout and boundaries, and in their relationship to their neighbours (Bennett & Bennett, 1974). For example, the historic villages situated along the north-south aligned A15 at the top of the Northern Lincolnshire Cliff lie within parishes that were aligned east to west, allowing each settlement access to and a fair share of a variety of the different resources available to farmers in the medieval period, including carr-land grazing, good quality arable land, and dry upland heath. The same pattern is also visible in parts of the Lincolnshire Wolds and the Central Vale.

Elsewhere in the county, as in the Fens, the Marshes, and the Isle of Axholme the historic pattern of settlement was governed by the availability of dry land for cultivation. In these areas, settlements are typically more linear or straggling than nucleated, and there is a high degree of settlement dispersal, reflecting the need to exploit even small areas of high ground. Parishes in these areas are also often linear, indicating their progressive growth along lines of exploitation and reclamation of wetlands.

The rural population grew rapidly in the 13th and 14th centuries. In areas such as the Lincolnshire Wolds, historically difficult to farm effectively, strip lynchets indicate that even these areas were brought into arable cultivation as a result of increasing population pressure. However, these efforts represent a high-water mark of medieval colonisation, and the many deserted and shrunken villages of the Wolds and the Ancholme valley demonstrate both the difficulty of cultivation and, perhaps, the effects of the waves of plague that struck the nation in the 14th and 15th centuries (Platts, 1985, pp169-170).

Following the enclosure of open fields and commons between the 16th and 19th centuries, the landscape took on a superficially very different character and form. Much of the building stock of villages and towns was completely reorganised and rebuilt, while the historically open rural landscape was divided among new owners by hedges and ditches. In many areas, arable farming gave way first to sheep and cattle, and later to industrialised mixed farming. This process removed the necessity for large quantities of manual labour and the population of the countryside fell sharply during this period (Rawding, 2001, pp190-191).

The so-called 'High Farming' period of the mid to late 19th century was characterised by the institution of industrial and scientific farming techniques across the county, involving the cycling of grain into fodder for cattle, the subsequent enrichment of the land with manure and resulting increased yields of arable crops. This cycle was enhanced by the investment of capital, in the form of buildings and machinery, and the addition of expensive and high quality animal feeds such as oil cake (Brown, 2005, p88). The introduction of early forms of mechanisation, such as steam power for crop processing, allowed still further gains of efficiency. However, the employment of labour remained high due to the necessity of caring for large flocks of cattle and sheep.

A particular effect of the new scientific methods was the widespread construction of new farm buildings for housing cattle, which until this time had typically been over-wintered in fields and paddocks. With the realisation that weight gain and manure quality could be improved by keeping

cattle indoors, farmers across Greater Lincolnshire began to adapt their existing buildings or to create entirely new planned farmsteads to take advantage of the new techniques (Brown, 2005, p95).

During the late 19th century the farming economy of Greater Lincolnshire fell into depression. This was due to a number of factors, including a run of poor harvests, increased global competition and falling prices. In particular, these factors affected the production of grain, wool and beef, the mainstays of Greater Lincolnshire's productivity. This had a variety of effects, including greater support from landlords for tenants in the form of rent reductions and capital investment, and widespread unemployment of farm labourers, who were often dismissed as soon as planting or harvesting was finished (Brown, 2005, pp180-1). There were also tangible effects in the landscape, including the dereliction of hedges and drainage, and the employment of more efficient and less labour intensive techniques for ploughing and threshing, including the widespread use of moveable steam engines.

5 Landscape and Settlement Context

5.1 National Background

The size and density in the landscape of farmsteads and their fields results from the type of farming – ranging from the largest corn-producing farms to the smallest dairying or stock rearing farms – and historical patterns of settlement and land use that can reach back into the medieval period and even earlier. Patterns of settlement in the countryside varied from large, nucleated villages to dispersed settlement areas with scattered, isolated hamlets and farmsteads, both being closely related to the patterns of fields and their associated boundaries in the surrounding landscape. There were many variations between the two extremes of communal open fields with their scattered holdings, which typically developed around larger nucleated settlements, and the anciently enclosed fields of isolated farmsteads and hamlets.

In areas of nucleated settlement communities have worked the land from villages, and most or all isolated farmsteads were established after the enclosure of open fields or common land. At the other extreme are areas of dispersed settlement of scattered dwellings and farmsteads with few or no villages. Other areas may have a mix of settlement patterns. As a result farmsteads can be found:

- Within or on the edge of villages
- Located in isolated clusters or in hamlets
- Isolated.

The fields and the patterns of roads, tracks and woodland around farmsteads reflect centuries of change. Farmland has historically been divided into arable for growing corn and other crops, and meadow for hay and grass. In the past, farmers also had access to fallow land, land laid open after the harvest and areas of rougher common ground for grazing livestock.

Re-arranging previously communal fields or common pasture land into self-contained private land units enabled the rationalisation of formerly scattered holdings, allowing better management of livestock and rotation of crops. This process of enclosure – evident from the 14th century and even earlier – resulted in the immediate or gradual establishment of new isolated farmsteads out in the fields. It could be undertaken on a piecemeal basis, or in one single phase, the latter form of enclosure being typically more regular in its appearance. Enclosure by parliamentary act, some of which formalised earlier agreements, often resulted in new designed landscapes. Parliamentary enclosure was concentrated in the period between 1750 – 1820.

Historic England has commissioned work on mapping these patterns of settlement in the English countryside, now published as *An Atlas of Rural Settlement in England* (Roberts & Wrathmell 2000) and *Region and Place, A Study of English Rural Settlement* (Roberts & Wrathmell 2002). In summary, it has been demonstrated that a Central Province mostly characterised by nucleated settlement and, by the 14th century, communal fields which occupied the great majority of the land area, is flanked by a South-Eastern Province and both a Northern and Western Province where settlement is mostly dispersed.

5.2 Greater Lincolnshire

In the Atlas of Rural Settlement, Roberts and Wrathmell identified a distinction between those parts of the county that are situated in the so-called “central province”, which is characterised by nucleated villages set in landscapes of former open fields and commons, and those which fall into the “eastern province”. This latter area is one of dispersed settlement, where villages and towns

have historically been uncommon and the predominant form of settlement has been the hamlet or isolated farmstead. The division between these two provinces is drawn approximately along the boundary between drained wetlands of the Fens and Marshes to the east and the higher ground of the Wolds the Lincolnshire Edge and the Kesteven Uplands to the west.

The sheer number of isolated farmsteads identified in the Fens and Marshes demonstrates the clear difference between the predominant patterns of settlement found in those two areas and that found in the rest of the county.

The archaeological record demonstrates that Greater Lincolnshire has been a rich farming landscape for most of its history. Aerial photography and cropmark analysis shows that areas such as the Lincolnshire Fens and Marshes were heavily settled in Roman Times, sustaining a large population of farming. Where now the fenland landscape is one of large sparsely populated arable lands, in Roman times there existed a tightly-packed network of villages, farmsteads and cattle enclosures.

After the end of Roman rule, Saxon and Danish settlers brought their own systems of agriculture to Greater Lincolnshire, which were eventually crystallised in the form of the classic open-field farming regime common to much of central England. This arrangement of a nucleated village situated within between two and four large open arable fields and various types of common grazing was the primary agricultural system in much of Greater Lincolnshire until the end of the medieval period. During this time farmers lived within the village proper, with the exception of specialist farms.

Historically, the Church has been a strong influence on the development of landscape in the more remote parts of the county. As well as the evident centres of power, such as Abbeys at Barlings, Thornton and Crowland, religious orders founded and maintained “Grange” farms throughout the landscape, operated by lay brothers and providing both an income for the monasteries and a presence in the wider landscape. Today, these Grange farms can still be seen among the many more recently founded isolated farmsteads in the county.

After the widespread planned enclosure of former commons, wastes and open fields, improving farmers were able to employ new industrial techniques of mixed farming, demonstrated in the proliferation of regular planned farmstead types. These farmsteads allowed the scientific raising of cattle for their manure, which was used to enrich the land for growing cereals, primarily corn. These farmsteads were often constructed to common designs, of which the particular exemplars were known as ‘model farms’.

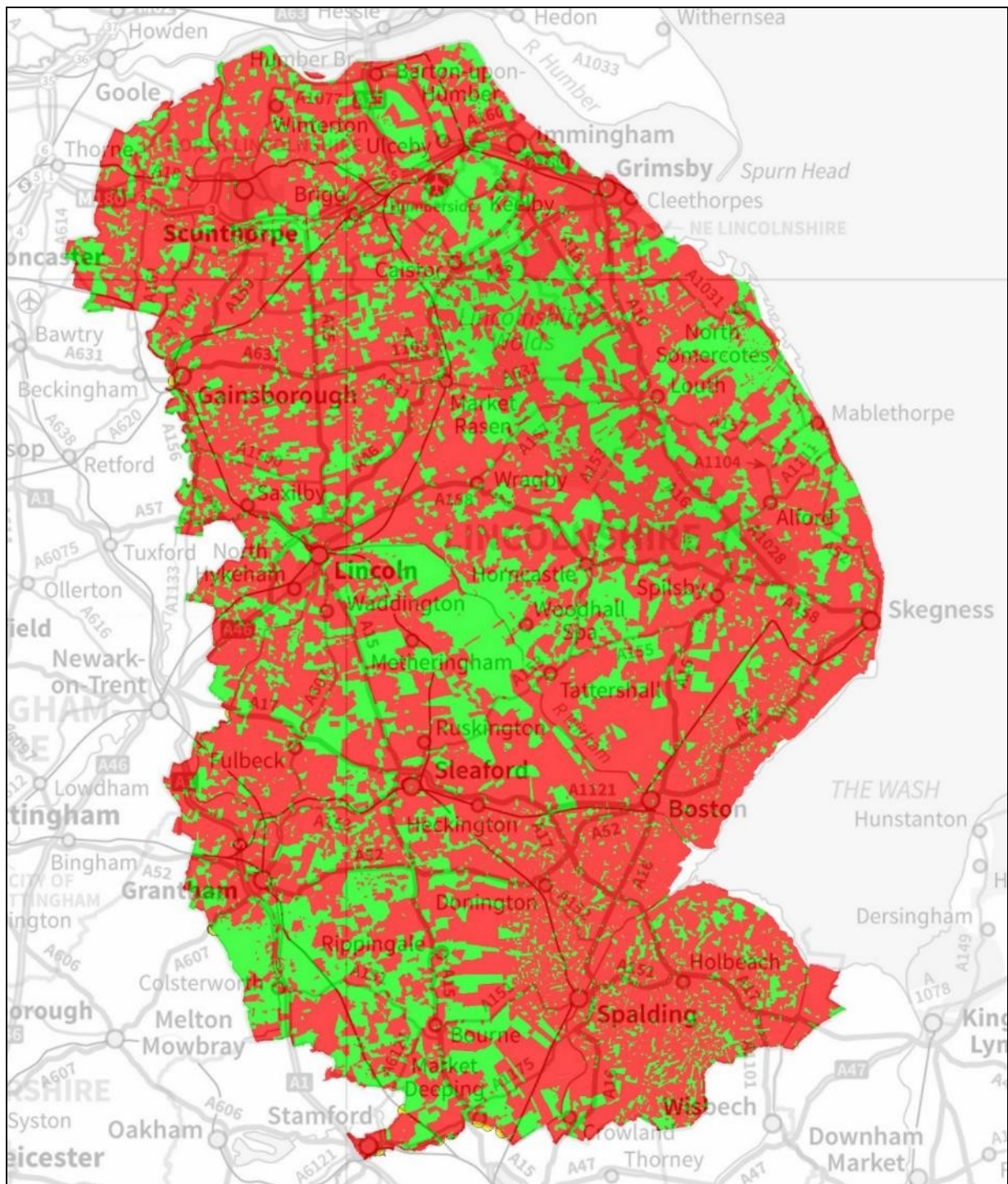


Figure 3 - Map of Greater Lincolnshire showing HLC polygons with origins pre-1850 (green) and post-1850 (red)

The map above is derived from the Lincolnshire HLC project. It shows the present day landscape of the county divided into two types; pre-1850 in green, and post 1850 in red. It shows very clearly the preservation of enclosure and pre-enclosure period landscapes in the Lincolnshire Wolds, Kesteven Uplands, and the Lincolnshire Coast and Marshes. These are also areas with high proportions of surviving listed farm buildings.

6 Results

The following overview results are broken down by National Character Area, and give an overall picture of trends within the county. The full dataset is available from Lincolnshire, North Lincolnshire and North-East Lincolnshire Historic Environment Records.

6.1 Historic Farmsteads Mapping

Farms and outfarms were mapped using the 2nd Edition Ordnance Survey 25" mapping of c.1905. A total of 10496 farmsteads and 361 outfarms were recorded across the study area.

This table gives a breakdown of the number of farmsteads and outfarms identified in each NCA, as well as a total number of records.

NCA	Outfarms	Farmsteads
CENTRAL LINCOLNSHIRE VALE	50	1169
HUMBER ESTUARY	6	100
HUMBERHEAD LEVELS	12	495
KESTIVEN UPLANDS	29	611
LINCOLNSHIRE COAST AND MARSHES	34	1523
LINCOLNSHIRE WOLDS	48	869
NORTHERN LINCOLNSHIRE EDGE WITH COVERSANDS	18	570
SOUTHERN LINCOLNSHIRE EDGE	23	657
THE FENS	103	3557
TRENT AND BELVOIR VALES	38	945
GREATER LINCOLNSHIRE	361	10496

It is notable that of all the NCAs the Fens is home to by far the greatest number of individual farmsteads and outfarms, followed by the Coast and Marshes. Also of interest is the fact that the Wolds, one of Greater Lincolnshire's most famed farming landscapes, has relatively few farmsteads by comparison, perhaps reflecting the somewhat later development of the Wolds as a profitable farming area and the large scale of farming undertaken in the 19th century.

Outfarms and Field Barns

In areas of extensive farm holdings it is often possible to find ancillary farm complexes constructed at a distance from the main farmstead. These provided storage, processing facilities and accommodation for livestock in remote locations, such as upland areas and marshland, and typically do not incorporate domestic elements such as farmhouses. The lack of adaptable housing means

that these buildings are highly vulnerable to obsolescence and demolition, especially in periods of agricultural change or downturns in the rural economy.

Smallholdings

Smallholdings have not been recorded as a specific subtype within the project. This is largely due to the difficulties inherent in consistently identifying them as agricultural buildings, and does not reflect their important role in the development of the rural landscape. Smallholdings are prevalent in low-lying areas such as the Fens and the Humberhead levels, and reflect the high productivity of those landscapes, allowing smaller farmsteads to be run cost effectively.

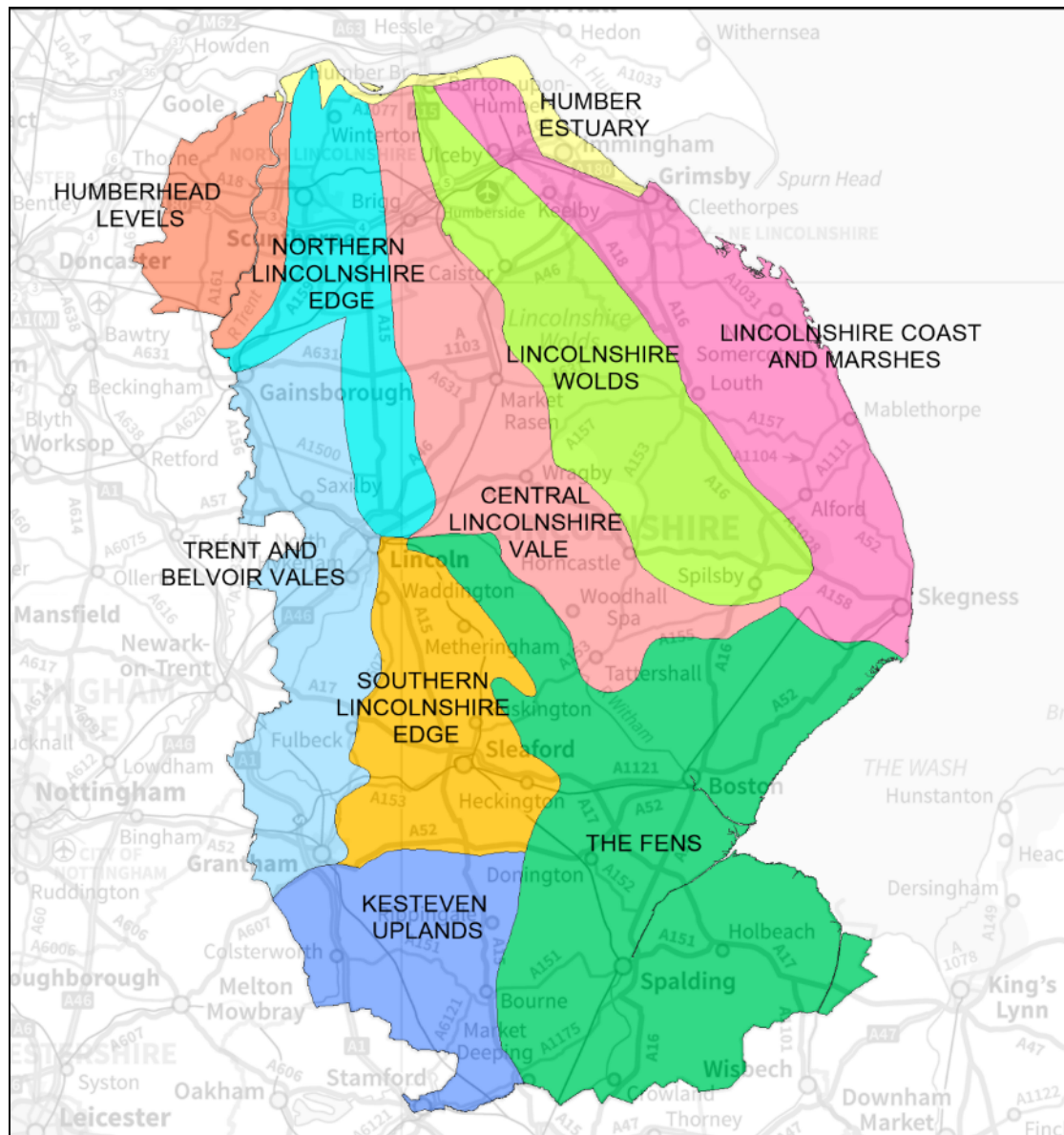


Figure 4 - NCAs in Greater Lincolnshire, presented here as a key to the distribution maps below

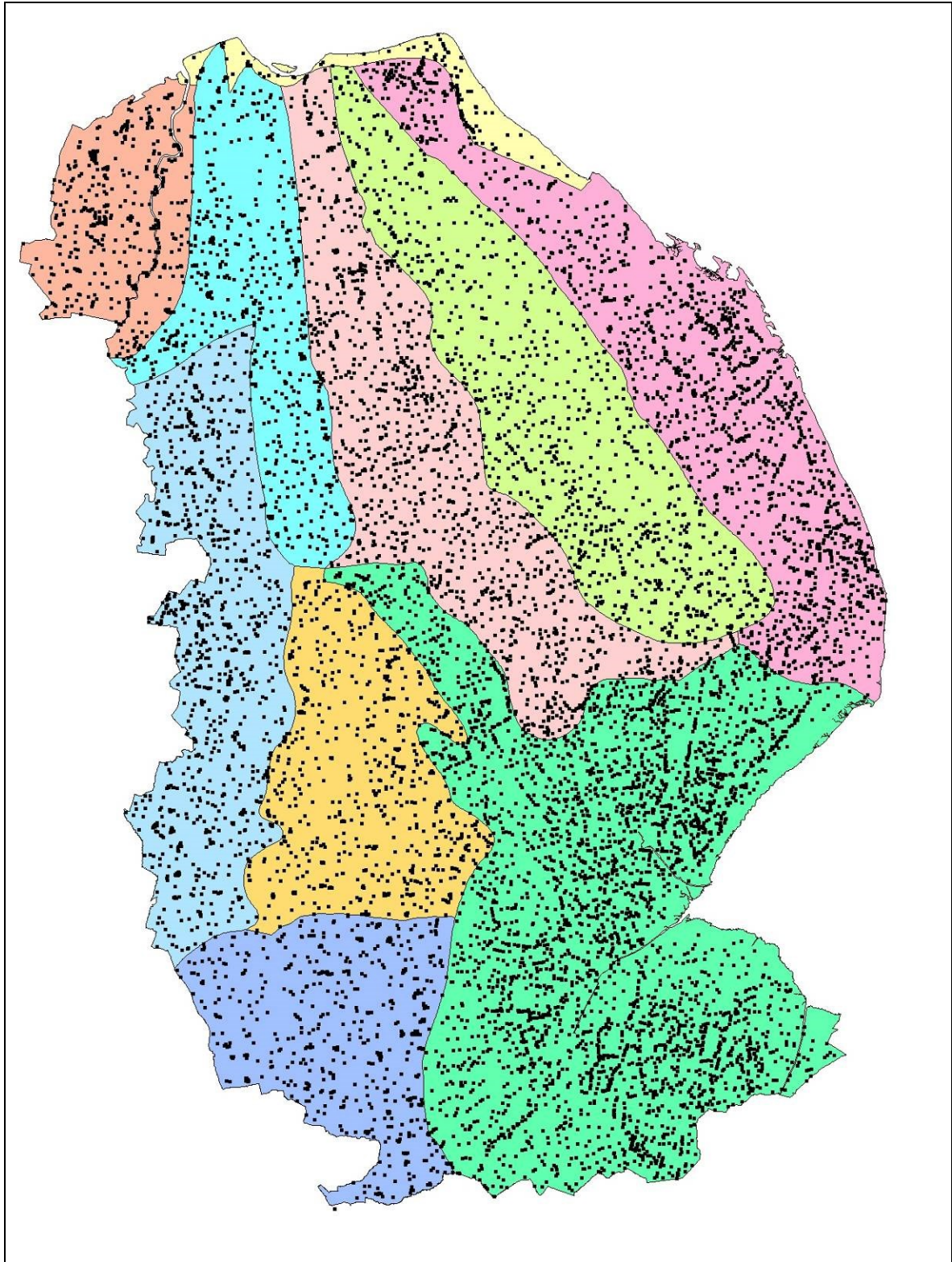


Figure 5 - Map of Greater Lincolnshire's Historic Farmsteads

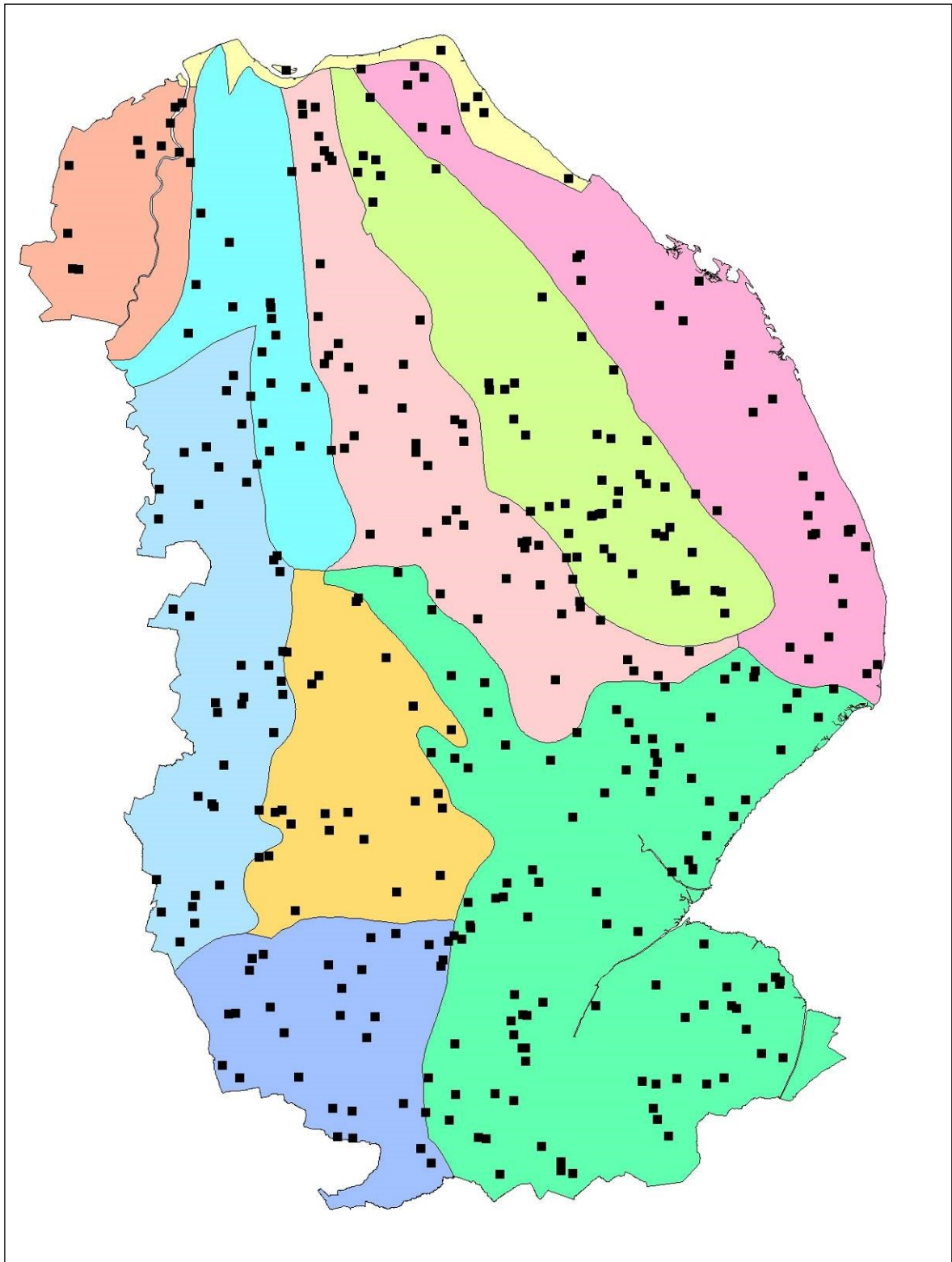


Figure 6 - Map of Greater Lincolnshire's Historic Outfarms

6.2 Historic Farmsteads: Landscape and Settlement Context

The location of the farmstead in relation to other settlement was recorded. This allows the opportunity to examine the distribution of farmsteads in villages, hamlets, loose farmstead groups and those that are in isolated positions, and compare these distributions against other attributes and landscape character.

