

Preliminary Environmental Information Report

Volume 3 Part B Section Specific Assessments

Section 3 New Lincolnshire Connection Substations A and B

Chapter 5 Historic Environment

Appendices

June 2025



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Grimsby to Walpole

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5A. Known Heritage Assets

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5A. Known Heritage Assets

- 5A.1.1 The gazetteer tables presented in this appendix identify the following heritage assets relevant to Section 3 New Lincolnshire Connection Substations A and B (Section 3) of the Grimsby to Walpole Project (the Project):
- i. Designated heritage assets within the 3 km Study Area surrounding the draft Order Limits (**Table 5A.1**);
 - ii. Designated heritage assets of high value within the 3 - 5 km Study Area surrounding the draft Order Limits (**Table 5A.2**); and
 - iii. Non-designated heritage assets within the draft Order Limits and surrounding 1 km Study Area (**Table 5A.3**).
- 5A.1.2 Designated and non-designated heritage assets are shown in relation to the draft Order Limits on the accompanying drawings:
- i. **PEI Report Volume 2 Part B Section 3 Figure 5.1 Designated Heritage Assets; and**
 - ii. **PEI Report Volume 2 Part B Section 3 Figure 5.2 Non-designated Heritage Assets.**

List of Abbreviations

- i. NHLE: National Heritage List for England
- ii. HER: Historic Environment Record

Table 5A.1 Designated Heritage Assets within the 3 km Study Area

NHLE No.	Designation and Grade	Name	Description	Period	NGR
1014426 1308598	Scheduled monument; Grade II listed structure	Churchyard cross, St Margaret's churchyard, Saleby	Cross shaft. C14. Ashlar. Square base, supports octagonal shaft via stop chamfers.	Medieval	TF 45779 78753
1008687	Scheduled monument	Site of St Mary's Priory, Greenfield	The monument includes the remains of the medieval priory of St Mary, Greenfield, a Cistercian nunnery founded before 1153 and dissolved in 1536. The remains consist of a moat enclosing a raised platform and other earthworks. The moat, averaging 10 m in width, encloses a roughly rectangular area of approximately 2ha currently occupied by a farmhouse, farm buildings, yards, garden and paddock. Enclosed by the moat is the area of the conventual precinct, raised approximately 1 m above the surrounding farmland. At the centre of the enclosure is a raised platform roughly 70 m square partly covered by the present farmhouse and its outbuildings.	Medieval	TF 43291 77979
1014425 1147185	Scheduled monument; Grade II listed structure	Churchyard cross, Holy Trinity churchyard	Cross base and shaft. C14, Ashlar. Square base, supporting octagonal shaft via stop chamfers.	Medieval	TF 46652 76700
1004987	Scheduled monument	Markby Priory	Earthworks and buried remains of a medieval priory in Markby.	Medieval	TF 48775 78721
4519	Conservation Area	Alford Conservation Area		-	TF 45493 76062
1146936	Grade I listed building	Windmill	Windmill. 1837, restored 1979, built by Alford millwright, Sam Oxley. Black bitumen painted brick, with 5 wooden sails and ogee cap. Tower mill of 6 floors tapering to moulded top. To ground floor are double doors and to all other floors are 2 light sliding sashes, in all 4 directions, with segmental heads.	Post-Medieval	TF4574376508
1063026	Grade I listed building	Church of St Wilfrid	Parish church. Mid C14, C15, c.1530, C17. Restoration c.1867 by Sir G.G. Scott. Coursed and squared greenstone, limestone dressings, stone slate roofs. Western tower, nave, aisles plus additional C19 north aisle, south porch with parvise, chancel, north chapel. The 4 stage tower was rebuilt 1525-1535, but part of the top stage and parapet are C19.	Medieval	TF 45554 76069
1147204	Grade I listed building	Church of St Andrew	Parish church. 1758 with early C19 addition and minor C20 alterations. Squared greenstone rubble, pantile roof with raised stone coped gables, C20 wooden bellcote with pyramidal roof. Nave with west porch.	Post-Medieval	TF 49981 79439
1146990	Grade II* listed building	Church of All Saints	Parish church. c.1300, C15, tower partly rebuilt c.1700, with minor C19 alterations. Squared greenstone rubble, red brick, slate roofs. Western tower, nave, chancel, south porch, vestry. 3 stage tower has moulded string courses, plain parapet and angle pinnacles.	Medieval	TF 46212 81392

NHLE No.	Designation and Grade	Name	Description	Period	NGR
1360007	Grade II* listed building	Church of the Holy Trinity	Parish church. C15, mid C18. Squared greenstone rubble, red brick, render, ashlar dressings, slate roofs. Western tower, nave, chancel, south porch, north aisle. The C18 tower of 2 stages, has plinth, plain band and corbelled out embattled parapet, the upper parts in brick.	Medieval	TF 46646 76716
1063009	Grade II* listed building	Church of St Peter	Parish Church. Mid C16 with reused stonework from the medieval Augustinian Priory on the site, restored 1962. Roughly coursed reused ashlar and brick, thatched with moulded coped gables. Nave and chancel.	Post-Medieval	TF 48724 78816
1308757	Grade II* listed building	Hanby Hall	House. Early C18, parapet added and interior modified in 1735 with late C18 additions. Built for Sir Richard Hanby. Red brick in Flemish bond with rubbed brick dressings, having deeply hipped plain tiled roof with 2 ridge stacks. L-plan. 2 storey plus attics, 6 bay front, originally 5, arranged 2:1:2, the centre bay being slightly advanced and the right hand end bay a later C18 addition. Central 6 panelled door with late C18 traceried fanlight in fluted wooden Doric surround with triglyph frieze to pediment. To left are 2 glazing bar sashes and to right 3 similar windows. To first floor are 6 further sashes, all windows have flat rubbed brick arches.	Post-Medieval	TF 45553 76017
1063001	Grade II* listed building	The Manor House	House, now museum and offices. Mid C16, cased in brick in C17, altered C18 with C19 additions and C20 alterations. Originally timber frame with mud walls, now red brick, with thatched roof having raised brick coped gables with kneelers, 2 ridge and single wall stacks. 2 storey with garrets, 7 bay front arranged 2:3:2, the outer pairs being advanced and gabled.	Post-Medieval	TF 45371 76045
1308650	Grade II* listed building	Church of St Andrew	Parish church. C13, 1841 substantial rebuilding. Red brick with ashlar dressings, squared chalk and greenstone rubble, slate roofs, timber and lead bellcote. Nave with western bellcote and chancel.	Medieval	TF 46413 80227
1359997	Grade II	Crown Inn	Crown Inn II Public house. Late C17, substantially altered c.1840, with minor C20 addition. Red brick, pantile roof, single gable and axial ridge stacks. Baffle entry plan. 2 storey, 4 bay front having off-centre half glazed door covered by timber porch. To left a single and to right 2 margin light sashes. To first floor 4 similar windows. All windows have flat brick arches. To left a lower 2 storey, 2 bay addition with to left a 2 light casement and to right a C20 projection. To first floor 2 sliding sashes. All windows with segmental brick heads. Over the door is a painted date of 1762. Interior retains a chamfered and stopped girder.		TF 46439 81328
1063012	Grade II listed building	Manor Farmhouse	Farmhouse. Mid C18 with minor mid C19 and C20 alterations. Red brick in Flemish bond, concrete tiled roof with raised brick coped tumbled gables and 2 gable stacks. T-plan. The range at the rear is a C19 addition. 2 storey with garret, 3 bay front with plinth and first floor band. Central C20 door with overlight flanked by single bordered sashes. To first floor 3 similar windows all with cambered brick heads. Interior is all fitted out in C19. The house sits in a large moated enclosure.	Post-Medieval	TF 45774 78226
1063014	Grade II listed building	The Cottage	Cottage. c.1830. Red brick in English garden wall bond of three, with pantile roof and single gable stack. Two storey, single bay front with dentillated eaves course and off-centre half glazed door and to left a three-light glazing bar casement. To first floor a single sliding sash. All openings have segmental heads.	Post-Medieval	TF4605977682

NHLE No.	Designation and Grade	Name	Description	Period	NGR
1063013	Grade II listed building	Stable Block at Thoresthorpe Manor House	Stable with granary over. Late C18. Brown red brick with corrugated iron roof. Two storey, three bay front with first floor band. Central stable door is flanked by single glazing bar sashes, door and windows having cambered brick heads. To first floor granary are two shuttered openings to eaves. In the gable is a doorway to first floor giving access to the granary and above are three flight holes to a pigeon loft.	Post-Medieval	TF4586177631
1308599	Grade II listed building	Manor House	House. Possibly C15, C17, with 1879 addition and C20 minor alterations. Originally timber frame, cased C17 in colourwashed brickwork, English bond. Pantile roof with raised brick coped gables, two external gable stacks and a single clustered ridge stack near the angle between the two ranges of the L-plan. Single storey with attics, three bay front, which was extended forwards in 1879 in brick with a lead roof and moulded top.	Medieval	TF4583677624
1308602	Grade II listed building	Barn at Thoresthorpe Manor House	Barn. Late C18 with later C19 addition. Red brick, pantiled hipped roof. Two storey with brick dentillated eaves course. Single bay front having rounded left hand corner and off centre planked double doors, with to first floor a shuttered opening. Both openings have segmental heads. There is a single breather. Single storey C19 blank extension with dentillated eaves to right.	Post-Medieval	TF4588477611
1063011	Grade II listed building	Church of St Margaret	Parish church. 1850 by Stephen Lewin. Restored 1958. Buff brick with ashlar dressings, slate roofs, stone coped. Nave with western bellcote, south aisle, chancel, south porch.	Post-Medieval	TF 45786 78762
1308594	Grade II listed building	Saleby Grange	House. Late C17, substantially altered and extended c.1820. Colourwashed brick, partly in English bond, shallow hipped slate roofs with deeply overhanging eaves and 3 brick stacks. 2 storey, 5 bay front, the left hand 2 bays are an early C19 addition and together with the raised third bay are taller and separately roofed. Plinth and first floor band to right hand 3 bays, left hand 2 bays are slightly advanced. Central 6 panelled door with fanlight, stone architrave and wooden neo-Georgian style doorcase, with to left 2 glazing bar sashes and to right a similar window and pair of French doors. To first floor are 5 glazing bar sashes.	Post-Medieval	TF 45770 78835
1168579	Grade II listed building	Ailby House Farmhouse	Farmhouse. C17, altered and extended C19, C20. Colourwashed brick, partly in English bond, thatched roof with brick coped gables, tumbled to right. Possibly originally timber frame. Single ridge and gable stacks. T-plan. 2 storey, irregular 4 bay front with central half glazed door covered by C20 rustic timber and thatch porch. To left 2 and to right a single tall plain sash with segmental brick heads. To first floor are 4 through eaves margin light eyebrow dormers. Over the door a pair of bordered lights to eaves, separated by a timber post, possibly part of an earlier frame. The right hand 3 bays have dentillated brick eaves and the left hand bay appears to be an early C19 addition. To the rear is a ramped gable over catslide to former dairy.	Post-Medieval	TF 43790 76976
1063040	Grade II listed building	Tothby Manor House	Farmhouse. Mid C17, altered C18 and c.1840. Small red bricks with slate roof having overhanging eaves and verge with bargeboard, 2 C19 red brick gable stacks. L-plan. 2 storey with garret, 5 bay front, having central, half glazed door flanked by pair of plain sashes with cambered heads. To first floor are 5 similar windows. The house stands beside a moated enclosure,	Post-Medieval	TF 44445 76682

NHLE No.	Designation and Grade	Name	Description	Period	NGR
			the site of the early Tothby Manor, home of the founder of the C14 Church of St. Wilfrid.		
1063010	Grade II listed building	The Cottage	Farmhouse. Late C17 altered c.1800 and C20. Red brick in English bond, pantile roof. 2 shortened gable stacks. 2 storey 3 bay front with short plinth. Central C20 gabled brick porch with half glazed and panelled door behind, flanked by single 2 light glazing bar sliding sashes with segmental heads. To 1st floor are 3 two light sliding sashes. To the rear is a contemporary single storey pent lean to with tumbled coped gable, altered C19 and C20. Interior retains 2 chamfered beams, one simply stopped, an inglenook fireplace now blocked, with a C18 brick bake oven in the corner.	Post-Medieval	TF 48612 78560
1147252	Grade II listed building	The Priory	Farmhouse. C16 with early C19 and late C19 and C20 alterations. Red brick in English bond with concrete tiled roofs. 2 external gable and one ridge C19 stacks in red and yellow bricks. 2 storey, 4 bay front with tall plinth and first floor band, having off centre C20 glazed door with evidence of reduction of opening and to left a portion of a hacked back brick hood mould. To left a triple glazing bar sash and to right 2 similar windows. To first floor are 3 similar smaller openings with to left a blocked rectangular opening.	Post-Medieval	TF 48752 78735
1063004	Grade II listed building	The Cottage	Late C17, altered early C19 and early C20. Mud and stud, partly cased in brick and raised four courses. Corrugated iron roof with central brick stack. Lobby entry plan. Single storey with garret, three bay front. Central boarded door, to left a three-light glazing bar sash and a very small two- light stair window, and to right a two-light similar window. To right is a lean-to timber shed.	Post-Medieval	TF4639780340
1146955	Grade II listed building	The Old Chapel	Formerly Baptist Chapel, now house. Founded 1690, altered c.1776 with C19 and C20 alterations. Red brick in Flemish bond, hipped pantile roof. 2 storey, 3 bay front with central C20 door flanked by glazing bar sashes. To first floor are 3 similar windows.	Post-Medieval	TF 46276 81024
1062985	Grade II listed building	Manor House	House. Late C18 with minor C19 alterations. Red brick in Flemish bond with stone coped slate roof and 2 gable stacks. L- plan. 3 storey, 5 bay front with plinth, central 6 panelled door with traceried fanlight having wood panelled reveals, doorcase consists of open dentillated pediment supported on Tuscan columns, flanked by pairs of margin light sashes. To first floor are 5 similar windows and to second floor are 5 smaller similar windows.	Post-Medieval	TF 46402 81028
1168596	Grade II listed building	Church of St James	Parish church. 1863 by James Fowler in the Neo-Norman style. Rock faced limestone with slate roof, decorative ridge tiles. Nave with western bellcote and porch, apsidal chancel.	Post-Medieval	TF 43090 75387
1359697	Grade II listed building	Garden Shed in grounds of Number 2 (Church Cottage)	Former cottage now shed. Late C18. Red brick in English garden wall bond of 3, pantile roof with raised brick coped gables, single yellow brick C19 gable stack. Parallel range plan. 2 storey, 2 bay front with dentillated eaves course having off centre planked door and a single 2 light sliding sash to each floor. The lower openings have segmental brick heads, the upper has timber lintel to eaves.	Post-Medieval	TF 43016 75394
1360008	Grade II listed building	Moat Farm	Farmhouse. Mid C17 with mid C19 alterations. Red brick in English bond, steeply pitched pantile roof, with central clustered ridge stack and reduced	Post-Medieval	TF4719276497

NHLE No.	Designation and Grade	Name	Description	Period	NGR
			tumbled gables. T-plan. 2 storey with garrets, 3 bay front, the central bay advanced and separately gabled to form 2 storey porch.		
1063005	Grade II listed building	Windmill	Tower mill. Early C19, altered and raised late C19. Red brick, partly tarred. 4 storey tapering tower with planked double doors and glazing bar pivot window to first floor on sides, and 2 light pivot to second floor on front. Top stage is later C19, with corbelled out eaves.	Post-Medieval	TF 46988 76609
1308641	Grade II listed building	Vine House and Barn	House and barn. c.1700 with early C19 alterations. Red brick with concrete tiled roof, single gable and axial stacks. 2 storey, 4 bay front with off-centre 5 panel door with to left 2 and to right a single glazing bar sashes. To first floor are 3 glazing bar sashes. All windows have splayed cambered arches. Attached to the left hand side is single storey barn with brick coped partly tumbled gable and single fixed light.	Post-Medieval	TF 47045 76468
1063006	Grade II listed building	The Forge	Forge. Early C19. Painted brick, pantile roof with single ridge stack. Single storey, 7 bay front with dentillated eaves course. Central planked door with to left a sliding glazing bar sash, planked double doors and a further window. To right 2 glazing bar fixed lights, and a plain light. Openings have segmental brick heads.	Post-Medieval	TF4698376491
1147197	Grade II listed building	Old Forge Cottage	Cottage. Late C17 with C19 and C20 alterations. Colourwashed brick with thatched roof having raised brick coped gables and single axial brick stack. Lobby entry. Single storey with attics, 3 bay front having central projecting thatched porch flanked by single 2 light glazing bar C20 casements. To the attic are 2 C20 glazing bar dormer windows with thatched eyebrows. To the right is a single storey 2 bay addition.	Post-Medieval	TF 46982 76472
1435370	Grade II listed building	Bilsby War Memorial	First World War memorial, 1919, with later additions for the Second World War. It is made of Cornish Granite and takes the form of a broken column, symbolizing lives cut short. The memorial stands on a concrete platform and consists of a square two-stepped base, the upper step of which is rough-hewn, surmounted by a square tapering plinth from which the circular column rises.	Modern	TF4666376712
1147167	Grade II listed building	Bilsby House	House. Mid C18 with 1904 alterations and additions. Red brick and stucco dressings, with hipped Westmoreland slate roof, having paired bracketed eaves and 2 wall stacks. 2 storey, 5 bay front with rendered plinth, central 6 panelled door with delicate traceried fanlight, panelled reveals, Doric pilastered doorcase, triglyph frieze, dentillated hood, flanked by pairs of tall glazing bar early C20 cross mullioned casements. To first floor are 5 similar windows. To either side are added single storey single bay wings, each with a triple glazing bar casement. All windows have louvred shutters and rusticated splayed stucco lintels with key blocks. Staircase and fittings dated from 1904. The house stands in a substantial moated enclosure.	Post-Medieval	TF4653476699
1359981	Grade II listed building	Queen Elizabeth Grammar School	Grammar school. 1881, with minor early C20 addition. Yellow Farlesthorne brick with red brick polychromatic bands, ashlar dressings, decorative tiled roofs, wooden shingled bellcote and 3 tall ribbed yellow brick ridge stacks. H-plan. 2 storey, 5 bay front, the left hand 2 bays and the right hand bay being advanced and separately gabled with plain bargeboards arranged in a lattice pattern at the gable.	Post-Medieval	TF4483975677

NHLE No.	Designation and Grade	Name	Description	Period	NGR
1308686	Grade II listed building	34, Station Road	House. c.1830. Yellow Farlesthorne brick with stucco quoins and dressings. Slate roof having deeply overhanging eaves and verge with bargeboard, and 2 tall moulded brick gable stacks. 2 storey, 5 bay front having central half glazed door, with overlight, panelled reveals and small Greek Doric portico, flanked by pairs of glazing bar sashes with splayed rusticated lintels with key blocks. To first floor are 5 similar windows.	Post-Medieval	TF 44663 75608
Grade II listed buildings within Alford Conservation Area					
1063029	Grade II listed building	Mill Offices	House and offices. c.1837. Yellow brick with hipped pantile roof having 2 ridge stacks. 2 storey, 6 bay front having central 4 flush panelled half glazed door flanked by single 2 light sliding sashes. To first floor are 2 bordered sashes with to right 2 plain sashes and a sliding sash. All openings have segmental heads. This building contained a bakehouse and the 2 flash ovens are still inside.	Post-Medieval	TF 45763 76505
1063030	Grade II listed building	Pigsties and Engine Shed at Alford Mill	Range of 4 pigsties and engine shed. c.1840. Yellow brick with monopitch pantile roof. Single storey, 4 bay front with 4 small openings at ground level having segmental heads. Attached to the pigsties is a taller gabled shed which originally contained an engine, powered by town gas, to drive the mill when there was insufficient wind.	Post-Medieval	TF 45738 76513
1146943	Grade II listed building	Sail Store and outbuildings at Alford Mill	Sail store and outbuilding. c.1837. Yellow brick with pantile roof. Single storey, 7 bay front with dentillated brick eaves course. The left hand end 2 bays are open and supported on timber uprights, allowing for storage of the sails. The off centre 4 flush panel door has to the right a slatted opening and to left 2 plain windows and a further boarded over opening. All openings have segmental heads.	Post-Medieval	TF 45738 76498
1359979	Grade II listed building	Welland House	House. c.1830, altered C20. Red brick with hipped slate roof, 2 tall wall stacks. 2 storey, 3 bay front with central half glazed panelled door flanked by Doric columns supporting a C20 gabled roof. To either side are single thin glazing bar sashes with splayed rubbed brick flat heads. To first floor are 3 similar windows.	Post-Medieval	TF 45762 76465
1146954	Grade II listed building	The Elms	House. Early C19 with later C19 alterations. Pale buff brick with stucco dressings, hipped slate roof with 2 wall stacks. 2 storey, 3 bay front, having central 6 panelled door with traceried fanlight set in doorcase with fluted pilasters and dentillated open pediment, flanked by later C19 canted plain sash bay window with hipped slate roofs. To first floor are 3 glazing bar sashes with splayed stucco lintels. To the right is a C20 conservatory. Interior retains contemporary doors, fireplaces and elegant dogleg staircase with slender balusters and carved string.	Post-Medieval	TF 45753 76323
1063031	Grade II listed building	The Yews	House. Early C19. Stucco with stucco dressings and quoins, hipped slate roof and 2 tall brick wall stacks. 2 storey, 3 bay front having central flush panelled door with overlight, in panelled reveals with narrow panelled pilasters and short hood, flanked by canted plain sash bay windows, with pilastered mullions and swept leaded roofs. To first floor are 3 plain sashes with splayed rusticated lintels and fluted keystones.	Post-Medieval	TF 45702 76268
1146933	Grade II listed building	3, East Street	House. Early C18, raised and refronted late C18. Red brick, partly in English bond with stucco dressings, hipped pantile roof with single gable	Post-Medieval	TF 45602 76184

NHLE No.	Designation and Grade	Name	Description	Period	NGR
			and 2 ridge stacks. L-plan. 2 storey with brick dentillated eaves course. The original front of 5 bays with plinth and first floor band, faced the road, and the blocked openings can still be seen, including the site of the central door.		
1063027	Grade II listed building	8, Church Street	House. Late C18 with some C20 alteration. Red brick, stucco dressings, concrete tiled roof, single gable stack. T-plan. 3 storey, 3 bay front, with plinth, first and second floor bands, dentillated eaves course. Central C20 panelled door with glazed surround, flanked by single windows. To first floor are 3 windows and to second floor are 3 smaller windows.	Post-Medieval	TF 45600 76082
1359978	Grade II listed building	Ivy House	House. c.1702, raised late C18. Red brick, stucco dressings, pantile roof, raised gables, one stone coped, the other brick coped, 2 gable stacks. L-plan. 3 storey, 3 bay front with crude rendered second floor band and dentillated eaves board. Off-centre half glazed panelled door, wood panelled reveals, eared and pedimented surround. To right, 2 glazing bar sashes with lattice grills to lower parts. To first floor 3 similar sashes and to second floor 3 shorter windows.	Post-Medieval	TF4558876048
1359977	Grade II listed building	War memorial in churchyard, south side of church	War memorial. By Sir Ninian Comper. 1919. Ashlar. In the form of a medieval churchyard cross, square base on 3 octagonal steps, supporting tapering octagonal shaft rising to castellated top and crucifixion. The faces of base and steps are inscribed and the west face has a wreath containing the inscription "To the Men of Alford who gave their lives in the Great War 1914-19".	Modern	TF4555576049
1146974	Grade II listed building	The George Hotel and shop adjoining	Public house and shop. Early C18 with C19 and C20 alterations. Colourwashed brick with pantile roof having brick coped gables and kneelers, 2 gable and single ridge stacks. L-plan. 2 storey plus attics, 8 bay front, arranged 5:3 around the corner, plinth, first floor band, dentillated eaves course.	Post-Medieval	TF4552076062
1063033	Grade II listed building	6, High Street	House now offices. Late C18, altered early C19. Colourwashed brick with stucco dressings, slate roof having stone coped gables, single gable and wall stacks. 3 storey, 3 bay front having stucco plinth, paired eaves brackets and stucco quoins. Central half glazed panelled double doors with wooden doorcase, panelled reveals and blank fanlight, short flat hood, with to left a single tripartite glazing bar sash window and to right a similar but plain sash window. To first floor a central glazing bar sash is flanked by single tripartite glazing bar sashes, and to second floor are 3 smaller similar windows.	Post-Medieval	TF4548176064
1146970	Grade II listed building	5, High Street	Shop. c.1700 with extensive late C19 alterations. Lined stucco, brick with pantile roof having brick coped gables and single gable stack. 2 storey, 4 bay front with plinth. Central 6 panelled door with wooden surround, hood and decorative overlight, flanked by single triple shop windows. To first floor are 4 glazing bar sashes. An early photograph shows that the central door has been moved from the right hand bay when the building was converted into a shop.	Post-Medieval	TF4547176063
1063032	Grade II listed building	Angelenes Pantry	Early C18, altered C19 and C20. Rendered with stucco quoins, steeply hipped slate roof and single ridge brick stack. 2 storey with attic, single bay front having central half glazed door flanked by 2 light shop windows all set	Post-Medieval	TF4546276064

NHLE No.	Designation and Grade	Name	Description	Period	NGR
			under deep fascia with side pilasters and fluted brackets. To first floor a single plain sash with deep architrave. In the roof a flat roofed dormer. To the right hand side front is a probably repositioned C18 doorcase with flat moulded hood.		
1063028	Grade II listed building	16, Church Street	House, formerly a public house. Early C18, raised late C18, with mid C19 alterations. Red brick, colour washed, pantile roof with 2 gable stacks. L-plan. 2 storey, 4 bay front with central 6 panelled door, overlight, plain wooden surround with short hood. To left, 2 plain sashes with heavy plain stucco surround with key blocks with above a blocked arch. To right is a plain tripartite window. to first floor are 4 glazing bar sashes. All windows have segmental heads with painted splayed lintels.	Post-Medieval	TF 45538 76019
1147003	Grade II listed building	White and Son	Shop, includes No.19 High Street. Early C19 with late C19 shop fronts and some C20 alteration. Red brick with pantile roof and single ridge stack. L-plan, with chamfered angle to corner of Market Place and High Street. 3 storey, 7 bays arranged 4:1:2 around the corner. Doorway to angle is half glazed with plain overlight with to left a single canted bay shop window and to right a similar double window with a smaller flush window beyond, all with wooden pilasters and moulded cornice. Beyond to left are 2 further doorways, one a plain panelled door and the other half glazed, each with canted window to the left, also having wooden pilasters and cornice. To first floor are 7 glazing bar sashes, 5 with segmental heads and 2 flat headed. To second floor are 7 fixed glazing bar lights to eaves.	Post-Medieval	TF4548676046
1063037	Grade II listed building	16 Market Place	Early C19 with late C19 shop front. Painted brick, pantile roof. Three storey, single bay front having off-centre half glazed panelled door with plain fanlight and to left single plain shop window with fluted wooden pilasters. To first and second floors are single glazing bar sashes.	Post-Medieval	TF4548176040
1147007	Grade II listed building	Drinking fountain at north end of Market Place	Drinking fountain. 1897. Polished red granite. Square base surmounted by shaft with octagonal knopped conical top. To either side are brass spigots and on one side only a projecting semi-circular basin. Above a recessed semi-circular headed panel is the inscription "Diamond Jubilee 1897" and on the side a further inscription "Victoria 1837-1901".	Post-Medieval	TF4547176044
1360005	Grade II listed building	East Corner Antiques	Shop. Late C18 with early C19 alterations. Red brick rendered, hipped concrete tiled roof. 2 storey, 3 bay front with dentillated eaves course. Central half glazed panelled door, wooden reveals, plain overlight, flanked by single early C19 rectangular shop bay windows with fine glazing bars, surmounted by timber cornice. To left of first floor a large bordered glazing bar sash and to right a smaller glazing bar sash, both with cambered heads.	Post-Medieval	TF4543376060
1063041	Grade II listed building	GW and MD Thornalley	Shop. Late C18 with late C19 alterations. Colourwashed brick with stucco dressings, slate roof, single gable stack. 3 storey, 3 bay front facing Market Square, having stucco quoins to right only. A blocked central doorway is flanked by C19 wooden shop fronts, one with dentillated cornice. To first and second floors are pairs of glazing bar sashes separated by blank window openings.	Post-Medieval	TF4545576045
1147107	Grade II listed building	The Venetian	Restaurant. Mid C18, with mid C19 and C20 alterations. Rendered brick with pantile roof. 2 storey, 4 bay front, 2 half glazed doors, with 3 plain shop	Post-Medieval	TF4542676057

