



WHITESTONE
solar farm

WHITESTONE SOLAR FARM

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Infrastructure Planning
(Applications: Prescribed Forms
and Procedure)
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Regulations 5(2)(a)

whitestonesolarfarm.co.uk

ENVIRONMENTAL STATEMENT

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Prepared by:

ERM

Prepared for:

Whitestone Net Zero Ltd

WSFY25



WHITESTONE SOLAR FARM

TRIAL TRENCHING EVALUATION COMPLETION STATEMENT PHASE 1

Headland Archaeology Scotland
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on behalf of Green Nation

27/02/2026

PROJECT INFORMATION:

PROJECT CODE	WSFY25
PROJECT NAME	Whitestone Solar Farm
TYPE OF WORK	Evaluation
CLIENT	Green Nation
PLANNING REF.	PIN EN0110020
NGR	Whitestone 1 SK504964, Whitestone 2 SK477874
LOCAL AUTHORITY	City of Doncaster Council & Rotherham Metropolitan Borough Council
FIELDWORK DATES	24 November 2025 - 30 January 2026

PROJECT TEAM:

PROJECT MANAGER	
PROJECT OFFICER	
AUTHOR	
GRAPHICS	

Drafted By		Approved By	
SIGN			
PRINT			

PROJECT SUMMARY

Headland Archaeology (UK) Ltd was commissioned by Green Nation to undertake an investigative programme of archaeological work to provide information in advance of a DCO application for Whitestone Solar Farm, Rotherham, South Yorkshire.

The Scheme takes in approximately 1,383 hectares (ha) of predominantly agricultural land within South Yorkshire, approximately 7 km and 5 km to the east of Sheffield and Rotherham, respectively. Phase 1 works were in five areas across Whitestone 1 and 2 (centred on National Grid Reference (NGR) SK 504964 and NGR SK 477874, respectively). The evaluation excavated 126 trenches measuring 1.8m x 30m across the five areas, with a further 19 trenches to be opened in WS1S2 in May due to ground conditions.

The following trenches contained archaeological activity: 042, 052 in WS1S2; 080, 086, 089, 098, 099, 100, 102, 103, 108, 112, 115 in WS2P2, with four trenches (105, 106, 107 and 112) showing evidence for medieval or post-medieval ridge and furrow; and no archaeological activity present in WS2P3. Of note is that most of the archaeology recorded in these trenches was not identified in the geophysical survey.

The archaeology recorded in WS2P2 indicates a potential enclosure aligning with a historic field system dating to the Medieval or Post-medieval period.

Overall, this site shows historic agricultural activity focused in discrete zones, with modern agricultural activity subsequently dominating the wider landscape.

LIST OF ILLUSTRATIONS

Illus 1 Site Location

Illus 2 Trench plan of WS1S2 showing geophysical survey results and interventions

Illus 3 Trench plan of WS2P2 showing geophysical survey results and interventions

Illus 4 Trench plan of WS2P3 showing geophysical survey results and interventions

INTRODUCTION

Headland Archaeology (UK) Ltd. was commissioned by Green Nation (the client) to undertake an archaeological evaluation programme prior to a DCO application for Whitestone Solar Farm. This report presents the completion statement for WS1S2, WS2P2 and WS2P3 areas of Phase 1 of this project in South Yorkshire evaluated between 24th of November 2025 and 30th of January of 2026 (Illus 1). The combined number of trial trenches excavated within these areas was 83.

The aim of the evaluation was to establish the presence, absence, location, extent, nature and date of any sub-surface archaeological features encountered.

This trenching work was informed by the Heritage Baseline (ERM 2025), and a programme of geophysical survey undertaken by Headland Archaeology between October 2024 and 2025 (Headland Archaeology Forthcoming). This phase of archaeological evaluation is being undertaken at the pre-submission stage to enhance the heritage baseline for the Cultural Heritage and Archaeology Chapter of the Environment Statement, which is due to be submitted in Spring 2026.

Prior to undertaking this phase of work a Written Scheme of Investigation was written by Headland Archaeology and approved by South Yorkshire Archaeology Service (Headland Archaeology 2025).