NCA	Village	Hamlet	Cluster	Isolated	Shrunken Settlement	High Status
CENTRAL LINCOLNSHIRE VALE	13.09%	3.68%	7.78%	73.14%	0.00%	2.31%
	153	43	91	855	0	27
HUMBER ESTUARY	26.00%	2.00%	5.00%	63.00%	0.00%	4.00%
	26	2	5	63	0	4
HUMBERHEAD LEVELS	38.18%	2.42%	9.09%	49.29%	0.00%	1.01%
	189	12	45	244	0	5
KESTEVEN UPLANDS	40.59%	3.27%	3.27%	47.79%	0.00%	5.07%
	248	20	20	292	0	31
LINCOLNSHIRE COAST AND MARSHES	16.28%	3.55%	14.31%	63.82%	0.00%	2.04%
	248	54	218	972	0	31
LINCOLNSHIRE WOLDS	18.41%	2.53%	2.53%	71.00%	0.12%	5.41%
	160	22	22	617	1	47
NORTHERN LINCOLNSHIRE EDGE WITH COVERSANDS	29.65%	2.63%	3.16%	60.53%	0.00%	4.04%
	169	15	18	345	0	23
SOUTHERN LINCOLNSHIRE EDGE	30.14%	1.37%	2.28%	59.67%	0.00%	6.24%
	198	9	15	392	0	41
THE FENS	7.17%	2.02%	13.52%	75.40%	0.00%	1.86%
	255	72	481	2682	0	66
TRENT AND BELVOIR VALES	24.44%	3.17%	8.57%	59.89%	0.00%	3.49%
	231	30	81	566	0	33
GREATER LINCOLNSHIRE	17.88%	2.66%	9.49%	66.96%	0.01%	2.93%
	1877	279	996	7028	1	308

The results show high proportions of Village farmsteads in the Kesteven Uplands and Humberhead Levels character areas. In the case of the former this is perhaps indicative of an upland landscape of early sheep pasture with relatively less medieval common arable land available for enclosure in the 18th and 19th centuries. The Humberhead Levels, in particular around the Isle of Axholme, is within an area of late-drained fenland, where farmsteads of all dates cluster around areas of high ground within historic villages.

By contrast, there are notable proportions of isolated farmsteads in areas of traditionally dispersed settlement such as the Fens and the Coast and Marshes NCAs, where reclamation and drainage has occurred over a very much longer period of time.

Isolated	Set away from nearby settlements and stands alone within its land holdings – these are often the result of 19 th century farming systems
Village	Situated within the boundaries of a town or village
Hamlet	Part of a small hamlet, perhaps comprising the majority of buildings in the settlement
Farmstead Cluster	One of a group making a small cluster.
Park	Within or associated with the holdings of a stately house, often displaying characteristic design features such as coats-of-arms
Shrunken Medieval Village	Adjacent to the remains of a deserted medieval village. It may therefore be an example of continuous settlement.
High Status	Associated with a manor house, ecclesiastical building or other high status residence.
Urban	The farmstead is within the boundaries of a major town or city

Historic Landscape Characterisation Analysis

The Lincolnshire HLC project categorised the landscape of the entire county in terms of its historic development. The following table was produced by establishing the landscape context of each farmstead record according to the HLC dataset and analysing them by National Character Area. As most farmstead records were created on top of existing HLC records for farmsteads, this was achieved by creating a new set of farmstead points moved 100m to the north of their actual location and then querying the underlying landscape types. As a result, the HLC analysis is indicative of underlying landscape types for each farmstead rather than providing a fully accurate picture. The four categories were selected to provide an illustration of the relationship between farmsteads in each character area and the dominant landscape types in the county. This is a contrast to other areas where farmstead characterisation was undertaken, as in these areas it has been possible to undertake more direct analysis of the relationship between farmsteads and landscape character.

- Farmsteads in the Fens are much more likely to be situated in landscapes of modern fields than is typical for the county as a whole, with over 57% of them as compared to a county rate of 45%. This reflects the drastic changes to the landscape of this highly productive area in the last 60 years.
- Fenland farmsteads are also significantly less likely to be found in the context of historic settlements, at a level of 1.48% compared to a county level of 5.18%. While this may be partially related to the difficulty of identifying farmsteads in settlement contexts, it also demonstrates the traditionally dispersed settlement pattern of the landscape around the Wash.
- Farmsteads in the Trent and Belvoir Vales, the Northern Lincolnshire Edge and the Humberhead Levels are more likely to be located within historic settlement cores than farmsteads in other areas and in the county as a whole, reflecting the importance of nucleated settlement in the development of these areas.

National Character Area	Planned Enclosure	Ancient Enclosure	Modern Fields	Historic Settlement Core
GREATER LINCOLNSHIRE (County Wide)	22.44%	8.85%	45.01%	5.18%
	2437	961	4889	563
Humber Estuary	7.48%	11.21%	41.12%	9.35%
	8	12	44	10
Humberhead Levels	21.46%	8.46%	33.07%	8.86%
	109	43	168	45
Lincolnshire Coast and Marshes	23.89%	9.44%	41.75%	6.23%
	372	147	650	97
Lincolnshire Wolds	27.04%	10.25%	41.55%	5.67%
	248	94	381	52
Northern Lincolnshire Edge	25.34%	11.05%	38.61%	5.78%
	149	65	227	34
Southern Lincolnshire Edge	24.23%	7.78%	37.89%	9.84%
	165	53	258	67
Central Lincolnshire Vale	32.65%	8.04%	35.19%	5.41%
	398	98	429	66
The Fens	17.05%	8.03%	57.02%	1.48%
	624	294	2087	54
Trent and Belvoir Vales	20.45%	10.89%	38.56%	9.36%
	201	107	379	92
The Kesteven Uplands	25.31%	7.50%	41.56%	7.19%
	162	48	266	46

- The planned enclosure landscapes of the Lincolnshire Wolds and the Central Lincolnshire Vale are reflected in the elevated proportions of farmsteads located in these landscape types. These areas also have correspondingly higher proportions of isolated farmsteads than the county average, perhaps suggesting a link between these two historical processes.
- The large numbers of farmsteads in the Northern Lincolnshire Edge character area that are situated in landscapes of ancient enclosure are potentially related to the equally high numbers of village based farmsteads in the area, as ancient enclosures are most frequently found around the peripheries of historic settlements. However, there is also the possibility that they relate to older farmsteads that pre-date the planned enclosure of the heath, as indicated by Roberts and Wrathmell's identification of specialist farms in the area.
- There are a number of questions suggested by these figures, including the relationship between the prevailing landscape in which farmsteads sit and their date, type and survival. Further analysis of these relationships would be revealing in a study of the ways in which farmsteads have reacted to landscape change over the centuries.

Level of Survival	Planned Enclosure	Ancient Enclosure	Modern Fields	Historic Settlement Core
Extant (1021)	241	100	411	64
	23.5%	9.8%	40.3%	6.3%
Altered <50% (3477)	825	295	1526	185
	23.7%	8.5%	43.9%	5.32%
Altered >50% (1998)	447	171	890	111
	22.4%	8.6%	44.5%	5.6%
House (984)	224	83	465	46
	22.8%	8.4%	47.3%	4.8%
Demolished (1392)	284	133	663	53
	20.4%	9.6%	47.6%	3.8%
Lost (1625)	324	151	775	88
	19.9%	9.29%	47.7%	5.4%
GREATER LINCOLNSHIRE (County Wide)	22.44%	8.85%	45.01%	5.18%
	2437	961	4889	563

- The data does not indicate particularly great variation in the survival of farmsteads within key landscape types by comparison to overall levels of survival in the county. However there are slight variations that may suggest a correlation, although more investigation would need to be undertaken to prove the statistical significance of the relationships.
- Broadly speaking, it appears that landscapes of Planned Enclosure, Ancient Enclosure and Historic Settlements are more likely to retain extant farmsteads or those with more limited alterations than the county as a whole.
- By comparison, areas of Modern Fields, which have been subject to amalgamation of historic field patterns, appear to have higher rates of loss and demolition than are visible in the wider county.

Farmstead Type	Planned Enclosure	Ancient Enclosure	Modern Fields	Historic Settlement Core
Regular Courtyard (7991)	1810	716	3557	420
	22.7%	9.0%	44.5%	5.3%
Loose Courtyard (1438)	296	122	703	68
	20.6%	8.5%	48.9%	4.7%
Dispersed (174)	37	13	82	9
	21.3%	7.5%	47.1%	5.2%
Other Types (894)	202	82	388	50
	22.6%	9.2%	43.4%	5.6%
GREATER LINCOLNSHIRE (County Wide)	22.44%	8.85%	45.01%	5.18%
	2437	961	4889	563

- Although the figures do not suggest particularly large variations in the prevalence of particular farmsteads within any given landscape type, there are nevertheless slight differences that may result from historical processes.
- Planned enclosure landscapes appear to be more strongly correlated with regular farmstead types than with other types, perhaps affirming the link between the establishment of industrial farming complexes and the reorganisation of the land within 18th and 19th century landscapes.
- “Other Types”, which are more typically composed of older and less regular types, appear to feature more strongly in landscapes of Ancient Enclosure than other farmstead types.

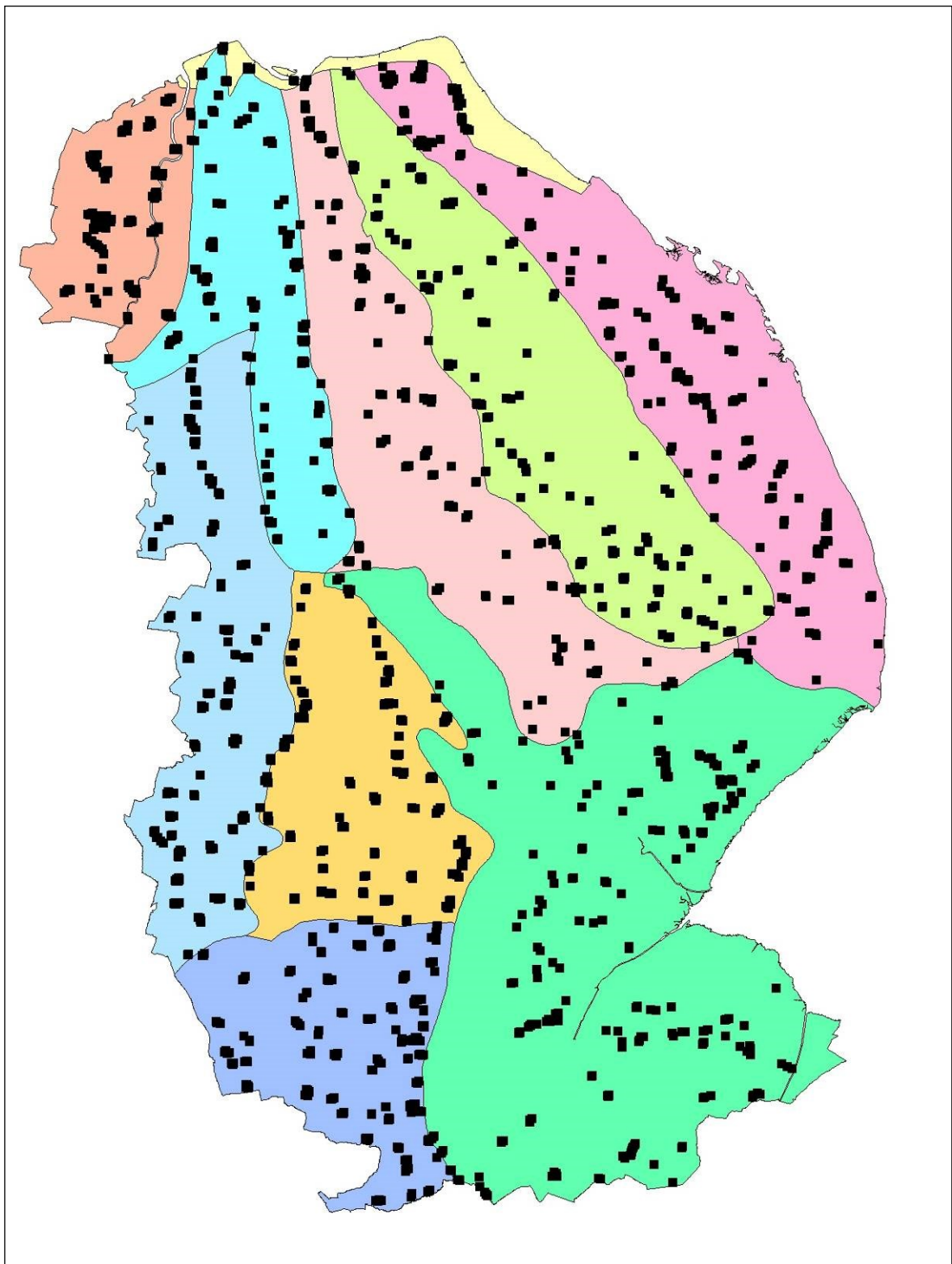


Figure 7 - Farmsteads located in Villages (VILL)

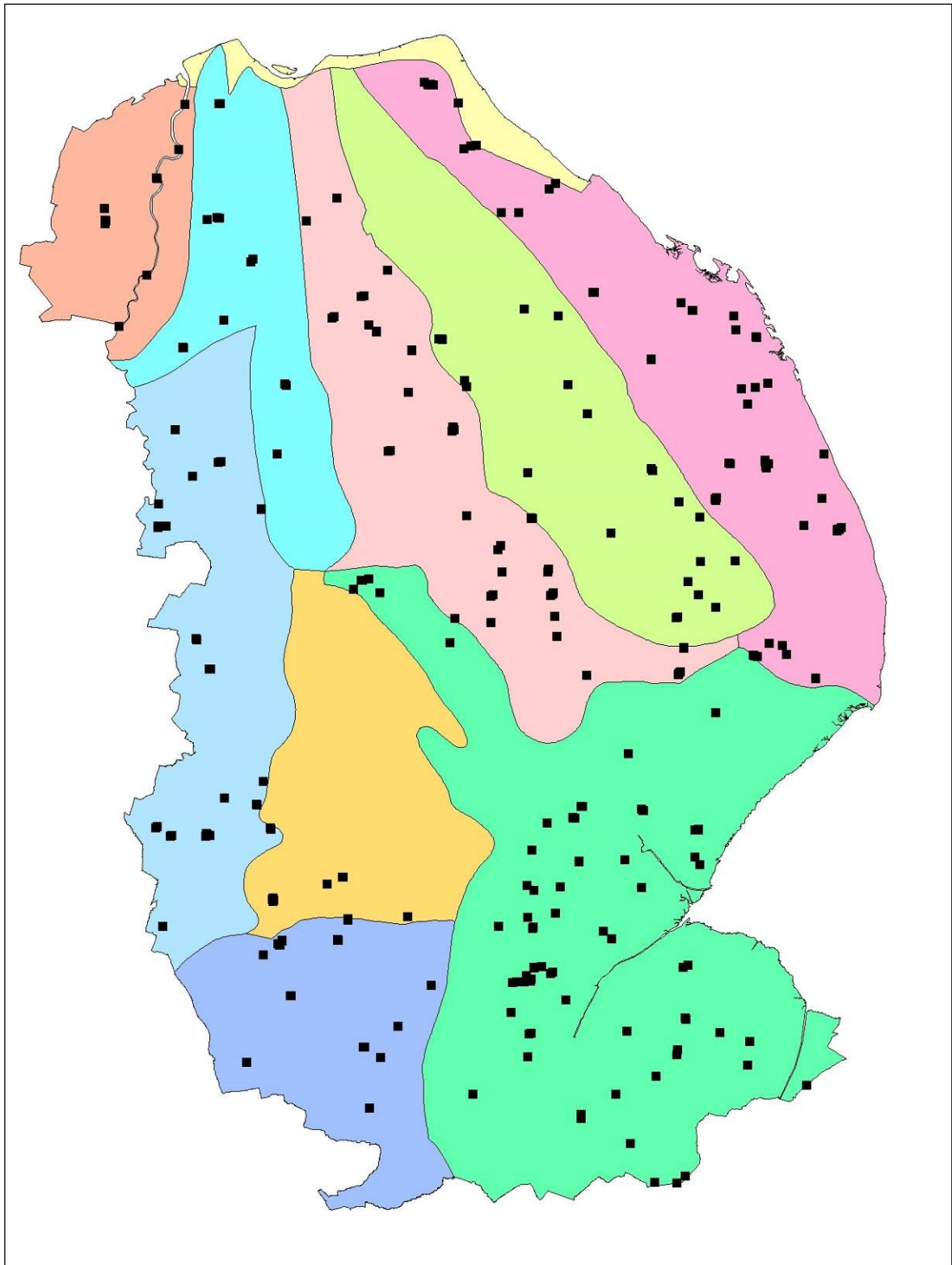


Figure 7 - Farmsteads Located in Hamlets (HAM)

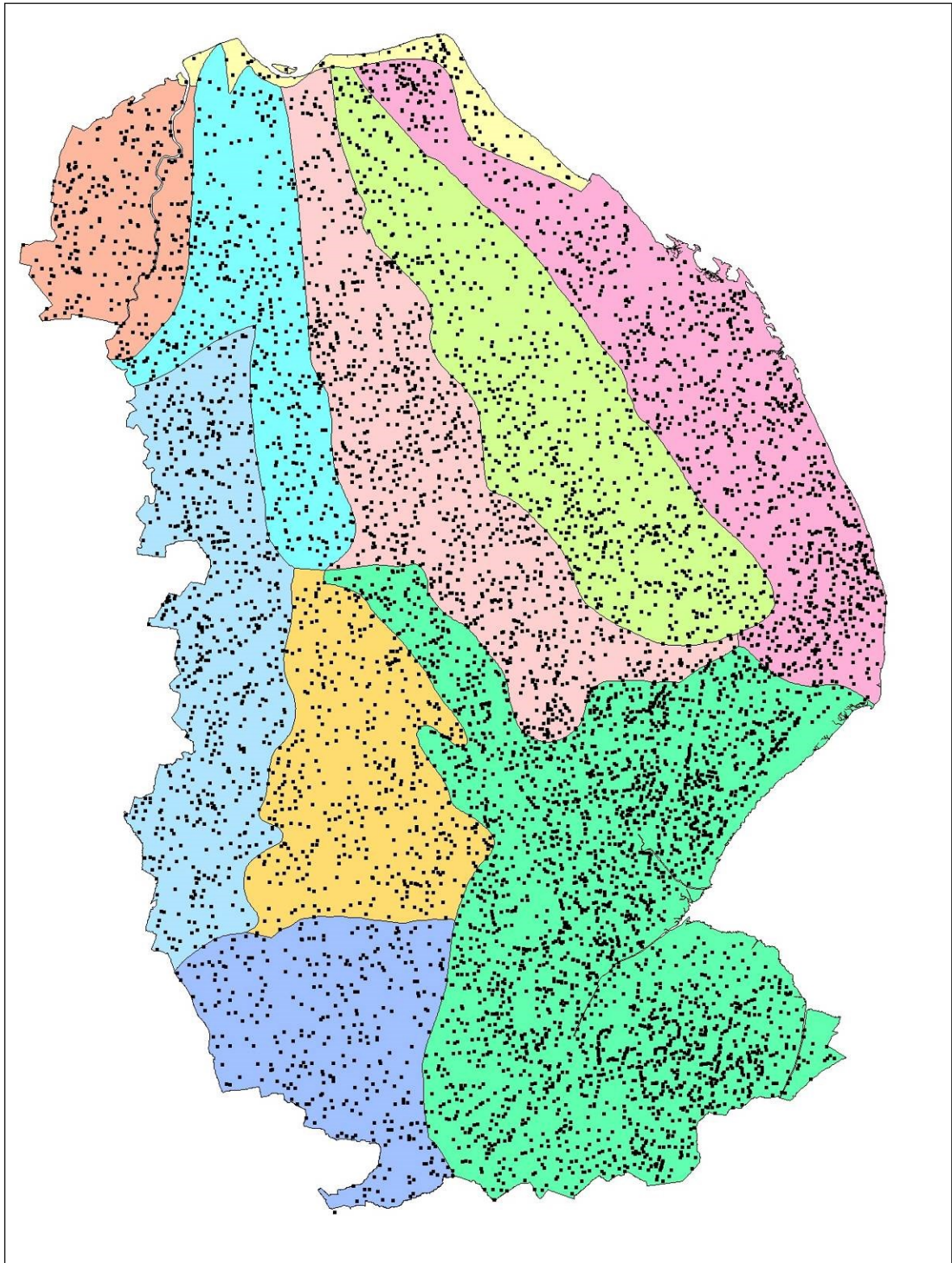


Figure 8 - Farmsteads in Isolated Locations (ISO)

6.3 Position of the Farmhouse

The position of the main residence on a farmstead indicates the relationship between the domestic aspects of farm life and the working arrangements of the agricultural regime. In many cases the farmhouse is either attached to working buildings, particularly stable ranges, or forms part of the main farmyard along with a series of detached working buildings. In the majority of cases the farmhouse is detached and situated at some distance from working buildings. This is particularly indicative of larger planned farms, where the farmer and his family were likely to be of high social standing and therefore required some distance from the working farm to maintain an appropriate lifestyle.

- It is clear from the farmsteads mapping data that detached farmhouses are by far the most common type in Greater Lincolnshire. This is consistent with the predominantly 19th century character of farmsteads in the county, demonstrating the separation of domestic and agricultural functions associated with more planned farming regimes.
- There are also many examples of detached farmsteads that form part of the main yard, whether gable end on or side on. It is not possible to say how these farmsteads are oriented with respect to the yard, and whether they face into it or away from it.
- That said, there are many examples of farmsteads where the house is attached to a range of working buildings. This includes linear and L-plan farmsteads, as well as more regular types with linking ranges between the house and the yard. These appear to be distributed relatively evenly across the county, although there are particular concentrations in the Fens, the Coastal Marsh, the Isle of Axholme (Humberhead Levels) and the Trent Valley (Trent and Belvoir Vales).



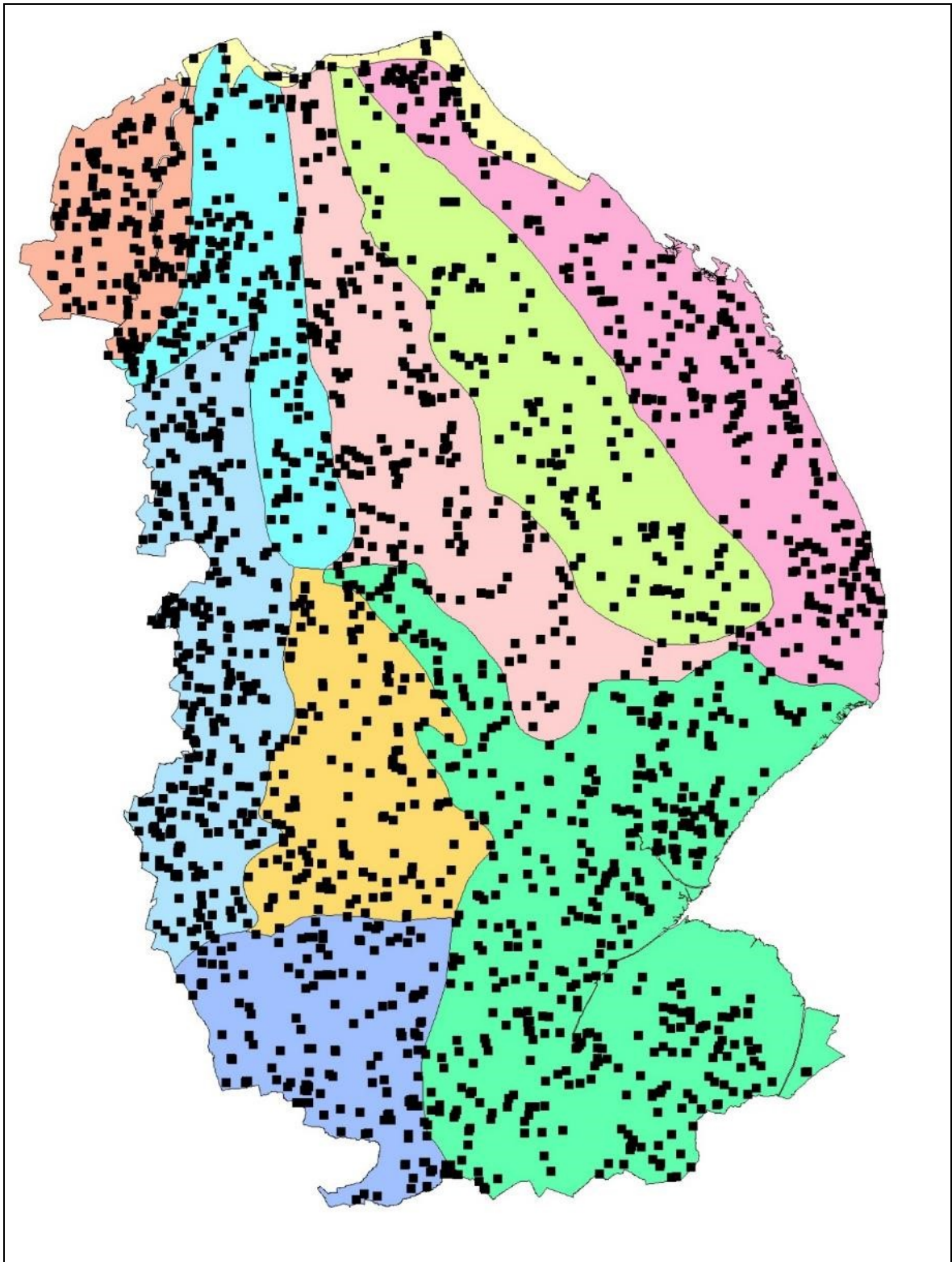


Figure 9 - Farmhouses attached to a working range (ATT)