NHLE No.	Designation and Grade	Name	Description	Period	NGR
			windows to ground floor, with wooden pilasters and fascia. To first floor 4 glazing bar sashes.		
1063036	Grade II listed building	Market Pharmacy	Shop. Late C18 with late C19 shop front and C20 fascia. Red brick, rendered on front with stucco dressings, slate roof and single brick ridge stack. 3 storey, 3 bay front, stucco plinth and quoins. To left of ground floor a half glazed door with plain overlight flanked by pairs of large rectangular shop windows with wooden pilasters and brackets to moulded cornice. To right a single glazing bar sash; there are 3 similar windows to first and second floors. All windows have broad moulded stucco architraves.	Post-Medieval	TF4545676034
1308705	Grade II listed building	Barclays Bank	Bank. 1906. Red brick with ashlar dressings, slate roof, having 3 rear wall stacks, with deeply dentillated cornice above first floor. Two and a half storeys, 4 bay front with 6 panelled door to right, traceried fanlight, set in semi-circular headed rusticated ashlar surround with keystone and cornice. To the left are 3 semi-circular headed margin light windows in moulded ashlar surrounds with keystones. To first floor are 5 glazing bar cross mullioned casements with deep segmental heads.	Modern	TF 45533 75988
1146997	Grade II listed building	Lloyds Bank	Bank. 1892. Red brick with limestone and terracotta dressings, hipped slate roof and 2 wall stacks. 2 storey, 3 bay front with plinth, moulded stone sill band, dentillated terracotta string course, corbelled out eaves. To ground floor 3 plain sashes with top hung lights over. To first floor are 2 similar windows.	Post-Medieval	TF4546176014
1063035	Grade II listed building	Windmill Hotel	Hotel. Early C19. Brown brick rendered on the front, slate roof, hipped one end with single gable and wall stacks. 3 storey, 5 bay front, the left hand 2 bays break forward slightly, with paired bracketed cornice. Off-centre half glazed double panelled doors with plain overlight having wooden Doric doorcase with flat projecting hood, with to right a single and to left 3 glazing bar sashes. To first floor 3 similar windows with to right a canted tripartite oriel with bordered sashes. To second floor are 5 smaller glazing bar sashes. On this site was once the Customs Office where Thomas Paine 1737-1809, author of the Rights of Man and the Age of Reason was an excise officer from 1764-1765.	Post-Medieval	TF4546476002
1147056	Grade II listed building	West Street House	House and 2 shops. Late C18 with late C19 alterations. Colourwashed brick, stucco quoins and dressings, slate roof. 3 storey, 4 bay front, having off-centre flush panelled door with traceried overlight, flanked by single C19 shop fronts. To left a central recessed half glazed door, flanked by plate glass windows, and to right, a recessed glazed door with plate glass window to left. Both shop fronts have pilastered surrounds with plain fascias having moulded pedimented brackets and cornices.	Post-Medieval	TF4540276026
1063034	Grade II listed building	Corn Exchange	Corn Exchange, now offices. 1856. Red brick with limestone dressings, hipped slate roof with 2 wall stacks. 2 storey, 3 bay front, centre bay slightly advanced, plinth, string course, moulded parapet, rusticated quoins. Central double half glazed doors in tripartite arrangement with tall flanking lights, rectangular pilasters with tiled inlay, scrolled brackets and moulded pediment. Flanked by 2 plain sashes, also in tripartite settings. To first floor 3 semi-circular headed margin light sashes with shouldered stone architraves and keyblocks. Above the middle window is a rectangular	Post-Medieval	TF4547575982

NHLE No.	Designation and Grade	Name	Description	Period	NGR
			plaque inscribed in relief "MDCCCLVI". At the centre of the parapet are the town arms in stone.		
1359980	Grade II listed building	CB and M Sutton	Shop. Early C19 with late C19 shop front. Colourwashed brick with stucco dressings, hipped slate roof. 2 storey, 2 bay front with first floor brick sill band. Central half glazed panelled door with overlight, flanked by double shop windows having cast iron moulded mullions with spandrels, the plain fascia is supported on battered Greek style pilasters with key design and swept capitals. To first floor are 2 glazing bar sashes with moulded stucco architraves.	Post-Medieval	TF4550575955
1308717	Grade II listed building	PJ Bedford	House and shop. Late C18 with minor C20 alteration. Colourwashed brick with hipped slate roof with paired moulded brackets, one rear wall stack. 3 storey, 3 bay front with first and second floor bands. Central 4 panelled door, up step, with plain overlight, to right a plain shop window with thin wooden pilastered surround and to left a glazing bar sash. To first floor are 3 similar windows and to second floor 3 smaller sashes. All windows have painted splayed lintels.	Post-Medieval	TF4552275918
1063038	Grade II listed building	Spridgeons	House and shop. C18, altered early C19 and late C19. Colourwashed brick with stucco dressings and pantile roof. 2 storey, 3 bay front with off-centre recessed half glazed door flanked by large plain shop windows having top cast iron ventilators and mullions, the angled fascia is supported by wooden panelled pilasters with fluted brackets. To right a glazing bar sash and C20 door. To first floor 3 glazing bar sashes with rusticated stucco lintels and key blocks.	Post-Medieval	TF4552875910
1308719	Grade II listed building	White Hart	Public house. c.1840. Yellow brick with slate roof and 2 gable stacks. 2 storey, 3 bay front having central flush panelled door with plain overlight, set in fluted pilastered wooden surround with cornice, flanked by single glazing bar sashes with splayed brick segmental heads. To first floor are 3 similar windows.	Post-Medieval	TF 45545 75876
1308675	Grade II listed building	Methodist chapel and Sunday school	Methodist Chapel and Sunday School. 1864, by W. Botterill of Hull. Yellow Farlesthorpe brick with ashlar dressings, banded blue and green slate roofs. The Sunday School is linked to the Chapel at the rear. The main front has stepped corner buttresses with tall pinnacles, and an elaborate corbelled out octagonal pinnacle to the gable with angle shafts having foliate capitals. There are 3 shouldered doorways set in deeply moulded pointed arches with angle shafts having floriate capitals, over the central door a glazed octofoil and over the flanking doorways are simple blank trefoils, all set under crocketed gablettes.	Post-Medieval	TF4530575997
1308722	Grade II listed building	12 and 14, South Street	Pair of cottages. 1819 with minor C20 alterations. Red brick, hipped slate and concrete tiled roof with deeply overhanging eaves, tall central ridge stack. 2 storey, 4 bay front, having short plinth, 2 C20 half glazed doors to the ends with one plain sash and one sliding sash in the centre. All openings are under brick labelled hood moulds. To first floor are 2 sliding glazing bar sashes, to eaves. At the rear is a datestone inscribed "TJ 1819".	Post-Medieval	TF4552475866
1359982	Grade II listed building	Half Moon Public House	Public house. Mid C18, with early C19 and C20 alterations. Red brick, rendered on front, with stucco quoins and dressings, plain tiled roof with	Post-Medieval	TF4531675951

NHLE No.	Designation and Grade	Name	Description	Period	NGR
			raised brick coped gables and 2 stacks. 3 storey. Street has 3 windows with plain bands to first and second floor, central 4 panelled door having plain overlight, pilastered surround and small flat hood, flanked by single C20 3 light casement windows, slightly projecting on moulded brackets. To first floor are 3 original glazing bar sashes, and to second floor 3 similar smaller sash windows.		
1063000	Grade II listed building	118, West Street	Cottage. C16, late C17, with later C18 alterations. Red brick, base and gable in English bond, remainder in Flemish bond. Half hipped thatched roof with 2 ridge stacks, one being axial. Lobby entry with stairs beside stack. Single storey, with attics, irregular 5 bay front having off-centre 4 panelled door flanked by single glazing bar sashes.	Post-Medieval	TF4527275945
1147061	Grade II listed building	White Horse Hotel	Public house. C17 with early C19 alterations. Possibly originally timber frame, now painted brick and render with stucco quoins and dressings, thatched roof with raised brick coped gables and 2 gable stacks. Single storey with attics, 3 bay front, having central boarded door in fluted surround with short hood on scrolled brackets, flanked by single tripartite glazing bar sashes with splayed rusticated stucco lintels with raised key blocks. Over the door is a niche containing the figure of a white horse. To the attic are 2 through eaves dormers with thatched gables and glazing bar sliding sashes and casements.	Post-Medieval	TF4528475928
1063039	Grade II listed building	Black Horse	Public house. c.1820 with minor C20 alterations. Colourwashed brick, with stucco dressings, hipped concrete tiled roof, with single ridge stack. 2 storey, 3 bay front, having central C20 door with plain fanlight, having pedimented wooden doorcase with Doric pilasters, flanked by single glazing bar sashes. To first floor central blank opening has black horse figure, flanked by C20 casement windows.	Post-Medieval	TF4554975789
1360004	Grade II listed building	114, West Street	Cottage. Late C17 with C18 and C20 alterations and additions. Red brick with thatched roof having raised rebuilt brick coped gables, single gable and axial stacks. Baffle entry plan. Single storey with attics, plinth and brick eaves band, irregular 4 bay front having off-centre planked door, with to left a C20 3 light glazing bar casement and to right 2 glazing bar sashes.	Post-Medieval	TF 45242 75947
1147089	Grade II listed building	Alloa Cottage and Potters Rest Cottage	Pair of cottages. C17 with late C18 alterations. Red brick, No.116 is colourwashed, thatched roofs, with raised brick coped gables and 2 ridge stacks, that to No.117 being rebuilt in yellow brick. Both are lobby entry plan. Single storey with attics, plinth and brick eaves band. 7 bay irregular front, signs of earlier fenestration can be seen in the brickwork. 6 panelled door flanked by single glazing bar sashes with to left a blank opening and a further 4 panelled door flanked by single glazing bar sashes.	Post-Medieval	TF4525875936
1359983	Grade II listed building	Acacia Cottage	Cottage. Late C17 with late C18 alterations and C19 addition, minor C20 alterations. Painted brick with thatched roof having raised brick coped gables and 2 rear wall stacks. Parallel ranges, the rear range being C19 addition. Single storey with attics, plinth and eaves band, 3 bay front having slightly off- centre 6 panelled door with overlight set in C19 projecting flat roofed porch with brick dentillated top, flanked by single glazing bar sashes, having segmental heads. The 2 through eaves dormers have raised brick coped gables, rebuilt C20, with thatched roofs and 2 light glazing bar casements.	Post-Medieval	TF4523775921

NHLE No.	Designation and Grade	Name	Description	Period	NGR
1063042	Grade II listed building	Merton Lodge	House. Late C17, substantially altered late C18 and early C19. Red brick, the lower part in English bond, the upper in English garden wall bond of 5, stucco dressings and rendered gable end. Slate roof with deeply overhanging eaves and bargeboard, 2 gable stacks. 2 storey with garret, first floor band, 5 storey front having central half glazed panelled door with simple Greek Doric portico, flanked by single canted glazing bar sash bay windows. To first floor are 5 glazing bar sashes with splayed rusticated stucco lintels.	Post-Medieval	TF4525975903
1147075	Grade II listed building	40-43, West Street	Six almshouses and wall, now 4. 1870. Red brick with 2 blue brick bands, ashlar and terracotta dressings, hipped slate roofs with decorative ridge tiles and finials, 4 ridge stacks with diamond set shafts. U-plan. Single storey with attics, 10 bay front, the end bays are advanced and hipped.	Post-Medieval	TF4517875860

Table 5A.2 Designated Heritage Assets of high value within the 3-5 km Study Area

NHLE No.	Designation and Grade	Name	Description	Period	NGR
1011454	Scheduled monument	Hagnaby Abbey: a Premonstratensian abbey and a post-medieval house and formal garden	The monument includes the remains of Hagnaby Abbey, a Premonstratensian monastery founded by Agnes de Orreby in 1175-6 as a dependent priory of Welbeck Abbey. The remains take the form of a group of earthworks contained within a large, ditched enclosure. At the highest part of the site, near the centre of the monument, is a raised area c.60 m square which includes the earthworks of building foundations. Fragments of dressed stone are visible on the surface. This is the site of the main monastic buildings, including the church and claustral ranges, and of the secular house which succeeded them. Adjacent to the east, north and south-west are further building remains including fragments of brick. These are considered to represent the remains of largely post-medieval buildings associated with the secular house, including service buildings and garden structures.	Medieval	TF 48423 80633
1168562	Grade I listed building	Church of St Leonard	Parish church. C11,late C12, C14, C15, restored 1873. Squared chalk and greenstone coursed rubble with some red brick patching, concrete tiled roof. Nave and chancel.	Medieval	TF 41562 75929

Table 5A.3 Non-designated Heritage Assets within the draft Order Limits or the 1 km Study Area

HER Reference	Record Type	Name	Description	Period	NGR	Within the Draft Order Limits or 1 km Study Area
MLI118534	Building	College Farm, Beesby with Saleby	Redeveloped 19 th century farmstead. Regular courtyard of U plan. The farmhouse is detached from the main working complex. Isolated location. Large modern sheds are located on the site.	Post-Medieval	TF 4631 7755	Within the 1 km Study Area
MLI116907	Building	Galley Hill, Beesby with Saleby	Redeveloped 19 th century farmstead. Regular courtyard of U plan. The farmhouse is detached from the main working complex. Isolated location. Large modern sheds are located to the side of the site.	Post-Medieval	TF 4403 7918	Within the 1 km Study Area
MLI116911	Building	Home Farm, Beesby with Saleby	Partially extant 19 th century farmstead. Regular courtyard with linked working buildings to all four sides of the yard. The farmhouse is detached from the main working complex. There has been a partial loss (less than 50%) of traditional buildings. Isolated location. Large modern sheds are located on the site.	Post-Medieval	TF 4584 7835	Within the 1 km Study Area
MLI116910	Building	Unnamed farmstead, Beesby with Saleby	Partially extant 19 th century farmstead. Regular courtyard of L plan. The farmhouse is detached with the long axis facing on to the yard. There has been significant loss (greater than 50%) of traditional buildings. Located within or in association with a village.	Post-Medieval	TF 4585 7884	Within the 1 km Study Area
MLI116909	Building	Finch Farm, Beesby with Saleby	Partially extant 19 th century farmstead. L-plan with additional detached elements. The farmhouse is detached from the main working complex. There has been a partial loss (less than 50%) of traditional buildings. Located within or in association with a village. Large modern sheds are located on the site.	Post-Medieval	TF 4595 7889	Within the 1 km Study Area
MLI116623	Building	(Furze Hill), Bilsby	Partially extant 19 th century farmstead. Regular courtyard of E plan. Additional, prominent detached elements to the main plan. The farmhouse is detached from the main working complex. There has been a partial loss (less than 50%) of traditional buildings. Isolated location. Large modern sheds are located on the site.	Post-Medieval	TF 4803 7788	Within the 1 km Study Area

HER Reference	Record Type	Name	Description	Period	NGR	Within the Draft Order Limits or 1 km Study Area
MLI116627	Building	Bilsby Moor Farm, Bilsby	Bilsby Moor Farm, Bilsby. Redeveloped 19 th century farmstead. Regular courtyard with L-plan range plus detached buildings to the third side of the yard. The farmhouse is detached from the main working complex. Located within or in association with a village. Large modern sheds are located on the site.	Post-Medieval	TF 4714 7660	Within the 1 km Study Area
MLI118494	Building	Greenfield, Aby with Greenfield	Greenfield, Aby with Greenfield. Redeveloped 19 th century farmstead. Regular courtyard of Z plan. The farmhouse is attached to a range of working buildings. Isolated location. Large modern sheds are located on the site.	Post-Medieval	TF 4327 7794	Within the 1 km Study Area
MLI88710	Monument – Military Airfield	RAF Strubby	RAF Strubby was the most eastern of Lincolnshire's airfields and it opened in April 1944. It was used by Coastal Command for anti-shipping missions. After the end of the Second World War RAF Strubby came under the RAF Flying College at RAF Manby, remaining in this role up to closure in 1972. It was used for a while (until the 1990s) as a helicopter base for the southern North Sea oil and gas rigs. In the 1980s the runways were ripped up for hardcore. RAF Strubby is active as a glider airfield. Strubby Gliding Club has used the site since 1978 and the club changed its name to the Lincolnshire Gliding Club in the 1990s.	Post-Medieval	TF 44716 81091	Within the 1 km Study Area
MLI116905	Building	Wood Farm, Beesby with Saleby	Wood Farm, Beesby with Saleby. Partially extant 19 th century farmstead. Regular courtyard of U plan. The farmhouse is detached from the main working complex. There has been significant loss (greater than 50%) of traditional buildings. Isolated location. Large modern sheds are located to the side of the site.	Post-Medieval	TF 4455 7968	Within the 1 km Study Area
MLI116906	Building	Unnamed farmstead, Beesby with Saleby	Partially extant 19 th century farmstead. L-plan. The farmhouse is detached from the main working complex. There has been a partial loss (less than 50%) of traditional buildings. Isolated location.	Post-Medieval	TF 4493 7967	Within the 1 km Study Area
MLI116912	Building	Mill House Farm (Old Mill House), Beesby with Saleby	Mill House Farm (Old Mill House), Beesby with Saleby. Partially extant 19 th century farmstead. Regular courtyard of L plan. The farmhouse is detached from the main working complex. There has been a partial loss (less than 50%) of traditional buildings. Isolated location. Large modern sheds are located on the site.	Post-Medieval	TF 4656 7867	Within the 1 km Study Area
MLI118536	Building	Lake House, Beesby with Saleby	Lake House, Beesby with Saleby. Partially extant 19 th century farmstead. Regular courtyard with L-plan range plus detached buildings to the third side of the yard. The farmhouse is detached from the main working complex. There has been significant loss (greater than 50%) of traditional buildings. Isolated location. Large modern sheds are located to the side of the site.	Post-Medieval	TF 4563 7714	Within the 1 km Study Area
MLI124959	Building	Bilsby Hall	19 th century house, set within a medieval moated enclosure at Bilsby. Thought to be built on the site of an earlier, possibly medieval, hall. Brick-built, with a 3 bay front range, and extensions only to the north-east. The building features a double pile roof structure and has a large porch and sash windows to the north-west front.	Post-Medieval	TF 46881 76265	Within the 1 km Study Area
MLI116626	Building	The Old Dairy, Bilsby	The Old Dairy, Bilsby. Extant 19 th century farmstead. Regular courtyard of L plan. The farmhouse is detached with the long axis facing on to the yard. Located within or in association with a village.	Post-Medieval	TF 4705 7642	Within the 1 km Study Area
MLI116622	Building	Pear Tree Farm, Bilsby	Pear Tree Farm, Bilsby. Partially extant 19 th century farmstead. Regular courtyard with L-plan range plus detached buildings to the third side of the yard. The farmhouse is detached from the main working complex. There has been significant loss (greater than 50%) of traditional buildings. Located within a loose farmstead cluster. Large modern sheds are located on the site.	Post-Medieval	TF 4894 7764	Within the 1 km Study Area

HER Reference	Record Type	Name	Description	Period	NGR	Within the Draft Order Limits or 1 km Study Area
MLI118533	Building	Glebe Farm, Beesby with Saleby	Glebe Farm, Beesby with Saleby. Redeveloped 19 th century farmstead. Regular courtyard with linked working buildings to all four sides of the yard. The farmhouse is detached from the main working complex. Isolated location. Large modern sheds are located on the site.	Post-Medieval	TF 4709 7879	Within the 1 km Study Area
MLI41491	Building	The Grange, Bilsby	The Grange, Bilsby. Partially extant 19 th century farmstead. Regular courtyard with linked working buildings to all four sides of the yard. Additional, prominent detached elements to the main plan. The farmhouse is detached from the main working complex. There has been a partial loss (less than 50%) of traditional buildings. Located within or in association with a village. Large modern sheds are located to the side of the site	Post-Medieval	TF 4708 7615	Within the 1 km Study Area
MLI99057	Building	Wesleyan Methodist Chapel, Saleby	Saleby Wesleyan Methodist chapel was built in 1855 to seat 100. Prior to this the society, which had been active since 1776, met in a house. A schoolroom was added in 1914. The chapel closed in 1984. The building currently stands empty. The building is of yellow brick and has a gabled roof. The building is in a state of some disrepair, and there is little in the way of decoration other than some stained glass and crenallations on the roof of the porch.	Post-Medieval	TF 45685 78431	Within the 1 km Study Area
MLI118535	Building	Manor House Farm (The Cottage), Thoresthorpe	Manor House Farm (The Cottage), Thoresthorpe. Partially extant 19 th century farmstead. Regular courtyard of L plan. The farmhouse is detached from the main working complex. There has been a partial loss (less than 50%) of traditional buildings. Isolated location. Large modern sheds are located on the site	Post-Medieval	TF 4584 7761	Within the 1 km Study Area
MLI126595	Building	Former School, Saleby	Former school. Single storey cross-wing plan red brick building in Flemish Bond, under a pitched gabled pantile roof. Brick hood moulds above the door and window openings. The doorway on the front gable elevation has been infilled. Above the doorway is a dedication stone with an inscription. There is a small flat roofed modern extension to the east of the gable elevation and a modern garage extension to the west of the building.	Post-Medieval	TF 4577 7869	Within the 1 km Study Area
MLI98315	Building	Late 18 th to 20 th century agricultural building complex, Saleby	College Farm, Beesby with Saleby. Partially extant 19 th century farmstead. Regular courtyard with multiple regular yards. The farmhouse is detached from the main working complex. There has been significant loss (greater than 50%) of traditional buildings. Located within or in association with a village. Large modern sheds are located on the site	Post-Medieval	TF 45660 78758	Within the 1 km Study Area
MLI125715	Building	Manor Barn (Thoresthorpe Manor), Thoresthorpe	Manor Barn (Thoresthorpe Manor), Thoresthorpe. Partially extant 18 th century farmstead. Regular courtyard of U plan. The farmhouse is detached from the main working complex. There has been significant loss (greater than 50%) of traditional buildings.	Post-Medieval	TF 4574 7753	Within the 1 km Study Area
MLI98900	Building	Wesleyan Methodist Chapel, Bilsby	A Wesleyan chapel, built in 1835 to seat 80. It is of red brick and has a hipped roof of Welsh slate. The chapel was closed in 1966 and the building became a warehouse. At some point after the chapel closed, the frontage was rendered and the original doorway bricked in	Post-Medieval	TF 47286 76420	Within the 1 km Study Area
MLI116099	Monument	Post-Medieval Activity, St Mary's Priory, Geenfield	The remains of two ditches and a brick wall were recorded in June 2015, during archaeological monitoring of the undergrounding of overhead power lines on the site of St Mary's Priory. Both ditches were aligned on an east to west axis, and, whilst no finds were recovered from their fills, both were cut into layers of post-medieval made ground. The remains of the wall were found further to the north, and closer to Priory House. The form of the wall and the mortar used in its construction would suggest that it was of 19 th century date, and likely related to the other farm buildings on the site.	Post-Medieval	TF 4330 7793	Within the 1 km Study Area

HER Reference	Record Type	Name	Description	Period	NGR	Within the Draft Order Limits or 1 km Study Area
MLI116908	Building	Saleby Woodhouse, Beesby with Saleby	Site of Saleby Woodhouse, Beesby with Saleby. Demolished 19 th century farmstead. Loose courtyard with three sides of the courtyard formed by working agricultural buildings. The farmhouse is detached from the main working complex. Isolated location.	Post-Medieval	TF 4425 7799	Within the 1 km Study Area
MLI118495	Building	(Goose Field), Aby with Greenfield	Site of (Goose Field), Aby with Greenfield. Demolished 19 th century farmstead. The farmhouse is detached from the main working complex. Isolated location.	Post-Medieval	TF 4446 7791	Within the 1 km Study Area
MLI125128	Building	Churchyard, Church of the Holy Trinity, Bilsby	The churchyard at the Church of the Holy Trinity is depicted on the 2nd edition 25" Ordnance Survey County Series map. It likely dates to at least the 15 th century, when the church it serves was built. Archaeological monitoring was conducted during the installation of a new trench arch drainage system within the churchyard in 2014.	Medieval	TF 4666 7668	Within the 1 km Study Area
MLI41135	Monument	Romano British Pottery Found NE of Alford	Report of Greyware Roman Pottery found North-east of Alford.	Roman	TF 4660 7720	Within the 1 km Study Area
MLI41472	Monument	Romano-British Pottery, Toad Hole, Bilsby	A scatter of Romano-British greyware pottery was found on land at Toad Hole to the north-east of Bilsby.	Roman	TF 486 771	Within the 1 km Study Area
MLI41473	Find Spot	Silver Penny of Edward I, found in Bilsby	Silver Penny Of Edward I Type Lia, York Mint, found in Garden.	Medieval	TF 4700 7654	Within the 1 km Study Area
MLI41474	Monument	Roman Samian ware, Bilsby	Samian ware ploughed up on Bilsby Manor Farm in 1975.	Roman	TF 4710 7660	Within the 1 km Study Area
MLI41475	Monument	Medieval pottery found in Bilsby	Samian ware ploughed up on Bilsby Manor Farm in 1975.	Medieval	TF 4710 7660	Within the 1 km Study Area
MLI41480	Monument	Bilsby Hall Park	Parkland is recorded around Bilsby Hall on the 1st edition 6 inch and 2nd edition 25-inch Ordnance Survey County Series maps (dating from around 1880 and 1905 respectively).	Post Medieval	TF 4667 7644	Within the 1 km Study Area
MLI41481	Monument	Medieval Moated Site, Bilsby	Earthwork remains of a large homestead moat with adjacent external fishpond, surrounding the 19 th century building of Bilsby Hall. It is claimed that the foundations of an extensive castellated mansion, supposed to have been the seat of the Bilsby Family, were located within the boundary of the moat. No surface indications of this earlier structure have been seen, however. Possible traces of the original hall building were recorded in August 2001, during a magnetometry survey, conducted to inform the proposed construction of a new tennis court. The possible remains were identified as groups of magnetic anomalies, many of which appeared to respect the principal alignments of the surrounding moated enclosure. A distinct magnetic anomaly in the south-western part of the survey area was also thought to represent a spread of brick and tile and may reflect a dump of material that derived from the demolition of this earlier structure.	Medieval	TF 4682 7626	Within the 1 km Study Area
MLI41485	Monument	Moated Site, Bilsby	An excellent example of a homestead moat surrounding 'moat house', which is itself a fine example of circa 16 th -17 th century domestic architecture.	Post-Medieval	TF 4717 7652	Within the 1 km Study Area

HER Reference	Record Type	Name	Description	Period	NGR	Within the Draft Order Limits or 1 km Study Area
MLI41489	Monument	Bilsby Deserted Medieval Village	The deserted medieval village of Bilsby. The village is mentioned in 1086. Beresford lists it under 'Small villages which once had a parish church but now have to worship elsewhere'. Medieval pottery was found in 1929, during the construction of a swimming pool, in the grounds of Bilsby Hall. The area around 'Bilsby Hall Camp' was previously scheduled as SAM 181, though was de-scheduled in 1989. It was listed as: A rectangular enclosure formed by a complicated series of banks up to 6ft high and about 100 yards square. On the east, the bank is 2ft high and 40ft wide. A bank 4ft high with a ditch on its north side runs from the north-east corner of the enclosure in an easterly direction - it is 36ft across. The rectangular enclosure is divided by a north to south aligned ditch and the western half is most uneven and must contain many buried walls. The land is now pasture with a few large trees. The owner said he has dug as a boy in one of the mounds and the British Museum identified the pottery as Roman.	Medieval	TF 4682 7638	Within the 1 km Study Area
MLI42521	Monument	Romano-British pottery found near Saleby Woodhouse	Romano-British pottery found close to Saleby Woodhouse	Roman	TF 4400 7800	Within the 1 km Study Area
MLI42522	Monument	Medieval pottery found near Saleby Woodhouse	Medieval pottery found close to Saleby Woodhouse.	Medieval	TF 4400 7800	Within the 1 km Study Area
MLI42523	Monument	Tumulus to the NW of Saleby	A mound visible against the skyline in a field under crop. The field is under cultivation on aerial photographs observed on Google Earth. There is no obvious sign of an earthwork on Google Streetview.	Undated	TF 4531 7889	Within the 1 km Study Area
MLI42524	Monument	Shrunken medieval village of Saleby	The village of Saleby is mentioned with Thoresthorpe in the Domesday Survey of 1086. Evidence of shrinkage comes from earthworks and aerial photographs. Depicted on the National Mapping Programme as a series of earthwork crofts, boundaries, ridge and furrow and enclosures.	Medieval	TF 4576 7858	Within the draft Order Limits
MLI42525	Monument	Moated site in Saleby Medieval Shrunken Villlage	Moated site within Saleby deserted medieval village.	Medieval	TF 4578 7819	Within the 1 km Study Area
MLI42526	Monument	Romano-British cremations found S of Thoresthorpe	In 1957 two greyware Romano-British vessels containing cremations were found in a field to the south of Thoresthorpe.	Roman	TF 4640 7740	Within the 1 km Study Area
MLI42527	Monument	Thoresthorpe shrunken medieval village	Thoresthorpe is mentioned in the domesday survey. The manor house is a c17 range with a steeply pitched roof and later additions. In the garden is a large collection of c. 13 moulded stone.	Medieval	TF 4611 7758	Within the draft Order Limits
MLI42545	Find Spot	Romano-British pottery, Alford	The base of a Roman carinated bowl was found in a field on the northern edge of Alford parish.	Roman	TF 4580 7700	Within the 1 km Study Area

