# Ground Source Heat Pump Installation
# Baddesley Clinton
# Warwickshire

## ARCHAEOLOGICAL INVESTIGATIONS

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**Archaeology Warwickshire Report No 1982**

**August 2019**

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Warwickshire County Council

Working for Warwickshire

| | |
|---|---|
| **Project:** | Baddesley Clinton, Ground Source Heat Pump Installation |
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# SUMMARY

*An archaeological evaluation was carried out in the field to the north of Baddesley Clinton house, on behalf of the National Trust, in advance of the installation of a ground-source heat pump exchange. No significant archaeological deposits or finds were recorded although one trench exposed a dark stony surface and a shallow pit, scoop or tree hole which contained a layer of charcoal, and two medieval furrows, one of which contained an amount of broken hand-made tile.*

*A watching brief undertaken during the excavation of the service trench near to the house, partly through the Scheduled area, recorded the remains of cobbled and possibly flagged stone paths and stonework that could relate to a previous structure in the area. Earthworks resulting from levelling the ground near the courtyard following the demolition of the building were also recorded.*

*A brick wall, on a substantial stone base, was found within the bank adjacent to the moat. While the wall appears to function as a support for the bank, the stone base may have been an earlier retaining wall for the moat itself.*

*A stone drainage culvert was revealed under the field boundary. Its course followed the field boundary.*

# 1 INTRODUCTION

1.1 The National Trust have installed a Ground Source Heat Pump (GSHP) at Baddesley Clinton. The trenching for the heat exchanger was in the field to the north of the house and the pipe trench connecting the heat exchanger to the house ran through an area of archaeological sensitivity, including part of the Scheduled Area by the house, so the archaeological advisor to the National Trust requested a watching brief to accompany the groundworks. Subsequently, Planning Archaeologist Anna Stocks requested that an evaluation also be carried out ahead of work on the area of the heat exchanger.

1.2 Archaeology Warwickshire (AW hereon) were commissioned to produce a Written Scheme of Investigation for an archaeological evaluation and watching brief, that was carried out ahead of, and in conjunction with, the groundworks phase of the development. The evaluation was carried out in November 2018 and the watching brief in May 2019.

1.3 This work was carried out in accordance with the Chartered Institute for Archaeologists Standard and guidance for field evaluation and watching briefs (2014).

# 2 SITE LOCATION

2.1 The area of the horizontal ground heat exchanger is centred on national grid reference SP 1994 7160, to the north of Baddesley Clinton house. The development consisted of up to 18 x 55m long trenches for a horizontal ground heat exchanger in the field to the north of the house, with a pipe trench running south and then west to the house itself.

2.2 The underlying geology of the area is Arden Sandstone, Siltstone and Sandstone (British Geological Survey 2018).

# 3 ARCHAEOLOGICAL BACKGROUND

3.1 Baddesley Clinton manor is not mentioned in Domesday and may have been included in Hampton-in-Arden at that time (VCH 1947, 16). It is mentioned in the 12th century when Roger de Mowbray is said to have bestowed Baddesley upon Walter de Bisege. The Mowbrays retained ownership of Baddesley until early in the 15th century, after which, it was held by the Clinton family. Baddesley Clinton Hall was built in the 15th century as a semi-fortified manor house (Warwickshire Historic Environment Record MWA 2643), surrounded by a moat (MWA 5351), but elements of the building are said to date back to the 14th century. The building is a large stone-built structure (Jaffray 1862, 57; Meeson, Alcock and Miles 2002). Considerable alterations were made in the 16th century (VCH 1947, 13). The east range has a brick front of Queen Anne date (Pevsner and Wedgwood 1966, 81). The house is a Grade I Listed Building (List Entry Number 1013155).

3.2 The Hall is set within a Grade II* Registered Park (MWA 2652). The area is mainly pasture but does include some medieval ridge and furrow. Within the park and to the south-east of the Hall is the Church of St Michael (MWA 2641), the nave of which dates to the 13th century, although the tower dates to the 16th century and the chancel to the 17th century (Pevsner and Wedgwood 1966, 80).