SUMMARY OF RESULTS

The geophysical survey identified numerous enclosures across Whitestone 2, including within Phase 1 WS2 P2. These anomalies are not securely dated but would seem likely to be associated with late prehistoric to Romano-British rural settlement and agriculture. A series of fragmentary linear anomalies, likely representative of fragmentary enclosure remains, field boundaries and field divisions, were also recorded across many of the land parcels within WS2, with the greatest concentrations in land parcels containing enclosures. These anomalies are likely to relate to both medieval and post-medieval agriculture (Headland Archaeology Forthcoming).

The geophysical survey across Phase 1 WS2 Area P2 showed a double ditched enclosure on the northern boundary of the field, truncated on its northern side by the M1 with a series of linear features to the south, west and east potentially representing more than one period of activity. These appear to represent field boundaries and a possible trackway.

The geophysical surveys in Phase 1 WS1 S2 and WS2 P3 did not identify any potential archaeological anomalies.

Archaeological features were identified in the trial trenches within two areas (WS1S2 and WS2P2) and they are presented below. These features primarily represent medieval and post-medieval agricultural features, with limited surviving remains of an enclosure within WS2P2. All features remain undated and no artefacts were recovered during the works.

WS1S2

Whitestone 1 Area S2 (WS1S2) is a c.5.28 ha area of arable land located approximately 1.5km to the west of Clifton centred at NGR 450356 396271. While the geophysical survey identified enclosures outside of the

investigation area, the trenches in WS1S2 targeted a largely blank area with limited evidence for ridge and furrow (Illus 2).

Ten of the proposed 29 trenches were opened, investigated and recorded during the evaluation. Due to the wet flooded conditions during the trenching in February 2026 the remaining 19 proposed trenches were not undertaken. The plan is to return to WS1S2 in Spring 2026 to complete the trenching when conditions are drier.

Eight trenches measured to 30m in length, whilst trench 030 was abandoned at 17.5m in length and trench 049 at 14m in length due to wet unstable ground conditions.

Two of the opened trenches (042 and 049) contained archaeology and a potential feature was investigated in trench 049, which was determined to be natural in origin.

Trench 042 contained a discrete pit [478014] at the north-west end of trench with evidence of in-situ burning. Trench 052 contained a terminus [478009] of a north-east to south-west orientated ditch, which continued beyond the southwestern edge of the trench. Neither of these archaeological features were indicated by the geophysical survey.

WS2P2

Whitestone 2 Area P2 (WS2P2) is a c.7.77ha area of arable land approximately 1.8km to the south-east of Whiston and next to the M1 centred at NGR 446422 389104. A potential double-ditched enclosure on the northern boundary of the field, a trackway to the south of the enclosure and a potential field system identified by the geophysical survey was targeted in the trenching (Illus 3). The remaining trenches targeted archaeologically blank areas or areas of magnetic disturbance.

Only the vestigial remains of the outer enclosure ditches identified on the geophysical survey were identified during the trenching works, however, there appeared to be better survival within the centre of the enclosure. There was also limited survival of the field system, suggesting that the identified ridge and furrow and ploughing may have truncated the archaeology across the area.

Forty-three 30m long trenches were opened, investigated and recorded during the evaluation. Eleven trenches (080, 086, 089, 098, 099, 100, 102, 103, 108, 112, 115) contained archaeology, with four trenches (105, 106, 107 and 112) showing evidence for medieval or post-medieval ridge and furrow.

Trenches 97, 101 and 108 targeted the outer ditches of the potential double ditched enclosure on the northern boundary of the site. The enclosure was not identified within trenches 097 and 101, with a single small ditch [218015] identified within trench 108, which corresponded with the inner ditch of the enclosure on the geophysical survey. A secondary ditch [218013] was identified to the west. It's orientation suggests it is a later feature related to the field system.