HER Reference	Record Type	Name	Description	Period	NGR	Within the Draft Order Limits or 1 km Study Area
MLI43037	Monument	Hornby, Mother and Greenfield Woods, Greenfield	An area of woodland (5 hectares of which classified as semi-natural and the remaining 41 hectares classified as plantation) included in the Nature Conservancy Council's 'Inventory of Ancient Woodland'. Ancient woodland status considered to be probable. An additional area of 7 hectares was felled and cleared for agriculture after 1956.	Medieval	TF 4305 7851	Within the draft Order Limits
MLI43131	Monument	Evidence for post-medieval road construction	During the Bilsby Village Watermain Relay Works, successive layers of foundation and metalling for the Alford to Sutton on Sea Road were identified.	Post-Medieval	TF 4640 7677	Within the 1 km Study Area
MLI43675	Monument	Sutton on Sea to Alford Tramway	An act of parliament was passed on July 29th, 1864, for a railway from Alford to Mablethorpe. This was not supported financially and thus was never built. The idea was revived in 1873 with a slightly different route, but this was rejected by parliament. The plan changed again and eventually a tramway from Alford to Sutton on Sea was built. It opened in 1884 with limited success. The route was difficult and consequently the trains were slow and unreliable. The death knoll tolled for the tramway in 1886 when the Great Northern Railway was built. The tramway finally closed in November 1889. The increasing capital cost of railway branch lines and the reluctance of the major companies to promote them led to the development of rural steam tramways as a cheaper alternative. In response to the opening of the LECR a steam tramway was built along the public roads from Sutton on Sea to Alford and opened in 1884. It was a 2 foot 6 inch gauge tramway with a single pair of rails. The tram route required a level surface, and evidence was seen during the watching brief on the Bisby village water main relay, of large scale raising of the ground contours.	Post Medieval	TF 4845 7874	Within the draft Order Limits
MLI82672	Monument	Post medieval wall, Thurlby Road, Bilsby	During a watching brief, an east-west aligned wall was recorded. Although it has not been formally dated it is thought to be contemporary with Vine house and probably associated with its former outbuildings.	Post-Medieval	TF 4709 7649	Within the 1 km Study Area
MLI87463	Monument	Medieval ridge and furrow, North of Alford	Medieval earthwork ridge and furrow was identified from aerial photographs.	Medieval	TF 4586 7660	Within the 1 km Study Area
MLI87464	Monument	Medieval ridge and furrow, North of Alford	Medieval earthwork ridge and furrow was identified from aerial photographs.	Medieval	TF 4584 7685	Within the 1 km Study Area
MLI87465	Monument	Medieval Ridge and Furrow, Alford	An earthwork survey was undertaken in March 2011, on land east of East Street, Alford. The majority of the field was flat and level although three possible ridges were observed. The space between these ridges is too large for ridge and furrow though. If there was ridge and furrow on this site, it has been almost completely ploughed out. Undulations were observed at the northern boundary of the site.	Medieval	TF 4572 7699	Within the 1 km Study Area
MLI87954	Monument	Boundary cropmark, north of Bilsby.	Potential unknown date boundary cropmark.	Undated	TF 4692 7705	Within the 1 km Study Area

HER Reference	Record Type	Name	Description	Period	NGR	Within the Draft Order Limits or 1 km Study Area
MLI88331	Monument	Pinfold at Saleby	A pinfold was observed on the Second Edition County Series Ordnance Survey map of 1905.	Post-Medieval	TF 4550 7837	Within the 1 km Study Area
MLI88742	Monument	Probable late medieval earthwork ridge and furrow, Saleby	Probable late medieval earthwork ridge and furrow, Saleby, as depicted on the National Mapping Project. This area appears to be under cultivation on aerial photographs seen on google earth.	Medieval	TF 44061 78698	Within the draft Order Limits
MLI90878	Monument	Possible Roman cropmark boundary and enclosures, Bilsby	Possible Roman cropmark boundary and enclosures, Bilsby seen on the National Mapping Project.	Roman	TF 46851 76846	Within the 1 km Study Area
MLI90885	Monument	Late medieval earthwork field system, Bilsby	Late medieval earthwork field system, Bilsby. Depicted on the National Mapping Project. Medieval ridge and furrow appears to have been ploughed out and is not visible (in 2013) on Google maps.	Medieval	TF 47961 77600	Within the draft Order Limits
MLI41477	Mon	Romano British greyware found in Bilsby	Artefact scatter of Romano-British greyware found in Bilsby.	Roman	TF 4680 7590	Within the 1 km Study Area
MLI41482	Mon	Roman Material, Bilsby Hall	Several fragments of Roman pavement, possibly re-used in the construction of the early Bilsby Hall, were said to have been preserved by the owner of the later Bilsby Hall.	Roman	TF 4682 7625	Within the 1 km Study Area
AEC300	Undated Site	Rectilinear enclosures south of Asserby Turn	A group of anomalies of possible archaeological origin comprising intercutting and overlying rectilinear enclosures, linear features and discrete features possibly representing pits and postholes of a 'ladder settlement' or series of agricultural enclosures have been identified during geophysical survey of the proposed LCS B substation site.	Undated	TF 48101 77250	Within the draft Order Limits
AEC301	Undated Site	Small rectilinear enclosure and linear feature south west of Asserby Turn	A possible archaeological anomaly comprising a small undated rectilinear enclosure and north-south aligned linear feature were identified during geophysical survey of the proposed LCS B substation site.	Undated	TF 48000 77020	Within the draft Order Limits
AEC302	Undated Site	Possible pit feature east of Mother Wood	A possible archaeological anomaly comprising a small undated curvilinear feature, possibly a ring ditch and north-south aligned linear feature were identified during geophysical survey of the proposed LCS A substation site.	Undated	TF 47733 77091	Within the draft Order Limits
AEC303	Undated Site	Former field boundary east of Mother Wood	A series of linear anomalies of possible archaeological origin representing former post-medieval field boundary were identified during geophysical survey of the proposed LCS A substation site.	Undated	TF 43652 78874	Within the draft Order Limits

HER Reference	Record Type	Name	Description	Period	NGR	Within the Draft Order Limits or 1 km Study Area
AEC304	Undated Site	Former ridge and furrow and field boundaries south of Galley Hill Farm	The ploughed out remains of ridge and furrow cultivation and linear former field boundaries were identified during geophysical survey of the proposed LCS A substation site.	Undated	TF 44058 79064	Within the draft Order Limits

5B. Preliminary Summary of Likely Non- Significant Effects

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5B Preliminary Summary of Likely Non-Significant Effects

5B.1 Introduction

- 5B.1.1 This appendix presents the detailed preliminary summary of non-significant effects on heritage assets identified as a result of construction and/or operational activities within the Study Area for the New Lincolnshire Connection Substations (LCS) A and B Section (Section 3) of the Grimsby to Walpole Project (the Project).
- 5B.1.2 A number of designated and non-designated heritage assets, which may experience non-significant effects, have been identified as warranting further explanation of their assessment due to particular sensitivities, such as their value, designed views, historic setting or their proximity to works proposed within the draft Order Limits. These are reported in **PEI Report Volume 2 Part B Section 3 Chapter 5 Historic Environment**, under section 5.7.
- 5B.1.3 It should be noted that the assessment which has informed the conclusions presented remains ongoing and is subject to change, due to the ongoing survey activities and further design development of the Project. A full detailed assessment will be included within the Environmental Statement submitted with the Development Consent Order application.

Table 5B.1 Preliminary summary of likely non-significant effects

Asset	Impact	Value of Asset	Magnitude of Impact	Significance of Effect	Rationale
Designated Heritage Assets within the 3 km Study Area					
Churchyard cross, St Margaret's churchyard, Saleby, scheduled monument (NHLE 1014426) and grade II listed (NHLE 1308598)	The construction and presence of the Project in the landscape from the time of construction and throughout its operational duration will have no temporary or permanent impact on the setting or value of this asset.	High	No Change	Neutral (not significant)	The Project does not form part of the setting of the asset and will not alter its value or way in which it is appreciated or understood. This would result in a neutral effect which would not be significant.
Churchyard cross, Holy Trinity churchyard, scheduled monument (NHLE 1014425) and grade II listed (NHLE 1147185)	The construction and presence of the Project from the time of construction and throughout its operational duration will have no temporary or permanent impact on the setting or value of this asset.	High	No Change	Neutral (not significant)	The Project does not form part of the setting of the asset and will not alter its value or way in which it is appreciated or understood. This would result in a neutral effect which would not be significant.
Windmill, grade I (NHLE 1146936)	Temporary changes to the setting of the asset arising from construction (such as noise and construction traffic) of the Project.	High	Negligible	Minor adverse (not significant)	Potential for slight, temporary changes to the setting which may result in a negligible magnitude of impact to the way in which it is experienced and appreciated. This would result in a minor adverse effect which is not significant.
	The construction and presence of the Project in the landscape from the time of construction	High	No change	Neutral (not significant)	The presence of the Project in the landscape from the time of construction and throughout its

Asset	Impact	Value of Asset	Magnitude of Impact	Significance of Effect	Rationale
	and throughout its operational duration will have no permanent impact on the setting or value of this asset.				operational duration will have no impact on the setting or value of the asset. This would result in a neutral effect which is not significant.
Church of St Andrew, grade I (NHLE 1147204)	The construction and presence of the Project from the time of construction and throughout its operational duration will have no temporary or permanent impact on the setting or value of this asset.	High	No Change	Neutral (not significant)	The Project does not form part of the setting of the asset and will not alter its value or way in which it is appreciated or understood. This would result in a neutral effect which is not significant.
Church of All Saints, grade II* (NHLE 1146990)	Temporary changes to the setting of the asset arising from construction (noise, construction traffic, lighting, mechanical plant) of the Project.	High	Negligible	Minor adverse (not significant)	Potential for slight, temporary changes to the setting of the church which may result in changes to the way in which it is experienced and appreciated. This would have a minor adverse effect which is not significant.
	Permanent changes to the setting of the asset arising from the presence of the Project, from the time of construction and throughout its operational duration in the wider landscape.	High	Negligible	Minor adverse (not significant)	Potential for limited, permanent visual intrusion to the setting of this high value asset that would hardly affect its value or the way in which it is appreciated or understood. This would have a minor adverse effect that is not significant.
Church of the Holy Trinity, grade II* (NHLE 1360007)	Temporary changes to the setting of the asset arising from construction (such as noise and construction traffic).	High	Negligible	Minor adverse (not significant)	Potential for slight, temporary changes (negligible magnitude) to the setting of the church which may alter the way in which it is experienced and appreciated. This

Asset	Impact	Value of Asset	Magnitude of Impact	Significance of Effect	Rationale
					would result in a minor adverse effect that is not significant.
	Permanent changes to the setting of the asset arising from the presence of the Project, from the time of construction and throughout for its operational duration in the wider landscape.	High	No Change	Neutral (not significant)	The Project does not form part of the setting of the asset and will not alter its value or way in which it is appreciated or understood. This would result in a neutral effect which is not significant.
Church of St Peter, grade II* (NHLE 1063009)	Temporary changes to the setting of the asset arising from construction (such as noise and construction traffic).	High	Negligible	Minor adverse (not significant)	Potential for slight, temporary changes (negligible magnitude) to the setting of the church which may alter the way in which it is experienced and appreciated. This would have a minor adverse effect that is not significant.
	Permanent changes to the setting of the asset arising from the presence of the Project, from the time of construction and throughout its operational duration in the wider landscape.	High	No Change	Neutral (not significant)	The Project does not form part of the setting of the asset and will not alter its value or way in which it is appreciated or understood. The resulting neutral effect would not be significant.
Alford Conservation Area (including the listed assets within it)	Temporary changes to the setting of the conservation area arising from construction (noise, construction traffic, lighting, mechanical plant, temporary towers and scaffolds) of the Project.	High	Negligible	Minor adverse (not significant)	Potential for slight, temporary changes to the setting which may result in a negligible magnitude of impact to the way in which it is experienced and appreciated. This would result in a minor adverse effect which would not be significant.

Asset	Impact	Value of Asset	Magnitude of Impact	Significance of Effect	Rationale
	The construction and presence of the Project in the landscape from the time of construction and throughout its operational duration will have no permanent impact on the setting or value of this asset.	High	No Change	Neutral (not Significant)	The presence of the Project in the landscape from the time of construction and throughout its operational duration will have no impact on the setting or value of the asset. This would result in a neutral effect which is not significant.
The Priory, grade II (NHLE 1147252)	Temporary changes to the setting of the asset arising from construction (such as noise and construction traffic).	Medium	Small	Minor adverse (not significant)	Potential for slight changes to the setting of the building which may temporarily alter the way in which it is experienced and appreciated. This would have a minor adverse effect that would not be significant.
	Permanent changes to the setting of the asset arising from the presence of the Project, from the time of construction and throughout for its operational duration in the wider landscape.	Medium	Small	Minor adverse (not significant)	Potential for a slight alteration to the setting of the asset and the way in which it is appreciated or understood. This would result in a minor adverse effect which is not significant.
The Crown Inn, grade II (NHLE 1359997)	The construction and presence of the Project from the time of construction and throughout its operational duration will have no temporary or permanent impact on the setting or value of this asset.	Medium	No Change	Neutral (not significant)	The Project does not form part of the setting of the asset and will not alter its value or way in which it is appreciated or understood. This would result in a neutral effect which is not significant.
Manor House, grade II (NHLE 1062985)	Temporary changes to the setting of the asset arising from construction (such as noise, construction traffic, lighting,	Medium	Negligible	Negligible adverse (not significant)	Potential for slight, temporary changes to the setting of the building which may result in changes to the way in which it is

Asset	Impact	Value of Asset	Magnitude of Impact	Significance of Effect	Rationale
	temporary infrastructure, mechanical plant)				experienced and appreciated. This would result in a negligible adverse effect that is not significant.
	Permanent changes to the setting of the asset arising from the presence of the Project, from the time of construction and throughout for its operational duration in the wider landscape.	Medium	Negligible	Negligible adverse (not significant)	Potential for limited, permanent visual intrusion to the setting of this medium value asset that would hardly affect its value, with no real change in how it is appreciated or understood. This would have a negligible adverse effect that is not significant.
The Old Chapel, grade II (NHLE 1446955)	Temporary changes to the setting of the asset arising from construction (such as noise and construction traffic) of the Project.	Medium	Negligible	Negligible adverse (not significant)	Potential for slight, temporary changes to the setting of the building which may alter the way in which it is experienced and appreciated. This would result in a negligible adverse effect that is not significant.
	The construction and presence of the Project in the landscape from the time of construction and throughout its operational duration will have no permanent impact on the setting or value of this asset.	Medium	No Change	Neutral (not significant)	The presence of the Project in the landscape from the time of construction and throughout its operational duration will have no impact on the setting or value of the asset. This would result in a neutral effect which is not significant.
The Cottage, grade II (NHLE 1063004)	The construction and presence of the Project from the time of construction and throughout its operational duration will have no temporary or permanent	Medium	No Change	Neutral (not significant)	The Project does not form part of the setting of the asset and will not alter its value or way in which it is appreciated or understood. This would result in a neutral effect which is not significant.

Asset	Impact	Value of Asset	Magnitude of Impact	Significance of Effect	Rationale
	impact on the setting or value of this asset.				
Saleby Grange, grade II (NHLE 1308594)	Temporary changes to the setting of the asset arising from construction (such as noise and construction traffic) of the Project.	Medium	Small	Minor adverse (not significant)	Potential for slight changes to the setting of the building which may temporarily alter the way in which it is experienced and appreciated. This would have a minor adverse effect that is not significant.
	The construction and presence of the Project in the landscape from the time of construction and throughout its operational duration will have no permanent impact on the setting or value of this asset.	Medium	No Change	Neutral (not significant)	The presence of the Project in the landscape from the time of construction and throughout its operational duration will have no impact on the setting or value of the asset. This would result in a neutral effect which is not significant.
Church of St Margaret, grade II (NHLE 1063011)	Temporary changes to the setting of the asset arising from construction (noise, construction traffic, lighting, mechanical plant) of the Project.	Medium	Small	Minor adverse (not significant)	Potential for slight temporary changes to the setting of the church which may alter the way in which it is experienced and appreciated. This would have a minor adverse effect that is not significant.
	Permanent changes to the setting of the asset arising from the presence of the Project, from the time of construction and throughout for its operational duration in the wider landscape.	Medium	Negligible	Negligible adverse (not significant)	Potential for change to the setting of this medium asset would hardly affect its value, with no real change in how it is appreciated or understood. This would have a negligible adverse effect that would not be significant.
The Cottage, grade II (NHLE 1063014)	Temporary changes to the setting of the asset arising from	Medium	Small	Minor adverse (not significant)	Potential for slight changes to the setting of the building which may

Asset	Impact	Value of Asset	Magnitude of Impact	Significance of Effect	Rationale
	construction (such as noise and construction traffic)				temporarily alter the way in which it is experienced and appreciated. This would have a minor adverse effect that is not significant.
	The construction and presence of the Project in the landscape from the time of construction and throughout its operational duration will have no permanent impact on the setting or value of this asset.	Medium	No Change	Neutral (not significant)	The presence of the Project in the landscape from the time of construction and throughout its operational duration will have no impact on the setting or value of the asset. This would result in a neutral effect which is not significant.
Bilsby House, grade II (NHLE 1147167)	Temporary changes to the setting of the asset arising from construction (such as noise and construction traffic).	Medium	Negligible	Negligible adverse (not significant)	Potential for slight, temporary changes to the setting of the building which may alter the way in which it is experienced and appreciated. This would result in a negligible adverse effect which is not significant.
	The construction and presence of the Project in the landscape from the time of construction and throughout its operational duration will have no permanent impact on the setting or value of this asset.	Medium	No Change	Neutral (not significant)	The presence of the Project in the landscape from the time of construction and throughout its operational duration will have no impact on the setting or value of the asset. This would result in a neutral effect which is not significant.
Bilsby War Memorial, grade II (NHLE 1435370)	The construction and presence of the Project from the time of construction and throughout its operational duration will have no temporary or permanent	Medium	No Change	Neutral (not significant)	The Project does not form part of the setting of the asset and will not alter its value or way in which it is appreciated or understood. This would result in a neutral effect which is not significant.

Asset	Impact	Value of Asset	Magnitude of Impact	Significance of Effect	Rationale
	impact on the setting or value of this asset.				
Windmill, grade II (NHLE 1063005)	Temporary changes to the setting of the asset arising from construction (such as noise, construction traffic, lighting, temporary infrastructure, mechanical plant, temporary towers and scaffolding)	Medium	Negligible	Negligible adverse (not significant)	Potential for slight, temporary changes to the setting of the building which may alter the way in which it is experienced and appreciated. This would have a negligible adverse effect that is not significant.
	Permanent changes to the setting of the asset arising from the presence of the Project for its operational duration in the wider landscape.	Medium	Negligible	Negligible adverse (not significant)	Potential for limited, permanent alteration to the setting of this medium asset that would hardly affect its value, with no real change in how it is appreciated or understood.
Moat Farm, grade II (NHLE 1360008)	Temporary changes to the setting of the asset arising from construction (such as noise and construction traffic).	Medium	Negligible	Negligible adverse (not significant)	Potential for slight, temporary changes to the setting of the building which may alter the way in which it is experienced and appreciated. This would result in a negligible adverse effect that would not be significant.
	The construction and presence of the Project in the landscape from the time of construction and throughout its operational duration will have no permanent impact on the setting or value of this asset.	Medium	No Change	Neutral (not significant)	The presence of the Project in the landscape from the time of construction and throughout its operational duration will have no impact on the setting or value of the asset. This would result in a neutral effect which is not significant.

Asset	Impact	Value of Asset	Magnitude of Impact	Significance of Effect	Rationale
Vine House and Barn, grade II (NHLE 1308641)	Temporary changes to the setting of the asset arising from construction (such as noise and traffic).	Medium	Negligible	Negligible adverse (not significant)	Potential for slight, temporary changes to the setting of the building which may alter the way in which it is experienced and appreciated. This would result in a negligible adverse effect that is not significant.
	The construction and presence of the Project in the landscape from the time of construction and throughout its operational duration will have no permanent impact on the setting or value of this asset.	Medium	No Change	Neutral (not significant)	The presence of the Project in the landscape from the time of construction and throughout its operational duration will have no impact on the setting or value of the asset. This would result in a neutral effect which is not significant.
The Forge, grade II (NHLE 1063006)	Temporary changes to the setting of the asset arising from construction (such as noise and construction traffic).	Medium	Negligible	Negligible adverse (not significant)	Potential for slight, temporary changes to the setting of the building which may alter the way in which it is experienced and appreciated. This would have a negligible adverse effect which is not significant.
	The construction and presence of the Project in the landscape from the time of construction and throughout its operational duration will have no permanent impact on the setting or value of this asset.	Medium	No Change	Neutral (not significant)	The presence of the Project in the landscape from the time of construction and throughout its operational duration will have no impact on the setting or value of the asset. This would result in a neutral effect which is not significant.
	Temporary changes to the setting of the asset arising from	Medium	Negligible	Negligible adverse	Potential for slight, temporary changes to the setting of the building which may alter the way in

Asset	Impact	Value of Asset	Magnitude of Impact	Significance of Effect	Rationale
Old Forge Cottage, grade II (NHLE 1147197)	construction (such as noise and construction traffic).			(not significant)	which it is experienced and appreciated. This would have a negligible adverse effect which is not significant.
	The construction and presence of the Project in the landscape from the time of construction and throughout its operational duration will have no permanent impact on the setting or value of this asset.	Medium	No Change	Neutral (not significant)	The presence of the Project in the landscape from the time of construction and throughout its operational duration will have no impact on the setting or value of the asset. This would result in a neutral effect which is not significant.
The Cottage, grade II (NHLE 1063010)	Temporary changes to the setting of the asset arising from construction (such as noise and construction traffic).	Medium	Small	Minor adverse (not significant)	Potential for slight changes to the setting of the building which may temporarily alter the way in which it is experienced and appreciated. This would have a minor adverse effect that would not be significant.
	The construction and presence of the Project in the landscape from the time of construction and throughout its operational duration will have no permanent impact on the setting or value of this asset.	Medium	No Change	Neutral (not significant)	The presence of the Project in the landscape from the time of construction and throughout its operational duration will have no impact on the setting or value of the asset. This would result in a neutral effect which is not significant.
Tothby Manor House, grade II (NHLE 1063040)	Temporary changes to the setting of the asset arising from construction (such as noise and construction traffic) of the Project.	Medium	Negligible	Negligible adverse (not significant)	Potential for temporary changes to the setting which may result in a negligible magnitude of impact to the way in which it is experienced and appreciated. This would have a negligible adverse effect that is not significant.

Asset	Impact	Value of Asset	Magnitude of Impact	Significance of Effect	Rationale
	The construction and presence of the Project in the landscape from the time of construction and throughout its operational duration will have no permanent impact on the setting or value of this asset.	Medium	No change	Neutral (not significant)	The presence of the Project in the landscape from the time of construction and throughout its operational duration will have no impact on the setting or value of the asset. This would result in a neutral effect which is not significant.
Ailby House Farmhouse, grade II (NHLE 1168579)	Temporary changes to the setting of the asset arising from construction (such as noise and construction traffic) of the Project.	Medium	Negligible	Negligible adverse (not significant)	Potential for temporary changes to the setting which may result in a negligible magnitude of impact to the way in which it is experienced and appreciated. This would have a negligible adverse effect that would not be significant.
	The construction and presence of the Project in the landscape from the time of construction and throughout its operational duration will have no permanent impact on the setting or value of this asset.	Medium	No change	Neutral (not significant)	The presence of the Project in the landscape from the time of construction and throughout its operational duration will have no impact on the setting or value of the asset. This would result in a neutral effect which is not significant.
Queen Elizabeth Grammar School, grade II (NHLE 1359881)	The construction and presence of the Project from the time of construction and throughout its operational duration will have no temporary or permanent impact on the setting or value of this asset.	Medium	No Change	Neutral (not significant)	The Project does not form part of the setting of the asset and will not alter its value or way in which it is appreciated or understood. This would result in a neutral effect which is not significant.

Asset	Impact	Value of Asset	Magnitude of Impact	Significance of Effect	Rationale
34 Station Road, grade II (NHLE 1308686)	The construction and presence of the Project from the time of construction and throughout its operational duration will have no temporary or permanent impact on the setting or value of this asset.	Medium	No Change	Neutral (not significant)	The Project does not form part of the setting of the asset and will not alter its value or way in which it is appreciated or understood. This would result in a neutral effect which is not significant.
Church of St James, grade II (1168596)	The construction and presence of the Project from the time of construction and throughout its operational duration will have no temporary or permanent impact on the setting or value of this asset.	Medium	No Change	Neutral (not significant)	The Project does not form part of the setting of the asset and will not alter its value or way in which it is appreciated or understood. This would result in a neutral effect which is not significant.
Garden Shed in grounds of Number 2 (Church Cottage), grade II (NHLE 1359697)	The construction and presence of the Project from the time of construction and throughout its operational duration will have no temporary or permanent impact on the setting or value of this asset.	Medium	No Change	Neutral (not significant)	The Project does not form part of the setting of the asset and will not alter its value or way in which it is appreciated or understood. This would result in a neutral effect which is not significant.

Designated Heritage Assets within the 3-5 km Study Area

Hagnaby Abbey, a Premonstratensian abbey and a post-medieval house and formal garden, scheduled	The construction and presence of the Project in the landscape from the time of construction and throughout its operational duration will have no temporary or permanent impact on the setting or value of this asset.	High	No Change	Neutral (not significant)	The Project does not form part of the setting of the asset and will not alter its value or way in which it is appreciated or understood. This would result in a neutral effect which is not significant.
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Asset	Impact	Value of Asset	Magnitude of Impact	Significance of Effect	Rationale
monument (NHLE 1011454)					
Church of St Leonard, grade I (NHLE 1168562)	The construction and presence of the Project from the time of construction and throughout its operational duration will have no temporary or permanent impact on the setting or value of this asset.	High	No Change	Neutral (not significant)	The Project does not form part of the setting of the asset and will not alter its value or way in which it is appreciated or understood. This would result in a neutral effect which is not significant.
Non-designated Heritage Assets within the draft Order Limits					
Shrunken medieval village of Saleby (MLI42524)	Temporary changes to the setting of the asset arising from construction (noise, construction traffic, plant movement, lighting and scaffolds) of the Project.	Medium	Small	Minor adverse (not significant)	Minor, temporary changes to the setting of this medium value asset would result in a small magnitude of impact to the way in which the monument is experienced and appreciated. This would result in a minor adverse effect, which would not be significant.
	Permanent change resulting from topsoil stripping and ground works ground reduction for the construction access haul road and bell mouth. This has the potential to remove or disturb a small part of this non-designated heritage asset.	Medium	Small	Negligible adverse (not significant, following additional mitigation)	Partial removal or disturbance (small magnitude of impact) of this non-designated heritage asset of medium value would result in a slight change to its value (minor adverse effect), which is not significant. The use of archaeological mitigation measures i.e. appropriate archaeological investigation and recording would reduce the significance of the effect to negligible adverse which would not be significant.

Asset	Impact	Value of Asset	Magnitude of Impact	Significance of Effect	Rationale
Thoresthorpe shrunken medieval village (MLI42527)	Temporary changes to the setting of the asset arising from construction (noise, construction traffic, plant movement, lighting and scaffolds) of the Project.	Medium	Small	Minor adverse (not significant)	Minor, temporary changes to the setting of this medium value asset would result in a minor magnitude of impact to the way in which the monument is experienced and appreciated. This would result in a minor adverse effect, which would not be significant.
	Permanent change resulting from topsoil stripping and ground works ground reduction for the construction access haul road and bell mouth. This has the potential to remove or disturb a small part of this non-designated heritage asset.	Medium	Small	Negligible adverse (not significant, following additional mitigation)	Partial removal or disturbance (small magnitude of impact) of this non-designated heritage asset of medium value would result in a slight change to its value (minor adverse effect), which is not significant. The use of archaeological mitigation measures i.e. appropriate archaeological investigation and recording would reduce the significance of the effect to negligible adverse which would not be significant.
Hornby, Mother and Greenfields (MLI43037)	Whilst the asset is located within the draft Order Limits, it is anticipated that there will be no intrusive activities or physical impacts to the asset from the construction of the Project	Low	No change	Neutral (not significant)	No impacts (No Change) to this non-designated heritage asset of low value would result in a no change to its value. The resulting neutral effect is not significant.
Sutton on Sea to Alford Tramway (MLI43675)	The route of the former tramway is currently followed by the modern Sutton Road.	Low	No change	Neutral (not significant)	The Project will not alter the value of this low value asset or the way in which it is appreciated or understood.