3.3 To the north-west of the church is an area of deserted medieval settlement, the remains of which were visible as earthworks prior to 1981 (MWA 2642). Some of the earthworks were apparently destroyed by the construction of the car park in the 1981. These appear to have been earthworks belonging to building remains along the edge of the roads with the remains of medieval ridge and furrow to the south-west. The buildings may have been outbuildings associated with the Hall itself, or part of the dispersed settlement of the parish (Dyer 1981, 1). The car park field was apparently ploughed during the war and in 1974 underdrained, ploughed and re-seeded (HER FI file 2644; correspondence between A. J. Finlinson, National Trust Regional Director and Helen Maclagan, County Field Archaeologist 1982). These works notwithstanding, aerial photographs of the area taken in 1977 show the remains of medieval ridge and furrow in the fields to the north-east and south-east of the Hall, some of the former being subsequently destroyed by the car park and overflow car park (Warwickshire Museum Collection WMAP 115/44).

3.4 Medieval fishponds (MWA 2644) lie to the south-west of the Hall. These ponds are historically well documented with 15th-century bailiff's accounts of payments to labourers to dig them and details of the pipes, flood-gates and other woodwork involved (Dyer 1981). Currie suggests that the larger pond to the west was a *vivarium* or breeding pond and that the smaller ponds were *servatoria* or storage ponds (Currie 1994, 92).

3.5 Documentary and place-name evidence suggests that a watermill was sited to the south-west of the Hall in the medieval period (MWA 2650). An estate map of 1699 has two fields in this vicinity labelled Mill Meadow and Mill Field (WRO Z 234L).

3.6 Archaeological work previously carried out at Baddesley Clinton includes three watching briefs carried out in the 1990s associated with the water control system connected with the ponds (Currie 1994, Currie 2000, Currie n.d.) and detailed archaeological analysis of the house (Meeson, Alcock and Miles 2002). In 2003 a dowsing survey was carried out to provide information about the hydrology of the site (Ewence and Milln 2003). Archaeological observation took place during the excavation of trenches for land drains at the overflow car park and for a new gas pipe at Baddesley Clinton in 2005-6 (Coutts 2006). No significant archaeological remains were found although a possible post-medieval terrace edge was recorded north of the house. The topsoil produced finds dating from the 15th/16th century onwards. Archaeological work also took place in the garden south of the house in 2015 (Coutts 2015). In 2017 a watching brief took place during the installation of fibre optic cabling, during which evidence for the former cobbled coach-turning circle in the forecourt was uncovered (Coutts 2018).

# 4 AIMS AND METHODS

4.1 The main aim of this evaluation was to determine if there were any significant archaeological remains in the area to be excavated for the heat exchanger; to form an understanding of their value and their potential to shed light on the subsequent development of the area. The main aim of the watching brief was to record any archaeological remains disturbed by the service trench from the heat exchanger area to the house, to collate the records in an archaeological archive and present the significant aspects of the archive in a report for dissemination.

4.2 The secondary aim was to form an understanding of the remains recorded in terms of their character and date, and to place the evidence in its local and regional context.

4.3 The area of the heat array was evaluated by means of 80m of trial trenching to clarify the character or extent of any significant features or deposits where necessary.

4.4 Topsoil, former ploughsoils and demonstrably modern overburden was removed by an appropriate machine using a toothless bucket under direct archaeological supervision. Ground reduction was in shallow spits until the uppermost archaeological horizon, or the geological natural was reached (whichever the higher). Excavation was then continued by hand.

4.5 The watching brief element of the work required an experienced archaeologist to be on site during groundworks for the service trench, to supervise ground reductions to formation levels, or the geological natural, whichever the higher.

# 5 RESULTS

### Evaluation

5.1 The geological natural across the whole site varied between a greenish-grey or blueish-grey clay, and yellowish-brown or yellowish-brown mottled grey silty clay (102, 202, 302 and 402), which was exposed at a depth of 0.4-0.6m below the current ground surface.

### Deposit sequence

5.2 Where not disturbed by anthropogenic activity, the geological natural was directly overlain by a simple sequence of subsoil overlaid by topsoil.

### Cut features

5.3 A number of potential archaeological features were encountered in Trench 4. A pit or tree hole (405) contained an amount of charcoal in its fill (404), two furrows or ditches ran SW-NE across the trench, furrow 409 to the NW end of Trench 4 and furrow 407 to the SE end of Trench 4. The furrows contained a yellow-brown and red-brown sandy silt (408 and 406 respectively), with many pieces of broken hand-made tile in fill 408. There was also a possible stony surface (410) in Trench 4, made up of around 50% small rounded pebbles and 50% grey silt with black mottling. The eastern end of Trench 3 contained a telephone cable which currently serves Baddesley Clinton.