Trench 100 targeted the internal features of the enclosure, which identified a large north-west to south-east orientated ditch [114003], which possibly represents a division within the enclosure. Four ditch termini were also identified within trench 100, one of which truncated ditch [114003] and potentially represents a second phase of activity within the enclosure. Terminus [218027] in the south-west end of the trench broadly corresponds to an L-shaped anomaly identified on the geophysical survey.

Trench 099 targeted two linear geophysical anomalies which were interpreted as forming a north to south trackway. This feature was not present. Numerous rubble land drains were identified, some of which

corresponded with the anomalies. One partially visible pit [218029] was identified at the eastern end of trench.

Trenches 086, 089, 098, 102, 108, 103, 112 and 115 contained ditches that broadly correlated to the geophysical anomalies relating to the potential field system. None of the ditches contained any artefactual material and none were seen to continue along the line of the geophysical anomalies into nearby trenches. The majority of the geophysical anomalies considered to be part of the field system were not identified within the trenches.

Trench 080 targeted a blank area on the geophysical survey and contained a discrete pit [418059] in the centre of trench with evidence of in-situ burning.

WS2P3

Whitestone 2 Area P3 (WS2P3) is a c.5.46ha area of arable land located over two fields approximately 3km west of Dinnington centred at NGR 449271 386206. The trenches in WS2P3 was targeting a blank area of archaeology on the geophysical survey, with limited evidence of field boundaries (Illus 4).

Thirty 30m long trenches were opened, investigated and recorded during the evaluation. None of the trenches contained archaeology. A potential feature investigated in trench 138 was determined to be natural in origin.

QUANTIFICATION OF THE ARCHIVE

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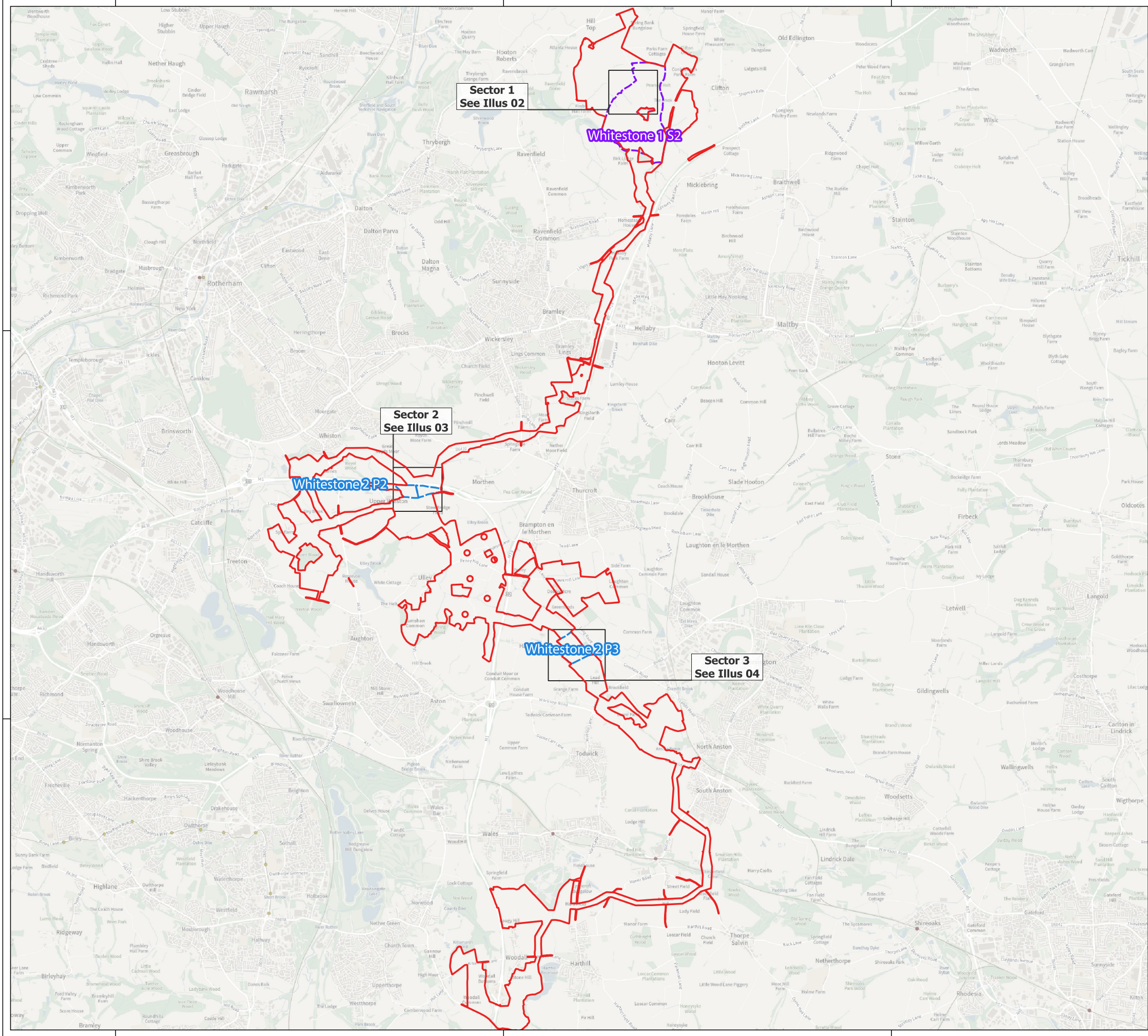
Environmental Samples: 12