Asset	Impact	Value of Asset	Magnitude of Impact	Significance of Effect	Rationale
	Construction of the Project will have no impact on the asset.				The resulting neutral effect is not significant.
Probable late medieval earthwork ridge and furrow, Saleby (MLI88742)	Topsoil stripping and groundworks associated with construction of the bell mouth, access road and the working area for pylon LB4 will result in partial truncation of the asset.	Low	Small	Negligible adverse (not significant, following additional mitigation)	Partial removal or disturbance of part (small magnitude of impact) of this non-designated heritage asset of low value would result in a slight change to its value (negligible adverse effect), which is not significant. The use of archaeological mitigation measures i.e. appropriate archaeological investigation and recording would offset the significance of the effect resulting in negligible adverse which would not be significant.
Late medieval earthwork field system, Bilsby (MLI90885)	Whilst the asset is located within the draft Order Limits, it is anticipated that there will be no intrusive activities or physical impacts to the asset from the construction of the Project	Low	No change	Neutral (not significant)	No impacts (No Change) to this non-designated heritage asset of low value would result in a no change to its value, a neutral effect, which is not significant
AEC300	Topsoil stripping and groundworks associated with construction of the LCS B substation will result in partial loss or truncation of the asset.	Medium	Small	Negligible adverse (not significant, following additional mitigation)	Partial removal or disturbance (small magnitude of impact) of this non-designated heritage asset of medium value would result in a minor adverse effect, which is not significant. The use of archaeological mitigation measures i.e. appropriate archaeological investigation and recording would reduce the significance of the effect to negligible

Asset	Impact	Value of Asset	Magnitude of Impact	Significance of Effect	Rationale
					adverse which would not be significant.
AEC302	Topsoil stripping and groundworks associated with construction of the LCS A substation has the potential to partially remove or disturb this small, undated curvilinear feature, possibly a ring ditch and north south aligned linear feature.	Low	Small	Negligible adverse (not significant, following additional mitigation)	Partial removal or disturbance (small magnitude of impact) of this non-designated heritage asset of low value would result in a negligible adverse effect, which is not significant. The use of archaeological mitigation measures i.e. appropriate archaeological investigation and recording would offset the significance of the effect resulting in a negligible adverse which would not be significant.
AEC303	Topsoil stripping and groundworks associated with construction of the LCS A substation, has the potential to remove or disturb part of these non-designated linear anomalies of possible archaeological origin.	Low	Small	Negligible adverse (not significant, following additional mitigation)	Partial removal or disturbance (small magnitude of impact) of this non-designated heritage asset of low value would result in a negligible adverse effect, which is not significant. The use of archaeological mitigation measures i.e. appropriate archaeological investigation and recording would offset the significance of the effect resulting in a negligible adverse which would not be significant.
AEC304	Topsoil stripping and groundworks associated with construction of the LCS A substation, associated	Low	Small	Negligible adverse (not significant, following	Partial removal or disturbance (small magnitude of impact) of this non-designated heritage asset of low value would result in a

Asset	Impact	Value of Asset	Magnitude of Impact	Significance of Effect	Rationale
	construction compound and permanent access has the potential to remove or disturb part of these non-designated geophysical anomalies representing ploughed out remains of ridge and furrow cultivation and linear former field boundaries.			additional mitigation)	negligible adverse effect, which is not significant. The use of archaeological mitigation measures i.e. appropriate archaeological investigation and recording would offset the significance of the effect resulting in a negligible adverse which would not be significant.

Non-designated Heritage Assets within the 1 km Study Area

RAF Strubby (MLI88710)	Construction of the Project may cause temporary changes to the setting of the asset (such as noise and construction traffic).	Medium	Negligible	Negligible adverse (not significant)	Potential for temporary changes to the setting of the asset that would have little effect on its value or the way in which it is appreciated or understood. This would result in a negligible adverse effect, which would not be significant
	Permanent changes to the setting of the asset arising from the presence of the Project in the landscape, from the time of construction and throughout its operational duration	Medium	Negligible	Negligible adverse (not significant)	Potential for permanent visual intrusion (small magnitude of impact) within the setting of this medium value asset that would affect the value of the asset and the way in which it is appreciated or understood. This would result in a minor adverse effect, which would not be significant.
Wood Farm, Beesby with Saleby (MLI116905)	Temporary changes to the setting of the asset arising from construction (such as noise, construction traffic, lighting,	Low	Medium	Minor adverse (not significant)	Temporary changes to the setting of the building which are noticeably different altering the way in which it is experienced and appreciated. This would have a minor adverse

Asset	Impact	Value of Asset	Magnitude of Impact	Significance of Effect	Rationale
	temporary infrastructure, mechanical plant).				effect on an asset of low value that would not be significant.
	Permanent changes to the setting of the asset arising from the presence of the Project, from the time of construction and throughout its operational duration in the wider landscape.	Low	Negligible	Negligible adverse (not significant)	Potential for permanent visual intrusion and alteration to the setting of this low value asset that would slightly change how it is appreciated and experienced. This would have a negligible adverse effect that is not significant.
Unnamed farmstead, Beesby with Saleby (MLI116906)	Temporary changes to the setting of the asset arising from construction (such as noise, construction traffic, lighting, temporary infrastructure, mechanical plant)	Low	Medium	Minor adverse (not significant)	Temporary changes to the setting of the building which are noticeably different altering the way in which it is experienced and appreciated. This would result in a minor adverse effect on an asset of low value which would not be significant.
	Permanent changes to the setting of the asset arising from the presence of the Project, from the time of construction and throughout its operational duration in the wider landscape.	Low	Negligible	Negligible adverse (not significant)	Potential for alteration to the setting of this low value asset that would slightly change how it is appreciated and experienced. This would result in a negligible adverse effect which would not be significant.
Greenfield (MLI118494)	Temporary changes to the setting of the asset arising from construction (such as noise, construction traffic, lighting, mechanical plant) of the Project.	Low	Small	Negligible adverse (not significant)	Potential for slight temporary changes to the setting of the low value asset which may alter the way in which it is experienced and appreciated. This would result in a negligible adverse effect which would not be significant.

Asset	Impact	Value of Asset	Magnitude of Impact	Significance of Effect	Rationale
	Permanent changes to the setting of the asset arising from the presence of the Project, from the time of construction and throughout its operational duration in the wider landscape.	Low	Negligible	Negligible Adverse (not significant)	Potential alteration to the setting of this low value asset that would hardly affect its value, with no real change in how it is appreciated or understood. This would result in a negligible adverse effect which would not be significant.
Former School, Saleby (MLI126595)	Temporary changes to the setting of the asset arising from construction (such as noise and construction traffic) of the Project.	Low	Small	Negligible adverse (not significant)	Potential for slight changes to the setting of the low value asset which may temporarily alter the way in which it is experienced and appreciated. This would result in a negligible adverse effect which would not be significant.
	The construction and presence of the Project in the landscape from the time of construction and throughout its operational duration will have no permanent impact on the setting or value of this asset.	Low	No Change	Neutral (not significant)	The presence of the Project in the landscape from the time of construction and throughout its operational duration will have no impact on the setting or value of the asset. This would result in a neutral effect which is not significant.
Unnamed Farmstead, Beesby with Saleby (MLI116910)	Temporary changes to the setting of the asset arising from construction (such as noise and construction traffic) of the Project.	Low	Negligible	Negligible adverse (not significant)	Potential for slight changes to the setting of the low value asset which may temporarily alter the way in which it is experienced and appreciated. This would result in a negligible adverse effect that would not be significant.
	The construction and presence of the Project in the landscape from the time of construction	Low	No Change	Neutral	The presence of the Project in the landscape from the time of construction and throughout its

Asset	Impact	Value of Asset	Magnitude of Impact	Significance of Effect	Rationale
	and throughout its operational duration will have no permanent impact on the setting or value of this asset.			(not significant)	operational duration will have no impact on the setting or value of the asset. This would result in a neutral effect which is not significant.
Finch Farm, Beesby with Saleby (MLI116909)	Temporary changes to the setting of the asset arising from construction (such as noise and construction traffic) of the Project.	Low	Negligible	Negligible adverse (not significant)	Potential for slight changes to the setting of the low value asset which may temporarily alter the way in which it is experienced and appreciated. This would have a negligible adverse effect that is not significant.
	The construction and presence of the Project in the landscape from the time of construction and throughout its operational duration will have no permanent impact on the setting or value of this asset.	Low	No Change	Neutral (not significant)	The presence of the Project in the landscape from the time of construction and throughout its operational duration will have no impact on the setting or value of the asset. This would result in a neutral effect which is not significant.
Wesleyan Methodist Chapel, Saleby (MLI99057)	Temporary changes to the setting of the asset arising from construction (such as noise and construction traffic) of the Project.	Low	Negligible	Negligible adverse (not significant)	Potential for slight changes to the setting of the low value asset which may temporarily alter the way in which it is experienced and appreciated. This would have a negligible adverse effect that is not significant.
	The construction and presence of the Project in the landscape from the time of construction and throughout its operational duration will have no permanent	Low	No Change	Neutral (not significant)	The presence of the Project in the landscape from the time of construction and throughout its operational duration will have no impact on the setting or value of the

Asset	Impact	Value of Asset	Magnitude of Impact	Significance of Effect	Rationale
	impact on the setting or value of this asset.				asset. This would result in a neutral effect which is not significant.
Home Farm, Beesby with Saleby (MLI116911)	Temporary changes to the setting of the asset arising from construction (such as noise, construction traffic, lighting, temporary infrastructure, mechanical plant)	Low	Medium	Minor adverse (not significant)	Temporary changes to the setting of this asset of low value which are noticeably different, altering the way in which it is experienced and appreciated. This would result in a minor adverse effect which would not be significant.
	Permanent changes to the setting of the asset arising from the construction and presence of the Project for its operational duration in the wider landscape.	Low	Medium	Minor adverse (not significant)	Potential for alteration (medium magnitude) to the setting of this low value asset, with change to its value and how it is appreciated or understood. This would have a minor adverse effect that is not significant.
Late 18 th to 20 th century agricultural complex, Saleby (MLI98315)	Temporary changes to the setting of the asset arising from construction (such as noise and construction traffic) of the Project.	Low	Negligible	Negligible adverse (not significant)	Potential for slight changes to the setting of the asset which may temporarily alter the way in which it is experienced and appreciated. This would have a negligible adverse effect that is not significant.
	The construction and presence of the Project in the landscape from the time of construction and throughout its operational duration will have no permanent impact on the setting or value of this asset.	Low	No Change	Neutral (not significant)	The presence of the Project in the landscape from the time of construction and throughout its operational duration will have no impact on the setting or value of the asset. This would result in a neutral effect which is not significant.

Asset	Impact	Value of Asset	Magnitude of Impact	Significance of Effect	Rationale
Mill House Farm (MLI116912)	Temporary changes to the setting of the asset arising from construction (such as noise, construction traffic, lighting, mechanical plant) of the Project.	Low	Small	Negligible adverse (not significant)	Potential for slight temporary changes to the setting of this low value asset which may alter the way in which it is experienced and appreciated. This would have a negligible adverse effect that is not significant.
	Permanent changes to the setting of the asset arising from the construction and presence of the Project for its operational duration in the wider landscape.	Low	Negligible	Negligible adverse (not significant)	Potential for alteration to the setting of this low value asset, with no real change in how it is appreciated or understood. This would have a negligible adverse effect that is not significant.
Glebe Farm (MLI118533)	Temporary changes to the setting of the asset arising from construction (noise, construction traffic, lighting, mechanical plant) of the Project.	Low	Small	Negligible adverse (not significant)	Potential for slight temporary changes to the setting of this low value asset which may alter the way in which it is experienced and appreciated. This would result in a negligible adverse effect that is not significant.
	Permanent changes to the setting of the asset arising from the presence of the Project, from the time of construction and throughout its operational duration in the wider landscape.	Low	Negligible	Negligible adverse (not significant)	Potential for alteration to the setting of this low value asset that would hardly affect its value, with no real change in how it is appreciated or understood. This would have a negligible adverse effect that is not significant.
Manor Barn, Thoresthorpe Manor	Temporary changes to the setting of the asset arising from construction (such as noise, construction traffic, lighting,	Low	Medium	Minor adverse (not significant)	Temporary changes to the setting of the low value asset which are noticeably different altering the way in which it is experienced and

Asset	Impact	Value of Asset	Magnitude of Impact	Significance of Effect	Rationale
(MLI125715)	temporary infrastructure, mechanical plant).				appreciated. This would have a minor adverse effect that is not significant.
	Permanent changes to the setting of the asset arising from the presence of the Project, from the time of construction and throughout its operational duration in the wider landscape.	Low	Medium	Minor adverse (not significant)	Potential for alteration to the setting of this low value asset that would change how it is appreciated and experienced. This would result in a minor adverse effect that is not significant.
Lake House, Beesby with Saleby (MLI118536)	Temporary changes to the setting of the asset arising from construction (such as noise, construction traffic, lighting, mechanical plant) of the Project.	Low	Small	Negligible adverse (not significant)	Potential for slight temporary changes to the setting of the low value asset which may alter the way in which it is experienced and appreciated. This would have a negligible adverse effect that is not significant.
	Permanent changes to the setting of the asset arising from the presence of the Project, from the time of construction and throughout its operational duration in the wider landscape.	Low	Negligible	Negligible adverse (not significant)	Potential for permanent visual intrusion and alteration to the setting of this low value asset that would hardly affect its value, with no real change in how it is appreciated or understood. This would have a negligible adverse effect that is not significant.
College Farm, Beesby with Saleby (MLI118534)	Temporary changes to the setting of the asset arising from construction (such as noise, construction traffic, lighting, temporary infrastructure, mechanical plant).	Low	Medium	Minor adverse (not significant)	Temporary changes to the setting of the low value asset which are noticeably different altering the way in which it is experienced and appreciated. This would have a minor adverse effect that is not significant.

Asset	Impact	Value of Asset	Magnitude of Impact	Significance of Effect	Rationale
	Permanent changes to the setting of the asset arising from the presence of the Project, from the time of construction and throughout its operational duration in the wider landscape.	Low	Medium	Minor adverse (not significant)	Potential for permanent visual intrusion and alteration to the setting of this low value asset that would change how it is appreciated and experienced. This would result in a minor adverse effect that is not significant.
Furze Hill, Bilsby (MLI116623)	Temporary changes to the setting of the asset arising from construction (such as noise, construction traffic, lighting, mechanical plant) of the Project.	Low	Small	Negligible adverse (not significant)	Potential for slight temporary changes to the setting of the low value asset which may alter the way in which it is experienced and appreciated. This would have a negligible adverse effect that would not be significant.
	Permanent changes to the setting of the asset arising from the presence of the Project, from the time of construction and throughout its operational duration in the wider landscape.	Low	Negligible	Negligible adverse (not significant)	Potential for alteration to the setting of this low asset that would hardly affect its value, with no real change in how it is appreciated or understood. This would result in a negligible adverse effect that is not significant.
Pear Tree Farm, Bilsby (MLI116622)	Temporary changes to the setting of the asset arising from construction (such as noise, construction traffic, lighting, mechanical plant) of the Project.	Low	Small	Negligible adverse (not significant)	Potential for slight temporary changes to the setting of the low value asset which may alter the way in which it is experienced and appreciated. This would result in a negligible adverse effect that is not significant.
	Permanent changes to the setting of the asset arising from	Low	Negligible	Negligible adverse	Potential for alteration to the setting of this low asset that would hardly

Asset	Impact	Value of Asset	Magnitude of Impact	Significance of Effect	Rationale
	the presence of the Project, from the time of construction and throughout its operational duration in the wider landscape.			(not significant)	affect its value, with no real change in how it is appreciated or understood. This would result in a negligible adverse effect that is not significant.
Bilsby Moor Farm, Bilsby (MLI116627)	Temporary changes to the setting of the asset arising from construction (such as noise, construction traffic, lighting, temporary infrastructure, mechanical plant).	Low	Small	Negligible adverse (not significant)	Temporary changes to the setting of this low value asset would slightly alter the way in which it is experienced and appreciated. This would result in a negligible adverse effect that is not significant.
	Permanent changes to the setting of the asset arising from the presence of the Project, from the time of construction and throughout its operational duration in the wider landscape.	Low	Small	Negligible (not significant)	Potential for alteration to the setting of this low value asset that would hardly affect the value of the asset or the way in which it is appreciated or understood. This would result in a negligible adverse effect which would not be significant.
The Old Dairy, Bilsby (MLI116626)	Temporary changes to the setting of the asset arising from construction (such as noise and construction traffic).	Low	Negligible	Negligible adverse (not significant)	Potential for slight, temporary changes to the setting of the low value asset which may alter the way in which it is experienced and appreciated. This would result in a negligible adverse effect that is not significant.
	The construction and presence of the Project in the landscape from the time of construction and throughout its operational duration will have no permanent	Low	No Change	Neutral (not significant)	The presence of the Project in the landscape from the time of construction and throughout its operational duration will have no impact on the setting or value of the

Asset	Impact	Value of Asset	Magnitude of Impact	Significance of Effect	Rationale
	impact on the setting or value of this asset.				asset. This would result in a neutral effect which is not significant.
The Grange, Bilsby (MLI41491)	Temporary changes to the setting of the asset arising from construction (such as noise and construction traffic).	Low	Negligible	Negligible adverse (not significant)	Potential for slight, temporary changes to the setting of the low value asset which may alter the way in which it is experienced and appreciated. This would result in a negligible adverse effect that is not significant.
	The construction and presence of the Project in the landscape from the time of construction and throughout its operational duration will have no permanent impact on the setting or value of this asset.	Low	No Change	Neutral (not significant)	The presence of the Project in the landscape from the time of construction and throughout its operational duration will have no impact on the setting or value of the asset. This would result in a neutral effect which is not significant.
Bilsby Hall (MLI124959)	Temporary changes to the setting of the asset arising from construction (such as noise and construction traffic).	Low	Negligible	Negligible adverse (not significant)	Potential for slight, temporary changes to the setting of the low value asset which may alter the way in which it is experienced and appreciated. This would have a negligible adverse effect which would not be significant.
	The construction and presence of the Project in the landscape from the time of construction and throughout its operational duration will have no permanent impact on the setting or value of this asset.	Low	No Change	Neutral (not significant)	The presence of the Project in the landscape from the time of construction and throughout its operational duration will have no impact on the setting or value of the asset. This would result in a neutral effect which is not significant.

Asset	Impact	Value of Asset	Magnitude of Impact	Significance of Effect	Rationale
Wesleyan Methodist Chapel (MLI98900)	Temporary changes to the setting of the asset arising from construction (such as noise and construction traffic).	Low	Negligible	Negligible adverse (not significant)	Potential for slight, temporary changes to the setting of the low value asset which may alter the way in which it is experienced and appreciated. This would result in a negligible adverse effect which would not be significant.
	The construction and presence of the Project in the landscape from the time of construction and throughout its operational duration will have no permanent impact on the setting or value of this asset.	Low	No Change	Neutral (not significant)	The presence of the Project in the landscape from the time of construction and throughout its operational duration will have no impact on the setting or value of the asset. This would result in a neutral effect which is not significant.
Medieval Moated Site, Bilsby (MLI41481)	Temporary changes to the setting of the asset arising from construction (such as noise, construction traffic, lighting, and scaffolds) of the Project.	Low	Small	Negligible adverse (not significant)	Minor, temporary changes to the setting of this low value asset would result in a small magnitude of impact to the way in which the monument is experienced and appreciated. This would result in a negligible adverse effect which is not significant.
	Permanent changes to the setting of the asset arising from the construction and presence of the new pylons and overhead line infrastructure within the landscape for the operational duration of the Project	Low	Small	Negligible adverse (not significant)	Potential for permanent visual intrusion within the setting of this low value asset that would hardly affect the value of the asset or the way in which it is appreciated or understood. This would result in a negligible adverse effect which is not significant.

Asset	Impact	Value of Asset	Magnitude of Impact	Significance of Effect	Rationale
Bilsby Hall Park (MLI41480)	Temporary changes to the setting of the asset arising from construction (such as noise, construction traffic, lighting, temporary infrastructure, mechanical plant)	Low	Medium	Minor adverse (not significant)	Potential for temporary changes (medium magnitude of impact) to the setting of the Bilsby Hall Park a non-designated heritage asset of low value, which may alter the way in which it is experienced and appreciated. This would result in a minor adverse effect which is not significant.
	Permanent changes to the setting of the asset arising from the construction and presence of the Project for its operational duration in the wider landscape.	Low	Medium	Minor adverse (not significant)	Potential for permanent visual intrusion and alteration (medium magnitude of impact) to the setting of this low value asset that would change how it is appreciated and experienced. This would result in a minor adverse effect which would not be significant.

5C. Detailed Gradiometer Survey Report

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5C. Detailed Gradiometer Survey Report

5C.1 Introduction

- 5C.1.1 This appendix provides the report detailing the results of geophysical survey (detailed magnetometry) completed for the proposed New Lincolnshire Connection Substations (LCS) A and B. The report presents a brief description of the methodology followed by the survey results and the archaeological interpretation of the geophysical data, accompanied by a series of plans showing both processed survey data as greyscale images and archaeological interpretation.
- 5C.1.2 The survey was undertaken by Wessex Archaeology using a cart-based gradiometer system. The interpretation of the geophysical survey results used by Wessex Archaeology separates anomalies into four main categories: archaeological, modern, agricultural, and uncertain origin/geological.



Grimsby to Walpole

Lincolnshire Connection Substation A

Gradiometer Survey Report

Document Ref.: 295220.07
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Summary

A gradiometer survey was conducted over land off Rye Lane, near Alford, Lincolnshire (centred on NGR 543819 378908). The project was commissioned by ARUP/AECOM with the aim of establishing the presence, or otherwise, and nature of detectable archaeological features in support of the Grimsby to Walpole Project, part of National Grid's Great Grid upgrade and will play an important part in allowing the UK to decarbonise its energy network.

The proposal by National Grid is to reinforce the transmission network with a new 400 kilovolt (kV) electricity transmission line over a distance of approximately 140 km starting from a new 400 kV substation west of the town of Grimsby in North East Lincolnshire and ending at a new 400 kV substation west of the village of Walpole St Andrew and north of the town of Wisbech, in King's Lynn and West Norfolk District. The Project also includes the construction two new 400 kV Lincolnshire Connection Substations located south-west of Mablethorpe in East Lindsey, up to two new 400 kV substations in the vicinity of the Spalding Tee-Point in South Holland District and the decommissioning (in full or part) of the existing Grimsby West Substation.

The site comprises arable and pasture fields located 1.4 km south of the village of Woodthorpe and 3.3 km north of the market town of Alford in the county of Lincolnshire, covering an area of 46.9 ha. The geophysical survey was undertaken across two separate deployments between 16 September – 30 October 2024 and 15 April 2025.

The gradiometer survey has been successful in detecting anomalies of possible archaeological origin, along with former field boundaries, ridge and furrow, agricultural features, and anomalies of geological and geomorphological origin. A modern service has also been detected running through the survey area.

A series of isolated linear anomalies have been detected, likely associated with possible archaeological origins. These anomalies may relate to medieval activity that is recorded within the survey area, however, may equally be related to an unmapped former field boundary or geomorphological and geological processes. Due to the lack of context and isolation of each anomaly, a more concise interpretation cannot be applied.

A possible ring-ditch has also been identified centrally on site. The anomaly is possibly early prehistoric to Iron Age in origin; however, it may also relate to geomorphological or geological processes that are apparent across the survey area. Evidence of ridge and furrow has also been identified in the south and north of the site, expected to be medieval in origin like similar activity previously outlined in the area.

Several former field boundaries have been identified across the site. These have likely been removed as fields have been expanded for more modern techniques. Modern agricultural practices have also been identified, in the form of drainage features and modern ploughing trends.

In the north-west construction equipment seen during the survey has been detected in the form of a track matting and work areas associated with ground investigation on site.

Evidence of geological and geomorphological processes have been detected across the survey area. These may relate to variations in the bedrock or superficial deposits. Also due to the sinuous morphology of the anomalies detected, there may have been a former water course that ran through the survey area on different orientations.

The remaining anomalies are modern, relating to a modern service and ferrous material around extant field boundaries.



Acknowledgements

Wessex Archaeology would like to thank ARUP/AECOM for commissioning the geophysical survey. The assistance of Hannah Blacknell and Iain Williamson is gratefully acknowledged in this regard.

The fieldwork was undertaken by Jo Instone-Brewer, Callum Jervis, Jack Trueman, Bethan Healey, Joe Anderson Cameron Lane, Daniele Clementi, Manasi Patil and David Butcher. Whilst Cameron Lane prepared the illustrations and wrote the final report, the geophysical work was quality controlled by Alastair Trace. The project was managed on behalf of Wessex Archaeology by Patricia Edwards.



Grimsby to Walpole Lincolnshire Connection Substation A

Gradiometer Survey Report

1 INTRODUCTION

1.1 Project background

1.1.1 Wessex Archaeology was commissioned by ARUP/AECOM to carry out a geophysical survey at land located south of Rye Lane, Alford, Lincolnshire (centred on NGR 543819 378908) (**Figure 1**). The survey forms part of an ongoing programme of archaeological works being undertaken in support of the Grimsby to Walpole Project, part of National Grid's Great Grid upgrade and will play an important part in allowing the UK to decarbonise its energy network.

1.1.2 The proposal by National Grid is to reinforce the transmission network with a new 400 kilovolt (kV) electricity transmission line over a distance of approximately 140 km starting from a new 400 kV substation west of the town of Grimsby in North East Lincolnshire and ending at a new 400 kV substation west of the village of Walpole St Andrew and north of the town of Wisbech, in King's Lynn and West Norfolk District. The Project also includes the construction two new 400 kV Lincolnshire Connection Substations located south-west of Mablethorpe in East Lindsey, up to two new 400 kV substations in the vicinity of the Spalding Tee-Point in South Holland District and the decommissioning (in full or part) of the existing Grimsby West Substation.

1.2 Scope of document

1.2.1 This report presents a brief description of the methodology followed by the survey results and the archaeological interpretation of the geophysical data. In format and content, it conforms to current best practice, as well as to the guidance outlined in *Management of Research Projects in the Historic Environment* (MoRPHE, Historic England 2015), the Chartered Institute for Archaeologists' (CIfA) *Standards and guidance for archaeological geophysical survey* (CIfA 2020), *Europae Archaeologiae Consilium* recommendations (Schmidt *et al.* 2015) and Historic England *Thesauri* (English Heritage 2014).

1.3 The site

1.3.1 The site is located 1.4 km south of the village of Woodthorpe and 3.3 km north of the market town of Alford in the county of Lincolnshire.

1.3.2 The survey comprises 46.9 ha of agricultural land, currently utilised for arable and animal housing. The site is bounded by Rye Lane to the north, by agricultural land to the east and south, with Greenfield and Mother Wood forming the site's western boundary.

1.3.3 The site is on a slight incline from 8 m above Ordnance Datum (aOD) at the north-eastern edge to 14 m aOD at the south-western edge.

1.3.4 The solid geology comprises Chalk of the Ferriby Chalk Formation, with overlying superficial geological deposits of Diamicton from the Devensian Till Formation (BGS 2024).



- 1.3.5 The soils underlying the northern site are likely to consist of typical stagnogley soils of the 711u (Holderness) association (SSEW SE Sheet 4 1983). Soils derived from such geological parent material have been shown to produce magnetic contrasts acceptable for the detection of archaeological remains through magnetometer survey.

2 ARCHAEOLOGICAL BACKGROUND

2.1 Introduction

- 2.1.1 The following historical and archaeological background has been compiled using publicly available online resources, combined with the results of Wessex Archaeology's previous investigations in the area, and in-house resources. It considers the recorded historic environment resource within a 500 m of Lincolnshire Connection Substation A (LCSA). The following archaeological background is not exhaustive but discusses known heritage assets relevant to the interpretation of the geophysical survey data (Lincolnshire Council Historic Environment Record search report dated 16/05/2024).

2.2 Summary of the archaeological resource

- 2.2.1 A review of data held by the National Heritage List for England (NHLE) and Lincolnshire Historic Environment Record (HER) has identified a number of known archaeological remains or findspots predating the medieval period within the site.
- 2.2.2 Evidence for medieval settlement is recorded within the site and surrounding area. The site of the St Mary's Priory scheduled monument (NHLE 1008687) is located 495 m to the south-west of the site, comprising the surface earthworks and below ground remains of a Cistercian nunnery founded before 1153 and dissolved in 1536.
- 2.2.3 There are two non-designated heritage assets within 500 m of the survey area. These comprise a 19th-century farmstead, Wood Farm, 470 m to the north-east of the survey area and a series of medieval to post-medieval ridge and furrow earthworks surrounding the survey area to the north and east which were recorded from analysis of aerial photographs and Google Earth.
- 2.2.4 Evidence for medieval agricultural open field systems is also recorded with areas of earthworks and cropmark ridge and furrow identified both within the eastern edges of the site, its eastern boundary, and north of Rye Lane to the north of the site. Evidence for the post-medieval agricultural landscape is recorded 470 m north-east of the site as a partially extant 19th-century farmstead of Wood Farm. Galley Hill is a redeveloped non-designated farmstead recorded 200 m north of the site.
- 2.2.5 A single farmstead has been identified as Galley Hill, 50 m north of land parcel 7 (LP_007) (**Figure 1**), and is listed as being of 19th century origin, as identified by the English Heritage Farmsteads Project (Historic England 2015) and subsequently recorded by the local HER (Heritage Gateway, 2024).
- 2.2.6 An area of woodland (5 ha) is located immediately west of the site, known as Hornby, Mother and Greenfield Woods. The woodland is included in the Nature Conservancy Council's 'Inventory of Ancient Woodland'. Ancient woodland status considered to be probable. An additional area of 7 hectares was felled and cleared for agriculture after 1956 (Nature Conservancy Council 1989).



- 2.2.7 A map regression of the area has identified the location of several former field boundaries formerly traversing across the survey area (NLS Maps 2024). These field boundaries appear to have been removed to allow for larger agricultural fields.

3 METHODOLOGY

3.1 Introduction

- 3.1.1 The geophysical survey was undertaken by Wessex Archaeology's in-house geophysics team across two separate deployments between 16 September – 30 October 2024 and 15 April 2025. Field conditions at the time of the survey were ideal throughout the period of survey. An overall coverage of 47 ha was achieved.
- 3.1.2 The methods and standards employed throughout the geophysical survey conform to that set out in the Written Scheme of Investigation (WSI) (Wessex Archaeology 2024), as well as to current best practice, and guidance outlined by the Chartered Institute for Archaeologists' (CIfA 2020) and European Archaeologiae Consilium (Schmidt *et al.* 2015).