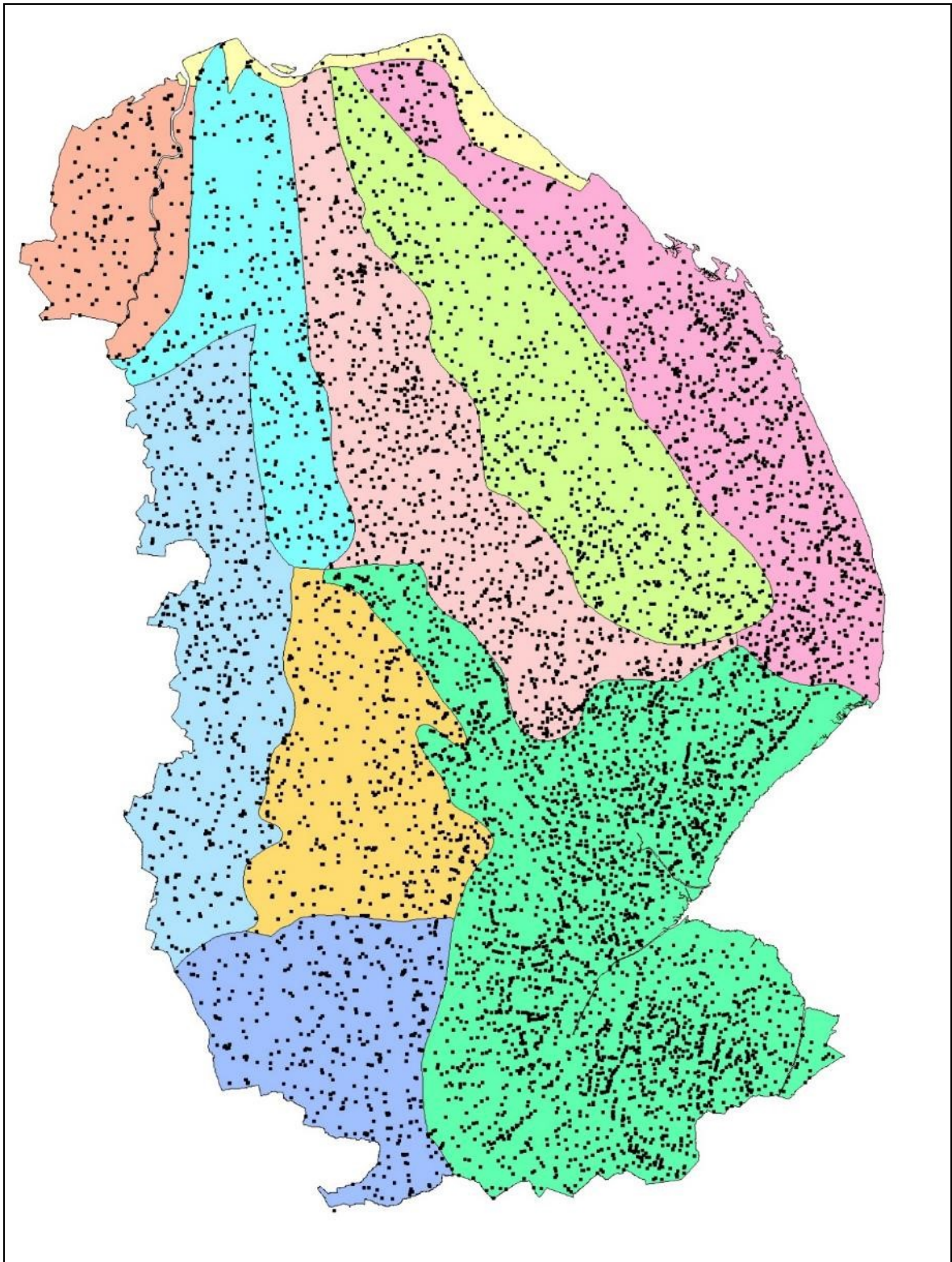


Figure 10 - Farmhouses detached from the main farmstead complex (DET)

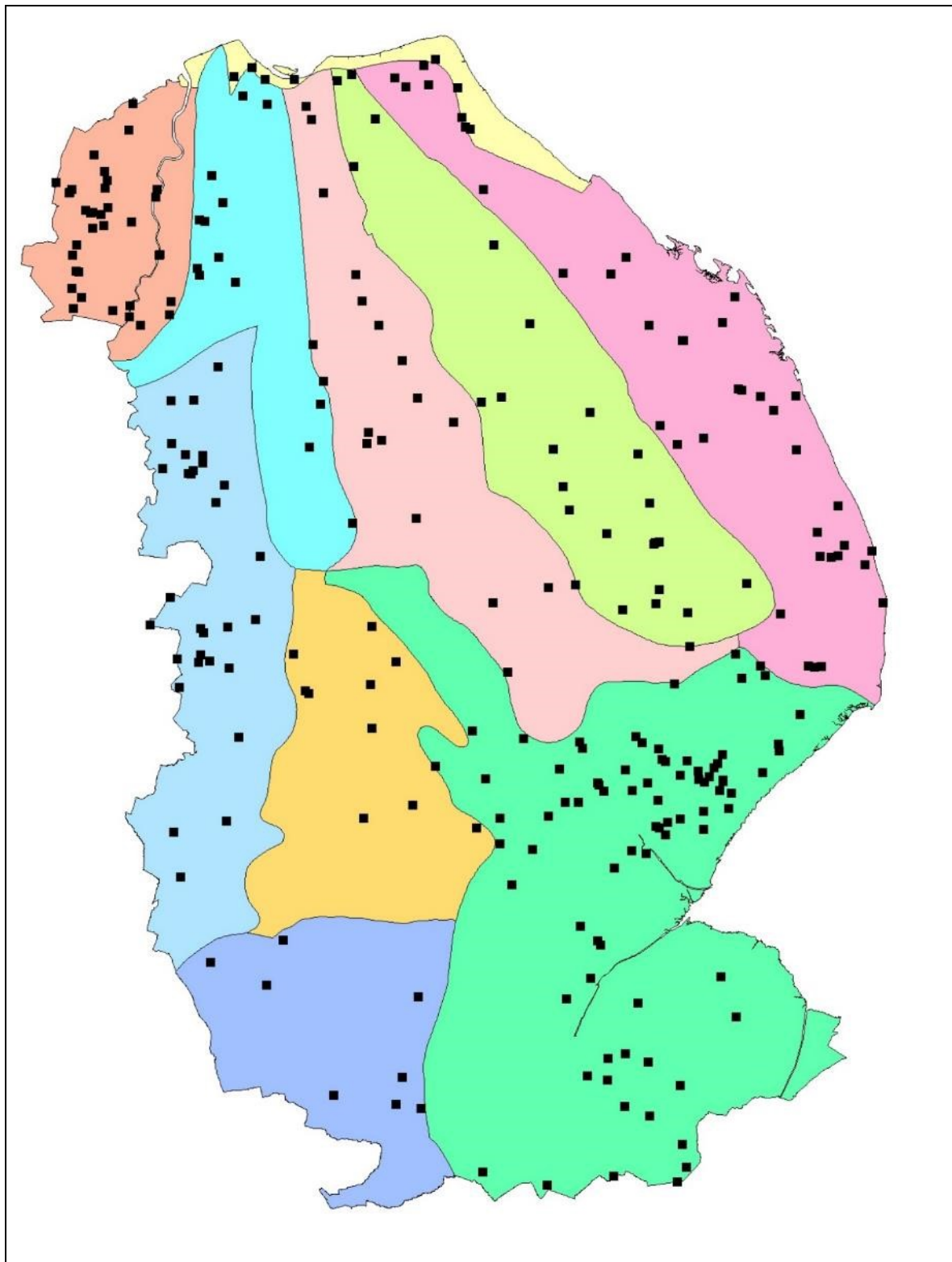


Figure 11 - Detached farmhouses forming part of the main yard – gable end on (GAB)

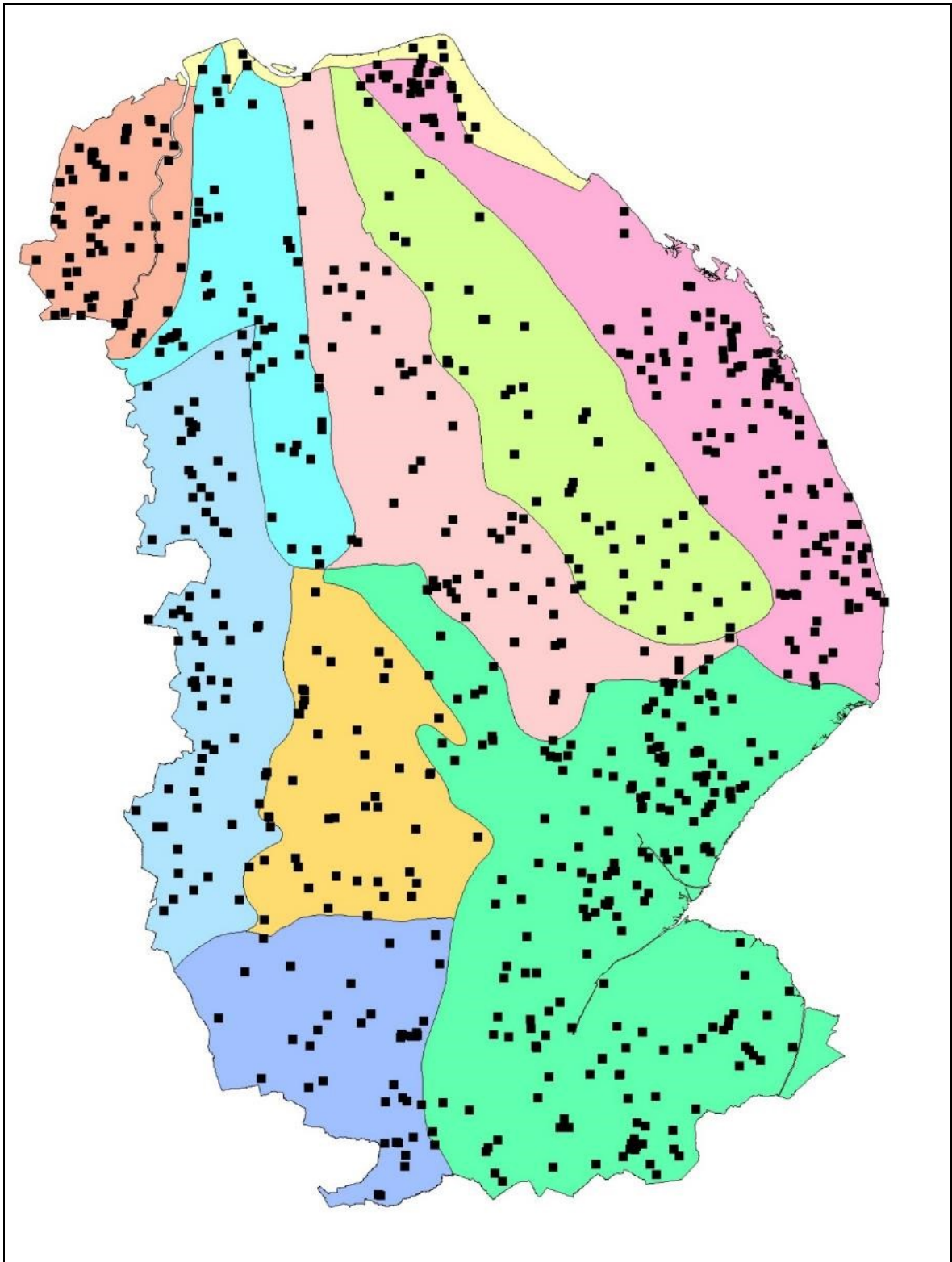


Figure 12 - Farmhouses forming part of the main yard - side on (LONG)

6.4 20th Century Change

By measuring the apparent change between the plan form visible on the 1902 map and the plan form visible today, the level of survival of historic farm buildings was assessed for each record. The table below shows the percentages of farmsteads in each character area that fall into each of the categories of survival.

NCA	Extant	Altered (<50%)	Altered (>50%)	House Only	Demolished	Total Loss
CENTRAL LINCOLNSHIRE VALE	11.55%	35.59%	18.99%	10.09%	10.69%	13.09%
	135	416	222	118	125	153
HUMBER ESTUARY	20.00%	26.00%	10.00%	4.00%	11.00%	29.00%
	20	26	10	4	11	29
HUMBERHEAD LEVELS	14.34%	29.49%	15.15%	7.88%	15.56%	17.58%
	71	146	75	39	77	87
KESTEVEN UPLANDS	14.89%	49.92%	14.57%	4.75%	5.07%	10.80%
	91	305	89	29	31	66
LINCOLNSHIRE COAST AND MARSHES	11.69%	32.57%	19.37%	8.47%	13.85%	14.05%
	178	496	295	129	211	214
LINCOLNSHIRE WOLDS	11.74%	38.20%	22.21%	5.29%	12.66%	9.90%
	102	332	193	46	110	86
NORTHERN LINCOLNSHIRE EDGE	13.33%	31.75%	22.81%	6.84%	10.70%	14.56%
	76	181	130	39	61	83
SOUTHERN LINCOLNSHIRE EDGE	11.11%	43.07%	22.83%	6.70%	6.09%	10.20%
	73	283	150	44	40	67
THE FENS	4.61%	24.80%	18.70%	13.38%	18.27%	20.24%
	164	882	665	476	650	720
TRENT AND BELVOIR VALES	11.75%	43.28%	17.88%	6.35%	8.04%	12.70%
	111	409	169	60	76	120
GREATER LINCOLNSHIRE	9.73%	33.12%	19.04%	9.38%	13.26%	15.48%
	1021	3476	1998	984	1392	1625

- The figures show significant levels of demolition and outright loss of farmsteads in the Fens NCA, with the Lincolnshire Coast and Marshes and the Humberhead Levels also demonstrating high levels of loss. This may relate to the very extensive landscape changes to have affected these areas over the last 50 to 100 years, including the consolidation of farm holdings and the implementation of new mechanised farming techniques, which have created prairie-style landscapes of large modern fields in particularly rich areas.
- Conversely, the Kesteven Uplands retains over 64% of its traditional farm buildings in either their original form or with less than 50% alteration, indicating the retention of more traditional pastoral farming practices, the greater prevalence of large parks and estates, and less consolidation of farm holdings in the last century.
- The high rates of loss may also reflect 20th century change affecting smaller-scale traditional farmsteads. Work on farmsteads in the West Midlands and Wiltshire shows that Cotswolds farmsteads, stone-built with capacity for adaptation, have high rates of survival matching those seen here in the Kesteven Uplands.

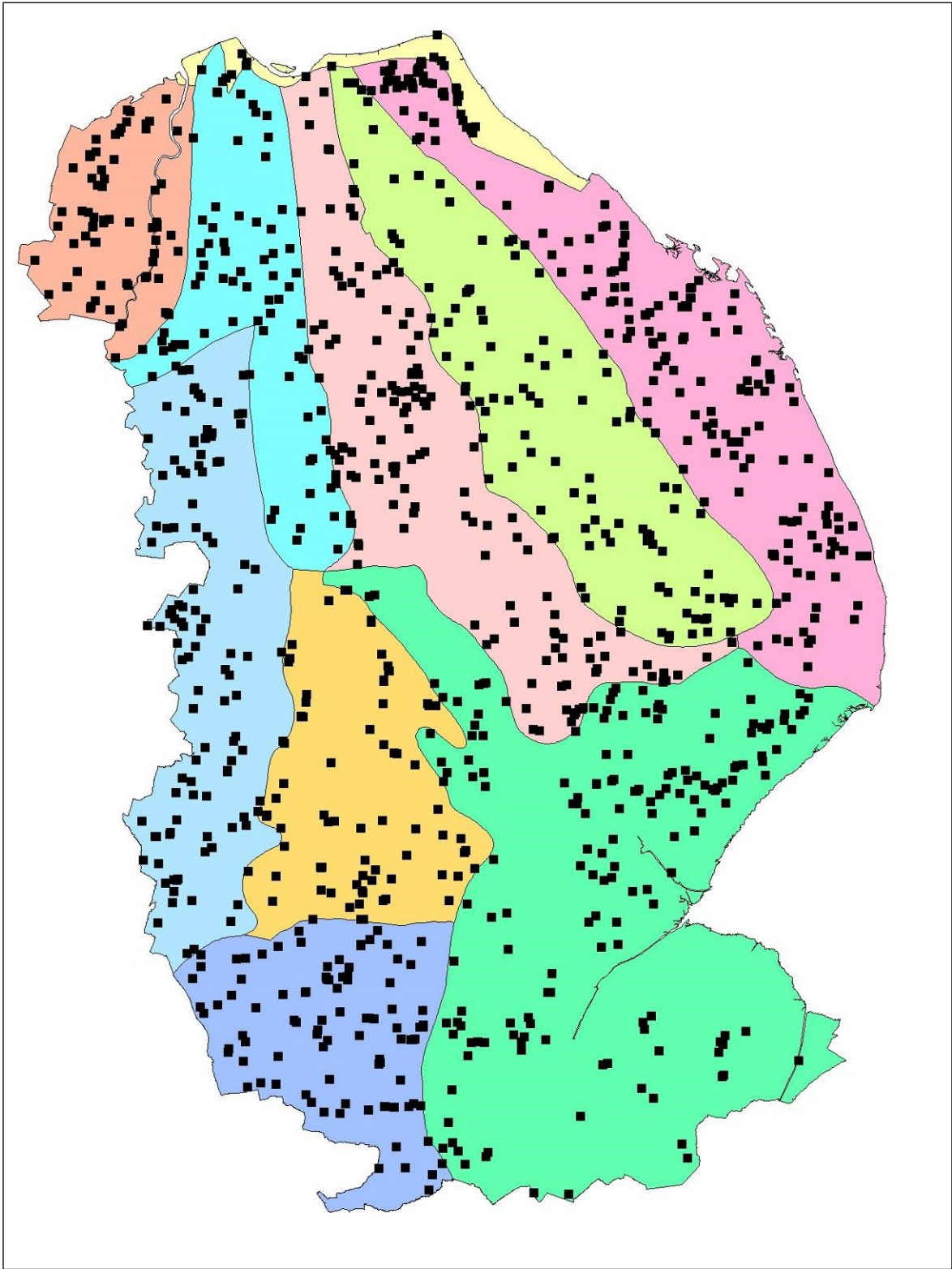


Figure 13 - Fully Extant Farmsteads (EXT)

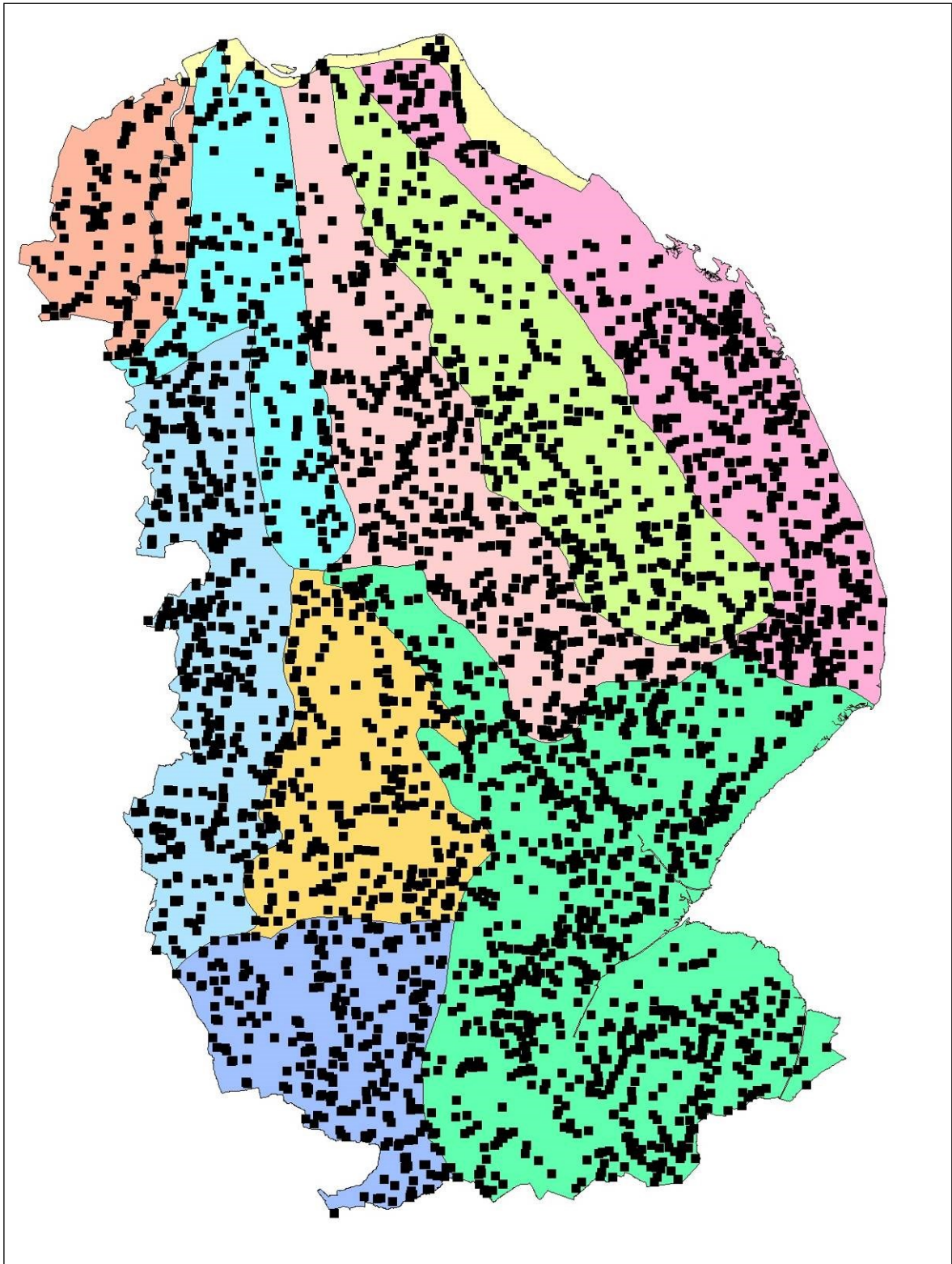


Figure 14 - Farmsteads that have been altered but retain over 50% of their traditional plan form (ALT)

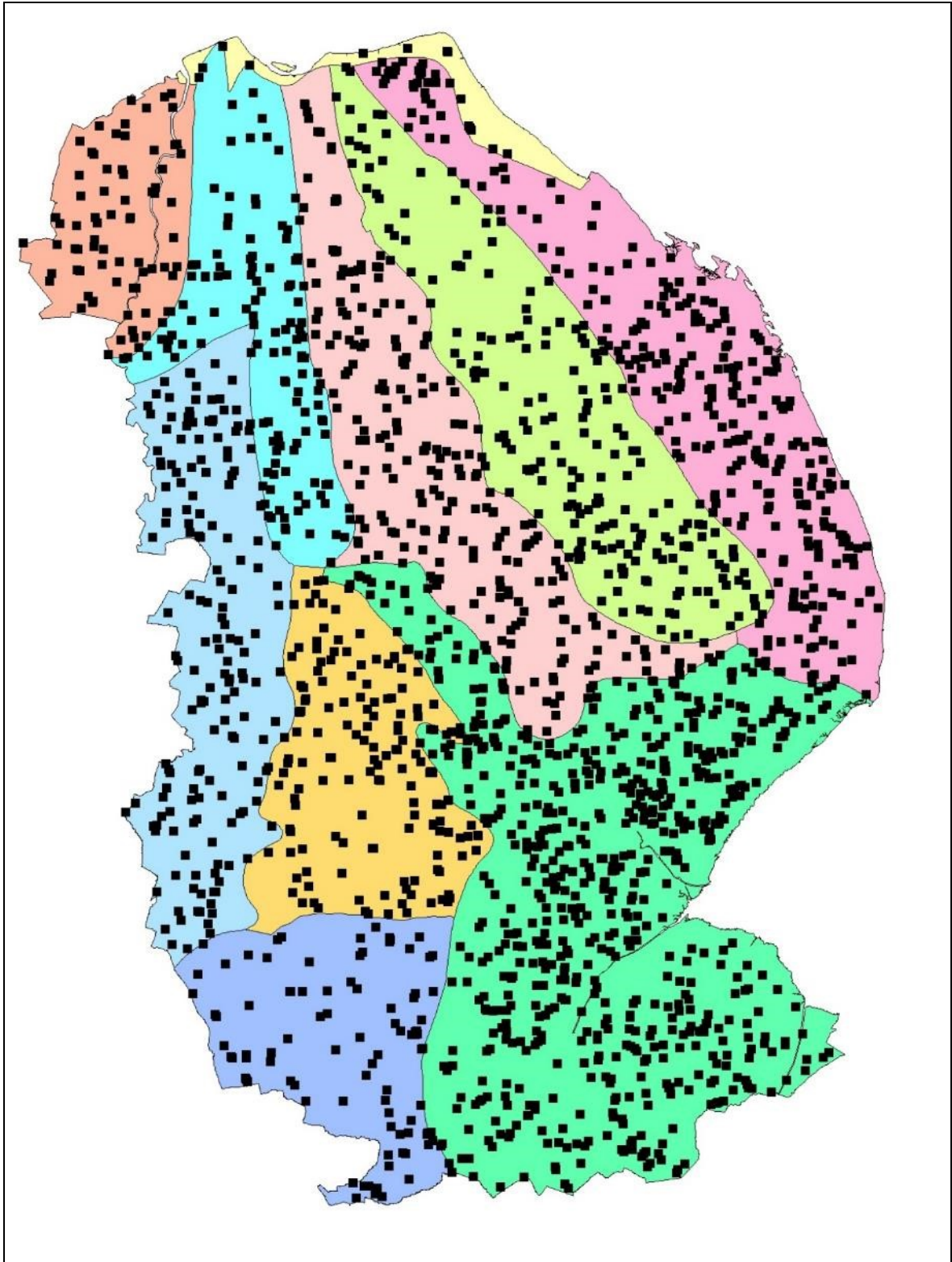


Figure 15 - Farmsteads that have been altered and retain less than 50% of their traditional plan form (ALTS)