### Watching Brief on service trench

5.4 The trench for the ground source heat pump link pipes was excavated by a machine using a toothless bucket. The trench was 0.6m wide and 74.5m long, running for *c*.50m from the fence towards the NW corner of the courtyard, then turned to run towards the moat (See Fig 2). It was excavated to a depth of up to 0.9m. Geological natural grey clay was recorded at a depth of 0.80-0.90m (502).

5.5 Where not disturbed by anthropogenic activity, the geological natural was directly overlain by a simple sequence of 0.50m of subsoil (501) overlaid by varying depths of topsoil (500). Relatively few features of interest were recorded until the trench approached the courtyard area.

### Structural evidence

5.6 Two large stone blocks (516 and 519) were revealed in the base of the part of the trench running alongside the courtyard. They were partially embedded into the natural clay (Photos 7 and 8). Both were aligned on the same orientation as the house and service range. Block 516 measured 0.96m by 0.3m and had traces of mortar on its upper face. Block 519 measured 0.81m by 0.28m by 0.3m. and was interpreted as the base for part of a wall. The area above the block appears to have been robbed out (cut 525). The fill of the robber trench (526) was made up of silt and mortar with infrequent fragments of brick, sitting on top of the stone block. A similar cut and fill (523 and 522) were revealed around 1m to the north-east of 516 but no stone block was evident in the trench. The 1699 estate map shows a building in this area which was demolished in the 18th century, and it is possible that these stone remnants relate to this building.

5.7 On the base of the trench an area of stone was recorded along 1.6m of the trench, with an uneven surface (520) (Photo 9). It is possible that this was a remnant of floor surface relating to the former building.

### Earthworks

5.8 Following the 18th-century demolition, the area north-west of the courtyard was built up with several deposits of dumped material, most likely to raise the ground surface to allow the courtyard to be level. A grey silty clay layer (515) with occasional fragments brick and tile extended 7m along the trench at the north-east end of the SW-NE stretch of trench, directly overlying the natural geology. Silty clay 515 was overlaid by a grey clayey silt layer (521) with infrequent fragments of brick and tile; and to the north-east 515 and 521 were both partially overlaid by a dark grey clayey silt with frequent brick, tiles, cobbles and charcoal (513). The horizons between these deposits were very unclear and as such they may represent variations within the same layer of dumped material.

5.9 To the south-west of 521 the ground was made up with a deposit of grey silty clay (524) containing infrequent fragments of brick and tile. This layer was extremely similar to the subsoil (501) apart from the amount of brick and tile within it. It extended for 12m to the moat wall and overlaid the natural geology as well as the

stone blocks (516 and 519 described above), and a small dump of broken brick and tile (527) which overlaid the natural geology.

### Moat wall

5.10 A low wall with a sandstone base (517) was revealed within the moat bank (Photo 10). The stone base, which was left *in situ*, was built to the height of the current moat wall and 1.27m from the edge of the water. Upon this was a three course high brick wall, 0.6m thick. The wall most likely represented a strengthening feature within the bank or a revetment at the front of a previous slope down to the moat. Although the horizons were vague, the dump of earth behind this wall (524) appeared to be made up to the level of the wall. The stone base may represent a former retaining wall for an early phase of the moat.

### Paths, drains and garden features

5.11 Lying embedded within the top of 524 were several stone slabs of a 2m wide path surface (Photos 11 and 12) or garden feature (514), post-dating the 18th century demolition of the building north of the house, and the subsequent build-up of the ground level with dumps of soil (515 and 524). This path ran perpendicular to the courtyard edge, apparently heading down the slope into the garden.

5.12 A further surface overlying one of the ground raising 'dumps' (513), was revealed 2m along the north-north-east arm of the pipe trench,. Cobbled surface 512 was made up of a dark grey silt containing many cobbles immediately to the south-south-west (Photo 13). The feature was 1m in width and 0.1m in depth, and located in the top of the subsoil; and was interpreted as a path with the remnant of a wall (532) to the side of it, sitting square with the house and service range buildings, but being of a different character to the flagstone path 514.