3.2 Project aims

- 3.2.1 The aims of the survey comprise the following:
- To determine, as far as is reasonably possible, the nature of the detectable archaeological resource within a specified area using appropriate methods and practices; and
 - To inform either the scope and nature of any further archaeological work that may be required; or the formation of a mitigation strategy (to offset the impact of the development on the archaeological resource); or a management strategy.

3.3 Project objectives

- 3.3.1 In order to achieve the above aims, the objectives of the geophysical survey were:
- To conduct a geophysical survey covering as much of the specified area as possible, allowing for on-site obstructions;
 - To clarify the presence/absence of anomalies of archaeological potential; and
 - Where possible, to determine the general nature of any anomalies of archaeological potential.

3.4 Fieldwork methodology

- 3.4.1 The cart-based gradiometer system used a Carlson BRX-7 RTK GNSS instrument, which receives corrections from a network of reference stations operated by the OS. Such instruments allow positions to be determined with a precision of 0.02 m in real-time and therefore exceeds Europae Archaeologiae Consilium recommendations (Schmidt *et al.* 2015).
- 3.4.2 The gradiometer survey was conducted using hand pushed non-magnetic cart fitted with four, Sensys FGM650/03 gradiometers mounted at 1 m intervals with an effective sensitivity of 0.03 nT over a ± 100 nT range.
- 3.4.3 Data was be collected at 0.25 m intervals along transects spaced 1 m apart, in accordance with Europae Archaeologiae Consilium recommendations (Schmidt *et al.* 2015). Data was be collected in the zigzag method.



3.5 Data processing

- 3.5.1 Where necessary, data from the survey was subject to minimal correction processes. The precise steps typically comprise a zero-mean traverse function (± 5 nT thresholds) to correct for variations in the calibration between the SenSYS sensors used and a de-step function to account for variations in traverse position due to varying ground cover and topography. The data was processed using in-house software which allows greyscale and trace plots to be produced. Interpretation was conducted within the latest version of ESRI ArcGIS Pro. All efforts were made during data collection to limit required processing and no further filtering was applied.
- 3.5.2 Further details of the geophysical and survey equipment, methods and processing are described in **Appendix 1**.

4 GEOPHYSICAL SURVEY RESULTS AND INTERPRETATION

4.1 Introduction

- 4.1.1 The gradiometer survey has identified magnetic anomalies across the site. Results are presented as a series of greyscale plots and archaeological interpretations at a scale of 1:5000 (**Figures 2 and 3**) and 1:2000 (**Fig. 4 – 11**). The data are displayed at -2 nT (white) to +3 nT (black) for the greyscale image.
- 4.1.2 The interpretation of the datasets highlights the presence of potential archaeological anomalies, ferrous responses, geological or geomorphological processes, and magnetic trends (**Figure 3**). Full definitions of the interpretation terms used in this report are provided in **Appendix 2**.
- 4.1.3 Numerous ferrous anomalies are visible throughout the dataset. These are presumed to be modern in provenance and are not referred to, unless considered relevant to the archaeological interpretation.
- 4.1.4 It should be noted that small, weakly magnetised features may produce responses that are below the detection threshold of magnetometers. It may therefore be the case that more archaeological features may be present than have been identified through geophysical survey.
- 4.1.5 Gradiometer survey may not detect all services present on site. This report and accompanying illustrations should not be used as the sole source for service locations and appropriate equipment (e.g., CAT and Genny) should be used to confirm the location of buried services before any trenches are opened on site.

4.2 Gradiometer survey results and interpretation

- 4.2.1 The geophysical survey has identified limited evidence of anomalies associated with archaeological remains. There are three anomalies of possible archaeological interest along with anomalies associated with former field boundaries, and agricultural features such as drainage and modern ploughing regimes. To the north and north-east of the site, a number of anomalies possibly relating to historical ploughing regimes, have been detected in the form of ridge and furrow. To the north-west, an anomaly that matched with platforms and pallets from ongoing construction work has been detected. Across the site, numerous amorphous and sinuous anomalies have been detected and likely relate to geological and geomorphological processes.
- 4.2.2 Two magnetically strong positive anomalies have been detected in LP_011 and LP_012 at **LCSA.4000** and **LCSA.4001 (Figure 11)**. These curvilinear and linear anomalies reach up to 2 m in width and 20 m in length. From its north-westernmost point anomaly **LCSA.4000** extends 6 m south-east before turning SSW for 2 m, forming a right-angle. These anomalies

may be related to ditches possibly related to the known medieval activity in the area, 495 m to the south-west. Alternatively, they may relate to unmapped former field boundaries or enhanced agricultural trends related to modern agricultural practices. It is equally possible that they are of geological origin similar anomalies identified in the immediate surrounding area. A similar positive curvilinear anomaly has also been identified traversing east – west across LP_007 at **LCSA.4002 (Figure 5)**. The anomaly is 1.5 m wide and 150 m long, possibly related to a ditched feature such as a former land division of unknown origin. However, is also possibly natural in origin or generated due to activity related to modern agriculture.

- 4.2.3 Two weakly positive annular anomalies have been detected in the centre of LP_009 at **LCSA.4003 (Figure 7)** and along the eastern boundary of LP_011 at **LCSA.4004 (Figure 11)**. These anomalies have widths up to 2 m and lengths up to 22 m. The anomalies are 10 m and 5 m in diameter respectively with a 7 m and 2 m gap in the centre. It is possible that these anomalies are small ring ditches of prehistoric to Late Iron Age date and could be associated with round barrows or round houses. However, due to their isolated occurrence and the significant presence of geological and geomorphological anomalies in the region, may equally be natural in origin.
- 4.2.4 Across the survey area, a series of strong and weak linear and curvilinear anomalies have been detected at **LCSB.4005 – 4010 (Fig. 5 – 11)**. These anomalies are broadly orientated either north – south or east – west concordant with known former field boundaries that have been mapped out on 6-inch historical OS mapping (NLS 2025).
- 4.2.5 An area increased response has been highlighted in the south-eastern corner of LP_007 at **LCSA.4011 (Figure 5)**. The ferrous disturbance covers an area 10 m wide by 18 m long and corresponds with the known location of a former building or structure recorded on 6-inch historical OS mapping (NLS 2025). It is likely that this disturbance is linked with the structures demolition and removal.
- 4.2.6 Several weak, positive anomalies are arranged in parallel linear and curvilinear arrangements across the site. These are detected in LP_006, LP_007, LP_008 and LP_011 at **LCSA.4012 – 4015 (Figures 5 and 11)** orientated north – south. The anomalies reach up to 150 m in length and have spacings from 4 – 12 m between each neighbouring anomaly. These anomalies are indicative of ridge and furrow ploughing regimes that are likely representative of the medieval agricultural practices previously highlighted to the immediate east of site.
- 4.2.7 Anomalies of amorphous and sinuous morphologies have been recorded throughout the site that and are indicative of natural processes, including areas of increased magnetic response related to geomorphological activity. These may relate to paleochannels and former watercourses that have passed through the survey area or variation in the geological bedrock, superficial deposits, or soils.
- 4.2.8 A series of strong, positive anomalies have been identified as increased magnetic response in the north-west of site at **LCSA.4016 (Figure 7)**. These anomalies are arranged along a linear alignment on a north-west to south-east orientation and reach up to 220 m in length by 5 m wide. At the north-western extent, these form a larger area, covering 45 m east – west by 28 m north – south. These anomalies are related to construction mats and material identified in the field at the time of survey.
- 4.2.9 Further examples of disturbance have been recorded within a natural band across the eastern portion of LP_005 at **LCSA.4017 – 4018 at (Figure 5)**. The northern disturbance at **LCSA.4017** is 20 m wide by 70 m long orientated north-west to south-east in line with the natural banding. The smaller, southern response at **LCSA.4018** covers an area 10 m by 12 m. Although it is not clear from the geophysical data alone whether these examples of



disturbance are modern or not. They are likely deposits within a buried landform, highlighted at the natural banding crossing through the land parcel. The natural landform is also visible on satellite mapping and may be related to the glaciofluvial deposits recorded immediately east of LP_005 (BGS 2025).

- 4.2.10 A strong, linear and dipolar anomaly has been detected in the centre of the survey area at **LCSA.4019 (Figures 5 and 7)**. From the northern-most point of LP_008, this anomaly runs 185 m south-west parallel to the survey extent of LP_008, continuing into LP_009. It is then diverted south 170 m through LP_009. At this point the anomaly splits with one half continuing south along the western extent of LP_012, whilst the other is diverted 230 m west along the southern extent of LP_009. The strong, dipolar response is characteristic of a modern service. A further example of this traverses east – west along LP_007 at **LCSA.4020 (Figure 5)**.
- 4.2.11 Across the survey area, a series of weak and strong linear anomalies have been detected. These anomalies reach across multiple land parcel with lengths between 60 – 600 m and occur in parallel to one another and along herring-bone patterns. These are indicative of agricultural activities such as drainage features and modern ploughing regimes.
- 4.2.12 Across the site, numerous strong and weak responses have been identified. These are likely related to ferrous materials that are present within the survey area or may also relate to extant field boundaries.

5 DISCUSSION

- 5.1.1 The gradiometer survey has been successful in detecting anomalies of possible archaeological origin, along with former field boundaries, ridge and furrow, agricultural features, and anomalies of geological and geomorphological origin. A modern service has also been detected running through the survey area.
- 5.1.2 A series of isolated linear anomalies have been detected, likely associated with possible archaeological origins. These anomalies may relate to medieval activity that is recorded within the survey area, however, may equally be related to an unmapped former field boundary or geomorphological and geological processes. Due to the lack of context and isolation of each anomaly, a more concise interpretation cannot be applied.
- 5.1.3 A possible ring-ditch has also been identified centrally on site. The anomaly is possibly early prehistoric to Iron Age in origin; however, it may also relate to geomorphological or geological processes that are apparent across the survey area. Evidence of ridge and furrow has also been identified in the south and north of the site, expected to be medieval in origin like similar activity previously outlined in the area.
- 5.1.4 Several former field boundaries have been identified across the site. These have likely been removed as fields have been expanded for more modern techniques. The demolished remains of a former building or structure has also been highlighted in the north-east. Modern agricultural practices have also been identified, in the form of drainage features and modern ploughing trends.
- 5.1.5 In the north-west construction equipment seen during the survey has been detected in the form of a track matting and work areas associated with ground investigation on site.
- 5.1.6 Evidence of geological and geomorphological processes have been detected across the survey area. These may relate to variations in the bedrock or superficial deposits. Also due to the sinuous morphology of the anomalies detected, there may have been a former water course that ran through the survey area on different orientations.



- 5.1.7 The remaining anomalies are modern, relating to a modern service and ferrous material around extant field boundaries.

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APPENDICES

Appendix 1 Survey equipment and data processing

Survey methods and equipment

CART-BASED GRADIOMETER SURVEY

The magnetic data for this project were acquired using a non-magnetic cart fitted with four SenSys FGM650/3 magnetic gradiometers. The instrument has four sensor assemblies fixed horizontally 1 m apart allowing four traverses to be recorded simultaneously. Each sensor contains two fluxgate magnetometers arranged vertically with a 0.6 m separation and measures the difference between the vertical components of the total magnetic field within each sensor array. This arrangement of magnetometers suppresses any diurnal or low frequency effects.

The gradiometers have an effective resolution of $\pm 8 \mu\text{T}$ over $\pm 1000 \text{ nT}$ range. All of the data are then relayed to a CS35 tablet, running the MONMX program, which is used to record the survey data from the array of FGM650/3 probes at a rate of 20 Hz. The program also receives measurements from a GPS system, which is fixed to the cart at a measured distance from the sensors, providing real time locational data for each data point.

The cart-based system relies upon accurate GPS location data which is collected using a Leica Captivate system with a rover and base station. This receives corrections from a network of reference stations operated by the Ordnance Survey and Leica Geosystems, allowing positions to be determined with a precision of 0.02m in real-time and therefore exceed the level of accuracy recommended by European Archaeologiae Consilium recommendations (Schmidt *et al.* 2015) for geophysical surveys.

Data may be collected with a higher sample density where complex archaeological anomalies are encountered, to aid the detection and characterisation of small and ephemeral features. Data may be collected at up to 0.01 m intervals along traverses spaced up to 0.25m apart.

Post-processing

The magnetic data collected during the survey is downloaded from the system for processing and analysis using both commercial and in-house software. This software allows for both the data and the images to be processed to enhance the results for analysis; however, it should be noted that minimal data processing is conducted so as not to distort the anomalies.

The cart-based system generally requires a lesser amount of post-processing than the handheld Bartington Grad 601-2 fluxgate gradiometer instrument. This is largely because mounting the gradiometers on the cart reduces the occurrence of operator error, caused by inconsistent walking speeds and deviation in traverse position due to varying ground cover and topography.

Typical data and image processing steps may include:

- Destripe – Applying a smooth function to remove differences caused by directional effects inherent in the magnetometer;
- Despike – Filtering isolated data points that exceed the mean by a specified amount to reduce the appearance of dominant anomalous readings (generally only used for earth resistance data)

Typical displays of the data used during processing and analysis:



- Greyscale – Presents the data in plan view using a greyscale to indicate the relative strength of the signal at each measurement point. These plots can be produced in colour to highlight certain features but generally greyscale plots are used during analysis of the data.
- XY Plot – Presents the data as a trace or graph line for each traverse. Each traverse is displaced down the image to produce a stacked profile effect. This type of image is useful as it shows the full range of individual anomalies. (XY plots can be made available upon request).

Appendix 2 Geophysical interpretation

The interpretation methodology used by Wessex Archaeology separates the anomalies into four main categories: archaeological, modern, agricultural, and uncertain origin/geological.

The archaeological category is used for features when the form, nature and pattern of the anomaly are indicative of archaeological material. Further sources of information such as aerial photographs may also have been incorporated in providing the final interpretation. This category is further sub-divided into three groups, implying a decreasing level of confidence:

- Archaeology – used when there is a clear geophysical response and anthropogenic pattern.
- Possible archaeology – used for features which give a response, but which form no discernible pattern or trend.

The modern category is used for anomalies that are presumed to be relatively modern in date:

- Ferrous – used for responses caused by ferrous material. These anomalies are likely to be of modern origin.
- Modern service – used for responses considered relating to cables and pipes; most are composed of ferrous/ceramic material although services made from non-magnetic material can sometimes be observed.

The agricultural category is used for the following:

- Former field boundaries – used for ditch sections that correspond to the position of boundaries marked on earlier mapping.
- Ridge and furrow – used for broad and diffuse linear anomalies that are considered to indicate areas of former ridge and furrow.
- Ploughing – used for well-defined narrow linear responses, usually aligned parallel to existing field boundaries.
- Drainage – used to define the course of ceramic field drains that are visible in the data as a series of repeating bipolar (black and white) responses.

The uncertain origin/geological category is used for features when the form, nature and pattern of the anomaly are not sufficient to warrant a classification as an archaeological feature. This category is further sub-divided into:

- Increased magnetic response – used for areas dominated by indistinct anomalies which may have some archaeological potential.
- Trend – used for low amplitude or indistinct linear anomalies.
- Superficial geology – used for diffuse edged spreads considered to relate to shallow geological deposits. They can be distinguished as areas of positive, negative, or broad bipolar (positive and negative) anomalies.



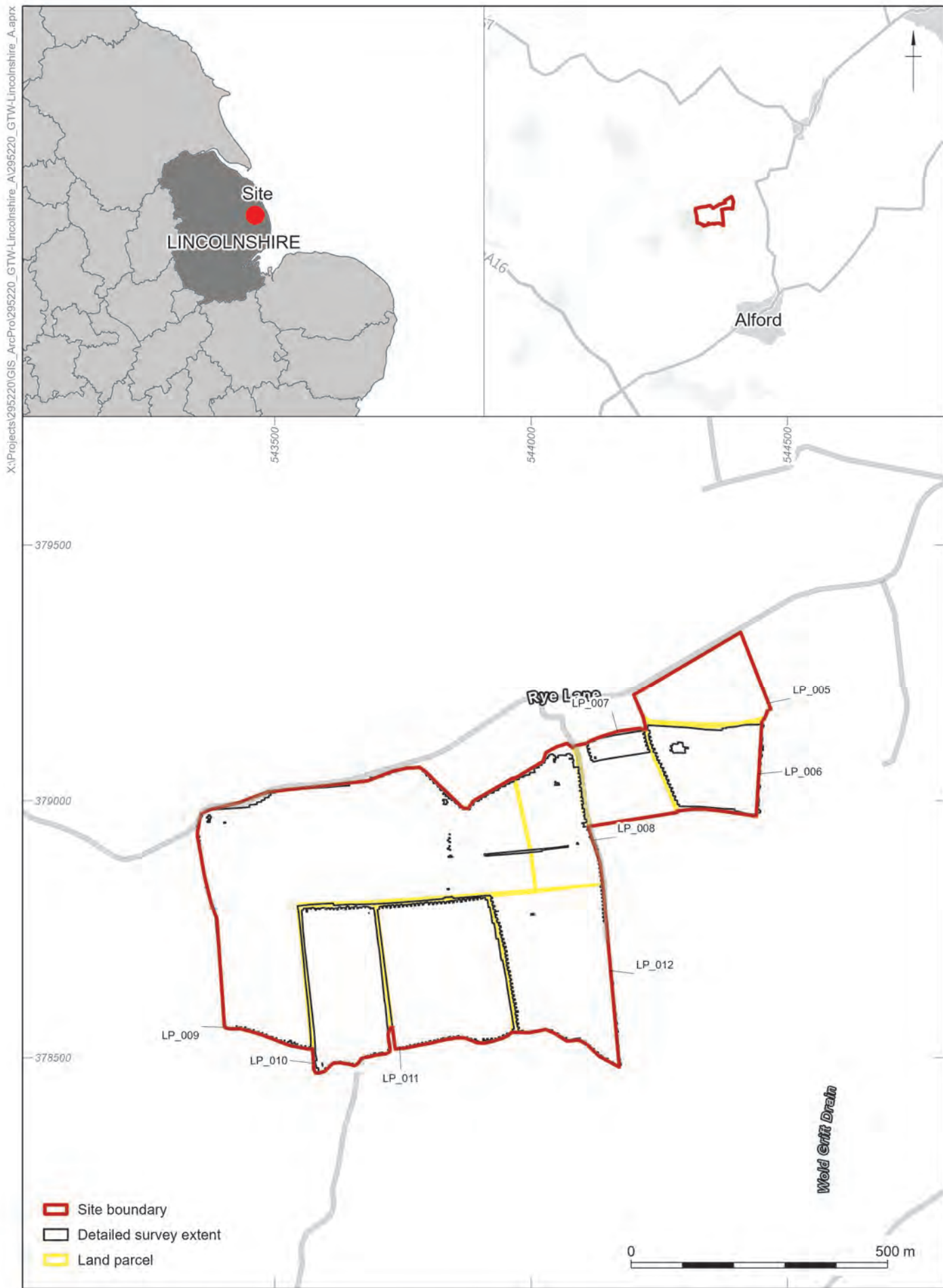
Appendix 3 OASIS form

Project Details:

OASIS Summary for wessexar1-532093

OASIS ID (UID)	wessexar1-532093
Project Name	Magnetometry Survey at Grimsby to Walpole: Lincolnshire Connection Substation A
Sitename	Grimsby to Walpole: Lincolnshire Connection Substation A
Sitecode	295220
Project Identifier(s)	Geophysical Survey at Lincolnshire Connection Substation A
Activity type	Magnetometry Survey, MAGNETOMETRY SURVEY
Planning Id	
Reason For Investigation	Planning requirement
Organisation Responsible for work	Wessex Archaeology
Project Dates	16-Sep-2024 - 15-Apr-2025
Location	Grimsby to Walpole: Lincolnshire Connection Substation A NGR : TF 43819 78908 LL : 53.28763105689243, 0.156007249272101 12 Fig : 543819,378908
Administrative Areas	Country : England County/Local Authority : Lincolnshire Local Authority District : East Lindsey Parish : Beesby with Saleby
Project Methodology	The geophysical survey was undertaken by Wessex Archaeology's in-house geophysics team between 16 September to 30 October 2024 and 15 April 2025. Field conditions at the time of the survey were ideal throughout the period of survey. An overall coverage of 47 ha was achieved The methods and standards employed throughout the geophysical survey conform to that set out in the Written Scheme of Investigation (WSI) (Wessex Archaeology 2024), as well as to current best practice, and guidance outlined by the Chartered Institute for Archaeologists (CIfA 2020) and European Archaeologiae Consilium (Schmidt et al. 2015).

Project Results	The gradiometer survey has been successful in detecting anomalies of possible archaeological origin, along with former field boundaries, ridge and furrow, agricultural features, and anomalies of geological and geomorphological origin. A modern service has also been detected running through the survey area. A series of isolated linear anomalies have been detected, likely associated with possible archaeological origins. These anomalies may relate to medieval activity that is recorded within the survey area, however, may equally be related to an unmapped former field boundary or geomorphological and geological processes. Due to the lack of context and isolation of each anomaly, a more concise interpretation cannot be applied. A possible ring-ditch has also been identified centrally on site. The anomaly is possibly early prehistoric to Iron Age in origin; however, it may also relate to geomorphological or geological processes that are apparent across the survey area. Evidence of ridge and furrow has also been identified in the south and north of the site, expected to be medieval in origin like similar activity previously outlined in the area. Several former field boundaries have been identified across the site. These have likely been removed as fields have been expanded for more modern techniques. Modern agricultural practices have also been identified, in the form of drainage features and modern ploughing trends. In the north-west construction equipment seen during the survey has been detected in the form of a track matting and work areas associated with ground investigation on site. Evidence of geological and geomorphological processes have been detected across the survey area. These may relate to variations in the bedrock or superficial deposits. Also due to the sinuous morphology of the anomalies detected, there may have been a former water course that ran through the survey area on different orientations. The remaining anomalies are modern, relating to a modern service and ferrous material around extant field boundaries.
Keywords	
Funder	Private or public corporation Arup
HER	Lincolnshire HER - unRev - STANDARD
Person Responsible for work	Patricia Edwards
HER Identifiers	
Archives	

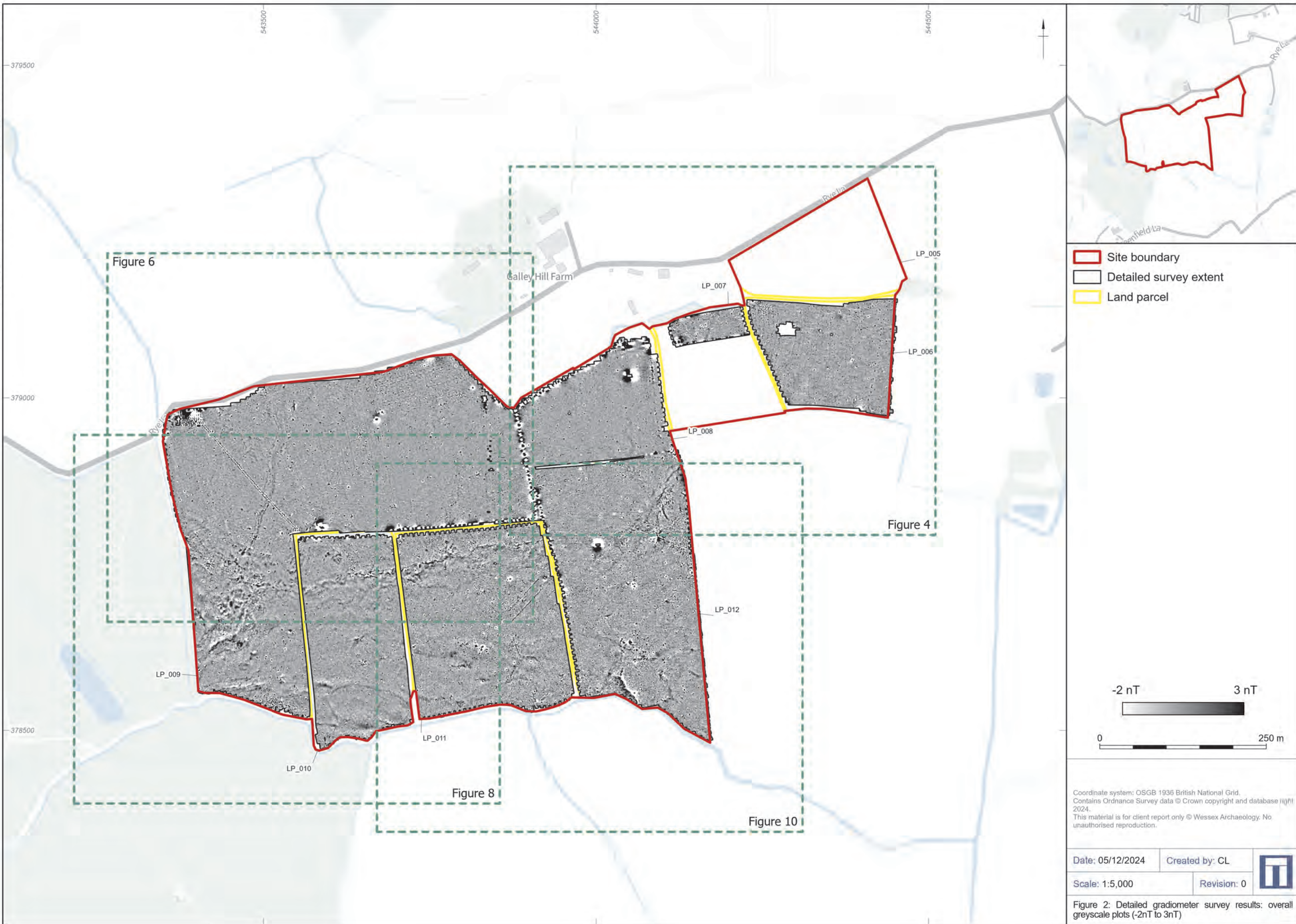


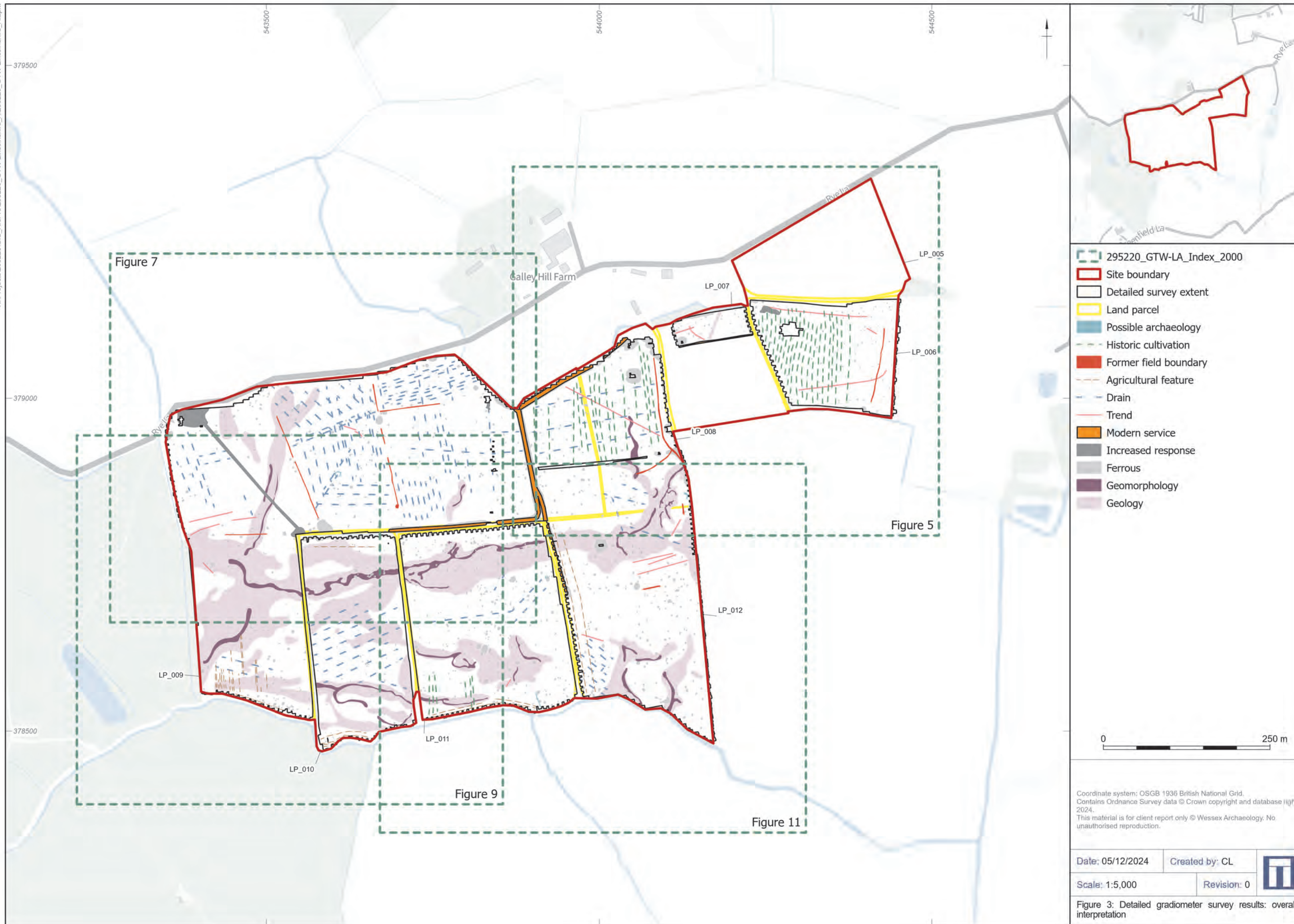
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Figure 1: Site location and survey extents (Lincolnshire A)