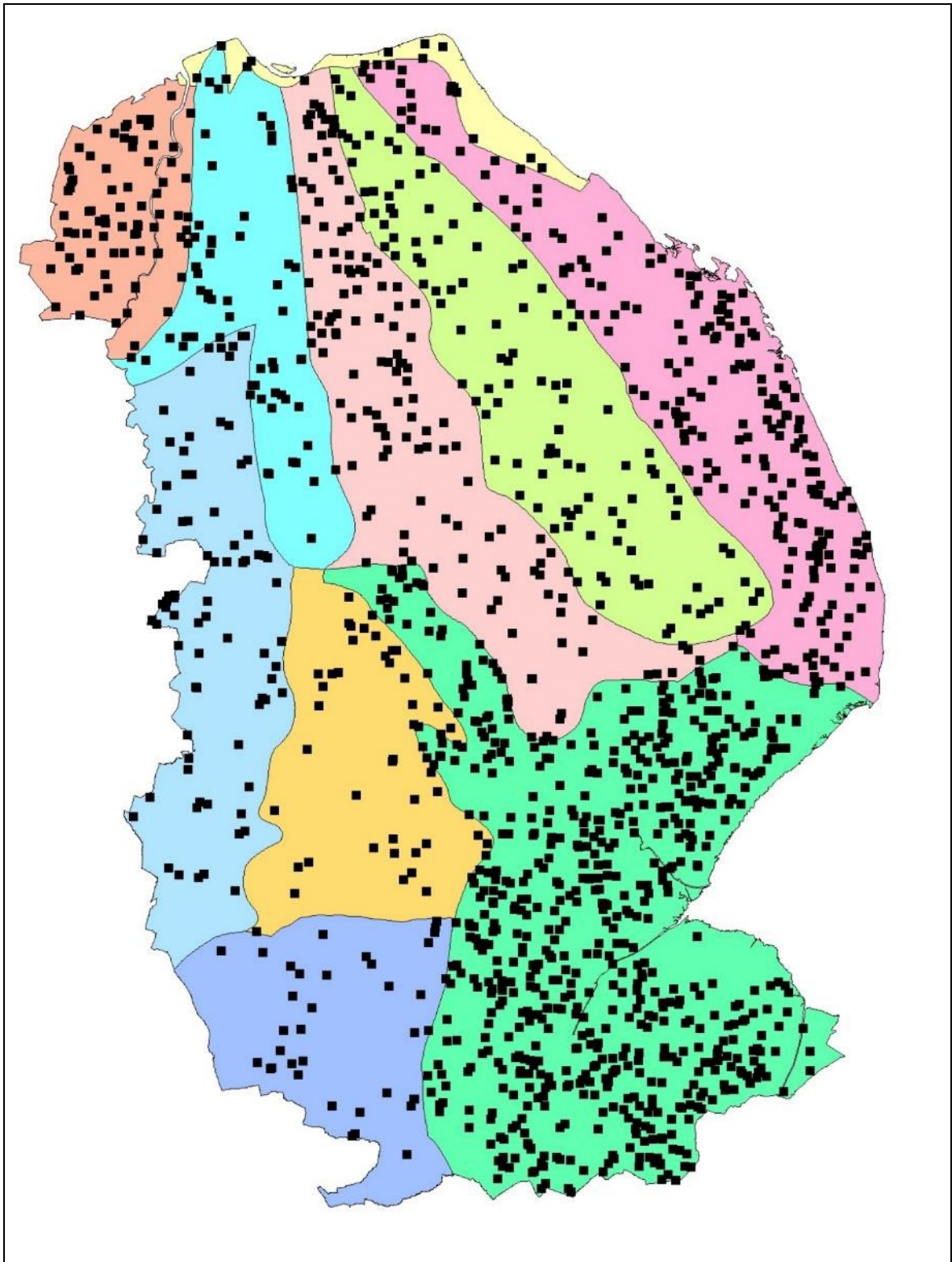


Figure 16 - Farmsteads that have been demolished but retain an agricultural use on site (DEM)

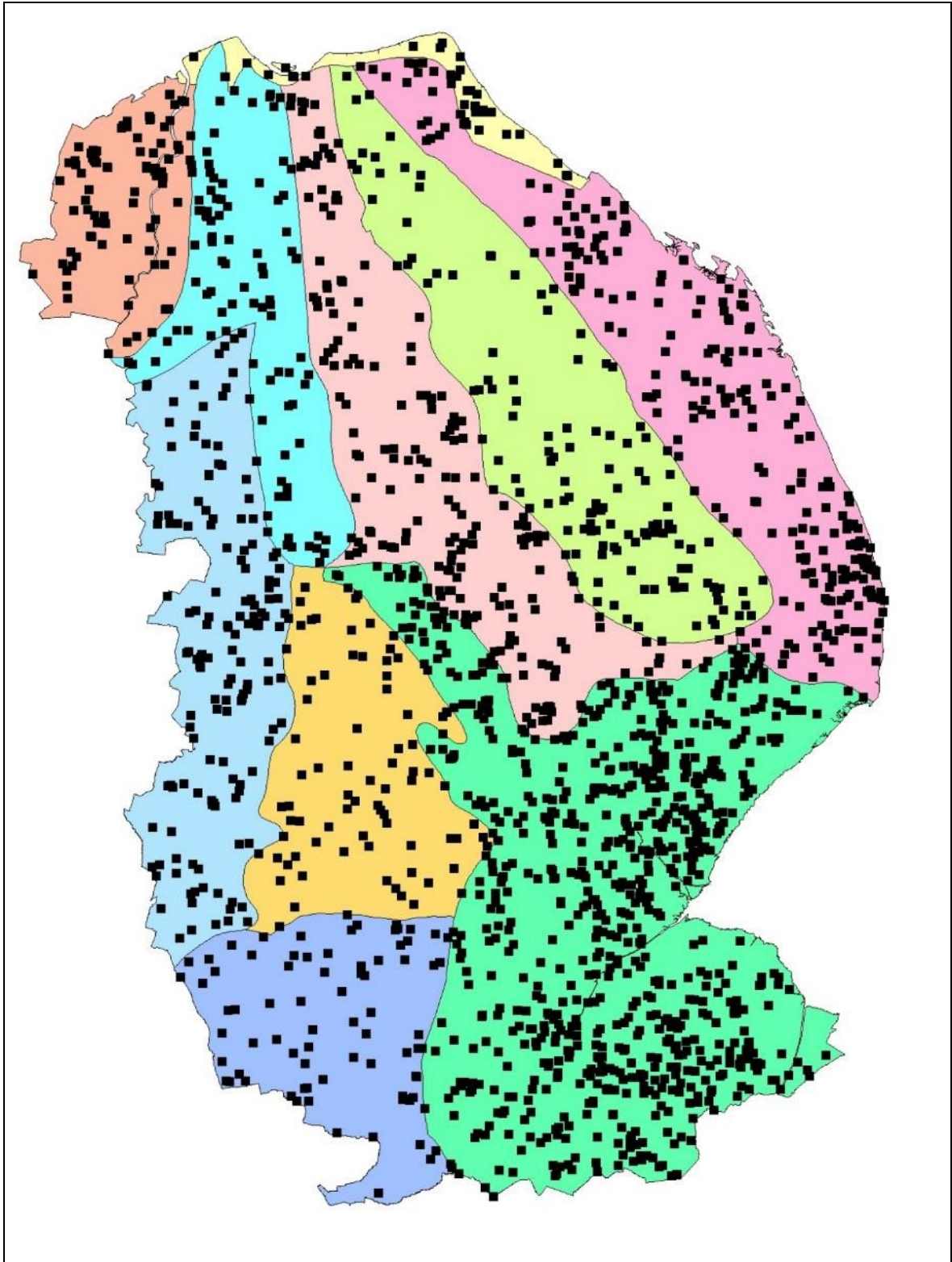


Figure 17 - Farmsteads that have been completely lost (LOST)

6.5 Dating Evidence for Recorded Historic Farmsteads

The following table provides a breakdown of known dates for farmsteads by National Character Area. It is derived from dates found in the listing description provided by Historic England, and does not include dates for unlisted farm buildings.

NCA	Med	C16	C17	C18	C19	Total
CENTRAL LINCOLNSHIRE VALE	3	3	9	23	18	56
	5.36%	5.36%	16.07%	41.07%	32.14%	
HUMBER ESTUARY	0	0	0	0	0	0
	0.00%	0.00%	0.00%	0.00%	0.00%	
HUMBERHEAD LEVELS	0	1	0	16	6	23
	0.00%	4.35%	0.00%	69.57%	26.09%	
KESTEVEN UPLANDS	3	3	42	34	21	103
	2.91%	2.91%	40.78%	33.01%	20.39%	
LINCOLNSHIRE COAST AND MARSHES	1	5	11	29	12	58
	1.72%	8.62%	18.97%	50.00%	20.69%	
LINCOLNSHIRE WOLDS	2	3	14	35	18	72
	2.78%	4.17%	19.44%	48.61%	25.00%	
NORTHERN LINCOLNSHIRE EDGE WITH COVERSANDS	1	3	5	27	15	51
	1.96%	5.88%	9.80%	52.94%	29.41%	
SOUTHERN LINCOLNSHIRE EDGE	2	3	15	32	20	72
	2.78%	4.17%	20.83%	44.44%	27.78%	
THE FENS	3	4	10	62	37	116
	2.59%	3.45%	8.62%	53.45%	31.90%	
TRENT AND BELVOIR VALES	2	4	19	39	21	85
	2.35%	4.71%	22.35%	45.88%	24.71%	
GREATER LINCOLNSHIRE	17	29	125	297	168	636
	2.67%	4.56%	19.65%	46.70%	26.42%	

Dating information extracted from the descriptions of listed buildings was added where relevant. The date information was recorded by century except from pre-1600 buildings, which were recorded as 'Medieval'. Whilst some listed buildings have date ranges that appear to be more accurate, for example, 'early 18th century', in some areas many listed buildings will only be dated to a century. Additionally, the dating of agricultural buildings, particularly those earlier than the 19th century, is often imprecise. Farmsteads identified only from the OS 2nd Edition 25" mapping were assigned a 19th century date which indicates a latest possible date of creation. This data should be treated with caution as one list entry may encapsulate a whole model farm, a linked group of buildings or a single structure. It is also likely that there are significant biases inherent in the listing process which mean that these figures are not indicative of the date range of the full farmsteads dataset.

- In the county as a whole there are very few examples of medieval or 16th century farm buildings. Indeed, it is difficult to draw any conclusions from the figures to indicate a particular prevalence in any single part of the county.
- Farm buildings from the 17th century are most concentrated in the Kesteven Uplands, reflecting the durable stone construction of historic buildings in this area, as well as its

notable productivity and wealth in this period derived from the production and export of wool.

- There are notable concentrations of 18th century listed farmsteads in the Fens, the Coastal Marshes and the Humberhead Levels. This may be indicative of the rapid agricultural expansion that followed drainage and improvement of these areas.

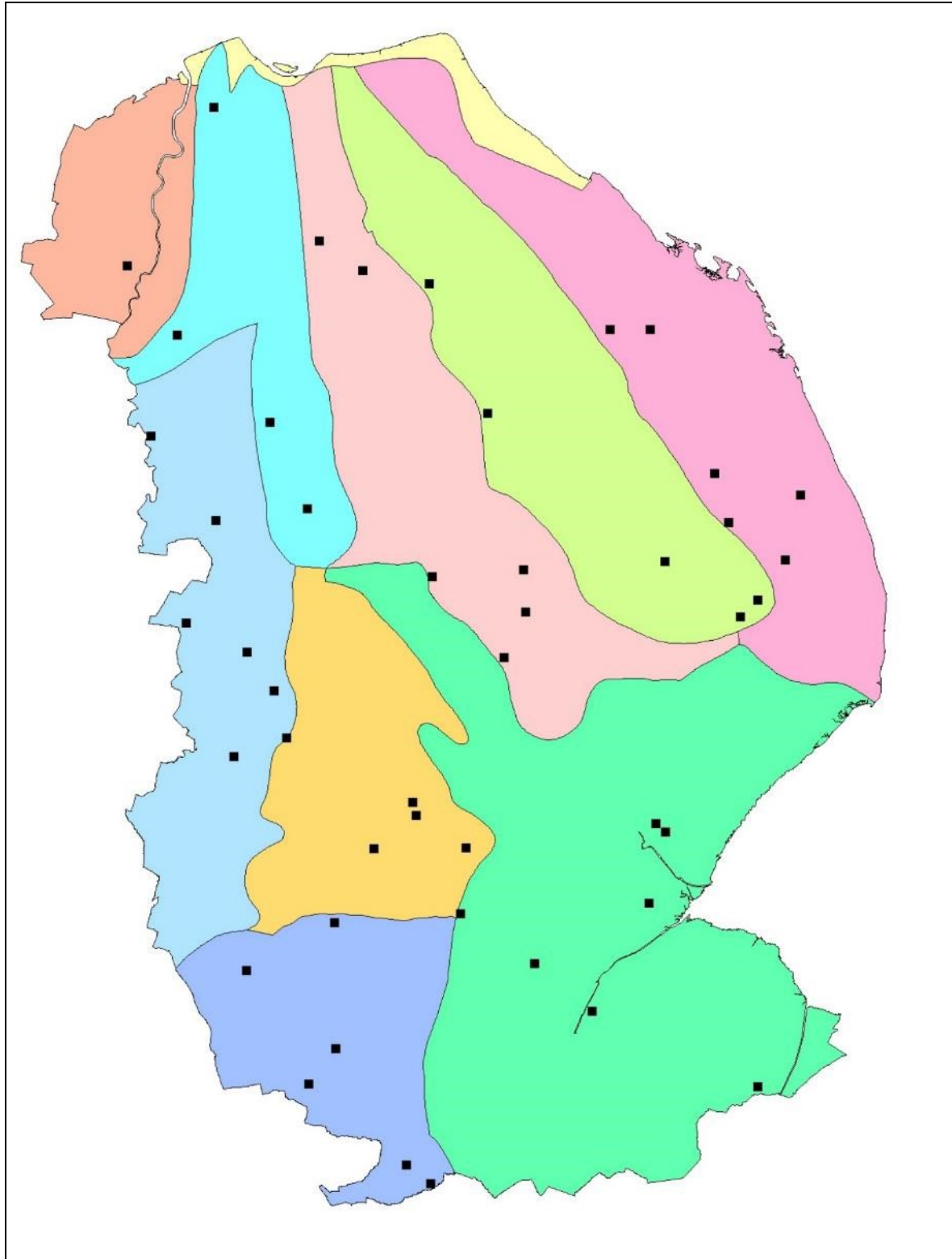


Figure 18 - Listed farm buildings dating from the 16th century and earlier

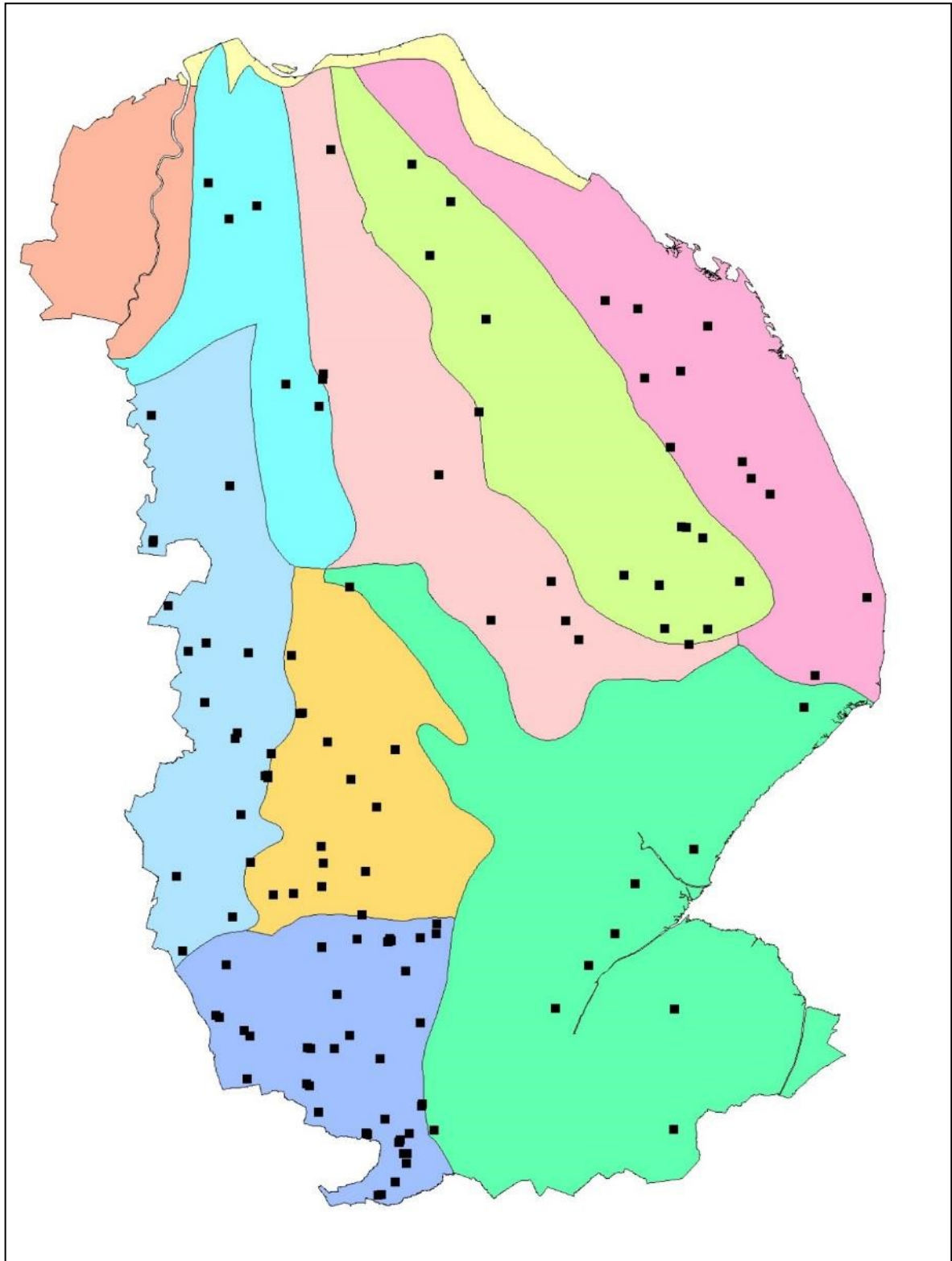


Figure 19 - Listed farm buildings dating from the 17th century

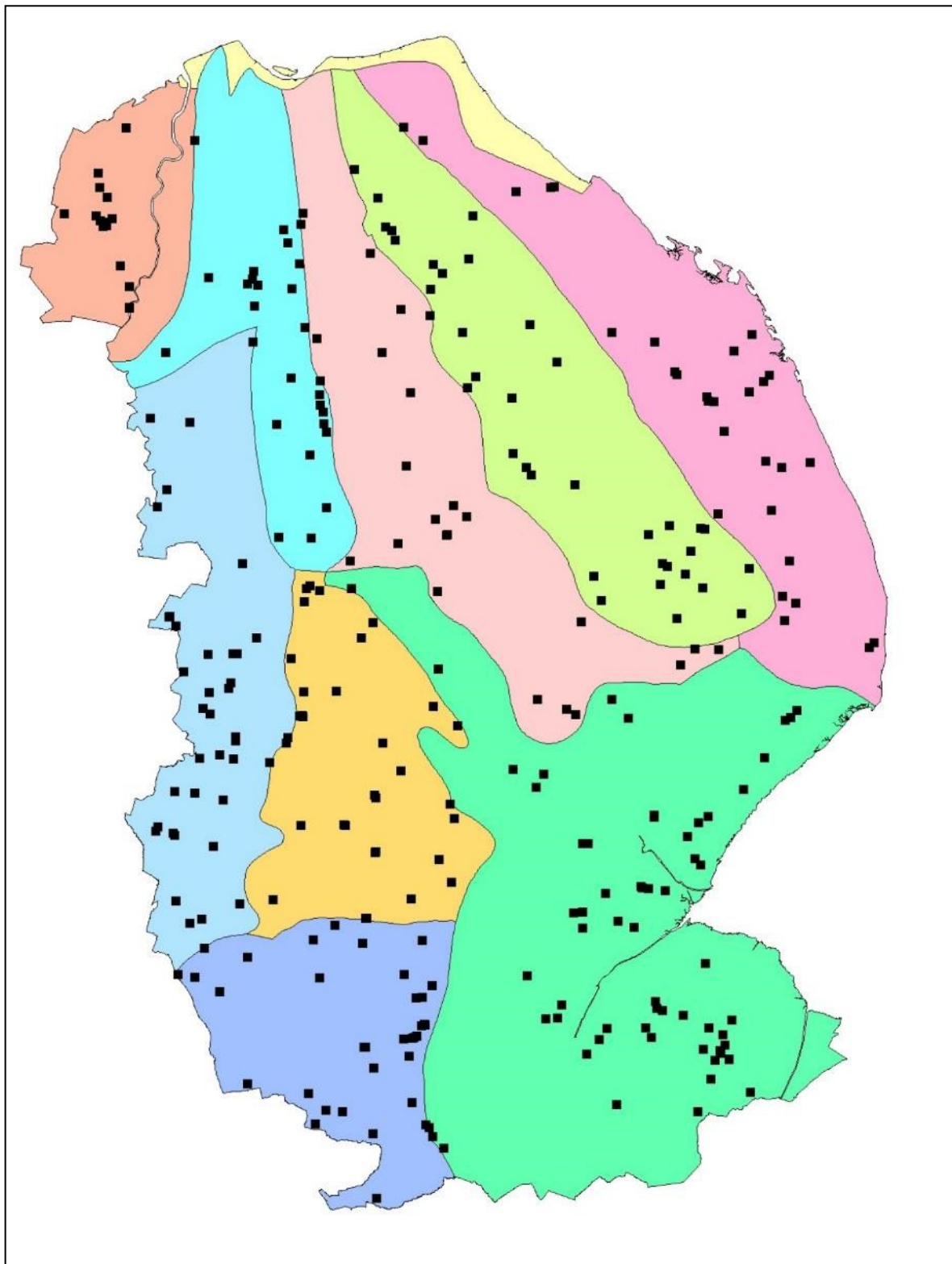


Figure 20 - Listed farm buildings dating from the 18th century

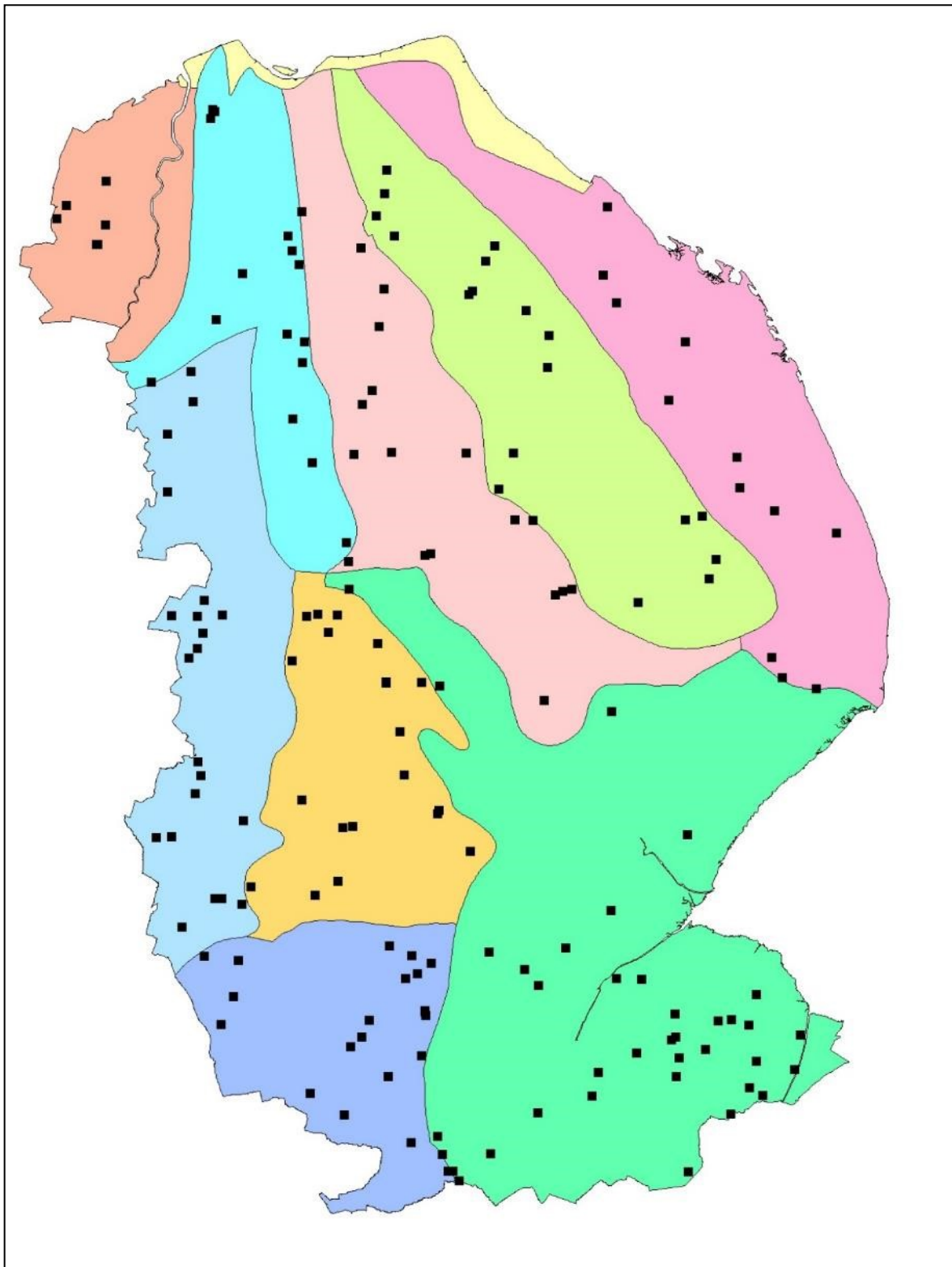


Figure 21 - Listed farm buildings dating from the 19th century

6.6 Farmstead Plan Types

Using the 2nd Edition OS map of c.1905 as the data source, plan form for each farmstead was recorded. As detailed above, farmsteads were divided into the following principal groups:

- Regular Courtyard
- Loose Courtyard
- Dispersed
- Linear
- L-plan (house attached)
- Parallel
- Row.

These classifications were used to record the principal attribute of the plan. Secondary attributes were also recorded allowing, for example, the distinction between a U-plan regular courtyard and an E-plan regular courtyard. Other secondary attributes included, for example, where a loose courtyard plan was the principal plan form but there were some detached or dispersed building elements.

In some farmsteads there are additional elements (beyond the primary and secondary attributes) that also warranted recording, for example, covered yards or particular courtyard arrangements such as a regular L-plan within a multi-yard farmstead. Such additional features were recorded within a Tertiary Element field.

The recording of the plan form of outfarms and field barns followed that of farmsteads, having a primary attribute, for example, Loose Courtyard or Regular Courtyard, and a secondary attribute recording the form. Where a field barn stands within a field with no yard it was recorded as a **Single** building.