5.13 A path (511), similar in nature to 512 but bounded by two walls (509 and 510), was revealed further along the north-north-east arm of the pipe trench, 10m from the turn next to the courtyard (Photos 14, 15 and 16). The path was made up of a layer of rounded cobbles with occasional broken brick and tile, in dark grey clayey silt. It was 1.3m wide and roughly aligned, as far as could be seen in the narrow trench, NE-SW, potentially square with the house and service buildings, and parallel with 512. Associated finds of Midlands Blackware pottery indicate that it was of 17th- to 18th-

century date or later. Lying immediately on to the north-west and on south-east of this path, and also at 0.3m below ground surface, were two spreads of stone and broken brick in grey clayey silt (509 and 510 respectively), the north-western one also contained mortar. Although no cut was apparent these were interpreted as the remains of walls bounding the path.

5.14 In the lower part of the garden a line of mortar (505), representing the base of a demolished wall, was recorded (Photo 17). The wall was aligned north-west to south-east, (parallel with the possible soakaway 506 – below). The mortar line indicated that the wall was one brick wide (0.23m), and cut into the upper part of the subsoil. As there were no other associated features, other than a little broken brick and tile on either side, this wall would appear to be a garden feature. No dating evidence was recovered, however, given its proximity to, parallel alignment with, and similar depth to 506 (below) it is reasonable to assign it a similar 18th century or later date.

5.15 A further 2m along the pipe trench from 505, towards the field, a shallow cut (506) in the top of the subsoil was revealed (Photo 18). The cut contained rounded cobbles, with infrequent fragments of broken brick and tile, in a dark grey silt (507), 0.15m in depth. The cobbles were smaller than those in 511 and 512, and looser. The feature was aligned NW-SE. The feature could be interpreted as a possible soakaway. Pottery retrieved from the fill included blue transfer-decorated sherds, suggesting a likely 19th-century date for the feature.

5.16 In the south-east part of the NW-SE run of trench was a spread of clayey silt containing infrequent broken bricks and tile (531). Covering 2m of the trench but only being 0.1m in depth this appears to be a dump of demolition material. Twenty metres further north-west along the trench towards the field a spread of clayey silt containing infrequent broken bricks and tile (530) was uncovered in the top of the subsoil. Covering 3.5m of the trench but only being 0.1m in depth this appeared to be another dump of demolition material.

5.17 A stone culvert (503) was revealed below the boundary between the garden and the field (Photo 19). This consisted of a shallow bowl-shaped arc of stone flags with a corresponding inverted arc of stones above it, being 0.45m high and 1.1m wide. This

feature followed the line of the field boundary fence and was overlain by the topsoil. No dating evidence was associated with it.

# 6 CONCLUSIONS

6.1 No significant archaeological deposits or finds were recorded on the site during the evaluation. A furrow in Trench 4 contained an amount of broken post-medieval hand-made tile.

6.2 During the watching brief a large number of features were recorded in the narrow service trench although the width of the trench made interpretation difficult. Structural remains were recorded just beyond the courtyard, in the form of large stone wall footings and evidence for robbed-out walls, which may relate to a building demolished in the 18th century.

6.3 The area immediately to the north-west of the courtyard has been historically built up to its present height, after which the remains of the walls of the building that once stood there were robbed out. A stone path was built upon one of the 'dumps' used to build up the ground level, the path was perpendicular to the courtyard, leading down into the garden.

6.4 A brick wall on a substantial stone base was revealed within the moat bank, the base of which may represent an earlier retaining wall for the moat, and the brick section of which may have been a revetment wall for a previous moat bank.

6.5 Several paths were revealed. Three were on a similar alignment with the courtyard and buildings. Two of these were laid over the dumped material that was used to make up the ground height. The first, made of flagstones, appeared to lead from the courtyard down the slope into the garden. The other was perpendicular, formed of cobblestones with the remains of a wall to one side of it. A third path on this alignment was also cobbled with walls on either side of it, with associated pottery suggesting a 17th- to 18th-century date or later. .

6.6 Several features ran diagonally across the lower half of the north-west arm of the pipe trench, and also parallel to three land drains. All were found in the top of the subsoil. A robbed-out wall and a possible soakaway were recorded. A substantial stone culvert was revealed close to the field boundary, along the south side of the fence.

## ACKNOWLEDGEMENTS

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WRO Z234L *Estate map of Baddesley Clinton, 1699*, Warwickshire County Record Office.