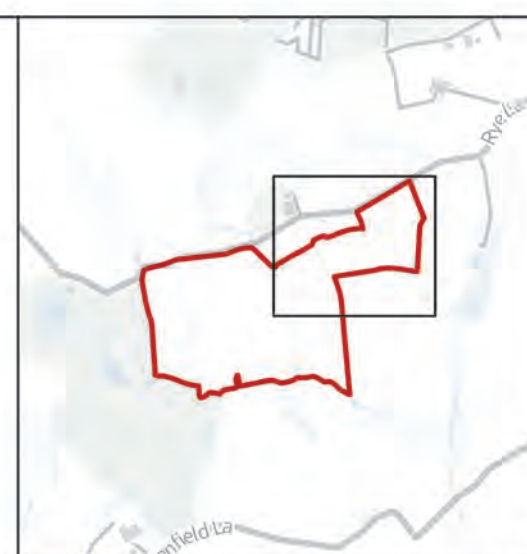


- 295220_GTW-LA_Index_2000
- Site boundary
- Detailed survey extent
- Land parcel
- Possible archaeology
- Historic cultivation
- Former field boundary
- Agricultural feature
- Drain
- Trend
- Modern service
- Increased response
- Ferrous
- Geomorphology
- Geology

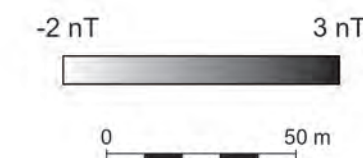
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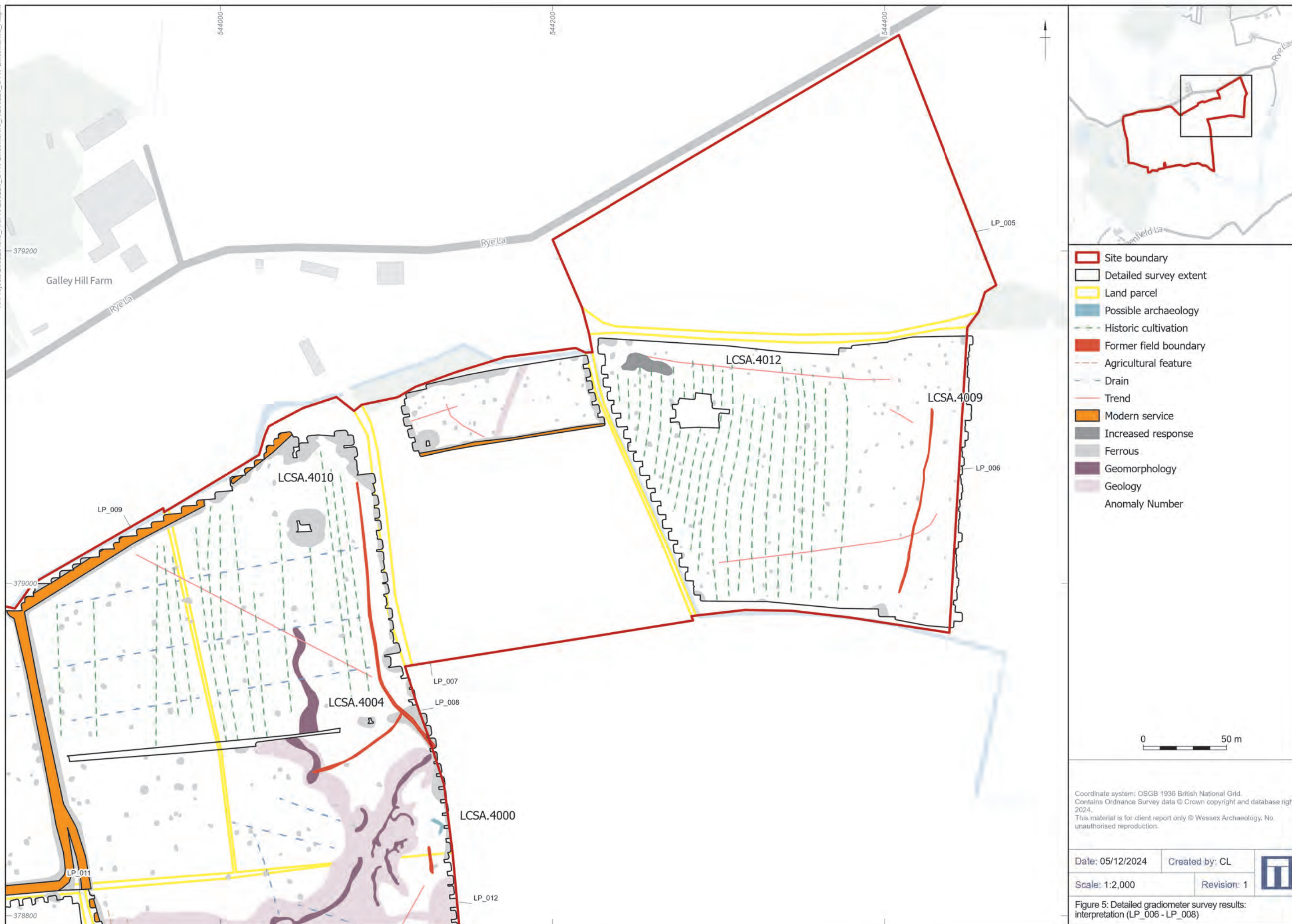
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- Land parcel
- Detailed survey extent

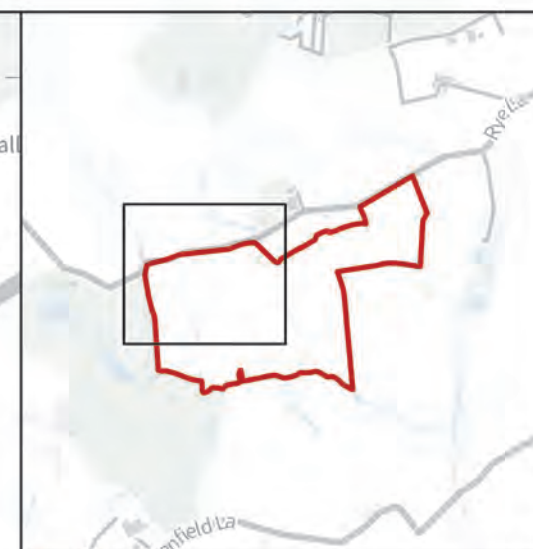
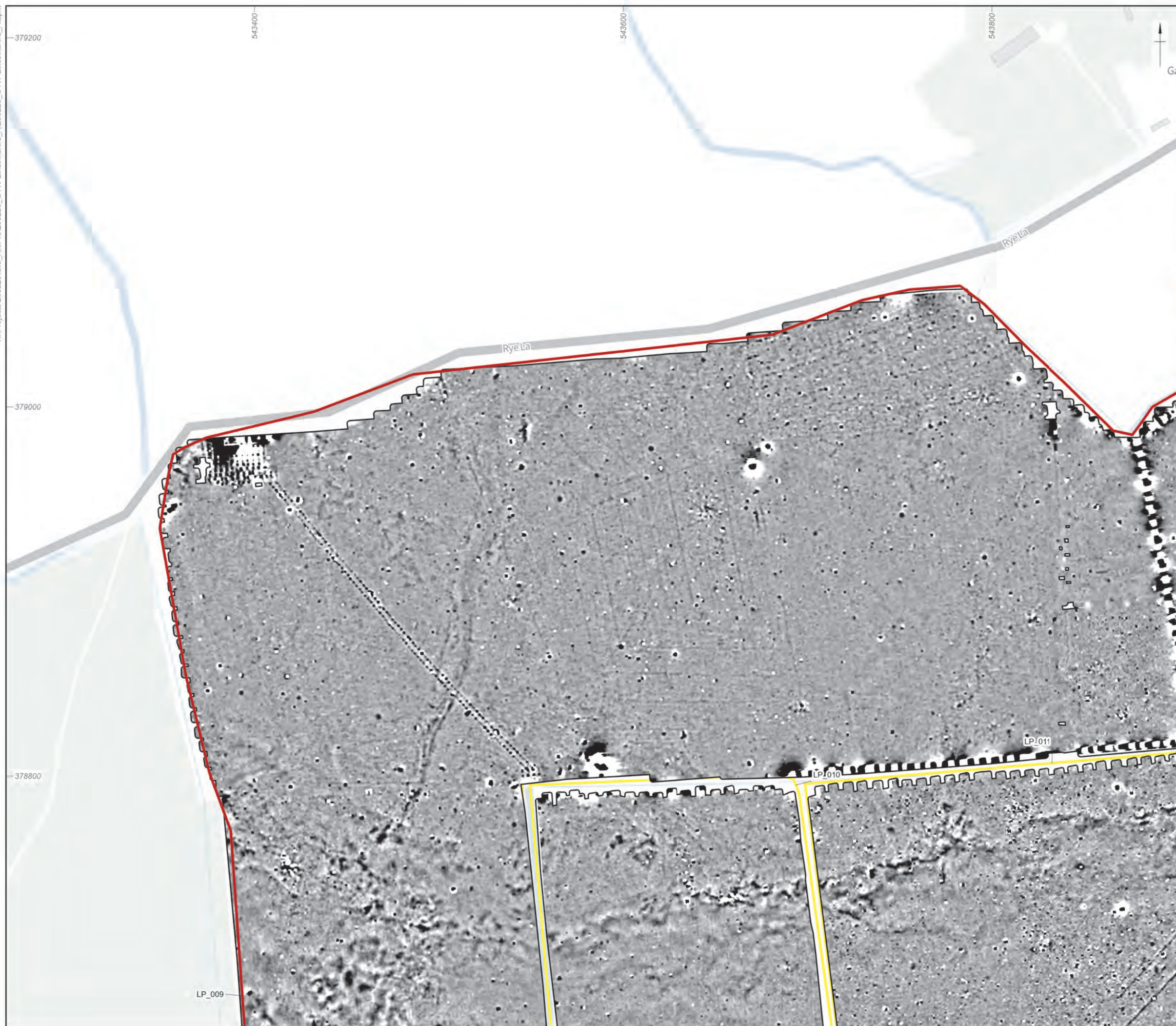


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Figure 4: Detailed gradiometer survey results: greyscale plot (LP_006 - LP_008)





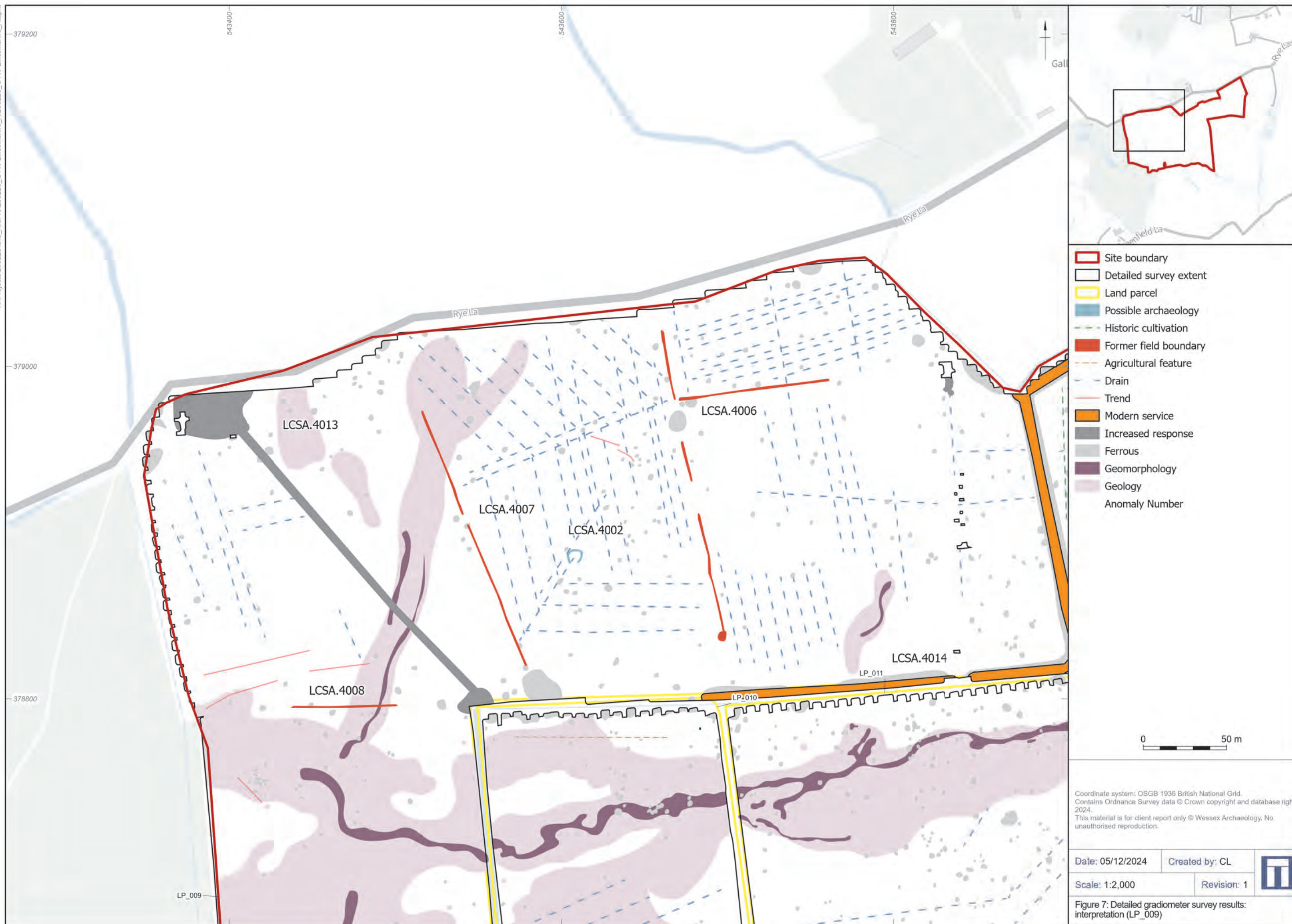
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- Land parcel
- Detailed survey extent



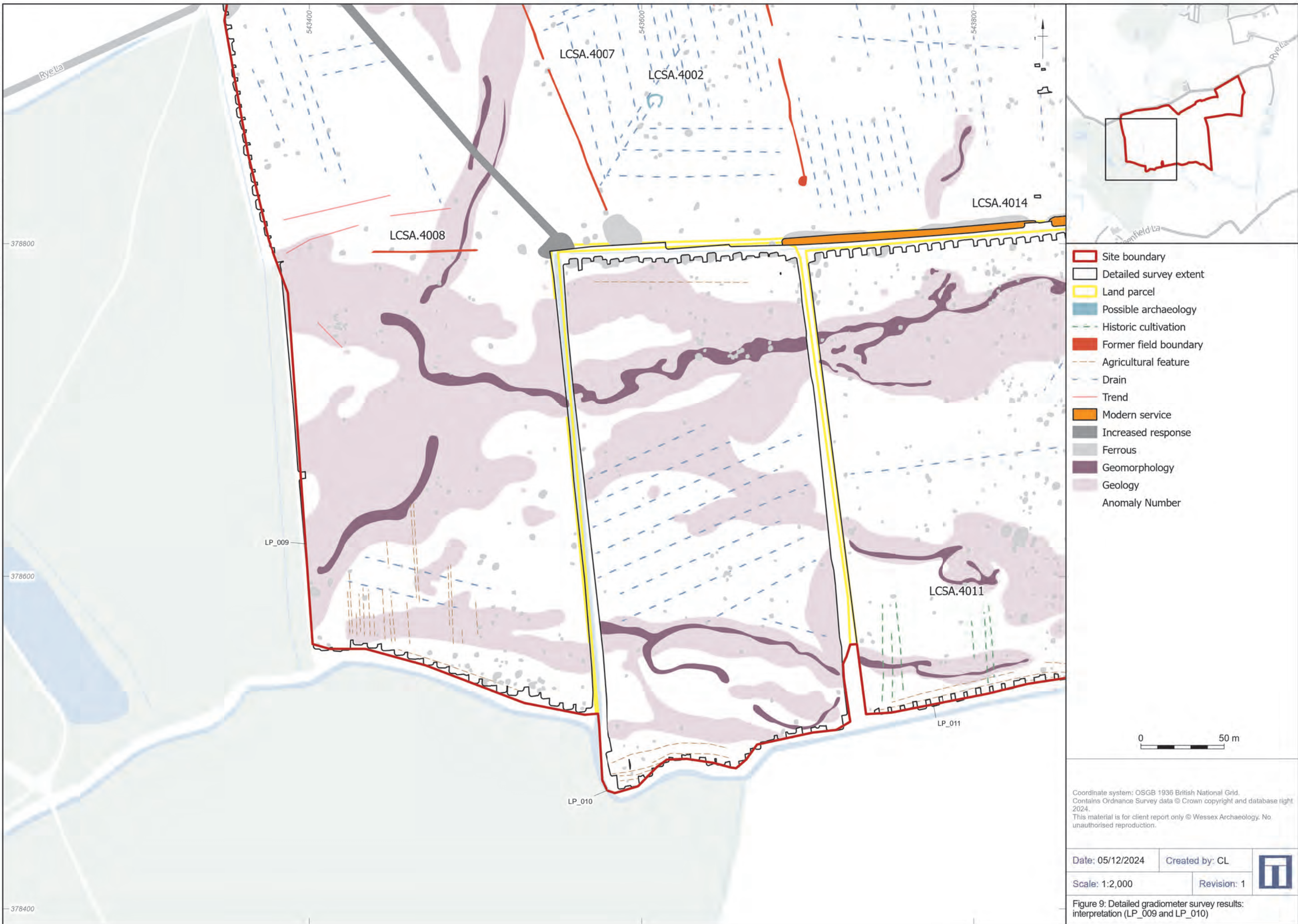
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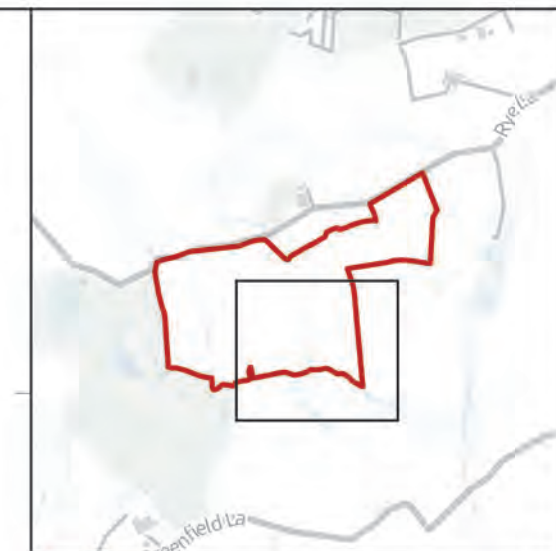
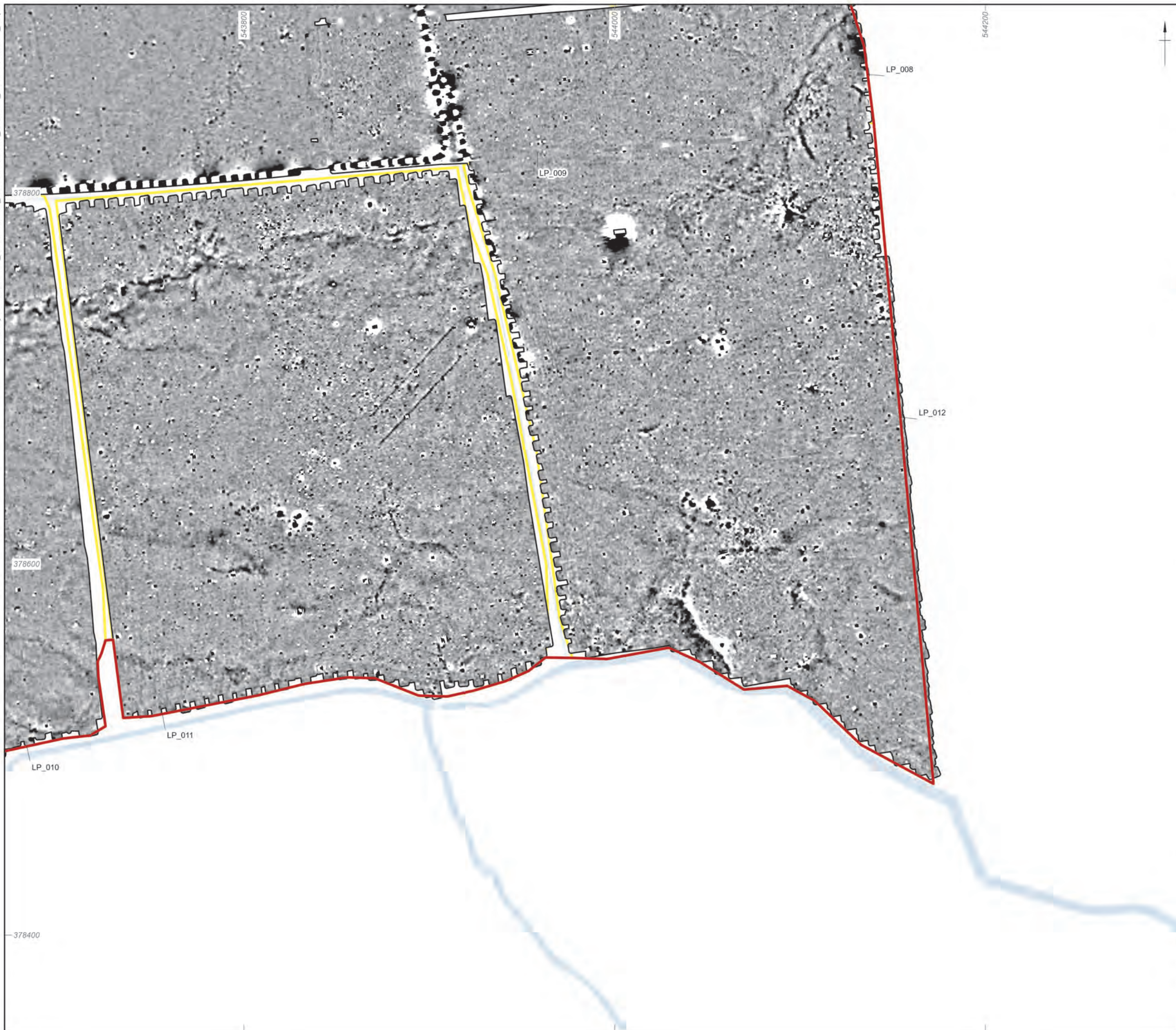
Figure 6: Detailed gradiometer survey results: greyscale plot (LP_009)



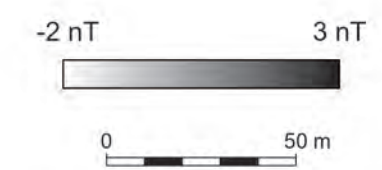




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- Site boundary
- Land parcel
- Detailed survey extent

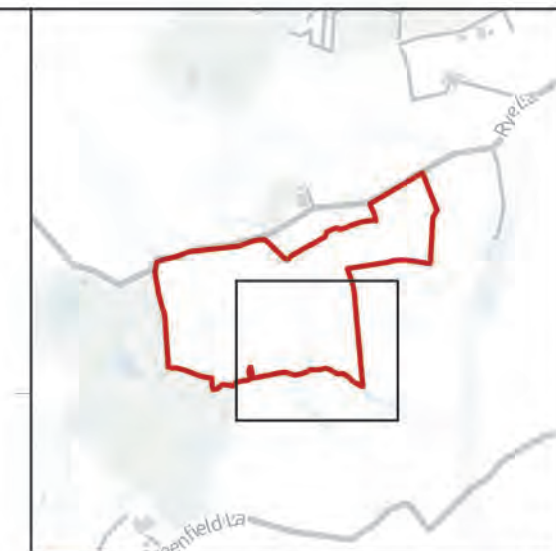
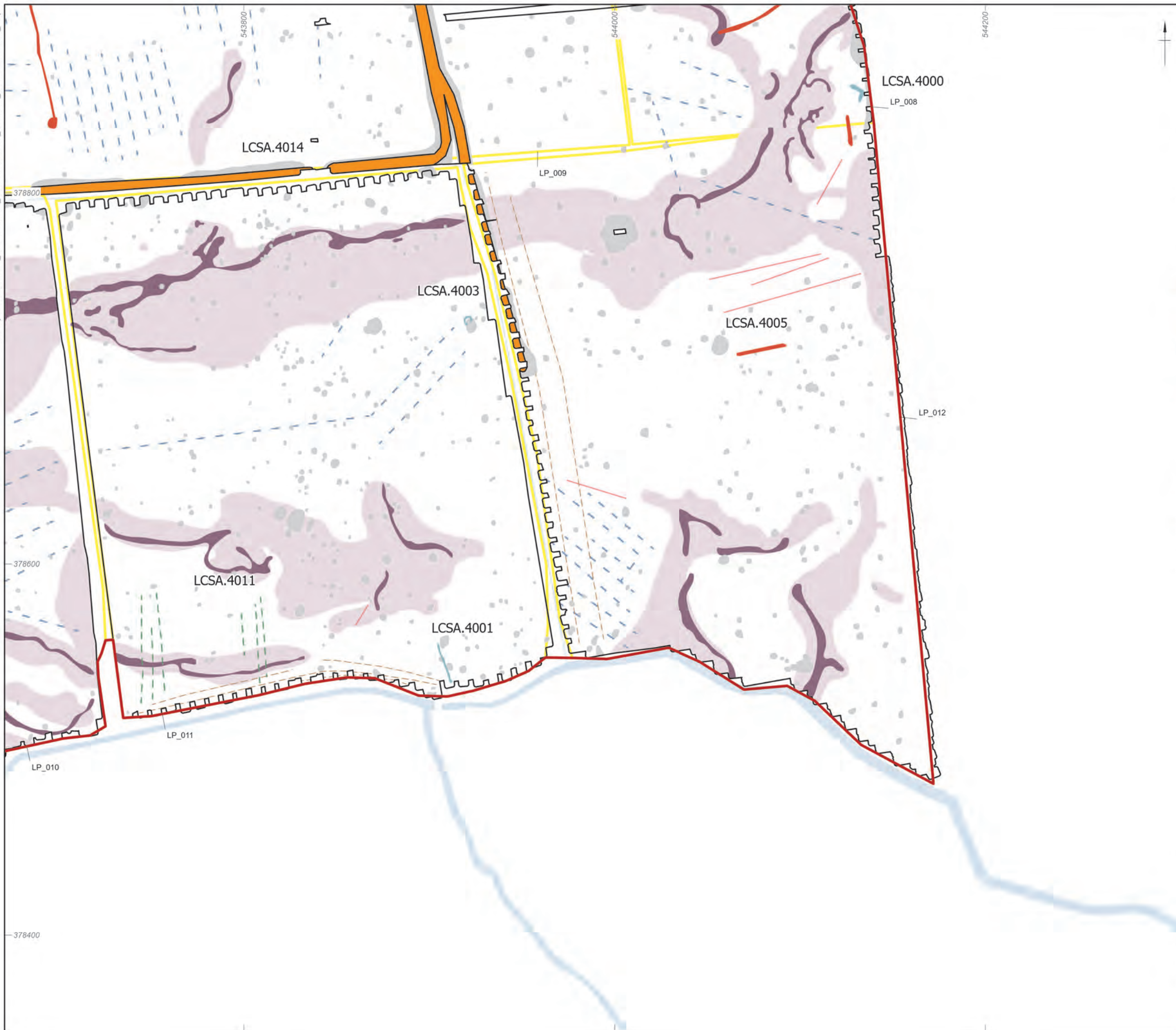


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Figure 10: Detailed gradiometer survey results: greyscale plot (LP_011 and LP_012)

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- Site boundary
- Detailed survey extent
- Land parcel
- Possible archaeology
- Historic cultivation
- Former field boundary
- Agricultural feature
- Drain
- Trend
- Modern service
- Ferrous
- Geomorphology
- Geology
- Anomaly Number



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Figure 11: Detailed gradiometer survey results: interpretation (LP_011 and LP_012)		



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Grimsby to Walpole

Lincolnshire Connection Substation B

Gradiometer Survey Report

Document Ref.: 295220.06
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National grid reference 547835 377052 (TF 47835 77052)
Museum Accession Code 2025.51
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Summary

A gradiometer survey has been conducted over land of Sutton Road, near Alford, Lincolnshire (centred on NGR 547835 377052). The project was commissioned by ARUP/AECOM with the aim of establishing the presence, or otherwise, and nature of detectable archaeological features in support of the Grimsby to Walpole Project, part of National Grid's Great Grid upgrade and will play an important part in allowing the UK to decarbonise its energy network.

The proposal by National Grid is to reinforce the transmission network with a new 400 kilovolt (kV) electricity transmission line over a distance of approximately 140 km starting from a new 400 kV substation west of the town of Grimsby in North East Lincolnshire and ending at a new 400 kV substation west of the village of Walpole St Andrew and north of the town of Wisbech, in King's Lynn and West Norfolk District. The Project also includes the construction two new 400 kV Lincolnshire Connection Substations located south-west of Mablethorpe in East Lindsey, up to two new 400 kV substations in the vicinity of the Spalding Tee-Point in South Holland District and the decommissioning (in full or part) of the existing Grimsby West Substation.