A full list of the various plan types is provided in Appendix 1 of this document with explanatory notes on all other attributes used in the mapping project. More detailed illustrated examples are provided in the Greater Lincolnshire Farmsteads Character Statement which accompanies this document as part of the Greater Lincolnshire Historic Farmsteads Guidance package.

Regular Courtyard Types

NCA	RC-Cov	RC-E	RC-F	RC-FUL	RC-L	RC-L3	RC-L4	RC-MY	RC-T	RC-U	RC-Z
CENTRAL LINCOLNSHIRE VALE	1.20%	6.42%	2.99%	12.32%	11.04%	10.69%	0.86%	8.47%	0.68%	23.10%	0.77%
	14	75	35	144	129	125	10	99	8	270	9
HUMBER ESTUARY	0.00%	3.00%	1.00%	31.00%	6.00%	10.00%	2.00%	11.00%	0.00%	16.00%	0.00%
	0	3	1	31	6	10	2	11	0	16	0
HUMBERHEAD LEVELS	0.81%	2.63%	0.81%	33.13%	4.44%	9.49%	2.42%	5.86%	1.41%	20.61%	0.61%
	4	13	4	164	22	47	12	29	7	102	3
KESTEVEN UPLANDS	1.64%	5.56%	2.95%	13.09%	11.46%	10.97%	2.45%	9.82%	1.15%	16.04%	0.82%
	10	34	18	80	70	67	15	60	7	98	5
LINCOLNSHIRE COAST AND MARSHES	0.59%	2.82%	2.30%	11.75%	13.92%	12.15%	1.64%	6.43%	1.44%	17.53%	1.31%
	9	43	35	179	212	185	25	98	22	267	20
LINCOLNSHIRE WOLDS	1.50%	7.13%	1.27%	15.54%	7.25%	10.93%	0.46%	12.20%	0.81%	19.33%	1.04%
	13	62	11	135	63	95	4	106	7	168	9
NORTHERN LINCOLNSHIRE EDGE WITH COVERSANDS	1.93%	6.32%	3.68%	23.86%	6.14%	8.77%	1.58%	12.63%	0.70%	21.05%	1.05%
	11	36	21	136	35	50	9	72	4	120	6
SOUTHERN LINCOLNSHIRE EDGE	2.74%	3.50%	3.20%	9.59%	7.76%	12.94%	2.89%	15.37%	1.37%	16.89%	0.61%
	18	23	21	63	51	85	19	101	9	111	4
THE FENS	0.56%	1.97%	2.92%	6.18%	16.56%	17.40%	3.60%	4.86%	1.71%	15.21%	0.82%
	20	70	104	220	589	619	128	173	61	541	29
TRENT AND BELVOIR VALES	1.06%	5.61%	3.70%	20.11%	6.46%	9.52%	2.65%	10.90%	2.12%	18.62%	0.74%
	10	53	35	190	61	90	25	103	20	176	7
GREATER LINCOLNSHIRE	1.04%	3.93%	2.72%	12.79%	11.79%	13.08%	2.37%	8.12%	1.38%	17.81%	0.88%
	109	412	285	1342	1238	1373	249	852	145	1869	92

Regular courtyard types are characterised by linked agricultural ranges set around a central yard area. They are typically planned in appearance, and were often built in a single phase of construction. Many of these farmsteads are products of the 'high farming' practices of the 19th century, and demonstrate a planned and scientific approach to managing the rural landscape. Work to understand the distribution of farmstead types elsewhere in the country (Lake and Edwards, 2006), shows that the pattern of Regular Farmsteads as a dominant type forms a clear band along the eastern edge of the country as a whole, extending from Norfolk to Northumberland.

- The results indicate that full regular courtyard types are very common in the Humber Estuary, Humberhead Levels Trent and Belvoir Vales and Northern Lincolnshire Edge NCAs
- These are all areas which were subject to extensive planned enclosure in the 18th and 19th centuries, suggesting a widespread reorganisation of their landscapes at the same time that planned farmsteads of this type were being developed
- U-plans are more evenly spread, although they are more prevalent in the Central Lincolnshire Vale and the Northern Lincolnshire Edge than elsewhere. This correlates with the prevalence of planned enclosure landscapes in those areas
- L-type farmsteads, when taken together, constitute approximately double the numbers of U-plans and Full Courtyards in the county as a whole
- Regular L type farmsteads, particularly those without a third or fourth range, are typically smaller than other types found in Greater Lincolnshire. This is particularly notable in the Fens and Marshes NCAs, where they are the dominant regular type
- L-types with a third and fourth range (RCL3 and RCL4) are also concentrated in the Fens and Coastal Marshes, although they are not so numerous as those without additional ranges.

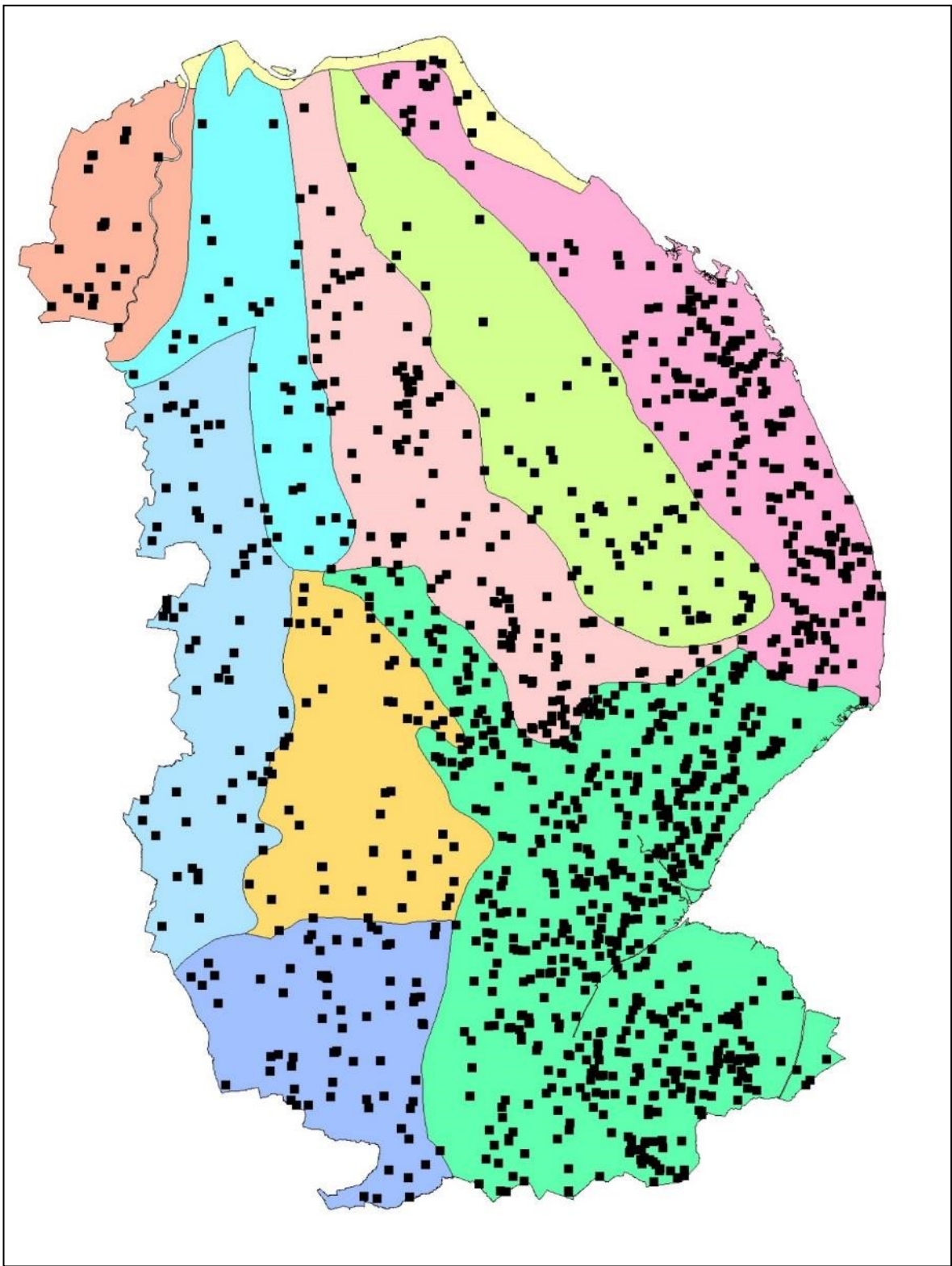


Figure 22 - RCL - Regular courtyard farmsteads with an L-plan range

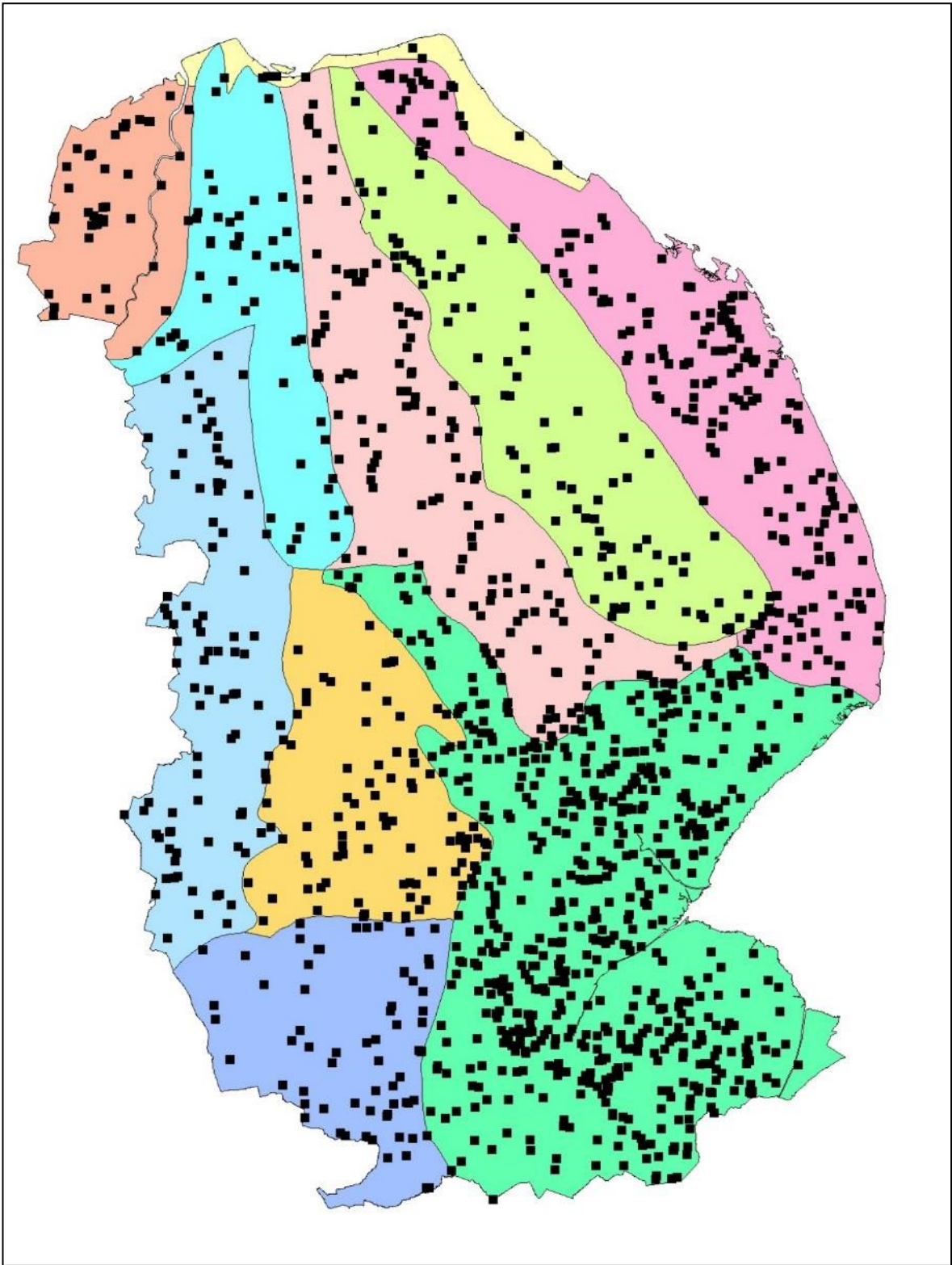


Figure 23 - RCL3 - Regular courtyard farmsteads with an L-plan range and a detached building to the third side of the yard

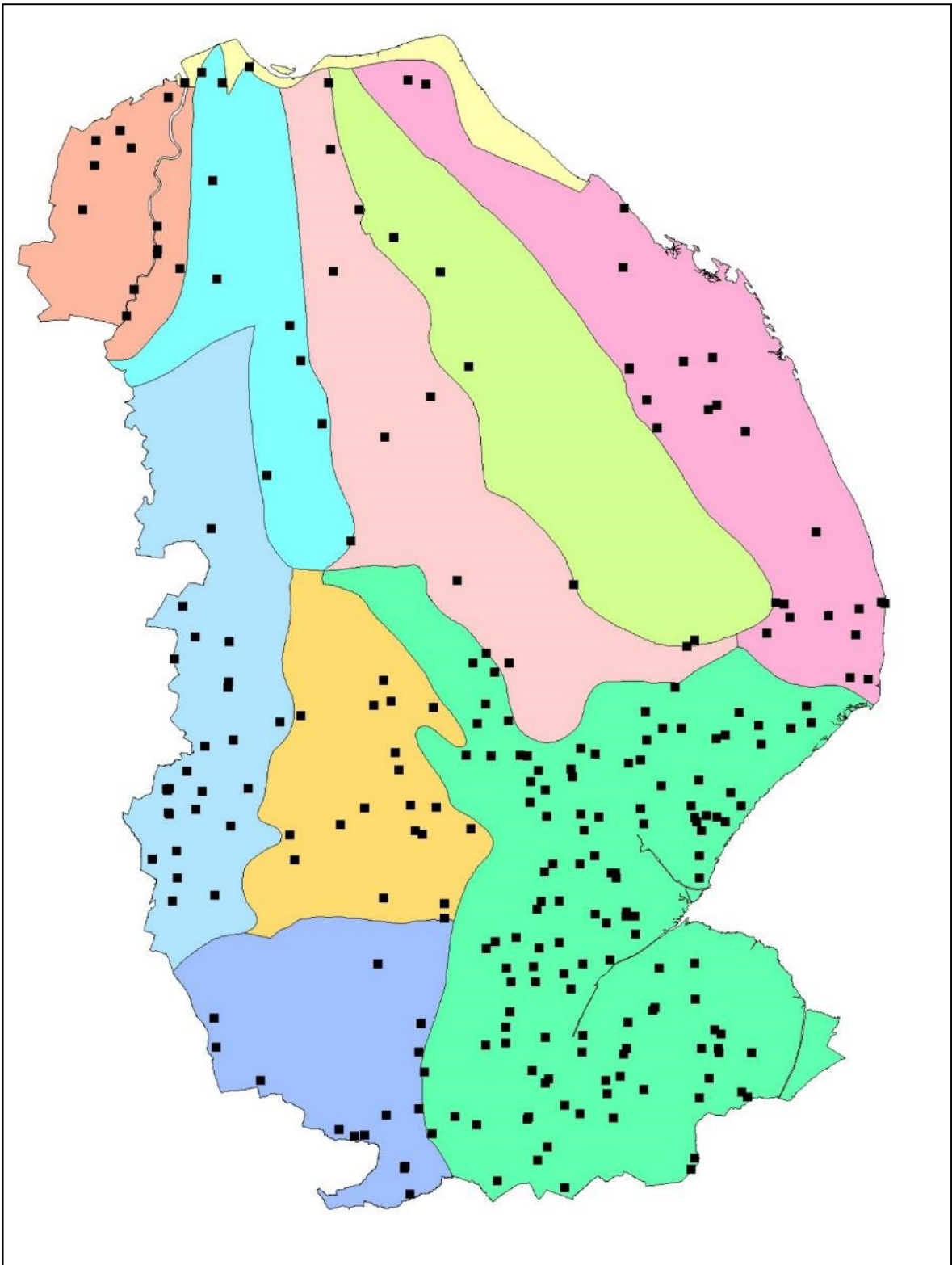


Figure 24 - RCL4 - Regular courtyard farmsteads with an L-plan range and a detached building to the third and fourth sides of the yard

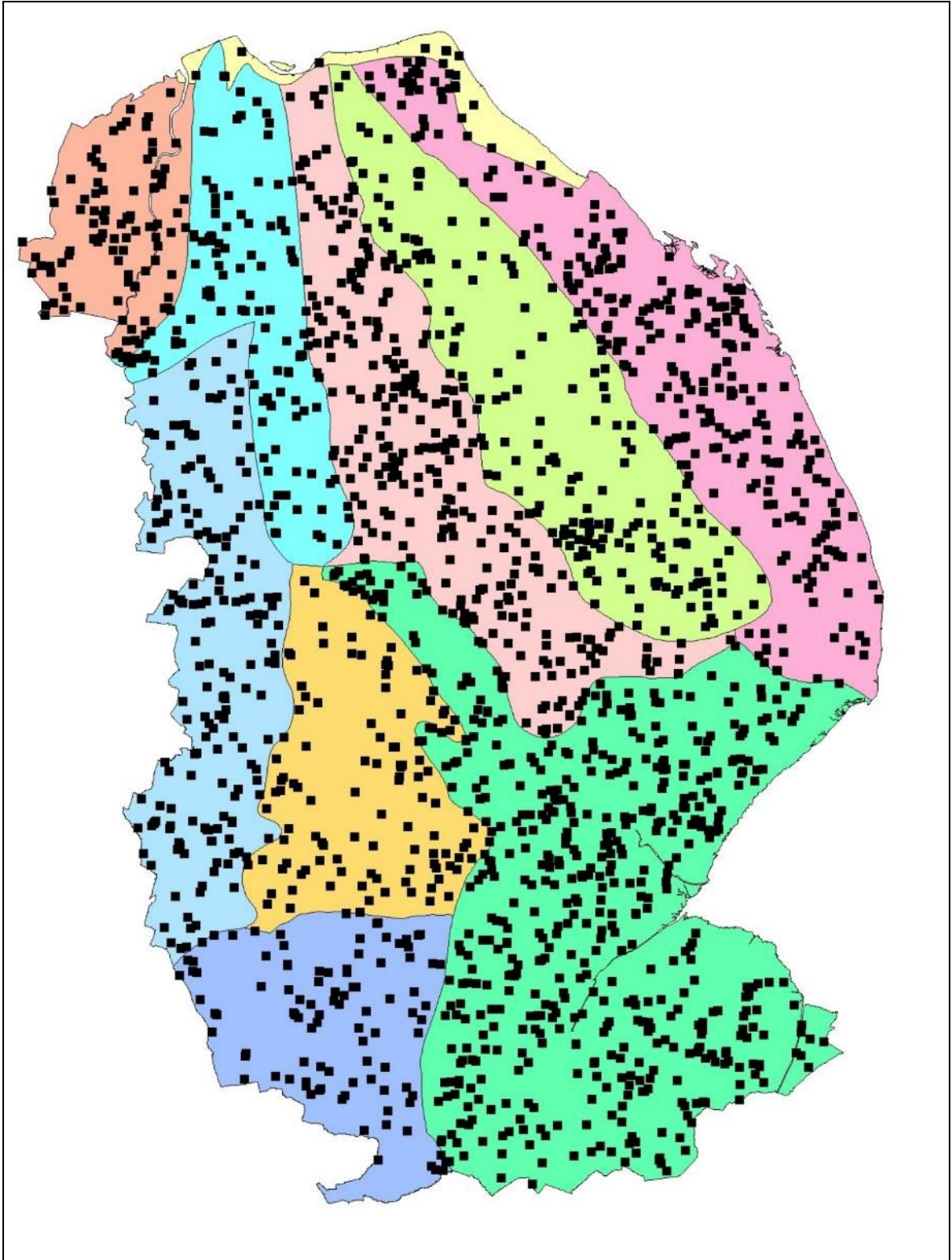


Figure 25 - RCU - Regular courtyard U-plan farmsteads

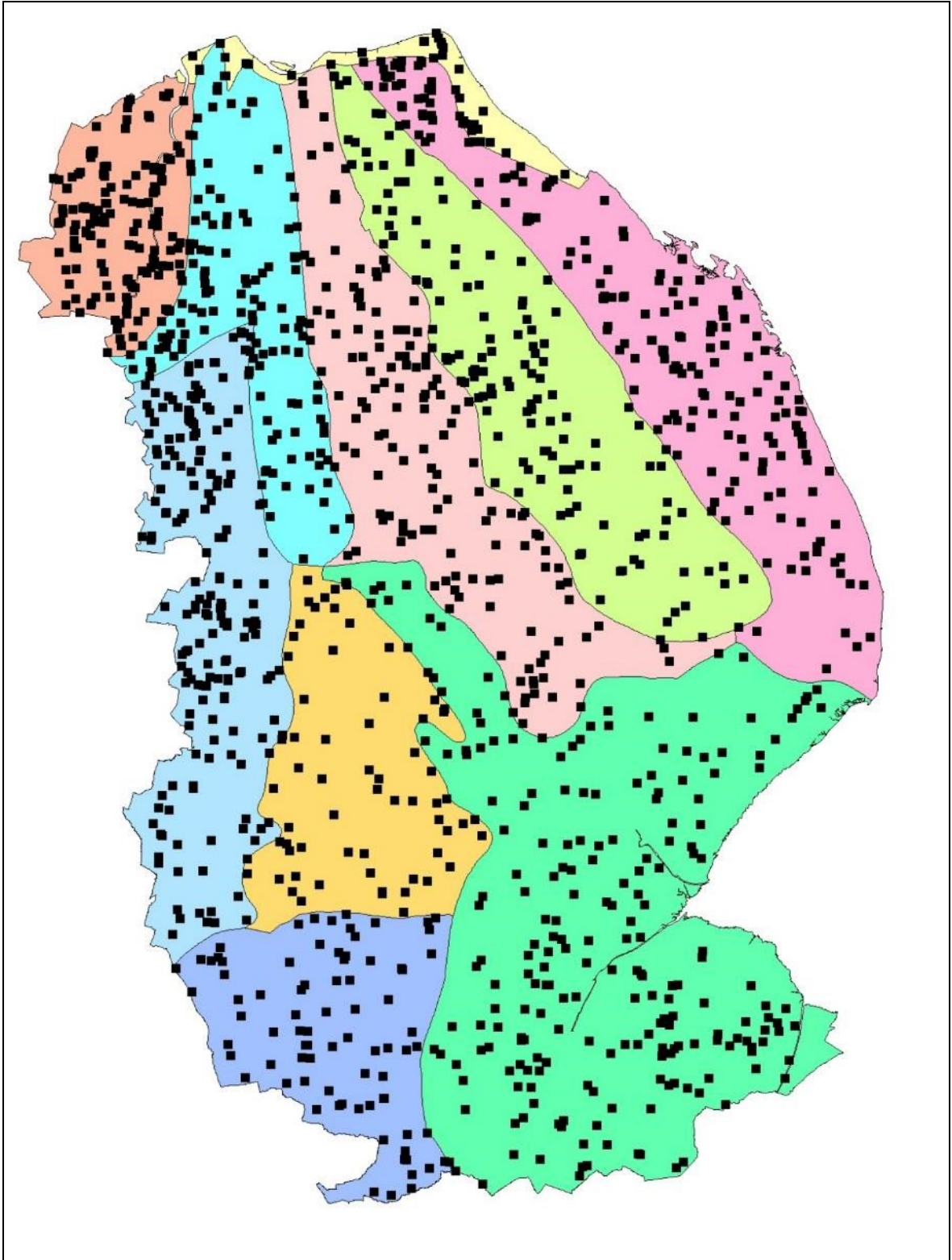


Figure 26 - RCful - Fully enclosed regular courtyard farmsteads. These appear to be found in greater densities in the Humberhead Levels and the Trent Vale, perhaps indicating greater emphasis on livestock management in these areas.

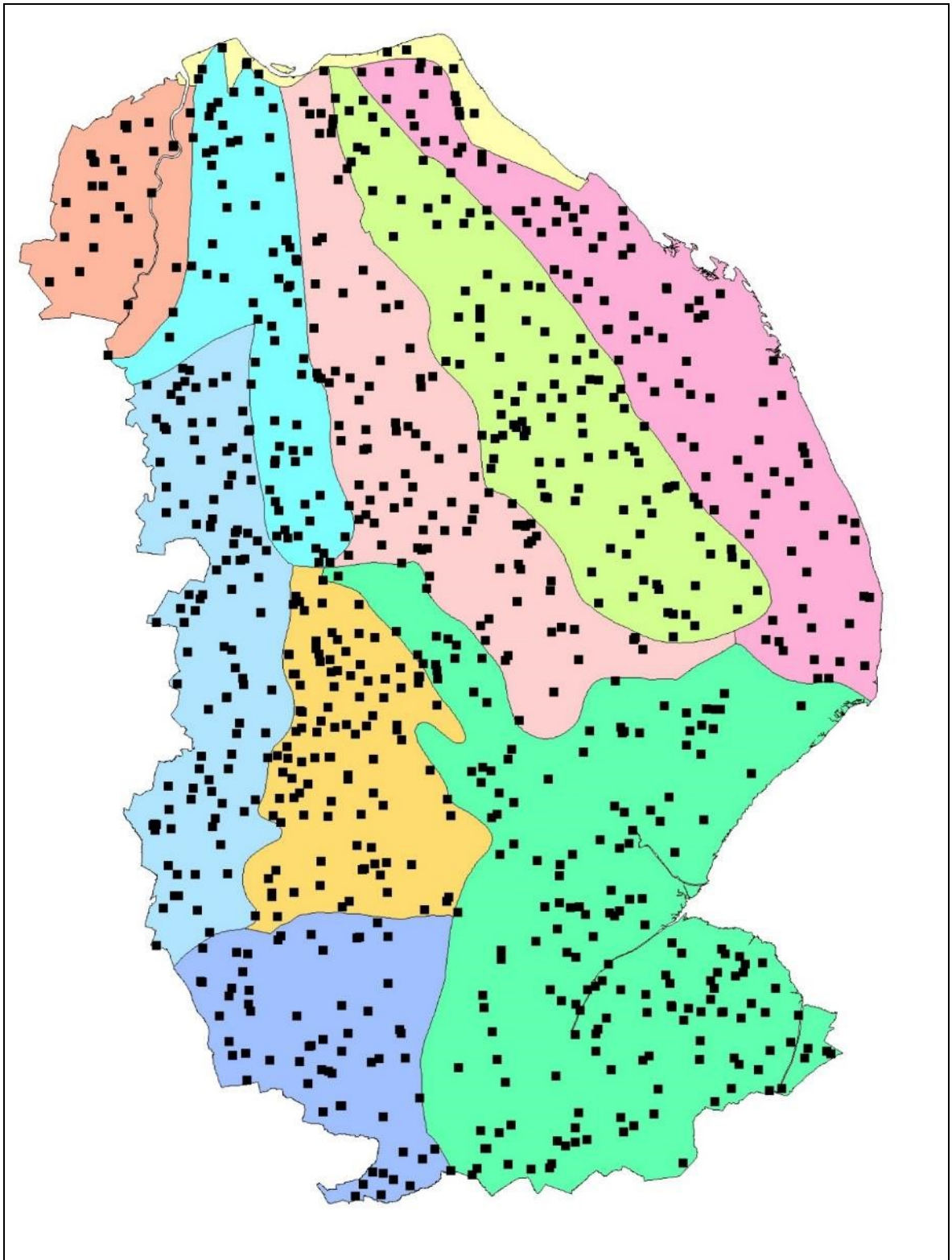


Figure 27 - RCmy - Regular courtyard farmsteads with multiple yards. Particular clusters are evident in the estate lands of the Wolds and the Southern Lincolnshire Edge.