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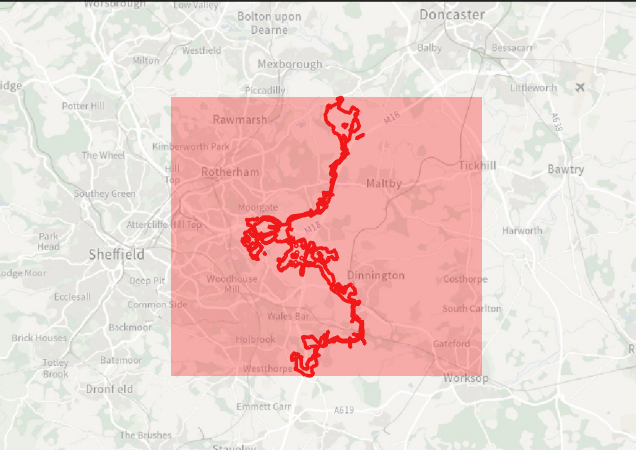
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Headland Archaeology Forthcoming *Whitestone Solar Farm: Geophysical Survey Report*. Unpublished client report.





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Key

-  Site Boundary
-  Areas for Illus 02 to 04
-  Whitestone 1
-  Whitestone 2

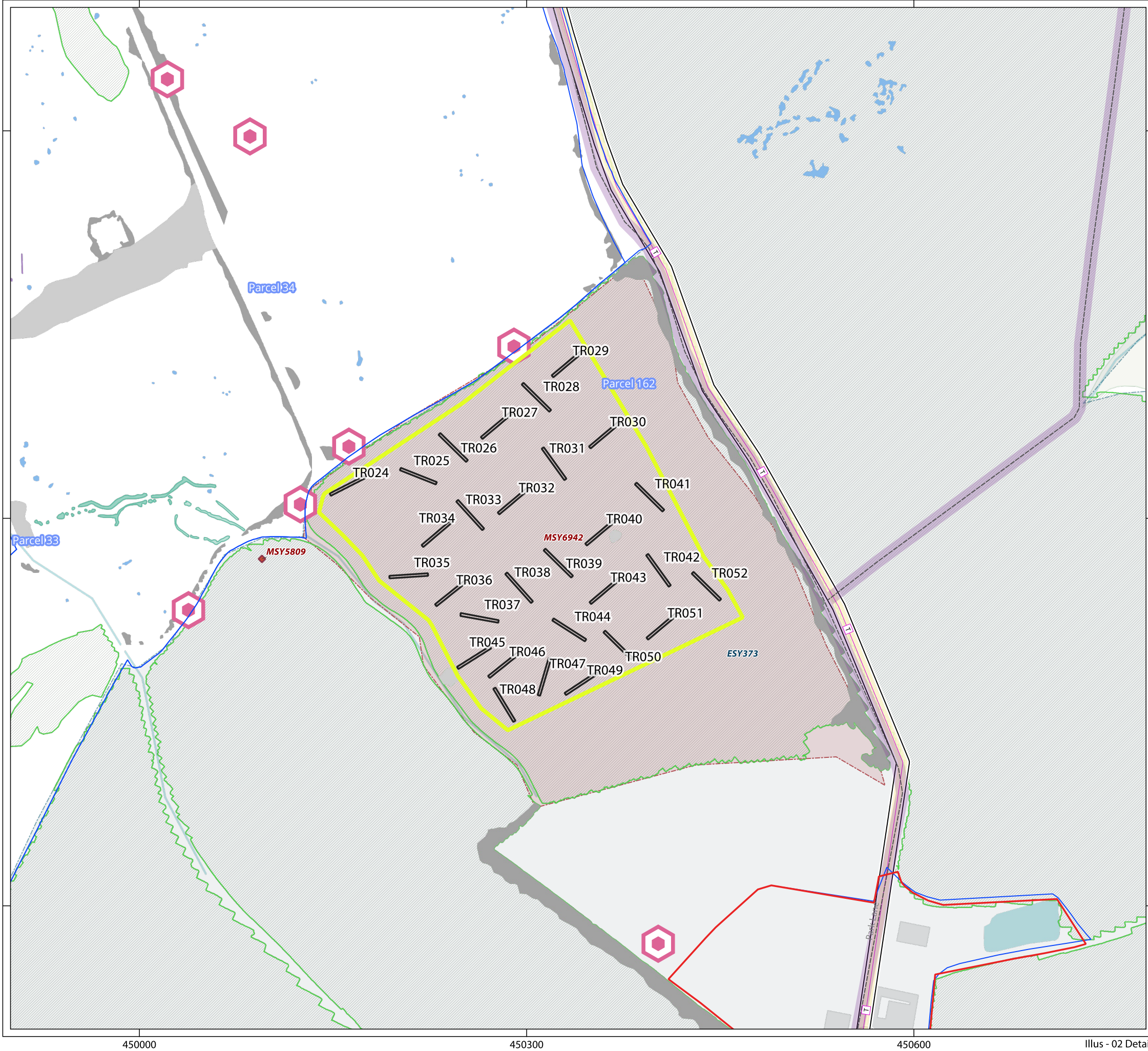
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Illus 01 - Overview of Proposed Trench Plan Area



Key

Site Boundary

Phase 1 Revised Plots

Parcel Numbers

Public Path

Public Path Buffer

Invasive Species

Proposed Trench Locations

Services Underground

Telecommunications

Buffer Underground

Buffer Overhead

HER Data

Monuments Point

Events Polygon

Monuments Polygon

Geophysics Interpretation

Magnetic Disturbance (Above Ground)

Magnetic Disturbance (Below Ground)