# APPENDICES

## A List of contexts

| *Trench* | *Context* | *Description* | *Depth (m)* | *Comment* |
|---|---|---|---|---|
| **1** | 100 | Brown silt and turf | 0.3 | Topsoil |
| **1** | 101 | Grey clayey silt | 0.6 | Subsoil |
| **1** | 102 | Greenish grey and reddish-brown mottled grey clay, and silty clay | | Geological natural |
| **2** | 200 | Brown silt and turf | 0.25 | Topsoil |
| **2** | 201 | Grey clayey silt | 0.5 | Subsoil |
| **2** | 202 | Greenish/blueish grey, and reddish-brown mottled grey clay and silty clay | | Geological natural |
| **3** | 300 | Brown silt and turf | 0.2 | Topsoil |
| **3** | 301 | Grey clayey-silt | 0.4 | Subsoil |
| **3** | 302 | Greenish/blueish grey, reddish-brown mottled grey, and very light grey clay and silty clay | | Geological natural |
| **4** | 400 | Brown silt and turf | 0.2 | Topsoil |
| **4** | 401 | Grey clayey silt | 0.6 | Subsoil |
| **4** | 402 | Greenish grey and yellowish-brown with darker brown flecks, clay and silty clay | | Geological natural |
| **4** | 403 | Greyish-brown clayey silt | 0.1 | Upper fill of pit/tree bole 405 |
| **4** | 404 | Black charcoal and silt | 0.1 | Lower fill of pit/tree bole 405 |
| **4** | 405 | Shallow pit/scoop or tree hole cut into natural | 0.1 | |
| **4** | 406 | Yellowish/reddish-brown sandy silt | | Fill of furrow 407 |
| **4** | 407 | Furrow cut into natural. | | |
| **4** | 408 | Yellowish/reddish-brown sandy silt. Included lots of broken hand-made tile | | Fill of furrow 409 |

| | | | | |
|---|---|---|---|---|
| **4** | 409 | Furrow cut into natural | | Cut of furrow |
| **4** | 410 | Black mottled grey surface with up to 50% small rounded stones | | |
| **4** | 411 | Black silt and turf, concentrated above possible furrow 409 and surface/layer 410 | 0.2 | Topsoil |

Watching Brief contexts

| ***Context*** | ***Description*** | ***Width (m)*** | ***Thickness/ Depth (m)*** | ***Comment*** |
|---|---|---|---|---|
| **500** | Brown silt | | 0.1-0.3 | Topsoil |
| **501** | Grey silty clay | | 0.5 | Subsoil |
| **502** | Grey clay | | @0.8-0.90 | Geological natural. |
| **503** | Stone culvert | 1.1 | 0.4 | Drainage feature/culvert Running along fence line |
| **504** | Cut for culvert 503 | 1.1 | 0.4 | |
| **505** | Mortar surrounded by broken brick and tile | 0.25 | 0.1 | Base of wall – mortar is one brick wide, running NW-SE |
| **506** | Cut for 507 | 0.6 | 0.15 | Running NW-SE |
| **507** | Dark grey silt with very frequent rounded pebbles and pieces of broken brick and tile | 0.6 | 0.15 | Possible soakaway, or linear rubble dump |
| **508** | Cut for 505 | 0.5 | 0.1 | |
| **509** | Stone and broken brick in clayey silt | 1.7 | 0.12 | Possible wall base |
| **510** | Stone and mortar with broken brick and broken tile in clayey silt | 0.4 | 0.1 | Possible wall base |
| **511** | Rounded cobbles with broken brick and broken tiles in clayey silt | 1.3 | 0.3 | Cobbled path surface |
| **512** | Rounded cobbles with broken brick and broken tile in clayey silt; with a deposit of yellow mortar to the north | 1.05 | 0.1 | Cobbled path surface with possible remains of wall (532) to north |