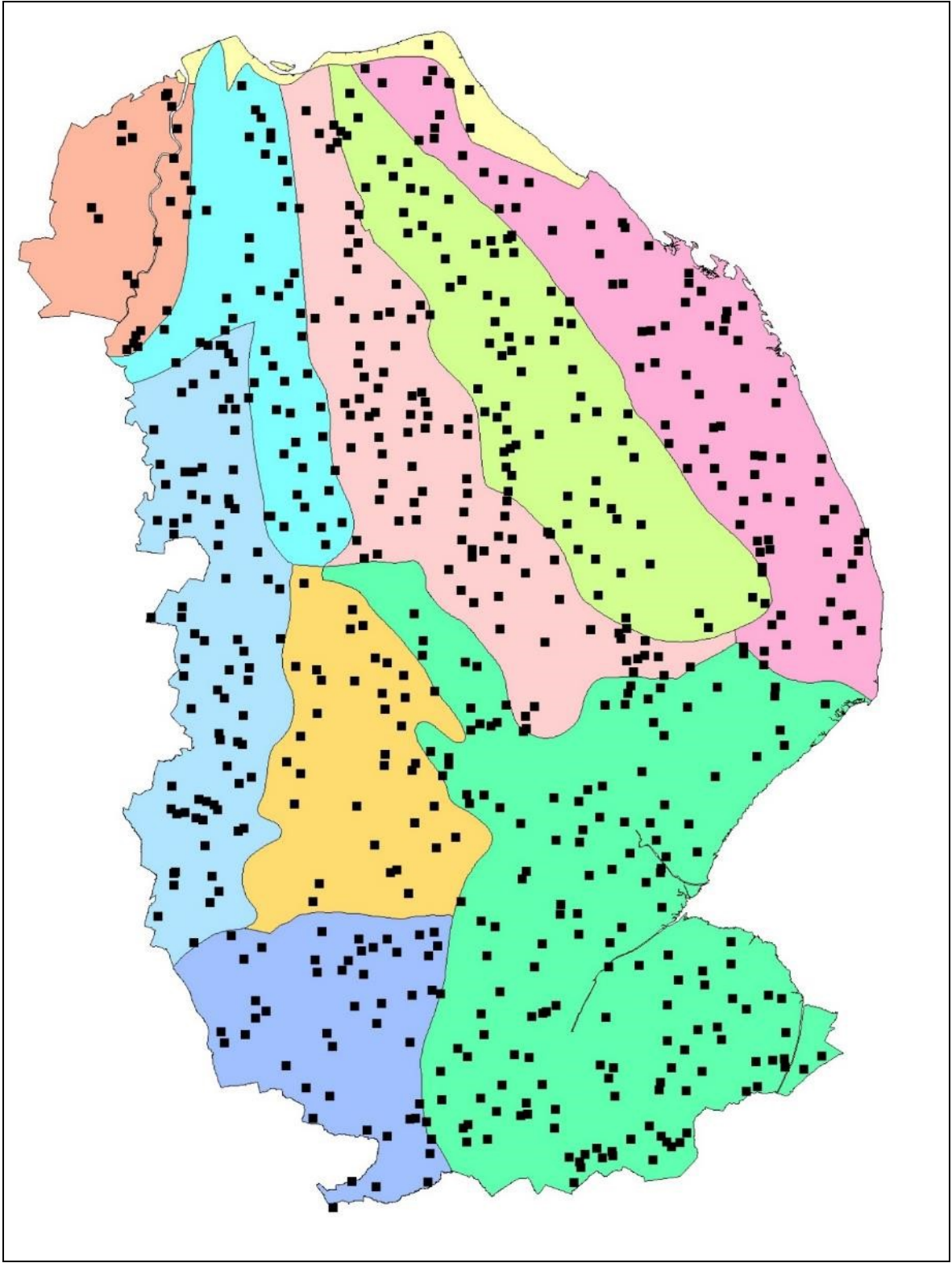


Figure 28 - RCE, RCt and RCz - Regular courtyard farmsteads with E-, T- and Z- plan ranges

Loose Courtyard Types

NCA	LC1	LC2	LC3	LC4	Covered	LC-Det	LC-L	LC-L3	LC-L4	LC-MY
CENTRAL LINCOLNSHIRE VALE	0.26%	1.88%	7.36%	1.71%	0.00%	0.00%	0.00%	0.26%	0.17%	0.00%
	3	22	86	20	0	0	0	3	2	0
HUMBER ESTUARY	0.00%	1.00%	8.00%	4.00%	0.00%	0.00%	0.00%	1.00%	0.00%	1.00%
	0	1	8	4	0	0	0	1	0	1
HUMBERHEAD LEVELS	0.00%	0.40%	4.85%	2.42%	0.00%	0.00%	0.00%	1.62%	0.40%	0.20%
	0	2	24	12	0	0	0	8	2	1
KESTEVEN UPLANDS	0.16%	2.13%	5.40%	4.91%	0.00%	0.00%	0.00%	0.49%	0.00%	0.00%
	1	13	33	30	0	0	0	3	0	0
LINCOLNSHIRE COAST AND MARSHES	0.39%	3.41%	6.89%	1.12%	0.00%	0.20%	0.07%	0.92%	0.07%	0.13%
	6	52	105	17	0	3	1	14	1	2
LINCOLNSHIRE WOLDS	0.58%	2.88%	7.02%	1.04%	0.00%	0.00%	0.00%	0.81%	0.23%	0.00%
	5	25	61	9	0	0	0	7	2	0
NORTHERN LINCOLNSHIRE EDGE WITH COVERSANDS	0.35%	0.70%	3.51%	0.00%	0.00%	0.00%	0.00%	1.05%	0.00%	0.18%
	2	4	20	0	0	0	0	6	0	1
SOUTHERN LINCOLNSHIRE EDGE	0.61%	2.74%	6.24%	2.89%	0.00%	0.00%	0.00%	0.61%	0.00%	0.00%
	4	18	41	19	0	0	0	4	0	0
THE FENS	0.34%	4.81%	8.38%	2.28%	0.03%	0.00%	0.17%	0.96%	0.34%	0.00%
	12	171	298	81	1	0	6	34	12	0
TRENT AND BELVOIR VALES	0.21%	1.38%	4.55%	1.90%	0.00%	0.00%	0.00%	0.53%	0.00%	0.00%
	2	13	43	18	0	0	0	5	0	0
GREATER LINCOLNSHIRE	0.33%	3.06%	6.85%	2.00%	0.01%	0.03%	0.07%	0.81%	0.18%	0.05%
	35	321	719	210	1	3	7	85	19	5

Loose Courtyard farmsteads are typified by detached agricultural buildings on two or more sides of a central yard. These are often the result of ongoing growth and change, with individual elements of the farmstead being added, removed and altered over time. Loose courtyard farms are much less common throughout the county than regular types. Within this type, areas of high concentration are the Fens and the Marshes, both NCAs with a greater survival of historic fieldscapes and a very long history of drainage and reclamation.

- The most common Loose Courtyard types are those with three buildings set around a yard (LC3). These are notably present in the Fens, the Central Lincolnshire Vale, and the Lincolnshire Wolds.
- Loose courtyards with two buildings set around a yard (LC2) are relatively common in the fens, where they account for 4.8% of farmsteads against a county-wide percentage of 3.06%, and in the Coastal Marsh, where they account for 3.41% of farmsteads.
- Least common are those loose courtyard farmsteads with additional features such as multiple or covered yards.

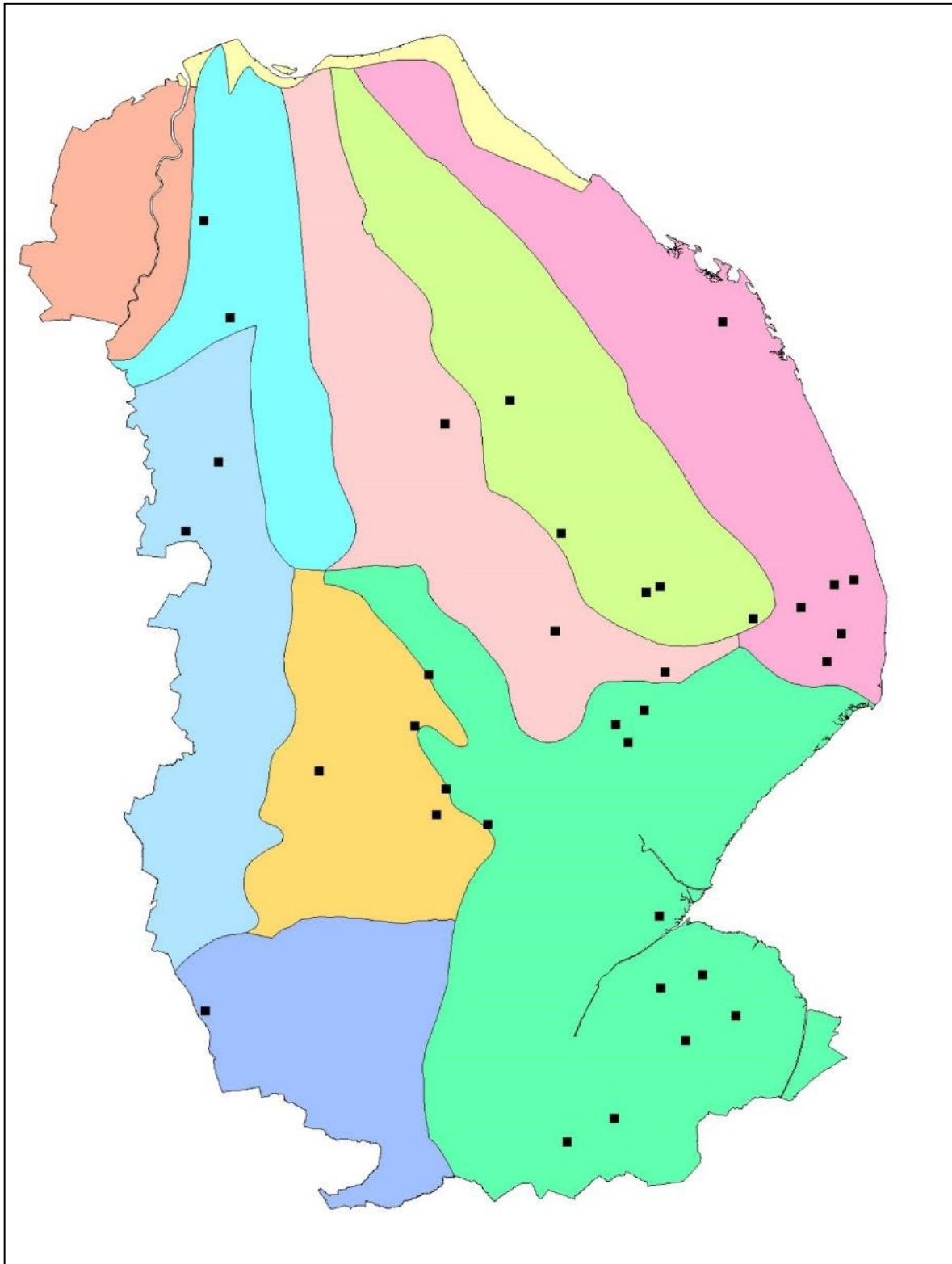


Figure 29 - LC1 - Loose courtyard farmsteads with a single working building facing on to the yard

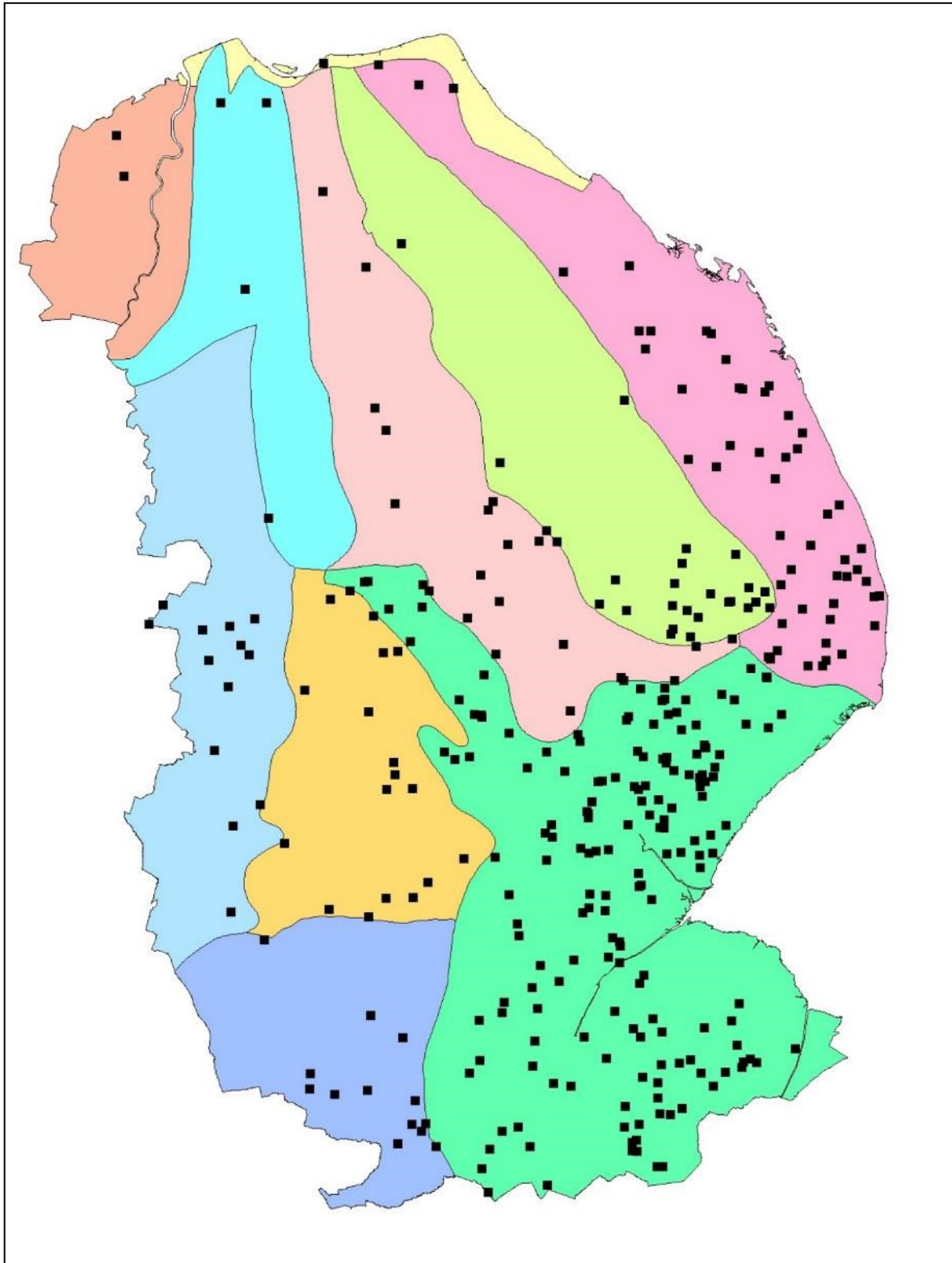


Figure 30 - LC2 - Loose courtyard farmsteads with two working buildings facing on to the yard

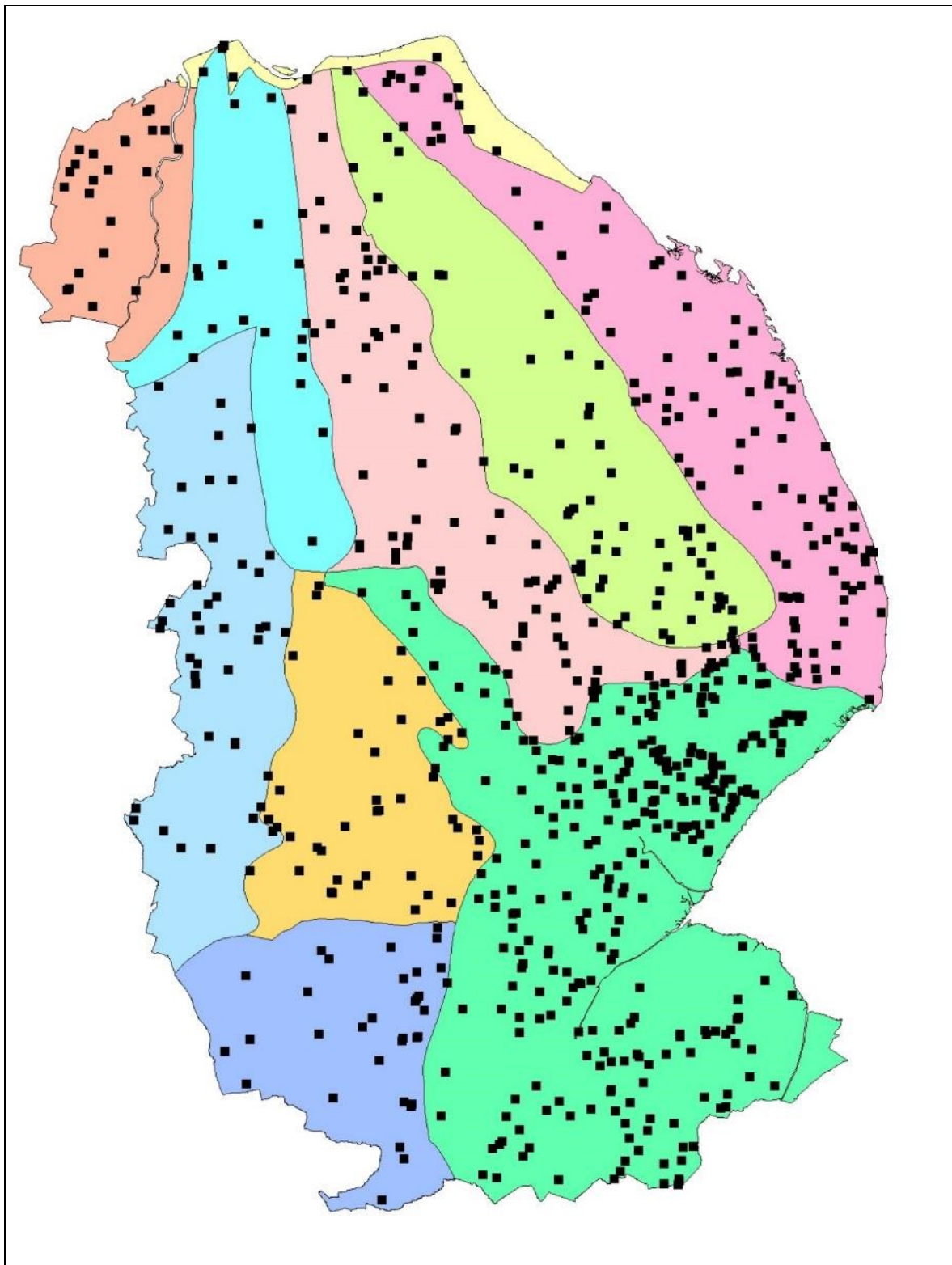


Figure 31 - LC3 - Loose courtyard farmsteads with 3 working buildings around the yard. These are by far the most numerous Loose Courtyard type, and appear in great numbers in the lowlands of the Fens and the Coastal Marshes. This may reflect the greater numbers of independent farmers in these areas as opposed to large tenanted estates.

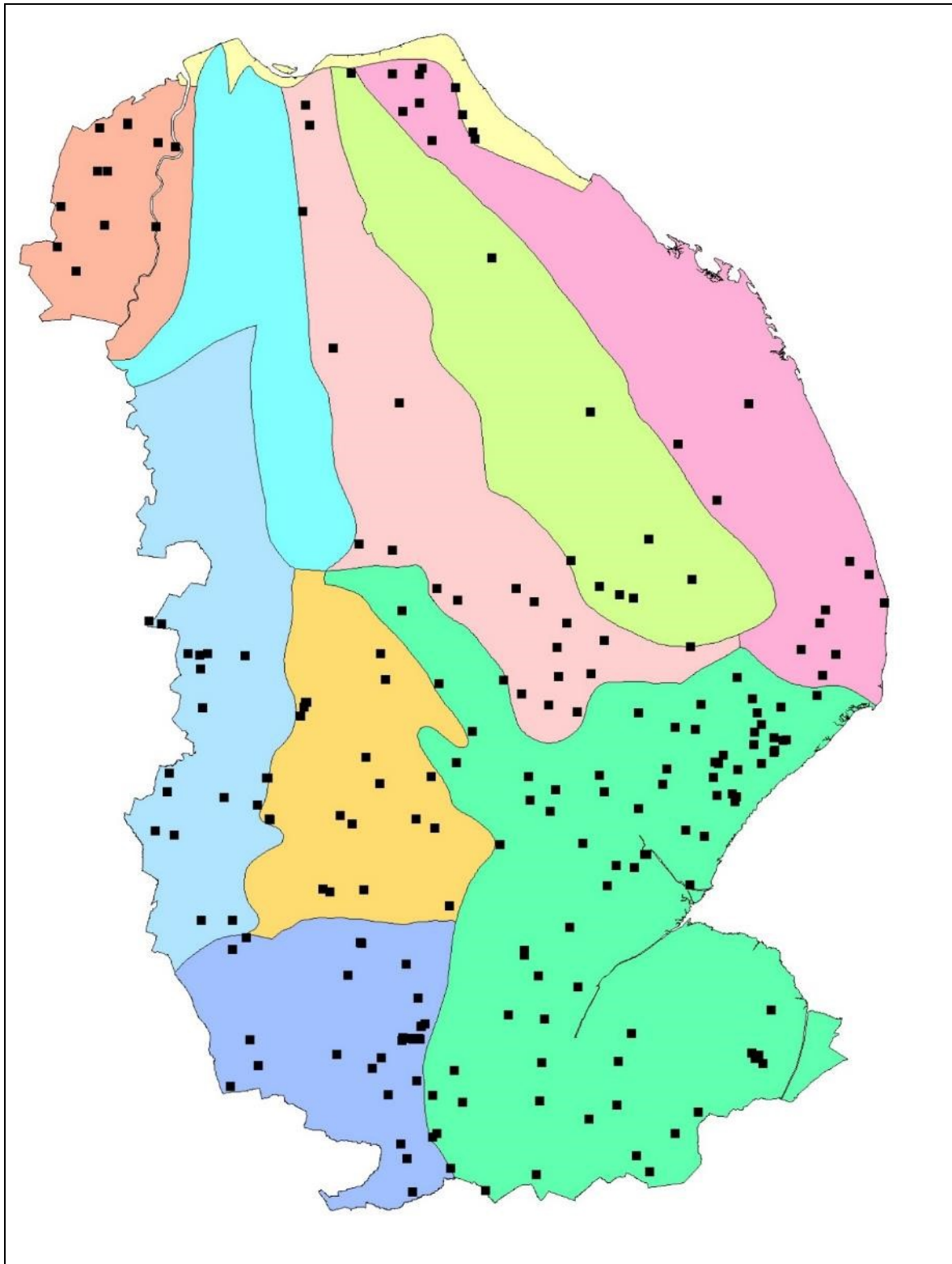


Figure 32 - LC4 - Loose courtyard farmsteads with four working buildings around the yard

Dispersed Types and Other Types

NCA	Dispersed Cluster	Dispersed Driftway	Dispersed Multi-Yard	L-Plan	Linear	Parallel	Row
CENTRAL LINCOLNSHIRE VALE	0.68%	0.00%	0.26%	2.40%	1.37%	1.45%	3.08%
	8	0	3	28	16	17	36
HUMBER ESTUARY	0.00%	0.00%	0.00%	0.00%	3.00%	2.00%	0.00%
	0	0	0	0	3	2	0
HUMBERHEAD LEVELS	0.20%	0.00%	0.00%	3.03%	0.61%	2.02%	1.62%
	1	0	0	15	3	10	8
KESTEVEN UPLANDS	1.31%	0.00%	1.80%	2.78%	0.00%	1.96%	2.45%
	8	0	11	17	0	12	15
LINCOLNSHIRE COAST AND MARSHES	1.84%	0.00%	0.46%	2.69%	2.10%	2.36%	4.14%
	28	0	7	41	32	36	63
LINCOLNSHIRE WOLDS	1.15%	0.12%	0.23%	1.61%	1.73%	1.27%	2.99%
	10	1	2	14	15	11	26
NORTHERN LINCOLNSHIRE EDGE WITH COVERSANDS	0.00%	0.00%	0.00%	2.46%	0.88%	1.58%	0.53%
	0	0	0	14	5	9	3
SOUTHERN LINCOLNSHIRE EDGE	0.76%	0.00%	1.22%	2.59%	0.91%	1.83%	2.13%
	5	0	8	17	6	12	14
THE FENS	1.10%	0.00%	0.87%	1.57%	0.53%	2.42%	4.16%
	39	0	31	56	19	86	148
TRENT AND BELVOIR VALES	0.74%	0.00%	0.53%	3.17%	1.06%	1.69%	2.22%
	7	0	5	30	10	16	21
GREATER LINCOLNSHIRE	1.01%	0.01%	0.64%	2.21%	1.04%	2.01%	3.18%
	106	1	67	232	109	211	334

The vast majority of farmsteads identified are either of the Regular or Loose courtyard types. Those that fall outside of these two categories are comparatively rare, and are largely concentrated in lowland areas.