The site comprises arable and livestock fields located 900 m east of the village of Bilsby and 2.6 km east of Alford in the county of Lincolnshire, covering an area of 30.6 ha. The geophysical survey was undertaken between 27 – 28 August 2024. The survey has demonstrated the presence of a number of anomalies of potential archaeological interest in the north field.

The anomalies identified as being of archaeological origin are primarily pit- and ditch-like features. Features identified in the eastern extent are likely to represent Iron Age to Romano-British settlements and areas of archaeology with further anomalies detected in the centre of the survey area possibly representing medieval or former agricultural activity.

Additionally, this archaeological investigation has detected anomalies related to former field boundaries as well as geomorphological features and evidence of agricultural practices such as drainage and ploughing regimes. Areas of ferrous material have also been detected across the survey area and around extant field boundaries.

Acknowledgements

Wessex Archaeology would like to thank ARUP/AECOM for commissioning the geophysical survey. The assistance of Hannah Blacknell and Iain Williamson is gratefully acknowledged in this regard.

The fieldwork was undertaken by Jack Trueman, Matthew Lester, Jo Instone-Brewer and Manasi Patil. Alastair Trace processed and interpreted the geophysical data. Whilst Cameron Lane prepared the illustrations and wrote the final report. The geophysical work was quality controlled by Alastair Trace. The project was managed on behalf of Wessex Archaeology by Patricia Edwards.



Grimsby to Walpole Lincolnshire Connection Substation B

Gradiometer Survey Report

1 INTRODUCTION

1.1 Project background

1.1.1 Wessex Archaeology was commissioned by ARUP/AECOM to carry out a geophysical survey across several sites in Lincolnshire. The current site comprises Lincolnshire Connection Substation B (centred on NGR 547835 377052) (**Figure 1**). The survey forms part of an ongoing programme of archaeological works being undertaken in support of the Grimsby to Walpole Project, part of National Grid's Great Grid upgrade and will play an important part in allowing the UK to decarbonise its energy network.

1.1.2 The proposal by National Grid is to reinforce the transmission network with a new 400 kilovolt (kV) electricity transmission line over a distance of approximately 140 km starting from a new 400 kV substation west of the town of Grimsby in North East Lincolnshire and ending at a new 400 kV substation west of the village of Walpole St Andrew and north of the town of Wisbech, in King's Lynn and West Norfolk District. The Project also includes the construction two new 400 kV Lincolnshire Connection Substations located south-west of Mablethorpe in East Lindsey, up to two new 400 kV substations in the vicinity of the Spalding Tee-Point in South Holland District and the decommissioning (in full or part) of the existing Grimsby West Substation.

1.2 Scope of document

1.2.1 This report presents a brief description of the methodology followed by the survey results and the archaeological interpretation of the geophysical data. In format and content, it conforms to current best practice, as well as to the guidance outlined in *Management of Research Projects in the Historic Environment* (MoRPHE, Historic England 2015), the Chartered Institute for Archaeologists' (CIfA) *Standards and guidance for archaeological geophysical survey* (CIfA 2020), Europae Archaeologiae Consilium recommendations (Schmidt *et al.* 2015) and Historic England *Thesauri* (English Heritage 2014).

1.3 The site

1.3.1 The site is located 900 m east of the village of Bilsby and 2.6 km east of Alford in the county of Lincolnshire.

1.3.2 The survey area comprises 30.6 ha of agricultural land, currently utilised for arable and animal housing. The site is bounded by Sutton Road to the north-west and agricultural land to the north-east, east, south, and west.

1.3.3 The site is on a slight slope from 7 m above Ordnance Datum (aOD) at the southern edge to 3 m aOD at the northern edge.

1.3.4 The solid geology comprises Chalk of the Welton Chalk Formation, with overlying superficial geological deposits of Diamicton from the Devensian Till Formation (BGS 2024).



- 1.3.5 The soils underlying the northern site are likely to consist of typical stagnogley soils of the 711u (Holderness) association (SSEW SE Sheet 4 1983). Soils derived from such geological parent material have been shown to produce magnetic contrasts acceptable for the detection of archaeological remains through magnetometer survey.

2 ARCHAEOLOGICAL BACKGROUND

2.1 Introduction

- 2.1.1 The following historical and archaeological background has been compiled using publicly available online resources, combined with the results of Wessex Archaeology's previous investigations in the area, and a search of the Lincolnshire Historic Environment Record (HER). It considers the recorded historic environment resource within a 500 m of Lincolnshire Connection Substation B (LCSB). The following archaeological background is not exhaustive but discusses known heritage assets relevant to the interpretation of the geophysical survey data (Lincolnshire Council Historic Environment Record search report dated 16/05/2024).

2.2 Summary of the archaeological resource

Archaeological and historical context

- 2.2.1 There is a single designated heritage asset recorded 500 m to the south-west of the proposed LCSB substation comprising the grade II listed Moat Farm (NHLE 1360008).
- 2.2.2 The Lincolnshire HER recorded several known non-designated assets within 500 m of the proposed substation.
- 2.2.3 The earliest evidence for occupation activity comprises several findspots of Roman pottery from fields surrounding the site. This includes a Roman greyware pottery scatter located 350 m south-east and sherds of Roman Samian Ware 475 m south-west of the site.
- 2.2.4 There is a strong medieval presence in the area with the site of the Bilsby deserted medieval village (DMV) and associated moated homestead known as 'Moat House'. Evidence for former medieval open fields to the east of the village survive as ridge and furrow earthworks, located 500 m south-east of the site and a later medieval earthwork field system recorded 170 m north-east.
- 2.2.5 A number of post-medieval farmsteads provide evidence for the enclosure of the medieval open field and the establishment of isolated farmsteads across the wider landscape. The Sutton on Sea to Alford Tramway is recorded abutting the northern boundary of the site along the alignment of Sutton Road.
- 2.2.6 The 1839 tithe map depicts the site to be located within areas of agricultural fields, and this is reflected within the first edition Ordnance Survey (OS) 1888 map, the 1907 OS map, and the 1951 OS map. Several of the post-medieval field boundaries appear to have been removed to allow for larger agricultural fields.
- 2.2.7 Finally, the Sutton on Sea to Alford Tramway is recorded as adjoining the northern boundary of the site along the alignment of where Sutton Road now exists.

2.3 Previous Investigations

- 2.3.1 An archaeological excavation was undertaken by Wessex Archaeology (2023) between Sandilands and Haugh, 800 m north of this site. Extensive late Roman



- 2.3.2 archaeological remains were recorded in the form of ditched enclosures from which a substantial assemblage of artefacts was recovered.

3 METHODOLOGY

3.1 Introduction

- 3.1.1 The geophysical survey was undertaken by Wessex Archaeology's in-house geophysics team between 27 – 28 August 2024. Field conditions at the time of the survey were conducive of a good survey throughout the period of survey. An overall coverage of 28.9 ha was achieved, with LP_013 descope on 23 September 2024 and hedgerows preventing survey around land parcel extents.

- 3.1.2 The methods and standards employed throughout the geophysical survey conform to that set out in the Written Scheme of Investigation (WSI) (Wessex Archaeology 2024), as well as to current best practice, and guidance outlined by the Chartered Institute for Archaeologists' (CIfA 2020) and European Archaeologiae Consilium (Schmidt *et al.* 2015).

3.2 Project aims

- 3.2.1 The aims of the survey comprise the following:

- To determine, as far as is reasonably possible, the nature of the detectable archaeological resource within a specified area using appropriate methods and practices; and
- To inform either the scope and nature of any further archaeological work that may be required; or the formation of a mitigation strategy (to offset the impact of the development on the archaeological resource); or a management strategy.

3.3 Project objectives

- 3.3.1 In order to achieve the above aims, the objectives of the geophysical survey were:

- To conduct a geophysical survey covering as much of the specified area as possible, allowing for on-site obstructions;
- To clarify the presence/absence of anomalies of archaeological potential; and
- Where possible, to determine the general nature of any anomalies of archaeological potential.

3.4 Fieldwork methodology

- 3.4.1 The cart-based gradiometer system used a Carlson BRX-7 RTK GNSS instrument, which receives corrections from a network of reference stations operated by the OS. Such instruments allow positions to be determined with a precision of 0.02 m in real-time and therefore exceeds Europae Archaeologiae Consilium recommendations (Schmidt *et al.* 2015).

- 3.4.2 The gradiometer survey was conducted using hand pushed non-magnetic cart fitted with four, Sensys FGM650/03 gradiometers mounted at 1 m intervals with an effective sensitivity of 0.03 nT over a ± 100 nT range.

- 3.4.3 Data was be collected at 0.25 m intervals along transects spaced 1 m apart, in accordance with Europae Archaeologiae Consilium recommendations (Schmidt *et al.* 2015). Data was collected in the zigzag method.

3.5 Data processing

- 3.5.1 Where necessary, data from the survey was subject to minimal correction processes. The precise steps typically comprise a zero-mean traverse function (± 5 nT thresholds) to correct for variations in the calibration between the SenSYS sensors used and a de-step function to account for variations in traverse position due to varying ground cover and topography. The data was processed using in-house software which allows greyscale and trace plots to be produced. Interpretation was conducted within the latest version of ESRI ArcGIS Pro. All efforts were made during data collection to limit required processing and no further filtering was applied.
- 3.5.2 Further details of the geophysical and survey equipment, methods and processing are described in **Appendix 1**.

4 GEOPHYSICAL SURVEY RESULTS AND INTERPRETATION

4.1 Introduction

- 4.1.1 The detailed gradiometer survey has identified magnetic anomalies across the site. Results are presented as a series of greyscale plots and archaeological interpretations at a scale of 1:5000 (**Fig. 2 and 3**) and 1:2000 (**Fig. 4 – 7**). The data are displayed at -2 nT (white) to +3 nT (black) for the greyscale image.
- 4.1.2 The interpretation of the datasets highlights the presence of potential archaeological anomalies, ferrous responses, burnt or fired objects, and magnetic trends (**Figure 3**). Full definitions of the interpretation terms used in this report are provided in **Appendix 2**.
- 4.1.3 Numerous ferrous anomalies are visible throughout the dataset. These are presumed to be modern in provenance and are not referred to, unless considered relevant to the archaeological interpretation.
- 4.1.4 It should be noted that small, weakly magnetised features may produce responses that are below the detection threshold of magnetometers. It may therefore be the case that more archaeological features may be present than have been identified through geophysical survey.
- 4.1.5 Gradiometer survey may not detect all services present on site. This report and accompanying illustrations should not be used as the sole source for service locations and appropriate equipment (e.g., CAT and Genny) should be used to confirm the location of buried services before any trenches are opened on site.

4.2 Gradiometer survey results and interpretation

- 4.2.1 The geophysical survey has identified a number of features that are likely to be associated with archaeological remains. These are predominantly located in the north-eastern corner of the site and are associated with rectilinear and sub-circular enclosures arranged in a linear trend. A series of linear anomalies related to former field boundaries have been identified in the of the survey area with drainage arranged in herring-bone patterns to the north-west and south. Across the survey extent, a series of sinuous and amorphous anomalies have been identified and are likely associated with geomorphological origins.
- 4.2.2 A series of strong positive anomalies along with weaker extents have been identified in the north-eastern corner of LP_016 at **LCSB.4000 (Figure 7)**. These anomalies are arranged in a linear fashion, 280 m north-west to south-east and 50 m north-east to south-west. The anomalies are indicative of 1 – 3 m wide ditch features and appear to form a series of partial rectilinear enclosures up to 30 m in both length and width. The anomalies also display possible annular enclosures up to 26 m in diameter. Alongside the enclosures, a series of smaller amorphous anomalies up to 4 m by 8 m form pit like features. These anomalies are

likely related to Iron Age to Romano-British settlement as Roman pottery scatters have been identified in fields surrounding the site. However, they may also be related to the deserted medieval village 500 south-east of the site as the anomalies run in parallel to the former field boundaries **LCSB.4008** as well as anomalies **LCSB.4004** and **LCSB.4005**.

- 4.2.3 A series of strong and weak magnetic variation have been identified immediately north of **LCSB.4000** at **LCSB.4001** and **LCSB.4002** (**Figure 7**). These cover an area 38 m north-east to south-west by 42 m north-west to south-east and 45 m by 28 m respectively. These anomalies do not display any patterns or shared orientation and are likely related to habitation of the region either through human waste or animal husbandry, possibly associated with **LCSB.4000** to the south. They may also be related to geological or geomorphological activities or variations within the underlying sediment and bedrock.
- 4.2.4 In the east of LP_016, a series of weak linear anomalies have been identified perpendicular to each other at **LCSB.4003** (**Figure 7**). These anomalies display both positive and negative magnetic properties with a width between 1 and 2 m, covering an area 70 m north-east to south-west by 40m north-west to south-east. These anomalies are likely ditches but given the negative magnetic properties they could equally be related to an embankment or build-up of soils. They likely combine to form the remains of a partial enclosure of unknown date, with a possible internal enclosed areas identified in the north. Although it is possible these anomalies are archaeological in origin, they could also be related to historical agricultural practices that have been carried out within the survey area or related to unmapped former field boundaries or modern drainage.
- 4.2.5 In the north and east of the area, several weak linear anomalies have been detected at **LCSB.4004 – 4006** (**Figure 7**). These anomalies have a width between 1 – 3 m and reach up to 190 m in length. They are orientated north-west to south-east with the northern extent of **LCSB.4004** extending 45 m to the north. It is likely that these anomalies are ditches of an unknown origin. The ditches are parallel and in close proximity to mapped former field boundaries (**LCSB.4008**) and may be related to historical field extents not recorded on first edition mapping. However, due to no records in historical OS maps, similar orientation and close proximity of nearby archaeology, these ditches could equally be related to the Iron Age to Romano-British activity in the region.
- 4.2.6 An isolated weak, positive anomaly has been detected in the south-western corner of LP_016 at **LCSB.4007** (**Figure 5**). This anomaly is 2 m wide with a length of 60 m. This anomaly may be a ditched feature related to archaeological activity within the land parcel but may equally be related to unmapped former field boundaries or modern agricultural practices, such as drainage or an enhanced ploughing trend.
- 4.2.7 Across LP_016, weak, positive linear anomalies have been detected at **LCSB.4008 – 4010** (**Figure 7**). These display widths between 1 – 2 m, lengths up to 190 m, and are orientated both north-west to south-east and north-east to south-west. These anomalies correspond with former field boundaries identified on 6-inch historical OS mapping 1888 – 1913.
- 4.2.8 Several linear anomalies displaying a weak positive signal are detected across the survey area and appear either parallel to one another or in a herringbone pattern. These are likely related to modern agricultural practices such as drainage features or plough lines.
- 4.2.9 A series of strong and weak positive anomalies have been detected across the survey area. These appear as sinuous or amorphous anomalies that reach up to 90 m long and 2 m wide. The anomalies detected are likely related to geomorphological activity within the survey extent, either due to variations in local water channels or flooding events that have affected the region related to possible paleochannels.



- 4.2.10 Several dipolar, strong and weak anomalies have been detected across the survey area and around the survey extents. These may relate to ferrous material and debris or may be attributed to extant field boundaries.
- 4.2.11 Weak linear and curvilinear trends have been identified across the survey area. These do not display any significant morphology or signal that allow for further classification.

5 DISCUSSION

- 5.1.1 The gradiometer survey has been successful in detecting anomalies of archaeological origin in the eastern corner of the survey area. In addition to these, anomalies interpreted as possible archaeology, former field boundaries, geomorphological and agricultural features have also been identified.
- 5.1.2 The archaeological anomalies in the field are likely related to ditches from Iron Age to Romano-British settlement. This interpretation has been assigned, due to the positive signals and variations of rectilinear and annular enclosures along with weak anomalies likely related to early settlement. This also correlates with a Roman pottery scatter, identified in fields surrounding the site. They may also relate to medieval activity due to close proximity of parallel linear anomalies which have been attributed to former field boundaries.
- 5.1.3 Anomalies of possible archaeological origin have been detected across the site. These may relate to isolated enclosures of Romano-British or Iron Age settlement but may equally be unmapped variations of former field boundaries. There is also the possibility that the anomalies relate to medieval activity within the region, with the Grade II listed Moat farm to the south-west and recorded presence of Bilsby DMV.
- 5.1.4 A series of former field boundaries have likely been removed to allow for larger scale agricultural practices. In addition, anomalies likely of agricultural origin have been detected and likely relate to drainage and ploughing.
- 5.1.5 Anomalies related to the underlying geological bedrock has likely been detected. These are in the form of chalk deposits or may also be related to natural soil variations.

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Historic England. 2023. *Aerial Archaeology Mapping Explorer*. <https://historicengland.maps.arcgis.com/apps/webappviewer/index.html?id=d45dabecef5541f18255e12e5cd5f85a&mobileBreakPoint=300> (accessed December 2024).

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Lincolnshire County Council HER <https://www.lincolnshire.gov.uk/historic-environment/historic-environment-record> (Accessed December 2024)

National Library of Scotland (NLS) <https://maps.nls.uk/geo/explore/> (accessed December 2024)



APPENDICES

Appendix 1 Survey equipment and data processing

Survey methods and equipment

CART-BASED GRADIOMETER SURVEY

The magnetic data for this project were acquired using a non-magnetic cart fitted with four SenSys FGM650/3 magnetic gradiometers. The instrument has four sensor assemblies fixed horizontally 1 m apart allowing four traverses to be recorded simultaneously. Each sensor contains two fluxgate magnetometers arranged vertically with a 0.6 m separation and measures the difference between the vertical components of the total magnetic field within each sensor array. This arrangement of magnetometers suppresses any diurnal or low frequency effects.

The gradiometers have an effective resolution of $\pm 8 \mu\text{T}$ over $\pm 1000 \text{ nT}$ range. All of the data are then relayed to a CS35 tablet, running the MONMX program, which is used to record the survey data from the array of FGM650/3 probes at a rate of 20 Hz. The program also receives measurements from a GPS system, which is fixed to the cart at a measured distance from the sensors, providing real time locational data for each data point.

The cart-based system relies upon accurate GPS location data which is collected using a Leica Captivate system with a rover and base station. This receives corrections from a network of reference stations operated by the Ordnance Survey and Leica Geosystems, allowing positions to be determined with a precision of 0.02m in real-time and therefore exceed the level of accuracy recommended by European Archaeologiae Consilium recommendations (Schmidt *et al.* 2015) for geophysical surveys.

Data may be collected with a higher sample density where complex archaeological anomalies are encountered, to aid the detection and characterisation of small and ephemeral features. Data may be collected at up to 0.01 m intervals along traverses spaced up to 0.25m apart.

Post-processing

The magnetic data collected during the survey is downloaded from the system for processing and analysis using both commercial and in-house software. This software allows for both the data and the images to be processed to enhance the results for analysis; however, it should be noted that minimal data processing is conducted so as not to distort the anomalies.

The cart-based system generally requires a lesser amount of post-processing than the handheld Bartington Grad 601-2 fluxgate gradiometer instrument. This is largely because mounting the gradiometers on the cart reduces the occurrence of operator error, caused by inconsistent walking speeds and deviation in traverse position due to varying ground cover and topography.

Typical data and image processing steps may include:

- Destripe – Applying a smooth function to remove differences caused by directional effects inherent in the magnetometer;
- Despike – Filtering isolated data points that exceed the mean by a specified amount to reduce the appearance of dominant anomalous readings (generally only used for earth resistance data)

Typical displays of the data used during processing and analysis:



- Greyscale – Presents the data in plan view using a greyscale to indicate the relative strength of the signal at each measurement point. These plots can be produced in colour to highlight certain features but generally greyscale plots are used during analysis of the data.
- XY Plot – Presents the data as a trace or graph line for each traverse. Each traverse is displaced down the image to produce a stacked profile effect. This type of image is useful as it shows the full range of individual anomalies. (XY plots can be made available upon request)

Appendix 2 Geophysical interpretation

The interpretation methodology used by Wessex Archaeology separates the anomalies into four main categories: archaeological, modern, agricultural, and uncertain origin/geological.

The archaeological category is used for features when the form, nature and pattern of the anomaly are indicative of archaeological material. Further sources of information such as aerial photographs may also have been incorporated in providing the final interpretation. This category is further sub-divided into three groups, implying a decreasing level of confidence:

- Archaeology – used when there is a clear geophysical response and anthropogenic pattern.
- Possible archaeology – used for features which give a response, but which form no discernible pattern or trend.

The modern category is used for anomalies that are presumed to be relatively modern in date:

- Ferrous – used for responses caused by ferrous material. These anomalies are likely to be of modern origin.
- Modern service – used for responses considered relating to cables and pipes; most are composed of ferrous/ceramic material although services made from non-magnetic material can sometimes be observed.

The agricultural category is used for the following:

- Former field boundaries – used for ditch sections that correspond to the position of boundaries marked on earlier mapping.
- Ridge and furrow – used for broad and diffuse linear anomalies that are considered to indicate areas of former ridge and furrow.
- Ploughing – used for well-defined narrow linear responses, usually aligned parallel to existing field boundaries.
- Drainage – used to define the course of ceramic field drains that are visible in the data as a series of repeating bipolar (black and white) responses.

The uncertain origin/geological category is used for features when the form, nature and pattern of the anomaly are not sufficient to warrant a classification as an archaeological feature. This category is further sub-divided into:

- Increased magnetic response – used for areas dominated by indistinct anomalies which may have some archaeological potential.
- Trend – used for low amplitude or indistinct linear anomalies.
- Superficial geology – used for diffuse edged spreads considered to relate to shallow geological deposits. They can be distinguished as areas of positive, negative, or broad bipolar (positive and negative) anomalies.



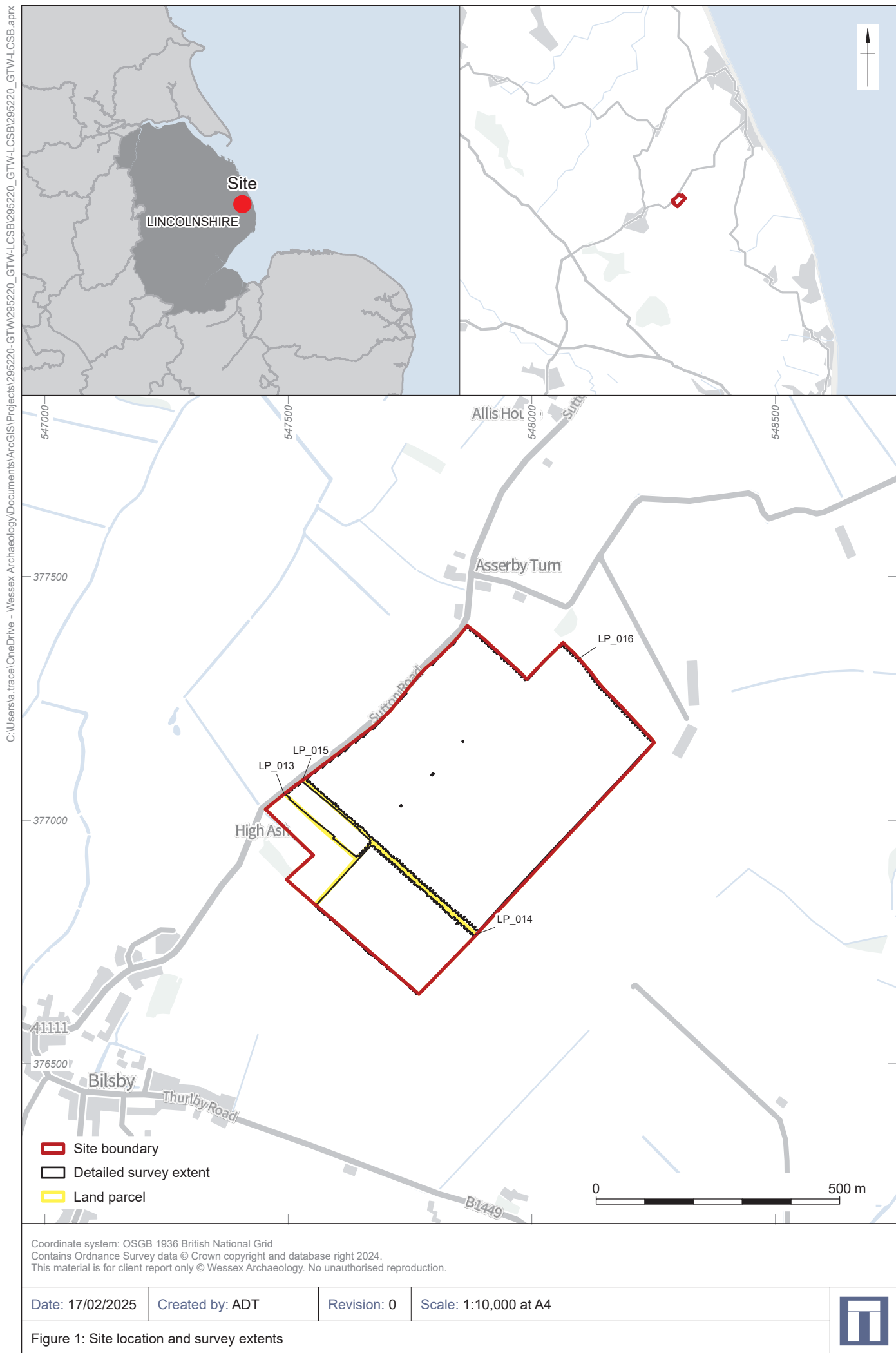
Appendix 3 OASIS form

Project Details:

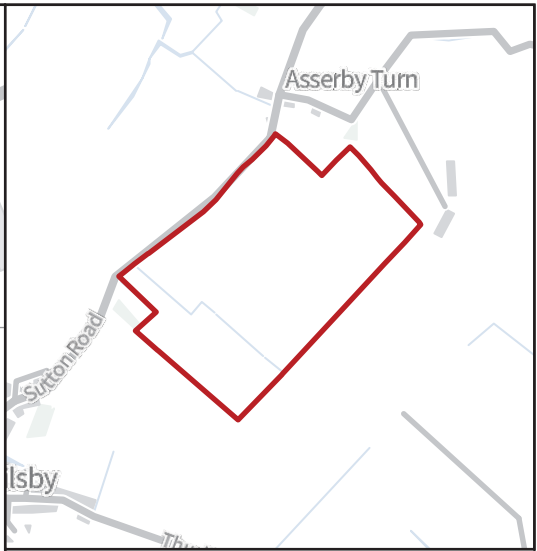
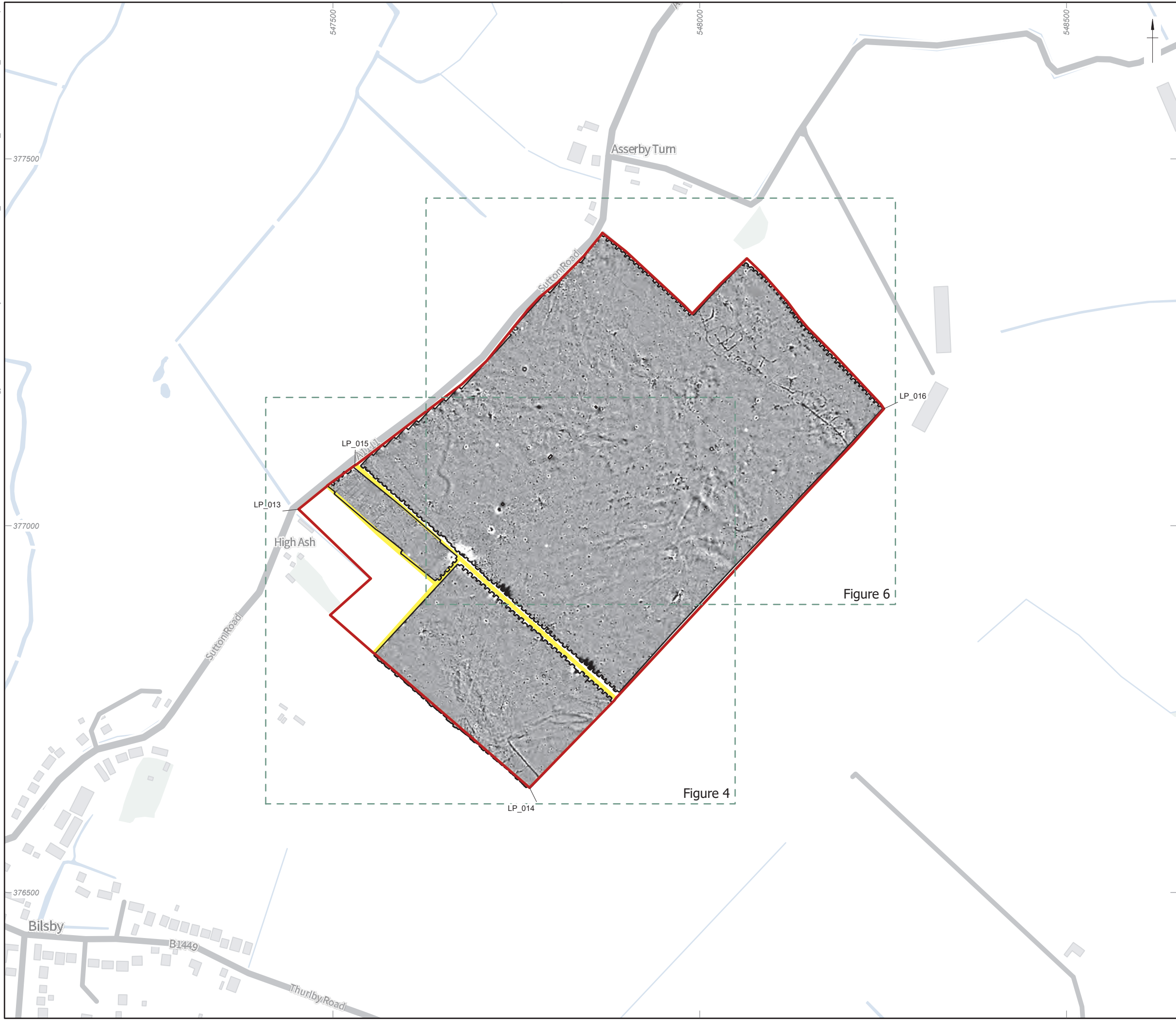
OASIS Summary for wessexar1-532091

OASIS ID (UID)	wessexar1-532091
Project Name	Magnetometry Survey at Grimsby to Walpole: Lincolnshire Connection Substation B
Sitename	Grimsby to Walpole: Lincolnshire Connection Substation B
Sitecode	295220
Project Identifier(s)	Geophysical Survey at Lincolnshire Connection Substation B
Activity type	Magnetometry Survey, MAGNETOMETRY SURVEY
Planning Id	
Reason For Investigation	Planning: Pre application
Organisation Responsible for work	Wessex Archaeology
Project Dates	27-Aug-2024 - 28-Aug-2024
Location	Grimsby to Walpole: Lincolnshire Connection Substation B NGR : TF 47835 77052 LL : 53.26985670957973, 0.215341171928937 12 Fig : 547835,377052
Administrative Areas	Country : England County/Local Authority : Lincolnshire Local Authority District : East Lindsey Parish : Bilsby
Project Methodology	The geophysical survey was undertaken by Wessex Archaeology's in-house geophysics team between 27 - 28 August 2024. Field conditions at the time of the survey were conducive of a good survey throughout the period of survey. An overall coverage of 28.9 ha was achieved, with LP_013 descoped on 23 September 2024 and hedgerows preventing survey around land parcel extents. The methods and standards employed throughout the geophysical survey conform to that set out in the Written Scheme of Investigation (WSI) (Wessex Archaeology 2024), as well as to current best practice, and guidance outlined by the Chartered Institute for Archaeologists (CIfA 2020) and European Archaeologiae Consilium (Schmidt et al. 2015).