Natural

Uncertain

Greenwaste

Former Stream

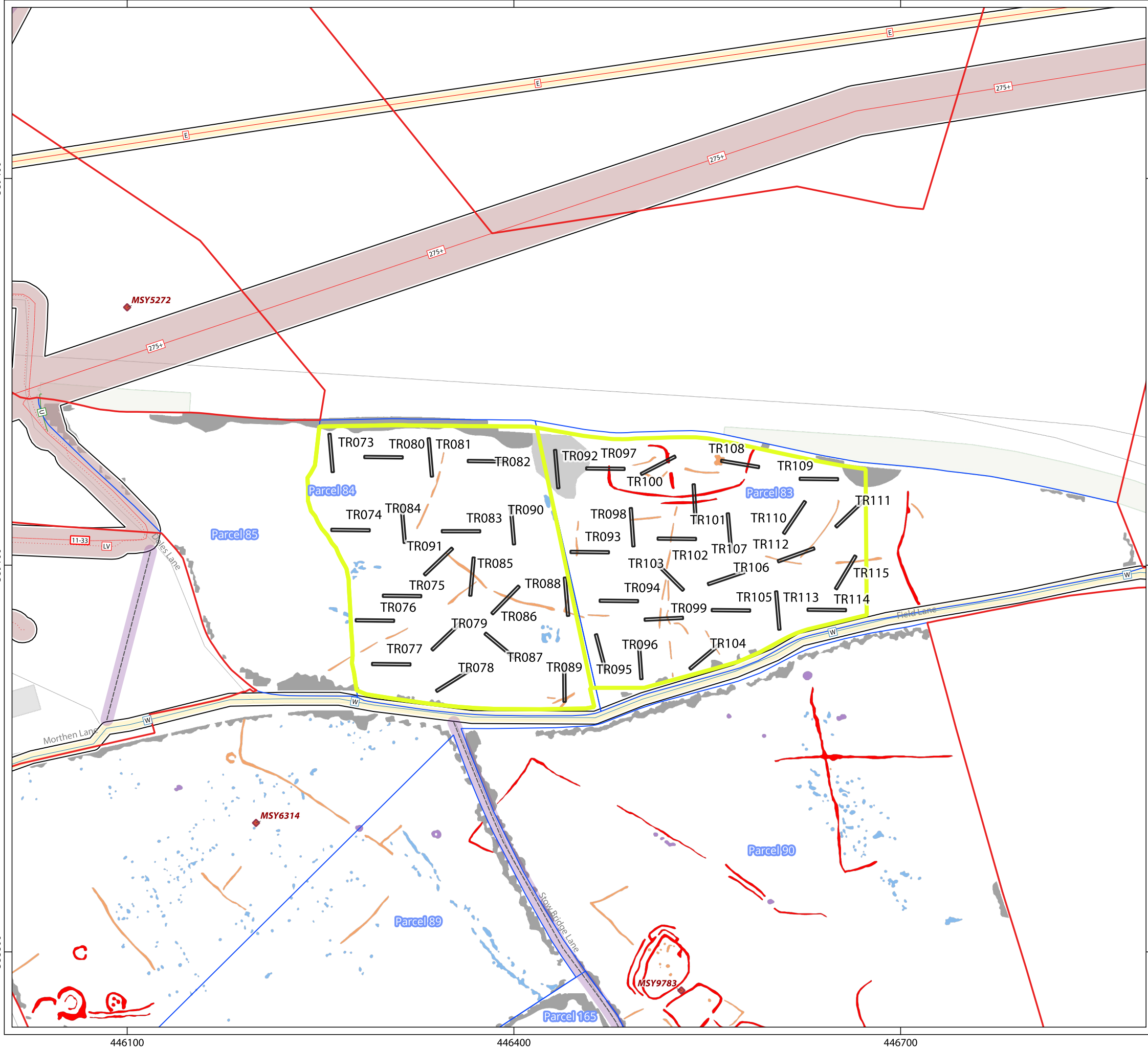
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Illus - 02 Detail of Proposed Trench Locations in Whitestone 1 S1 and Whitestone S2; Sector 1



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Key

Site Boundary

Phase 1 Revised Plots

Parcel Numbers

Public Path

Public Path Buffer

Proposed Trench Locations

Electric

Water

Buffer Underground

Electric 11-33KV

Electric HV 275+

Low Voltage

Unknown

Buffer Overhead

HER Data

Monuments Point

Geophysics Interpretation

Archaeology

Magnetic Disturbance (Above Ground)

Magnetic Disturbance (Below Ground)