The lack of these more irregular types in the Greater Lincolnshire building stock is indicative of the profound changes that have occurred to agriculture in the last 200 years. It is not necessarily the case that these types are typically older in origin than the more common courtyard types, although this is often the case with linear and L-plan farmsteads. It is however likely that these forms have either been less likely to have survived through the development of industrial farming techniques and the late 19th century agricultural depression. It is important to recognise that the scarcity of these types goes hand-in-hand with their vulnerability, especially where buildings are disused, dilapidated or otherwise at risk.

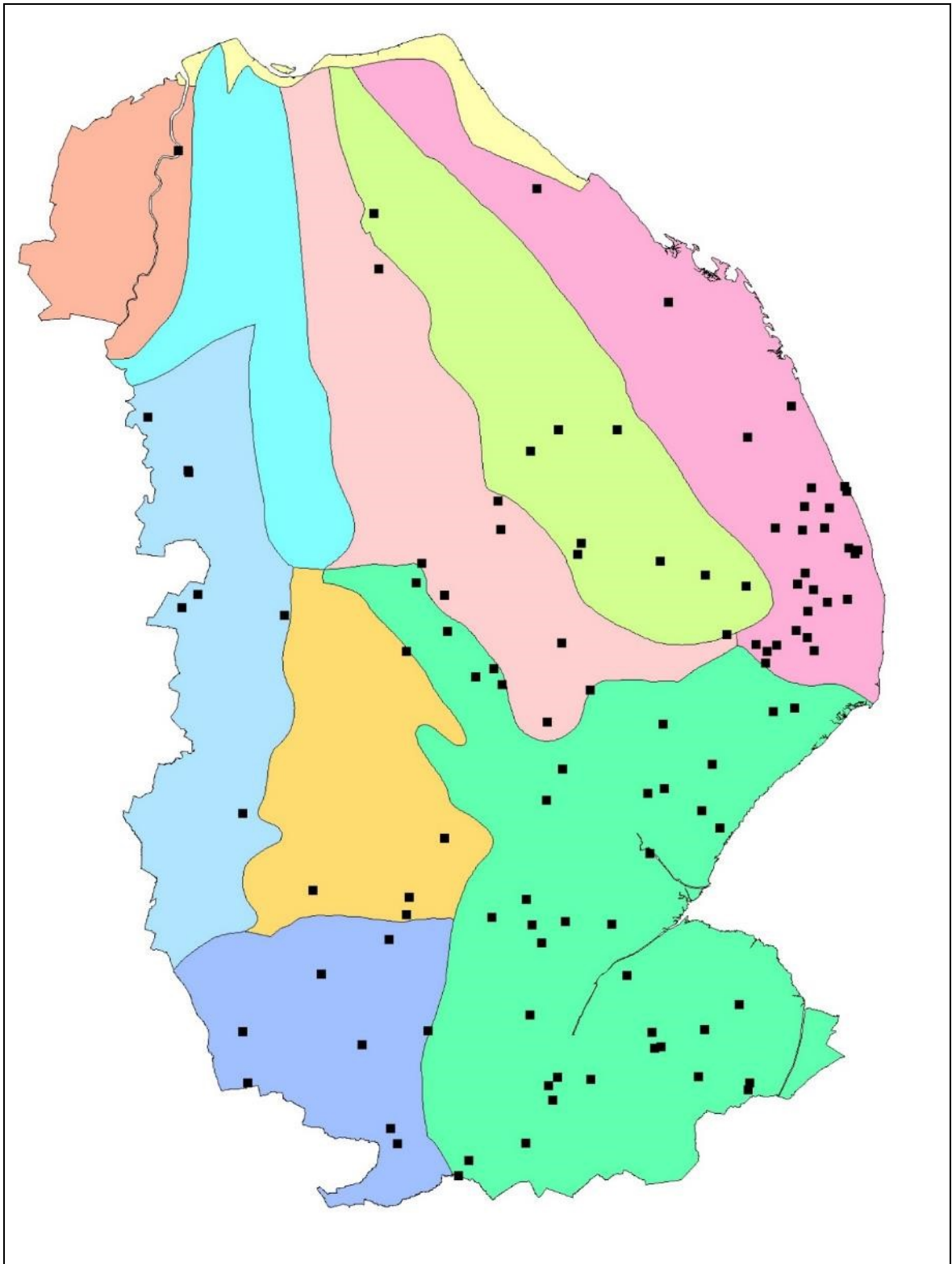


Figure 33 - DispCL - Dispersed plan farmsteads arranged in clusters of buildings with no obvious main yard

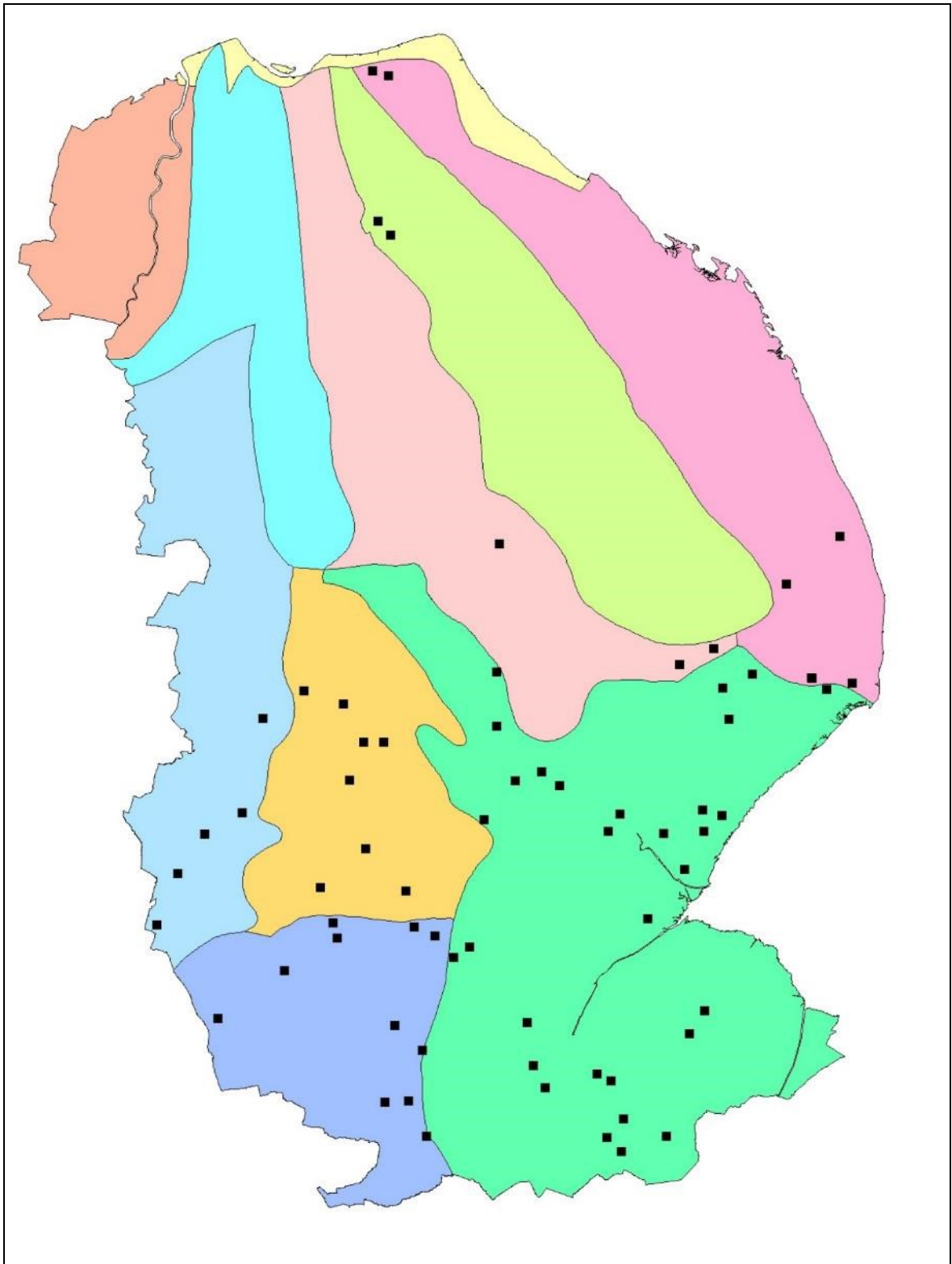


Figure 34 - DispMY - Dispersed plan farmsteads with several yards

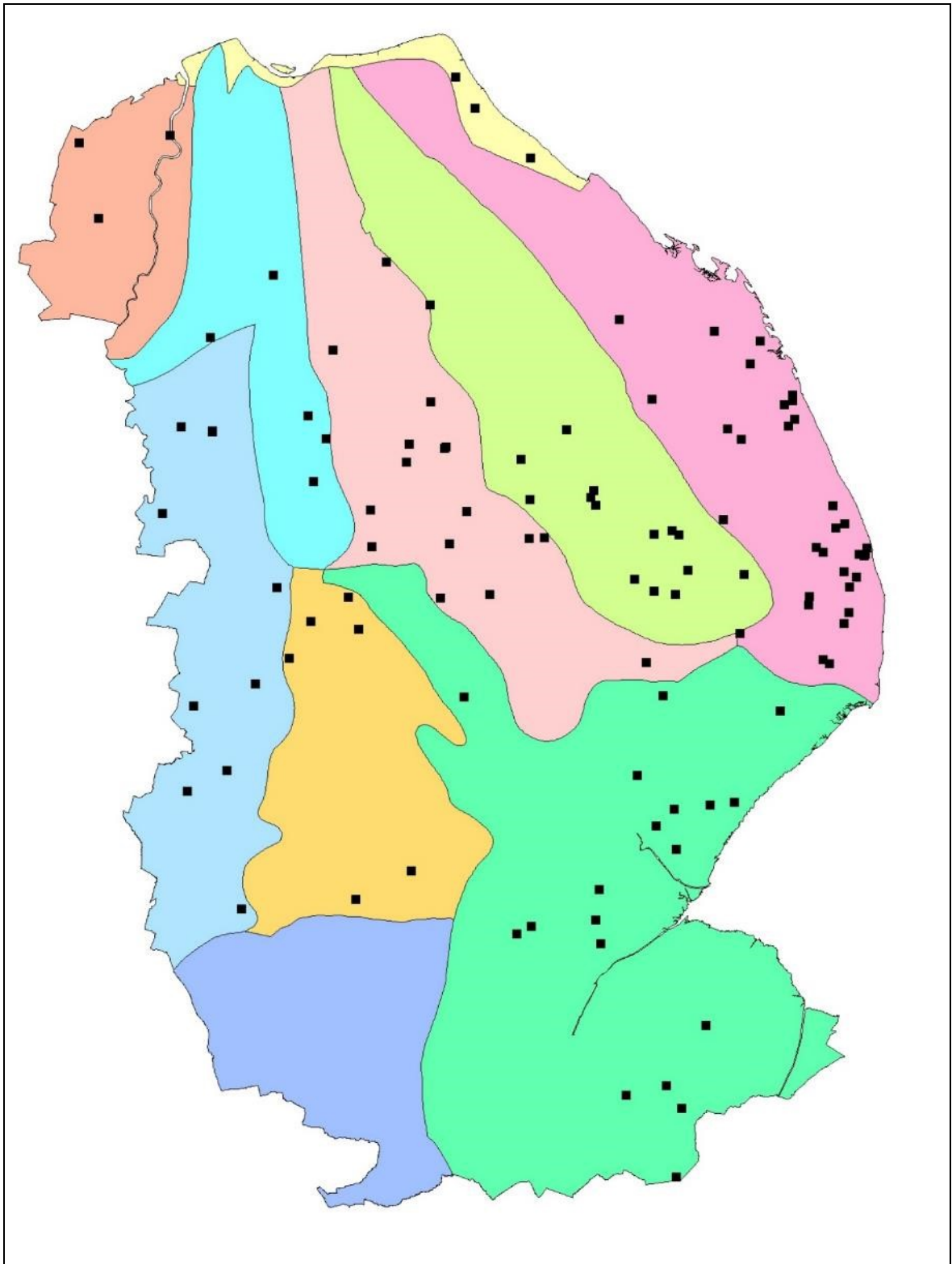


Figure 35 - Lin - Linear plan farmsteads with the house attached to a working range in a line

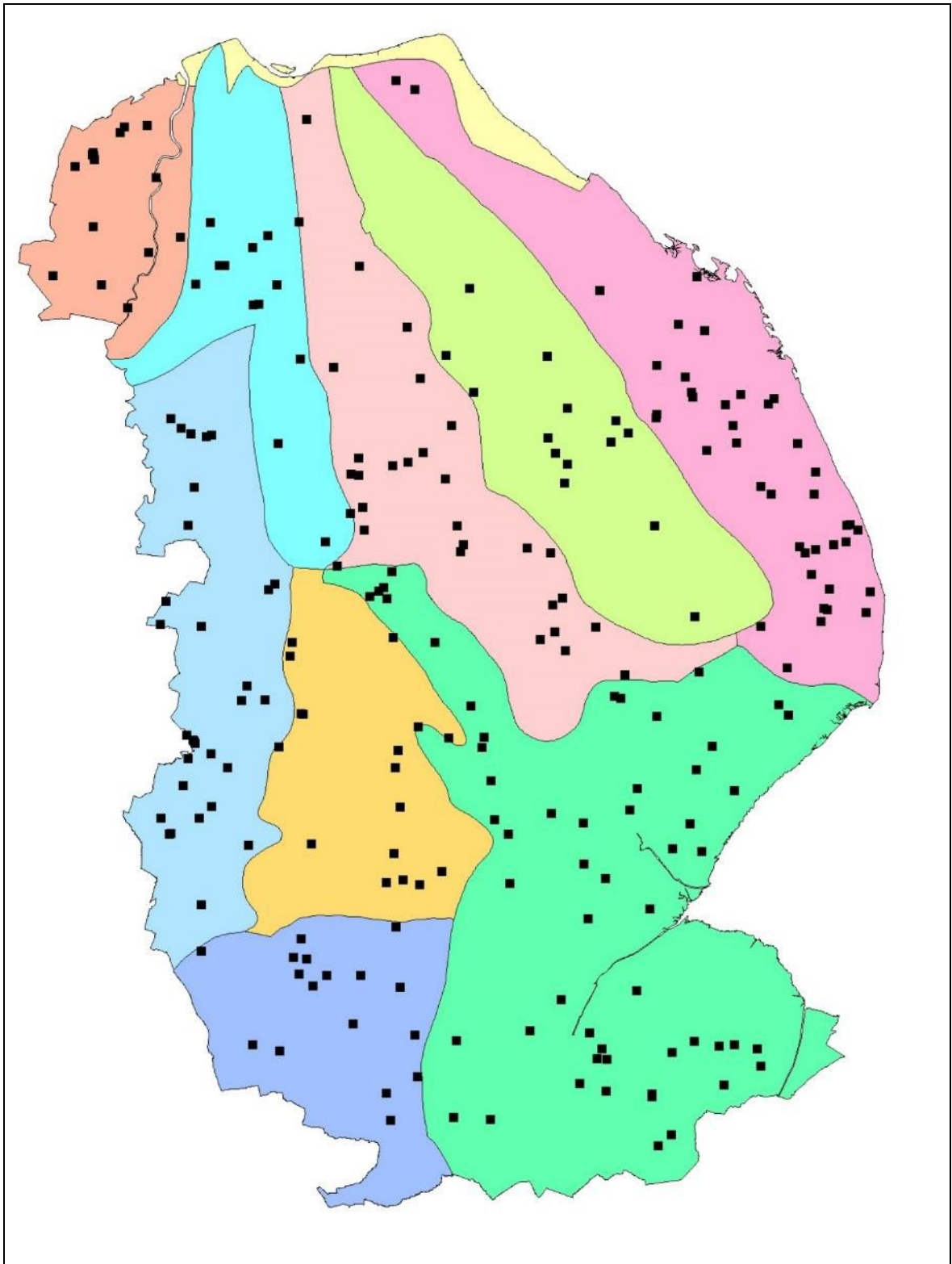


Figure 36 - LP - L-plan farmsteads with the house and working range attached in an L shape. Elsewhere in the country these small scale farms are typically associated with common edge and upland areas. In Greater Lincolnshire they are comparatively more evenly spread, perhaps indicating that they occur as smaller farms in areas where later larger farms have become more dominant.

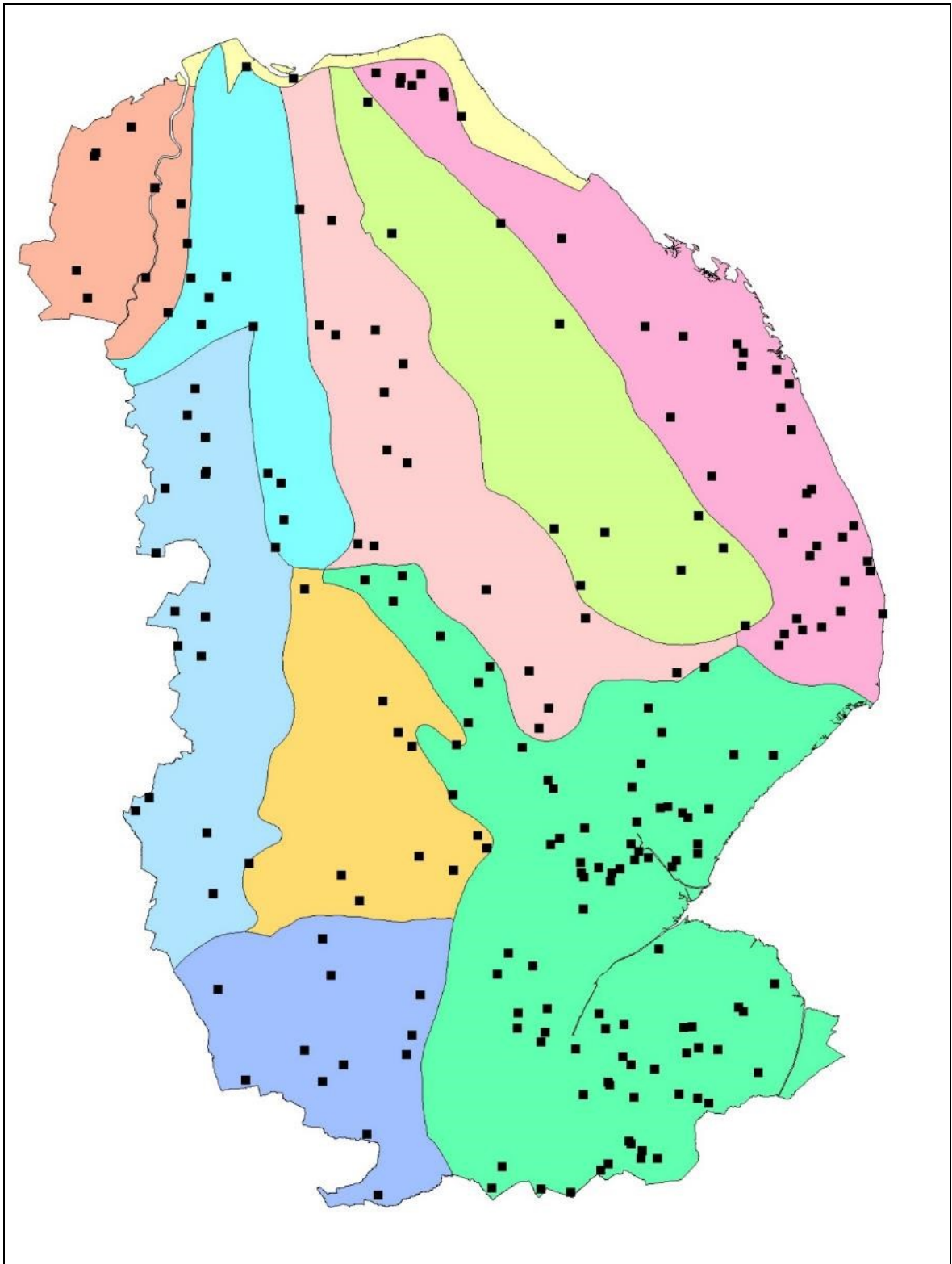


Figure 37 - PAR - Parallel plan farmsteads

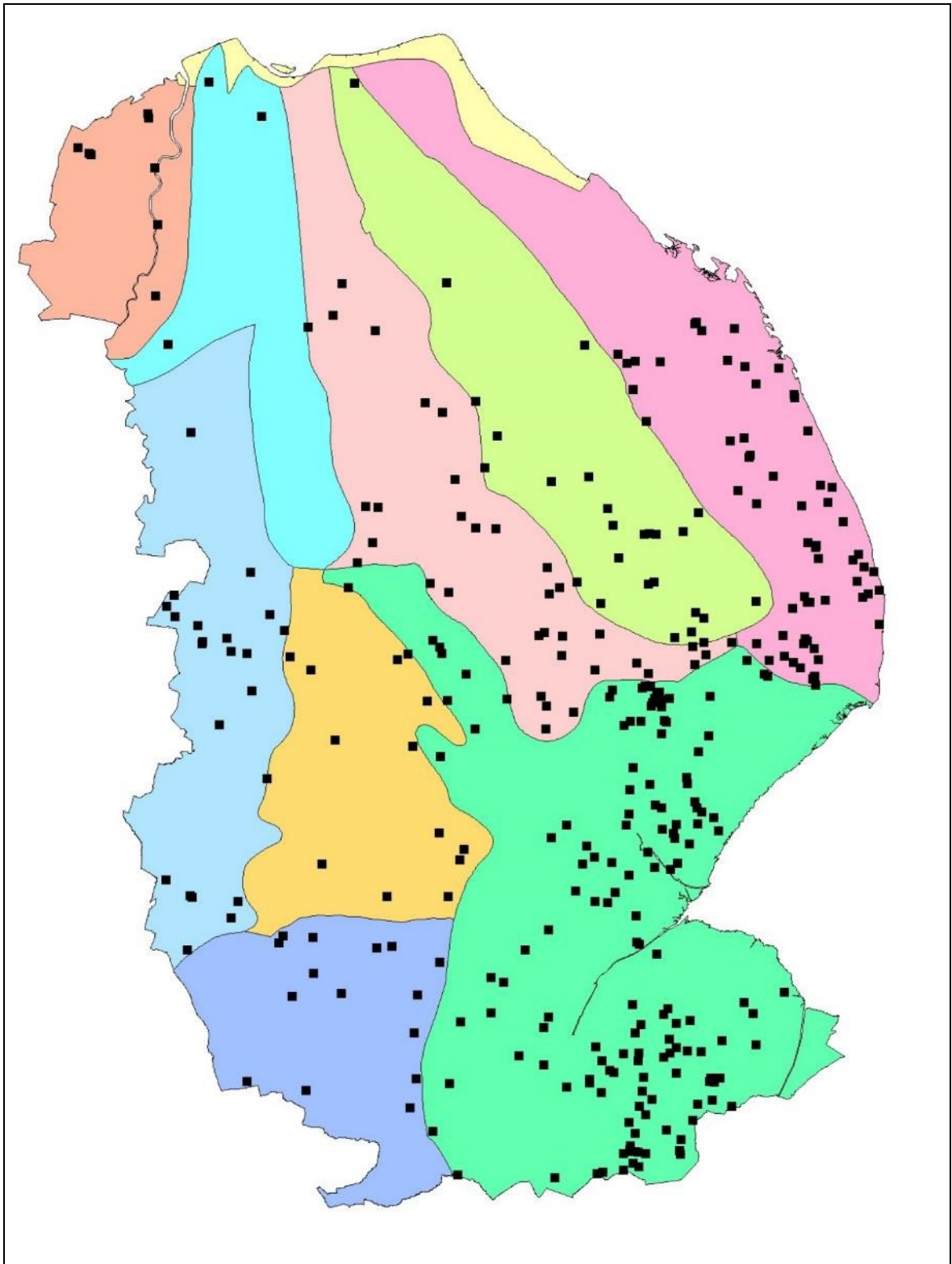


Figure 38 - Row - Farmsteads with working buildings arranged in a single row.

6.7 Farmstead Size

NCA	<25m Across	26-50m Across	51-75m Across	76-100m Across	>100m Across
CENTRAL LINCOLNSHIRE VALE	12.23%	62.53%	20.02%	4.19%	1.03%
	143	731	234	49	12
HUMBER ESTUARY	4.00%	70.00%	24.00%	1.00%	1.00%
	4	70	24	1	1
HUMBERHEAD LEVELS	6.26%	65.05%	22.22%	4.65%	1.82%
	31	322	110	23	9
KESTEVEN UPLANDS	4.42%	58.92%	28.48%	6.06%	2.13%
	27	360	174	37	13
LINCOLNSHIRE COAST AND MARSHES	17.27%	60.80%	17.73%	3.48%	0.72%
	263	926	270	53	11
LINCOLNSHIRE WOLDS	8.06%	50.29%	31.19%	7.36%	3.11%
	70	437	271	64	27
NORTHERN LINCOLNSHIRE EDGE WITH COVERSANDS	4.04%	51.23%	30.53%	10.35%	3.86%
	23	292	174	59	22
SOUTHERN LINCOLNSHIRE EDGE	7.46%	47.95%	33.49%	8.07%	3.04%
	49	315	220	53	20
THE FENS	21.48%	62.58%	13.72%	1.86%	0.37%
	764	2226	488	66	13
TRENT AND BELVOIR VALES	9.95%	57.57%	27.09%	4.66%	0.74%
	94	544	256	44	7
GREATER LINCOLNSHIRE	13.99%	59.29%	21.16%	4.28%	1.29%
	1468	6223	2221	449	135

Farmstead size is potentially a proxy measurement for the overall scale of farming undertaken in a character area. A great many small farmsteads is potentially indicative of a varied and densely populated farming landscape with easily exploited and profitable land. By contrast larger farmsteads indicate the investment of high levels of resources, even on an industrial scale.

- There is a clear prevalence of smaller farmsteads in lowland fens and marshy areas, while areas of chalk and limestone plateaux are more likely to include farms that exceed 100m in size. This is perhaps indicative of the varying levels of investment required in these distinct areas in order to make farming cost effective. In fens and marshland areas the naturally productive land made small scale farming a viable option. In more difficult areas, such as the wolds and the heaths, large investments were required to enable cultivation, with correspondingly larger farms being constructed in these areas.
- There is also a correlation between farmstead size and the numbers of farmsteads in a given area. For example, the Fens has many farmsteads but they are of a smaller average size than those in the Wolds, where farmsteads are typically larger than the average. Larger farms are also more likely to include a greater number of outbuildings and tertiary plan form features such as covered yards.