Project Results	The gradiometer survey has been successful in detecting anomalies of archaeological origin in the eastern corner of the survey area. In addition to these, anomalies interpreted as possible archaeology, former field boundaries, geomorphological and agricultural features have also been identified. The archaeological anomalies in the field are likely related to ditches from Iron Age to Romano-British settlement. This interpretation has been assigned, due to the positive signals and variations of rectilinear and annular enclosures along with weak anomalies likely related to early settlement. This also correlates with Roman pottery scatter, identified in fields surrounding the site. They may also relate to medieval activity due to close proximity of parallel linear anomalies which have been attributed to former field boundaries. Anomalies of possible archaeological origin have been detected across the site. These may relate to isolated enclosures of Romano-British or Iron Age settlement but may equally be unmapped variations of former field boundaries. There is also the possibility that the anomalies relate to medieval activity within the region, with the Grade II listed Moat farm to the south-west and recorded presence of Bilsby DMV. A series of former field boundaries have likely been removed to allow for larger scale agricultural practices. In addition, anomalies likely of agricultural origin have been detected and likely relate to drainage and ploughing. Anomalies related to the underlying geological bedrock has likely been detected. These are in the form of chalk deposits or may also be related to natural soil variations.
Keywords	
Funder	Private or public corporation Arup,Private individual
HER	Lincolnshire HER - unRev - STANDARD
Person Responsible for work	Patricia Edwards
HER Identifiers	
Archives	



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- Site boundary
- Detailed survey extent
- Land parcel

Figure 6

Figure 4

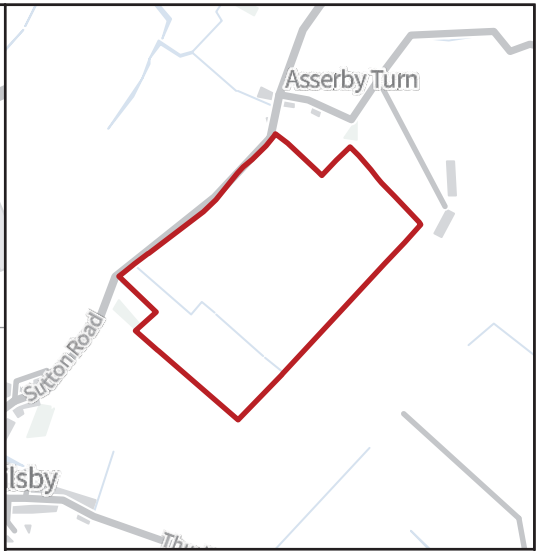
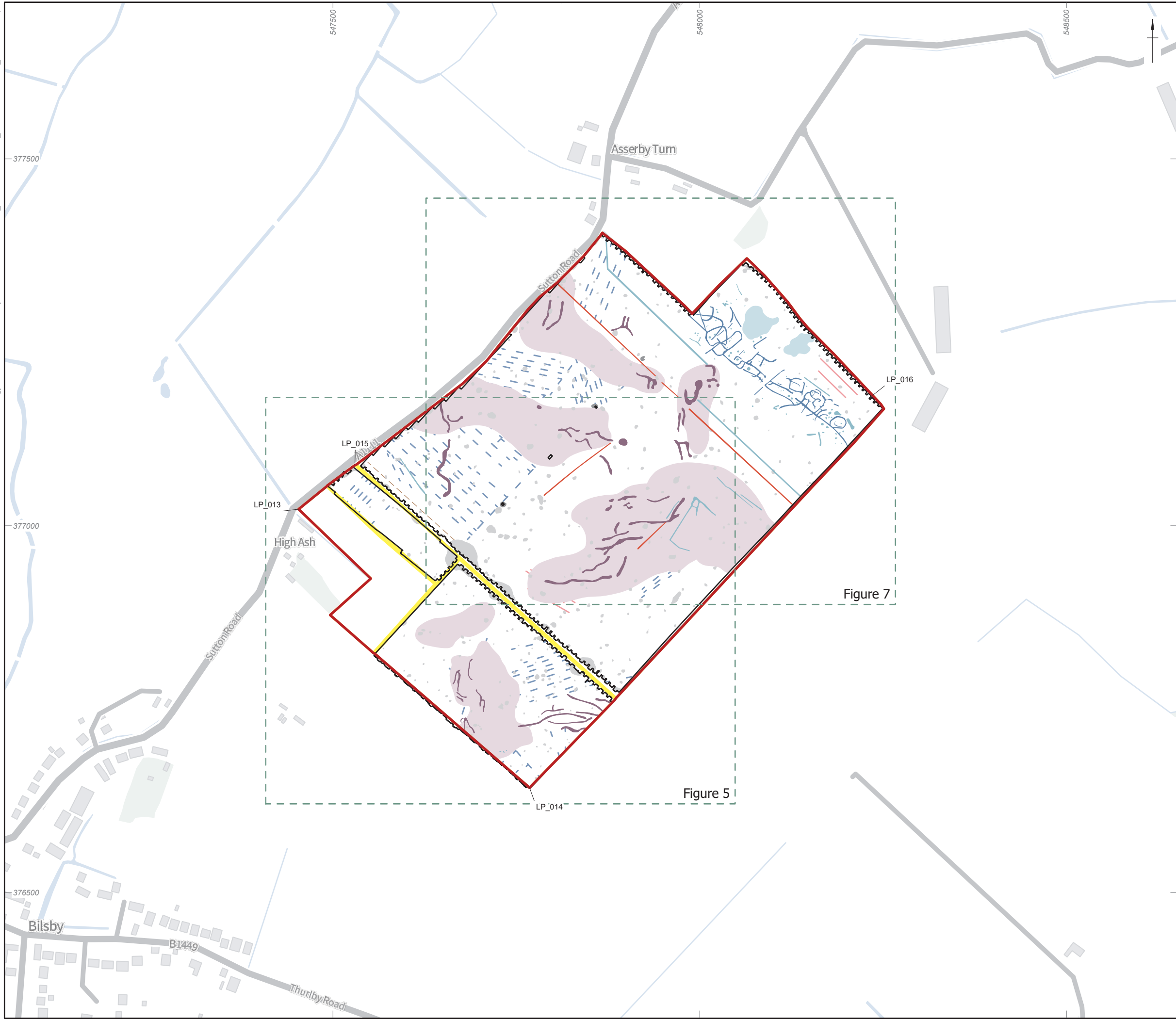


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Figure 2: Detailed gradiometer survey results: overall greyscale plots (-2nT to 3nT)

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- Site boundary
- Detailed survey extent
- Land parcel
- Archaeology
- Possible archaeology
- Possible archaeology - desposit
- Former field boundary
- Geology
- Geomorphology
- Increased response
- Ferrous
- Agricultural feature
- Drain
- Trend

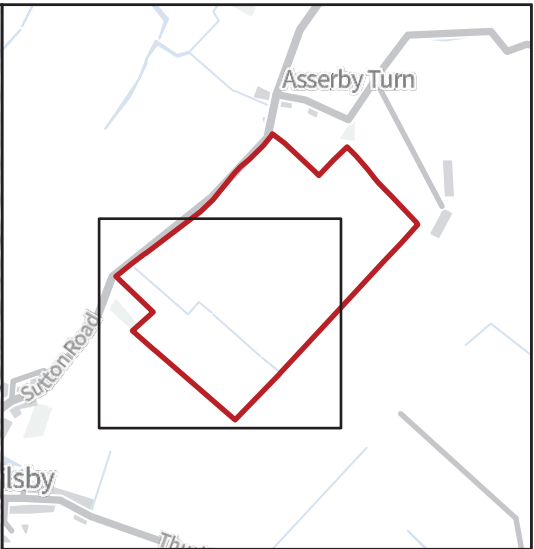
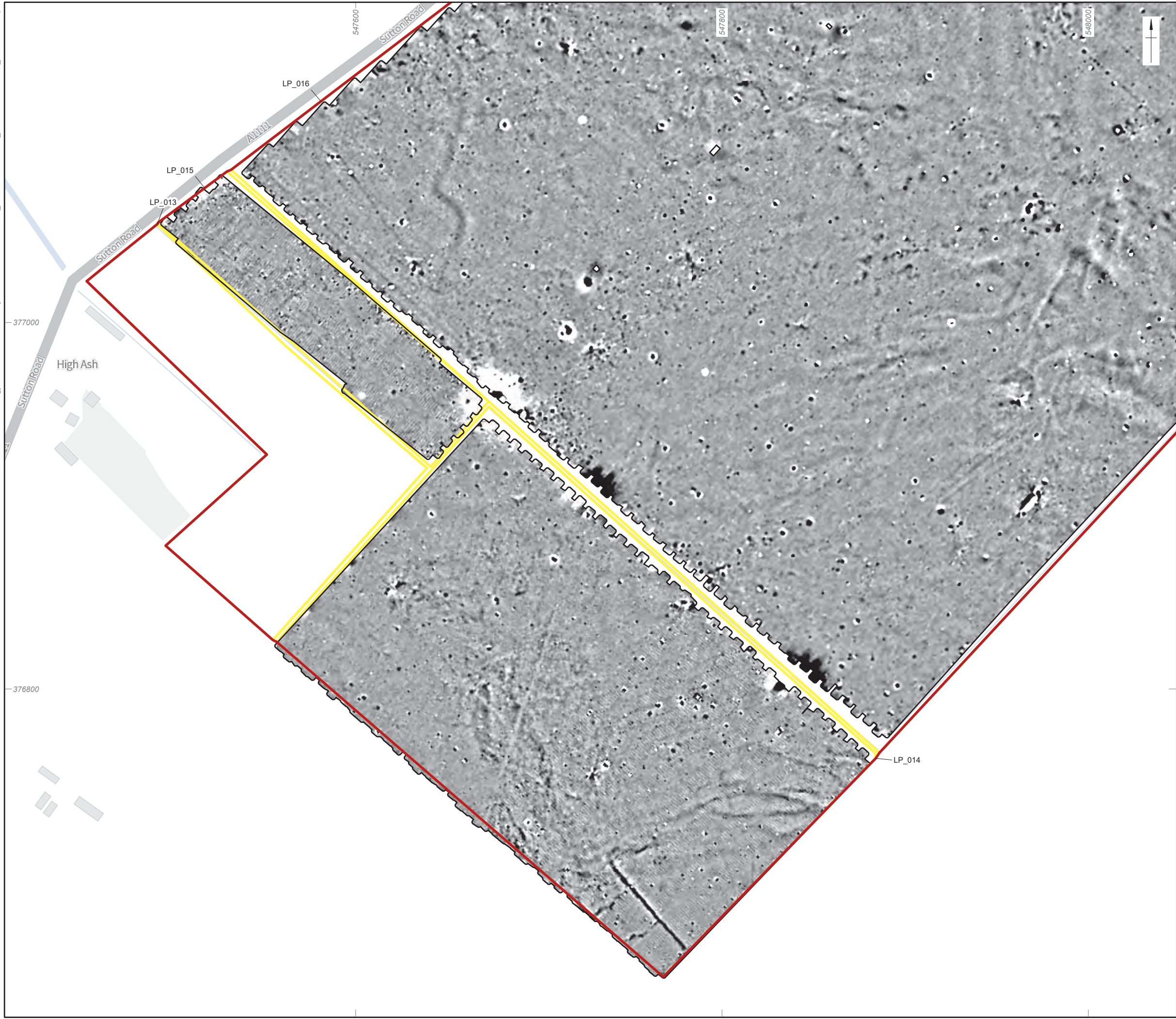
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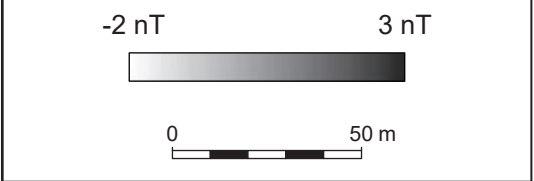
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Figure 3: Detailed gradiometer survey results: overall interpretation

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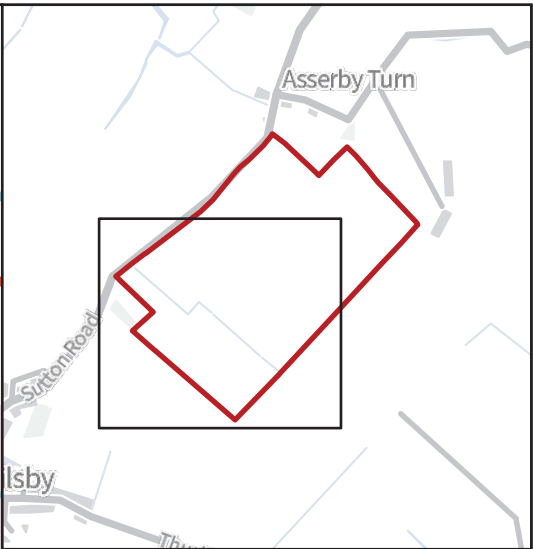
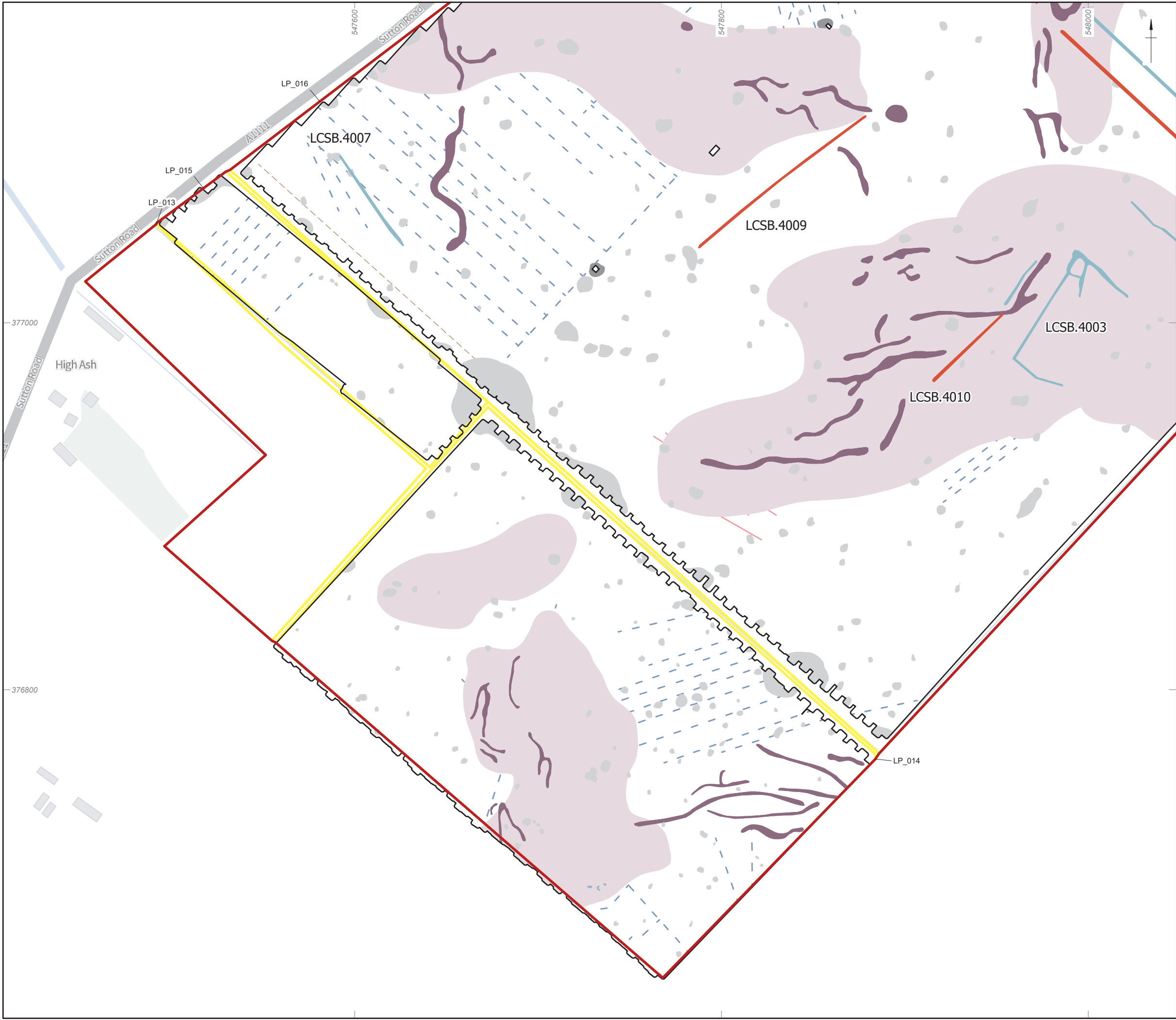
- Site boundary
- Detailed survey extent
- Land parcel



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Figure 4: Detailed gradiometer survey results: greyscale plot (LP_013 - LP_016)		

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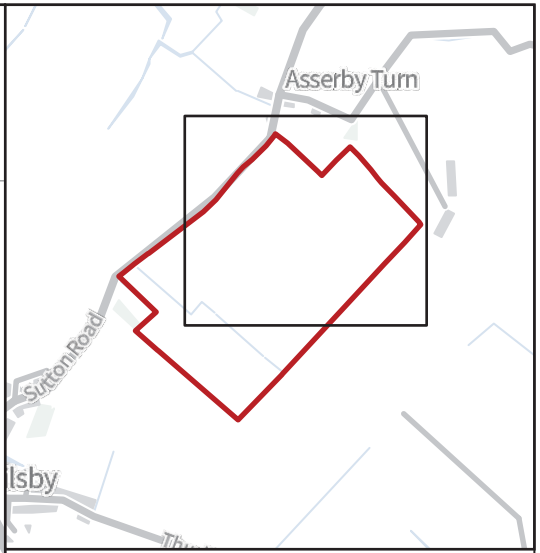
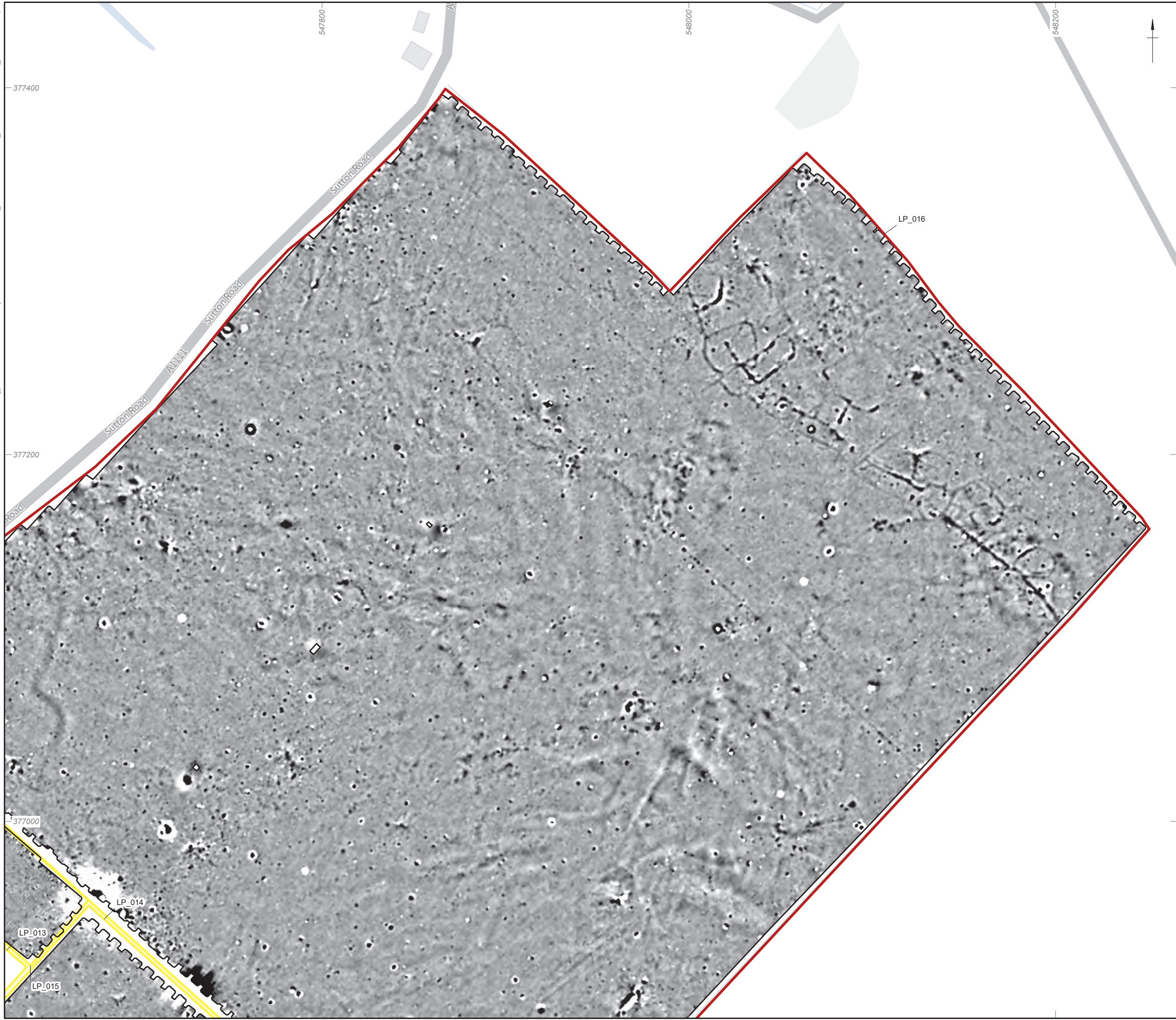
- Site boundary
- Detailed survey extent
- Land parcel
- Possible archaeology
- Former field boundary
- Geology
- Geomorphology
- Increased response
- Ferrous
- Agricultural feature
- Drain
- Trend

0 50 m

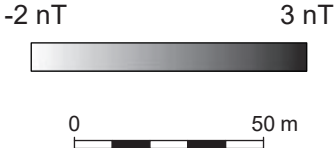
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Figure 5: Detailed gradiometer survey results: interpretation (LP_013 - LP_016)		

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- Site boundary
- Detailed survey extent
- Land parcel

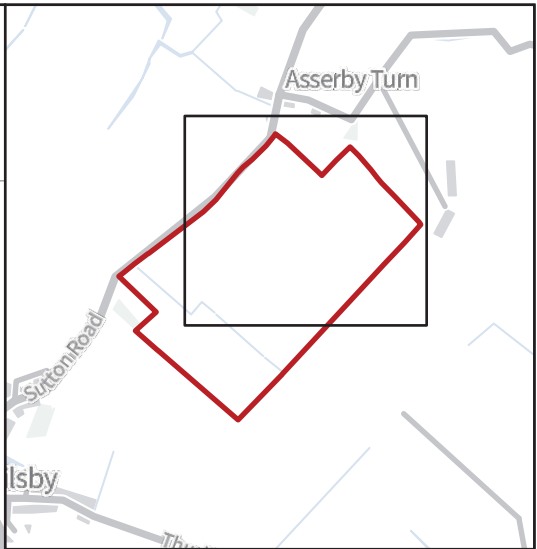
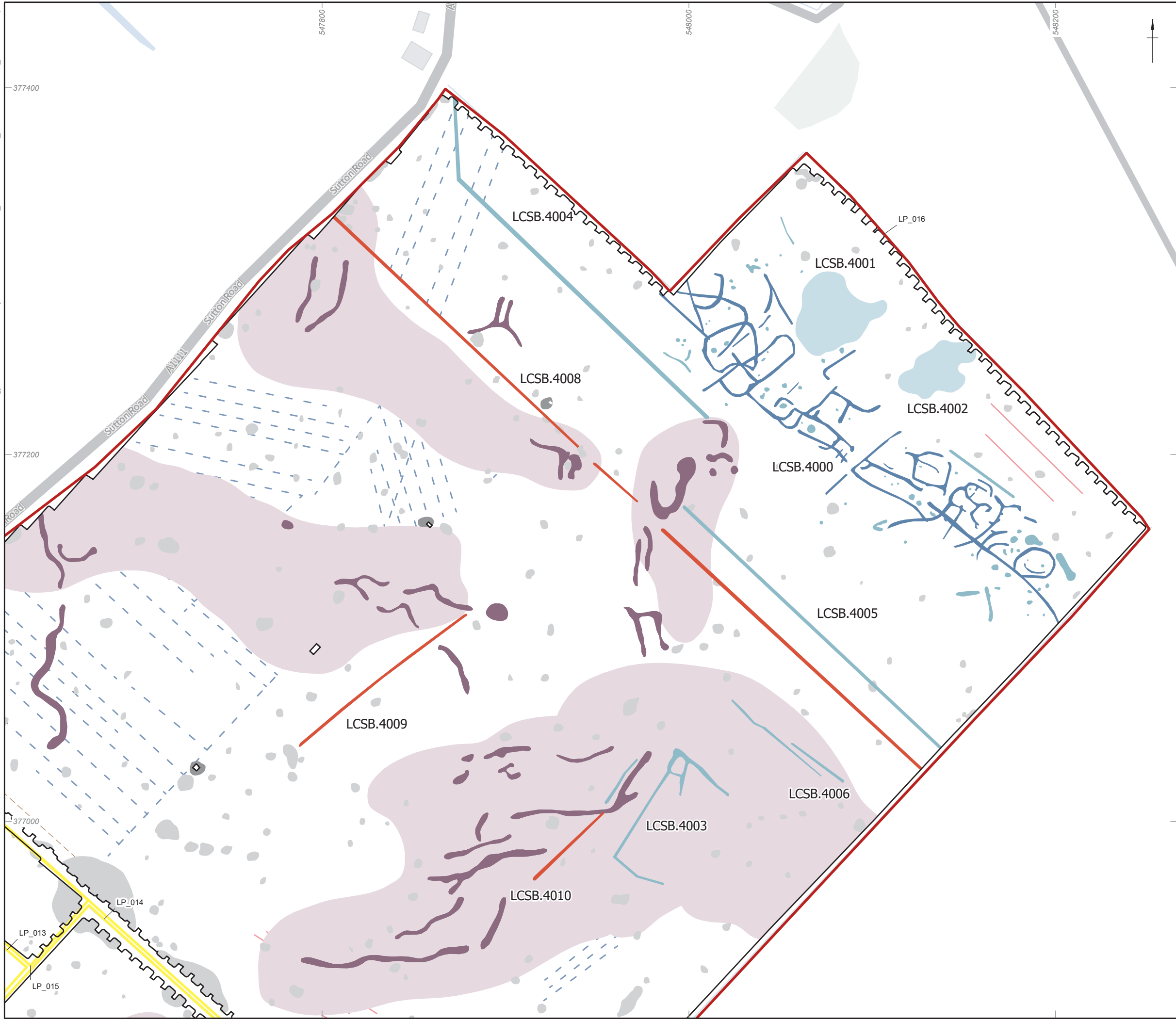


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Figure 6: Detailed gradiometer survey results: greyscale plot (LP_016)

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- Site boundary
- Detailed survey extent
- Land parcel
- Archaeology
- Possible archaeology
- Possible archaeology - desposit
- Former field boundary
- Geology
- Geomorphology
- Increased response
- Ferrous
- Agricultural feature
- Drain
- Trend

0 50 m

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Figure 7: Detailed gradiometer survey results: interpretation (LP_016)		



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