Natural

Possible Archaeology

Uncertain

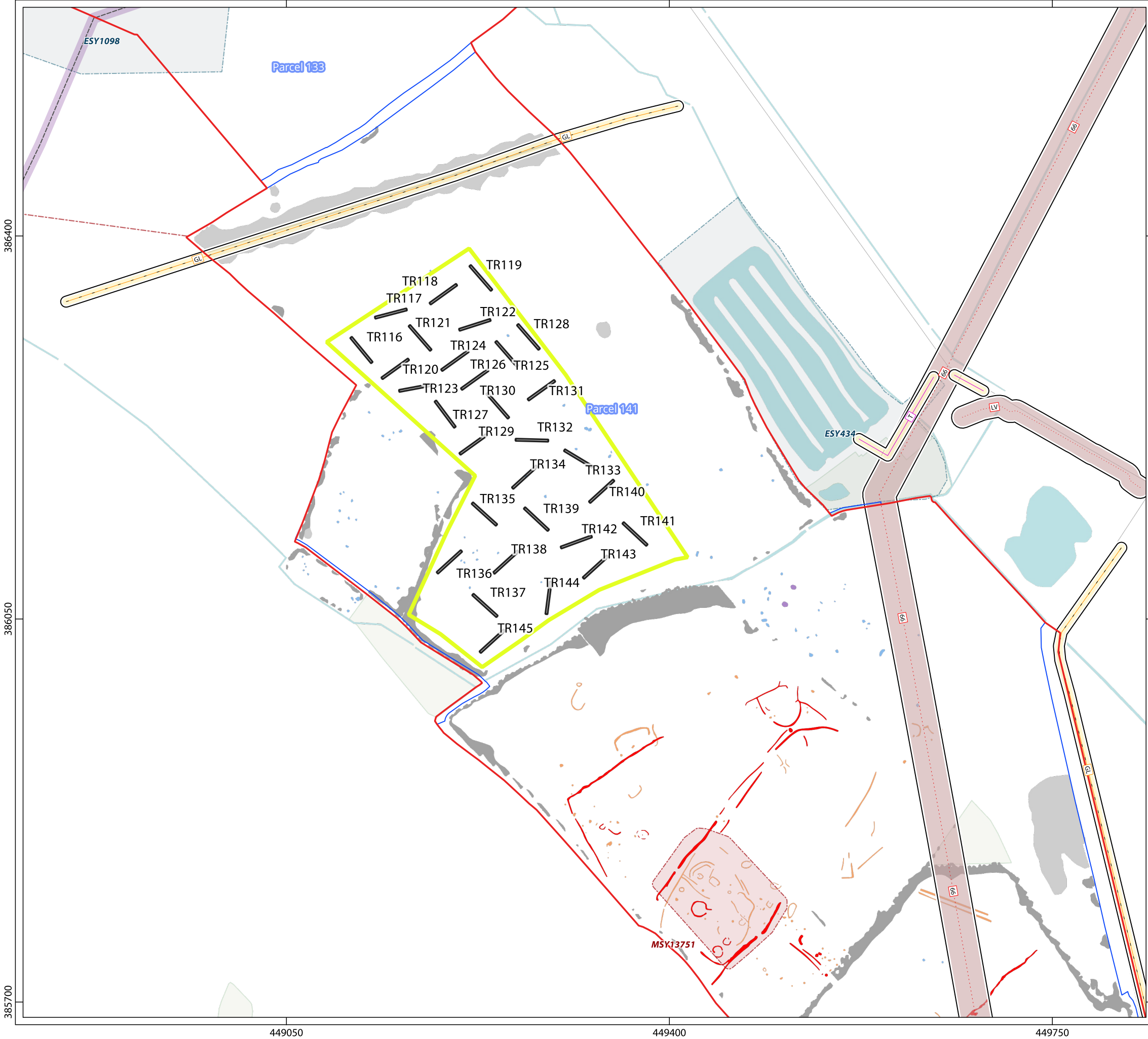
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Illus - 03 Detail of Proposed Trench Locations in Whitestone 1 S3; Sector 2



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Site Boundary

Phase 1 Revised Plots

Parcel Numbers

Public Path

Public Path Buffer

Proposed Trench Locations

Services Underground

Gas Low/Medium

Telecommunications

Buffer Underground

Services Overhead

Electric 66KV

Low Voltage

Buffer Overhead

HER Data

Monuments Line

Events Polygon

Monuments Polygon

Geophysics Interpretation

Service

Archaeology

Magnetic Disturbance (Above Ground)

Magnetic Disturbance (Below Ground)

Natural

Possible Archaeology

Uncertain

080160

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Illus - 04 Detail of Proposed Trench Locations in Whitestone 2 P2; Sector 3



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