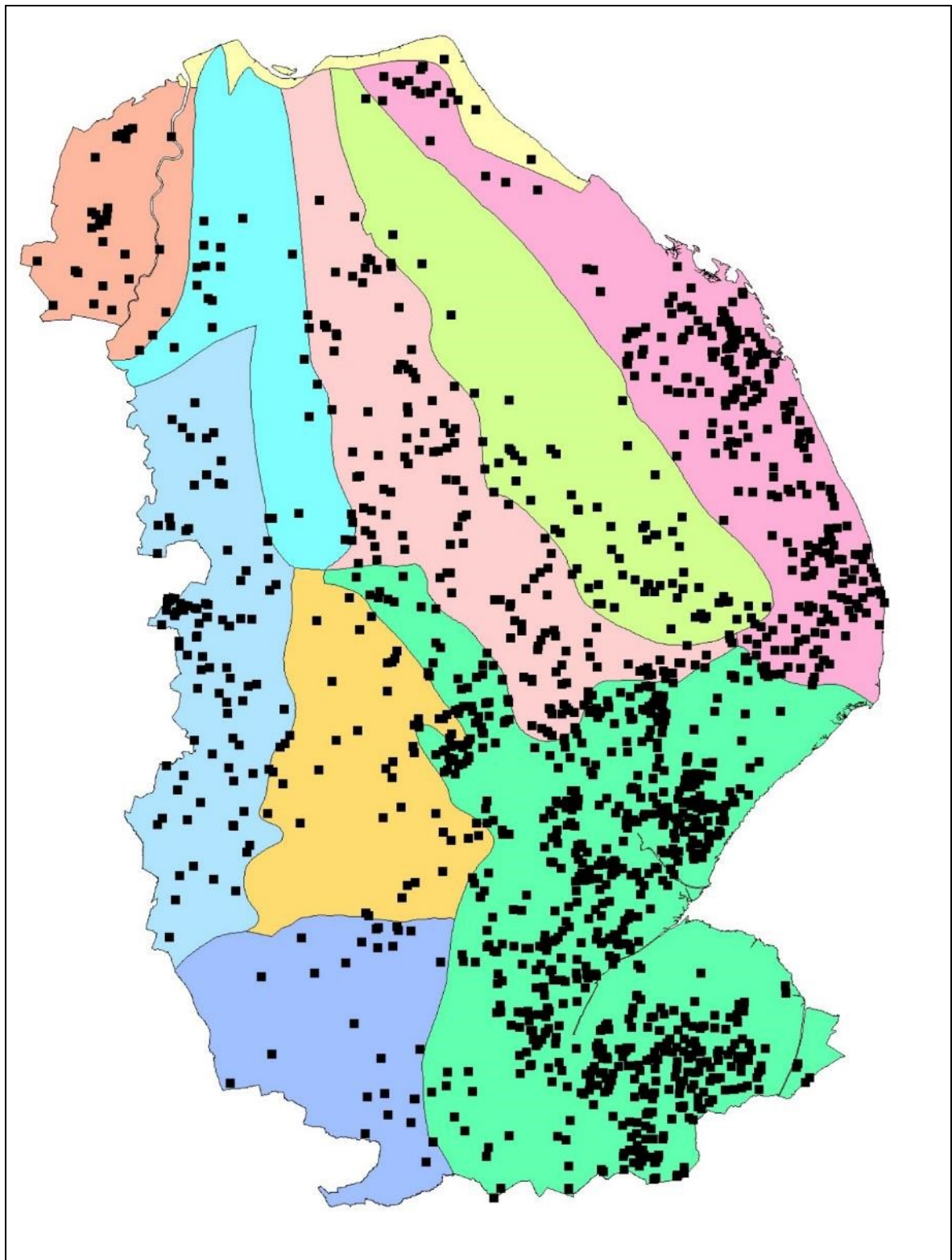


Figure 39 - Farmsteads less than 25m across

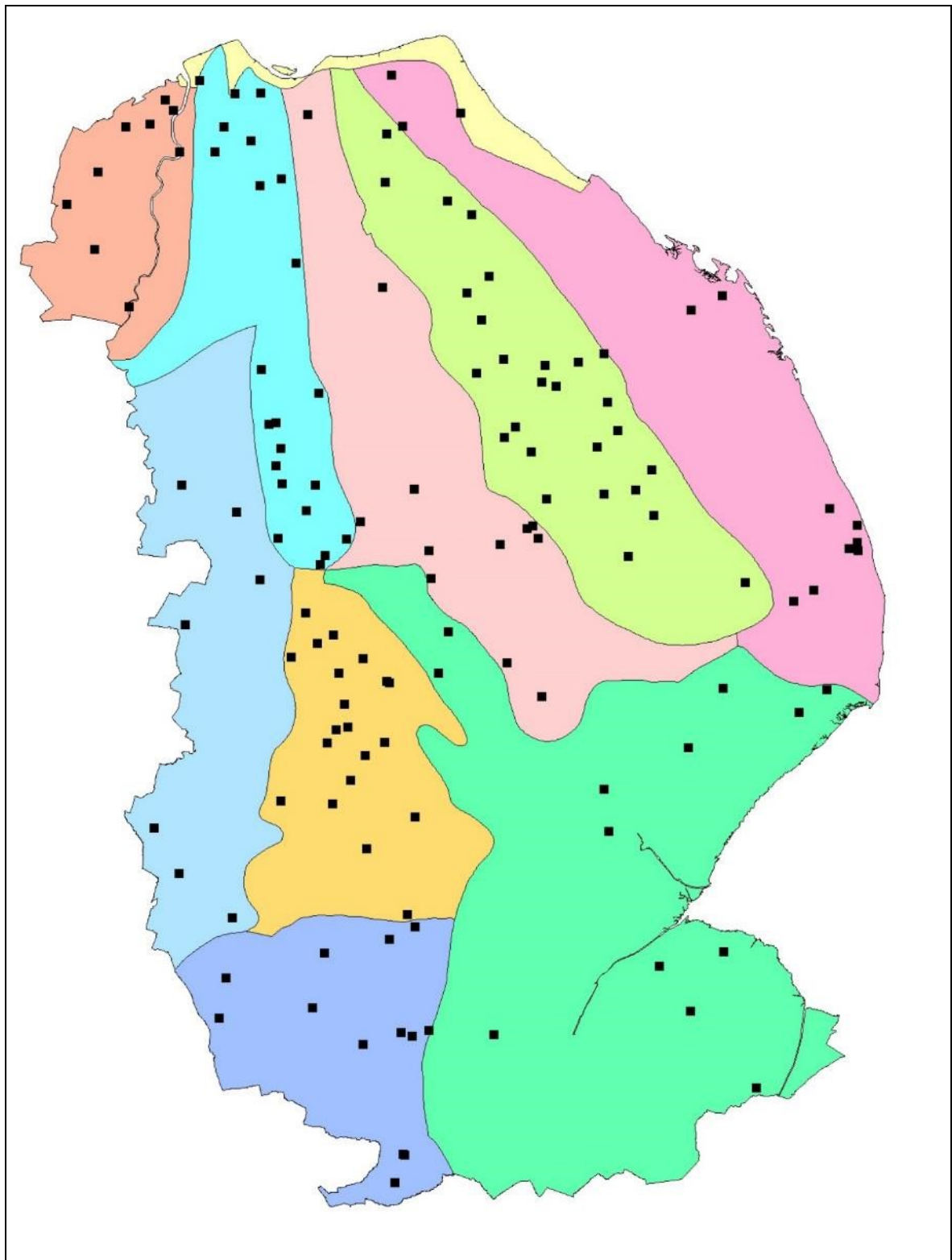


Figure 40 - Farmstead complexes exceeding 100m

7 Conclusions

7.1 Farmstead Survival

The Greater Lincolnshire Farmsteads Mapping project has recorded 10,857 individual farmsteads from historic mapping dating from 1902. Of these, 7539 (69%) still exist in some form today. This represents a significant resource of historic buildings which contribute to the historic character of their surrounding landscapes.

Conversely, the data shows that over 25% of historic farmsteads have been lost, either through demolition or through complete replacement of historic buildings. Although it is not possible to identify the condition of individual buildings using the farmstead survey methodology, it can be assumed that the rate of loss will continue as farming practices continue to change.

The survival of Greater Lincolnshire's farm buildings as an identifiable group of assets will depend on finding new uses for them that maintain their visual and functional contribution to the wider landscape, or on the sensitive redevelopment of sites with new buildings that reflect the aesthetic and historical character of their predecessors.

7.2 The Contribution of the Project

The project has provided a new evidence base for the extent and survival of traditional farm buildings across Greater Lincolnshire. The data will be used to enhance the Historic Environment Records of Lincolnshire, North Lincolnshire and North-East Lincolnshire, and will be publicly accessible and available through each of these repositories.

The mapping data has been used to underpin recommendations and guidance for the re-use and redevelopment of farmsteads presented in the Greater Lincolnshire Farmsteads Guidance package. This will be used by both planners and developers to ensure that proposals for the reuse and redevelopment of historic farmsteads are governed by a joint approach.

7.3 Broad Patterns

Although farming has been a key part of Greater Lincolnshire's economy throughout history, the project has demonstrated the overwhelmingly 19th century character of surviving farmsteads. Earlier farmsteads, as identified from listing descriptions, are relatively rare. However, it should be noted that many of the farmsteads identified from mapping as being of 19th century origin may date from earlier periods, and a programme of further research would be required before any definitive dating could be attempted.

The data has also shown that Greater Lincolnshire's farmsteads are overwhelmingly of the various courtyard types, especially regular planned courtyard farms reflecting 19th century agricultural reform. Loose courtyard types make up around a quarter of the dataset. The county has a smattering of less common types such as linear and L-plan farmsteads, especially in the Fens and the Coast and Marshes, reflecting the more dispersed medieval settlement patterns of these areas.

Field Barns and outfarms are a small but significant element of the dataset, but by comparison to other areas that have been studied in the country there are many fewer of them in Greater Lincolnshire. It is not possible to advance an explanation for this based on

the mapping results, although there are clear differences between the champion landscapes of Greater Lincolnshire and the more dispersed settlement patterns of Wiltshire and Kent, where mapping projects have also been undertaken and where far higher numbers of outfarms have been recorded. It is possible that outfarms and field barns established before the 19th century agricultural expansion have been adapted and subsumed into later farmstead complexes. It is also possible that outfarms were not built in such numbers in Greater Lincolnshire as elsewhere, perhaps due to the fact that sheep and cattle were generally kept outdoors until the reforms of the mid to late 19th century.

By far the greater part of the county's historic farmsteads contain no listed buildings. Indeed, only 5.86% of farmsteads recorded by the project are associated with either a listed farmhouse or working building. Where buildings are listed, development will necessarily require input from local authority officers at an early stage. However, even where they are not formally designated, Greater Lincolnshire's farmsteads are a key element of the character of its rural landscape and historic villages.

7.4 Local Patterns

The primary analysis of the mapping data has been undertaken with reference to the Natural England National Character Areas, enabling it to be shared and understood across a range of authorities and agencies who use the NCAs as a primary spatial background. The farmstead data has demonstrated the validity of the National Character Areas as a tool for understanding and differentiating landscape character. There are clear and understandable differences in the data for each area;

- The farming landscapes of the Fens and the Coastal Marshes have clear similarities to each other, both in the prevalence of smaller farmsteads with footprints of less than 25m, and in the greater occurrence of dispersed, linear and L-plan farmstead types.
- The plateau landscapes of the Wolds, the Northern and Southern Lincolnshire Edge and the Kesteven Uplands are likewise similar to each other in the prevalence of courtyard types, but have clear distinctions in the survival and location of historic farmsteads.

Within the overall NCA framework, the data has been analysed against the results of the Lincolnshire HLC project. This analysis has revealed that;

- Over 50% of farmsteads in the Fens are found in landscapes of modern fields, indicating extensive reorganisation of the rural landscape in the 20th century. This coincides with a much higher rate of farmstead loss in the Fens than in other parts of the county.
- Farmsteads in the Wolds and the Northern Lincolnshire Edge are more likely to be found in areas of ancient enclosure than farmsteads elsewhere in the county.
- By comparison to the county as a whole, farmsteads in the Central Lincolnshire Vale are more likely to be found in landscapes of planned enclosure, reflecting the improvement and enclosure of this area in the 18th and 19th centuries.
- Farmsteads in the Kesteven Uplands, the Southern Lincolnshire Edge, the Trent and Belvoir Vales and the Humberhead Levels are all more likely to be found in historic settlements than farmsteads in other parts of the study area, and indeed in Greater Lincolnshire as a whole.

These analyses could be deepened and enhanced by undertaking further map based analysis on a more local level, especially by using tithe and enclosure award maps to understand the plan forms of farmsteads prior to 1900.

8 Research Questions

Thematic Research - Farmsteads	
Houses	Do the relative sizes of farmhouses indicate differing social structures and land ownership or tenancy patterns?
	Are the relationships between farmhouses and working buildings indicative of incremental development of earlier farmsteads or wholesale change and rebuilding?
	Does the aspect and orientation of the farmhouse indicate engagement with the wider landscape? How common is the re-orientation of existing farmhouses, and does this phenomenon relate to changing patterns of ownership and tenancy?
Farmstead Types	Can the development of different farmstead types be dated and plotted? For example, is there a progression from small scale linear and L-plan farmsteads through loose courtyards to more regular planned types?
	Are the many regular courtyard farmsteads in Greater Lincolnshire indicative of wholesale planning, or is it the case that they represent incremental development of older farmsteads to accommodate new techniques?
	How do the smaller farmsteads of coastal and fenland areas relate to larger farmsteads in higher or more inland areas? Is there a physical link between the two based on the seasonal movement of cattle between these areas, especially pre-dating enclosure?
Buildings	Is there potential to provide more accurate dates to the bulk of farmsteads that cannot be dated from the listing description? There are potentially many more 17 th or 18 th century examples hidden in the dataset.
	Can a chronology be established for the addition of different types of farm building (e.g. cartsheds) to developed farmsteads across the county?
Field Barns and Outfarms	Is there evidence for early use of outfarms and field barns for sheltering or shearing sheep and cattle, especially in the Wolds and on the Clifftop Heath?
	How do outfarms relate to different farmstead types? Is there a correlation between certain farmstead types or scales and associations with one or more outfarms?
Thematic Research - Landscape	

Farmsteads and Enclosure	How do different farmstead types relate to different enclosure processes, both in terms of date and form?
	Is there a correlation between the establishment of certain types of farmstead and the landscape in which they sit?
	Can the Lincolnshire HLC project add to our understanding of the ways in which farmsteads have developed alongside the landscape, for example through the re-organisation of piecemeal enclosure or through assarting?
	What are the prevailing characteristics of farmsteads in liminal areas, for example at the changeover between planned and ancient enclosure?
Farmsteads and Settlement Pattern	Is it possible to quantify the relationship between architectural/material aspects of farmsteads and their surrounding landscapes?
	Is it possible to establish an accurate chronology of the development of village farmsteads, and does this reveal information about the growth and change of villages over time?
	What was the contribution of village farmsteads to the farming economy of the nineteenth century? At what point did they begin to fall out of use?
Farmsteads and Moated Sites/ Shrunken Settlement	Greater Lincolnshire, and in particular the Wolds, has many deserted or shrunken medieval settlements. To what extent do farmsteads associated with these features derive from medieval settlement, and are they reflective of manorial or estate centres?
	Moated sites are particularly prevalent in the former marshlands along the coast. Is this indicative of a particular agricultural function, or were the sites moated to distinguish them from wider settlement patterns?
Manorial and Estate Farms	There are many farms which were 'granges' or medieval church held farms across Greater Lincolnshire. Is this influence reflected in the style or character of the farms today?
	Farmsteads on estates often display a unified palette of materials and common design elements, especially in the Wolds and the Kesteven Uplands. Are estate farmsteads in other areas, such as the Fens and the Coastal Marshes, equally well defined?
	To what extent do farmsteads that have fallen out of

	Estate control still reflect the material and aesthetic character of their origins? Have new owners taken action to remove former links?
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Area-based research questions	
Humberhead Levels	The Isle of Axholme Historic Landscape project provided a series of research questions which could now be addressed and updated using farmstead mapping data
	Smallholdings are at present under recognised providing an opportunity for greater research and identification.
	Surviving buildings may provide evidence for early brickmaking in the area through reuse in later buildings, including Dutch influence dating from early reclamation.
	An intensive study of farmsteads around Belton, Epworth and Haxey may reveal how they are linked to the historic open field farming practices of the area, and the ways in which they retain features that have been lost elsewhere.
Humber Estuary	Study of building materials, especially surviving Mud and Stud cottages, could reveal the chronology and location of farmstead settlement in the area
	Potential to study contrasting and related settlement patterns and development between the marshland and the adjacent Wolds
	Materials used in farmstead construction, particularly pantiles, could indicate the transition between the use of imported Dutch materials and locally produced examples
Lincolnshire Coast and Marshes	Although surviving mud and stud construction is apparently rare in the area, further research may identify new examples in refaced or altered farmsteads
	Research into the economic and agricultural connections with the neighbouring Wolds character area would illuminate the historic development of the grazing marshes and associated farm buildings
Trent and Belvoir Vales	To what extent did the historically more accessible transportation links of this area give rise to earlier enclosure of the former open fields for pasture and later for the conversion to mixed arable farming? Are farmstead buildings reflective of this pattern, for example in the early construction of cartsheds and granaries?

	Does the historic farming landscape of the area demonstrate linkages to counties to the west of the Trent as well as to Greater Lincolnshire? Is there an identifiable zone of transition between farms that used markets outside the county and those that traded internally?
Lincolnshire Wolds	Identify the extent of former estate holdings and compare to the present day. This will help in understanding the trajectory of change in these key landscape elements.
	Identify and understand the material legacy of early sheep farming on the Wolds, and the ways in which it is legible within developed farmsteads.
	Are there any patterns identifiable in the layout and scale of farmsteads along the main drove roads to the Marshes and Fens? Are these farmsteads indicative of relationships between large wolds sheep farms and summer pastures in former wetland?
Northern Lincolnshire Edge	The former heathland along Ermine Street is divided and enclosed by a mixture of hedges and drystone walls. To what extent do the latter indicate more ancient patterns of enclosure associated with grazing patterns or estate ownership? Are historic farmsteads associated with these patterns?
	The patterns of settlement and enclosure of the heath identified by Roberts and Wrathmell indicate the possible presence of medieval specialist farms in areas of ancient enclosure. Are these potentially preserved in the continuation of settlement by 19 th century isolated farmsteads?
Southern Lincolnshire Edge	The RCHME study of the area by Barnwell and Giles could provide a basis for more detailed recording projects of individual village farmsteads, for example at Helpringham.
	Many farmsteads in the area incorporate windmills. Are derelict windmills in residential areas indicative of former farmsteads that have since been lost?
Kesteven Uplands	Identification of farms constructed by major estates, with a view to establishing extents of historical estate influence.

	Where the area meets the fens there is potential for identification of transitional landscape and building forms. Is there an identifiable pattern of materials used in this liminal zone, and if so is it indicative of status and ownership as well as the availability of materials?
The Fens	Develop an understanding of the extent and chronology of early post medieval sheep-farming, and the subsequent effects of cattle raising on the built heritage
	Prepare further research into the origins and extent of smallholdings from the 18 th century onwards. Are historic smallholdings subsumed within the footprint of apparently later farmsteads? What proportion of the agricultural output of the Fens has been due to smallholdings at different stages of landscape development?
	Is there an identifiable tradition of estate farming in the Fens, and if so how does it relate to neighbouring areas such as the Wolds and the Kesteven Uplands? To what extent did large estates own or rent grazing land in the Fens, and how has this historic relationship affected the built heritage of both areas?
Central Lincolnshire Vale	The area has a notable proportion of outfarms with respect to the county as a whole. Is this reflective of pre-enclosure and improvement pastoral farming, and if so, are former outfarms and field barns incorporated within apparently more recent post-enclosure farmsteads in the area?
	This character area is particularly associated with monastic complexes and associated granges. To what extent are ostensibly 19 th century isolated farmsteads derived from more ancient farms associated with the religious orders of the area?

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Appendix 1 – Farmstead Mapping Attributes

The following table provides a full list of the attributes used in the Greater Lincolnshire Farmsteads Mapping project. These are derived in large part from the Historic England Farmsteads Mapping Handbook, although they were slightly altered to better fit the requirements of the project.

PRN	Unique No.	Numeric sequence chosen to fit with any existing data set PRNs
Site Name	Modern Name (historic name)	Modern farm name with historic name (if different) recorded in brackets
Classification	FARMSTEAD	Farmstead with house
Primary Attribute	OUTFARM	Outfarm or field barn
Date_Cent		Earliest century date based on presence of listed building or map evidence (Codes as per Date_HM below)
Date_HM (Date of House based on presence of dated building or Map evidence)	MED C17 C18 C19L C19	Pre 1600 17 th century 18 th century 19 th century (based on presence of a listed building dated to 19 th century) 19 th century (based on presence on historic map)
Date_WB (Date of Working Building based on presence of dated building)	MED C17 C18 C19L	Pre 1600 17 th century 18 th century 19 th century (based on presence of a listed building dated to 19 th century)
Plan Type		Combination of Primary and Secondary Plan Attributes e.g. LC3; RCe etc. (see below)
Plan Type	DISP	Dispersed
Primary Attribute	LC	Loose Courtyard
	LIN	Linear
	LP	L-plan (attached house)

	PAR RC ROW UNC	Parallel Regular Courtyard Row Plan Uncertain
Plan Type Secondary Attribute	1, 2, 3, 4 L3 or L4 L u e f h t z cl dw my cov d y	No. of sides to loose courtyard formed by <i>working</i> agricultural buildings Yard with an L-plan range plus detached buildings to the third and/or fourth side of the yard (may be used with LC or RC dependent on overall character) Regular Courtyard L-plan (detached house) Regular Courtyard U-plan Regular Courtyard E-plan Regular Courtyard F-plan Regular Courtyard H-plan Regular Courtyard T-plan Regular Courtyard Z-plan Cluster (Used with DISP) Driftway (Used with DISP) Multi-yard (Used with DISP or RC) Covered yard forms an element of farmstead Additional detached elements to main plan Presence of small second yard with one main yard evident
Tertiary Attribute		Codes as per Secondary Attribute table e.g. cov or combination of Primary and Secondary Attributes e.g RCL notes presence of a prominent Regular L-plan within a dispersed multi-yard group (DISPmy)
Farmhouse Position	ATT LONG GAB DET UNC	Attached to agricultural range Detached, side on to yard Detached, gable on to yard Farmhouse set away from yard Uncertain (cannot identify which is farmhouse)
Location Primary	VILL	Village location

Attribute	HAM FC ISO PARK SMV CM URB	Hamlet Loose farmstead cluster Isolated position Located within a park Shrunken village site Church and Manor Farm group (or other high status farmstead) Urban
Survival	EXT ALT ALTS DEM HOUS LOST	Extant – no apparent alteration Partial Loss – less than 50% change Significant Loss – more than 50% alteration Farmstead survives but complete alteration to plan Farmhouse only survives Farmstead/Outfarm totally demolished
Sheds	SITE SIDE	Large modern sheds on site of historic farmstead – may have destroyed historic buildings or may obscure them Large modern sheds to side of historic farmstead – suggests farmstead probably still in agricultural use
Confidence	H M L	High Medium Low
Notes		Free text field to add notes relating to the character or identification of a record

Appendix 2 – Farmstead Mapping Database Structure

The database structure was designed with reference to the structure provided in the Project Brief and the required data standards for Lincolnshire HER. The HERs for both North and North-East Lincolnshire indicated that they will not require any data over and above the extra information requested by Lincolnshire County Council HER.

Field Name	Description
PRN	Numeric sequence chosen to fit with any existing data set PRNs. This field acts as the Unique Identification Number for individual records and map objects within the Farmsteads project. It should not be confused with the PRNs used for monument records by the three Local Authority HERs.
Site Name	Modern farm name with historic name (if different) recorded in brackets. Some basic location data has been added in this field at the request of LCC HER, e.g. "Grange Farm, Pointon".
Parish	Indicates the civil parish in which the farm complex is located
Authority	Indicates the district or unitary authority area in which the farmstead is located
Classification Primary Attribute	Indicates the type of farm complex under consideration.
Date_Cent	Earliest century date based on presence of listed building or map evidence
Date_HM	Date of House based on presence of dated building or Map evidence
Date_WB	Date of Working Building based on presence of dated building
Date_End	Latest visible date if the building is no longer extant. This field will allow a "Date-To" entry to be provided for the creation of an HER monument record
Plan Type	Combination of Primary and Secondary Plan Attributes
Farmstead Size	Size of farmstead indicated by a diagonal measurement across the complex.
Plan Type Primary Attribute	Indicates the overall plan form of the farm complex
Plan Type Secondary Attribute	Indicates subsidiary attributes of the plan form of the farm complex

Tertiary Attribute	Indicates further subsidiary attributes based on code combinations from Primary and Secondary Attributes
Farmhouse Position	Indicates the position of the farmhouse within the overall farm complex
Location Primary Attribute	Describes the location of the farm complex (e.g. Village, Isolated etc.)
Survival	Indicates the extent to which the farm identified from OS 2 nd Edition map survives to the present day.
Sheds	Describes the position of large modern sheds with respect to the historic farm complex
Monument Type	This field will be completed according to the Inscription Monument Type list, as requested by Lincolnshire HER.
Monument Description	This field provides a descriptive entry suitable for inclusion in the new monument records that will be produced from this dataset.
Confidence	Indicates the level of confidence in the record
Positional accuracy	Free text to note this: (eg "Approximate – based on 2nd edition OS")
Notes	Free text field to add notes relating to the character or identification of a record
HER Monument UID	Where a farmstead complex is already recorded by one of the HER offices, its UID is recorded here.
Date of Visit	Date field showing the date on which a farmstead was visited by project staff as part of the programme of field visits.
Site Visit Notes	A free text field containing observations and extra information recorded as part of site visits. This information will be entered into the county and UA HER monument records created for those farmsteads visited as part of the programme of field visits.