| | | | | |
|---|---|---|---|---|
| **513** | Dark grey clayey silt with frequent broken brick, broken tile, cobbles and charcoal | 4.00+ | 0.6 | Dump of material used to raise ground surface |
| **514** | Stone slabs with deposit of mortar at centre. | 2.00 | 0.06 | Paved surface – garden path? |
| **515** | Grey silty clay with infrequent broken brick and broken tile | 7.0 | 0.6 | Dump of material used to raise ground surface |
| **516** | Large limestone block | 0.96 | ? | Left in place in base of trench |
| **517** | Brick wall (three courses high) on base of sandstone blocks | 1.1 | 0.42 | Located inside moat bank, with base of brick wall at same elevation as the top of the current moat wall: either original moat wall or reinforcing wall for bank |
| **518** | Cut for wall 517 | 1.1 | ? | |
| **519** | Large stone block with traces of mortar | 0.81 | 0.3 | Same alignment as (516). South-west end aligned with south-west wall of stables building |
| **520** | Large sandstone(?) slab(s) | 1.4 | ? | Located in base of trench. |
| **521** | Dark grey silty clay with infrequent broken brick and broken tile | 7.0 | 0.2 | Dump of material used to raise ground surface |
| **522** | Yellow silty mortar and infrequent broken brick and limestone | 2.0 | 0.75 | Demolition deposit with whole bricks and/or stone removed |
| **523** | Cut for 522 | 2.0 | 0.75 | |
| **524** | Grey clay with infrequent broken brick and broken tile | 12.0 | 0.65 | Dump of material used to raise ground surface |
| **525** | Cut of (526) | 2.0 | 0.3 | |
| **526** | Yellow silty mortar and infrequent broken brick and broken tile | 2.0 | 0.3 | Demolition deposit with whole bricks and/or stone removed |
| **527** | Grey silt with a large amount of broken brick and broken tile | 1.0 | 0.35 | Dump of rubble |

| | | | | |
|---|---|---|---|---|
| **528** | Cut of small pit or gully | 0.9 | 0.25 | |
| **529** | Grey silt, no inclusions | 0.9 | 0.25 | Fill of 528 |
| **530** | Grey clayey silt with infrequent broken brick and broken tile | 3.5 | 0.1 | Spread of spoil or rubble |
| **531** | Grey clayey silt with infrequent broken brick and broken tile | 2.5 | 0.1 | Spread of spoil or rubble |
| **532** | Area of mortar –possible brick wall base | | | Adjacent to path 512 |

## B List of finds

| Context | Type | Quantity | Comment |
|---|---|---|---|
| **101** | Tile | Few fragments | Not retained |
| **101** | Brick | Few fragments | Not retained |
| **201** | Burnt bone | One small piece | On lower horizon (not retained). |
| **301** | Tile | Few fragments | Not retained |
| **302** | Tile | Few fragments | Intruding into surface (not retained) |
| **408** | Tile | 24 fragments | The tile fragments can broadly be divided into two groups: 4 fragments have grog within their fabric, the other 20 do not. Two of the latter group have possible nibs, and one retains its full width of 0.18m. The tiles appear to be post-medieval. |
| **505** | Pottery | 1 | Blue transfer-decorated (**MGW**) |
| **507** | Pottery | 1 | Blue transfer-decorated (**MGW**) |
| **511** | Glass | 3 | Green glass, two bottle bases (diameters: 0.14m and 0.11m) and one body fragment. One is an onion bottle of late 17th/early 18th-century date |
| **511** | Animal bone | 2 | Pelvis fragments, large mammal |
| **511** | Pottery | 3 | 2 x Midlands Black ware, 17th-19th century (**MB**), 1 x Tin-glazed earthen ware, 17th-18th century (TGE) |
| **511** | Tile | 3 | Red, 0.17m thick, handmade, one with slight curve. One grey, possibly of early (16thC?) date, 0.18m thick |


1: Trench 1, looking south-west


2: Trench 2: looking north-west


3: Trench 3, looking south-west


4: Trench 4, looking north-west


5: South-east-facing section of pit/tree hole 404


6: Possible surface 410, looking north-east


7: Stone block 516, looking south-west


8: Stone block 519, looking north-east

9: Stone surface 520, looking north-west


10: Moat wall 517, looking east


11: North-east part of stone path 514, looking south


12: South-west part of stone path 514, looking south


13: Cobbled path 512 and wall remnant 532, looking south


14: Demolished wall(?) 509, looking south


15: Cobbled path 511, looking south

16: Cobbled path 511 (foreground) and possible wall base 510 (background), looking south


17: Wall 505, looking south


18: Possible soakaway fill 507 (cut 506), looking south


19: Culvert 503, looking west-north-west

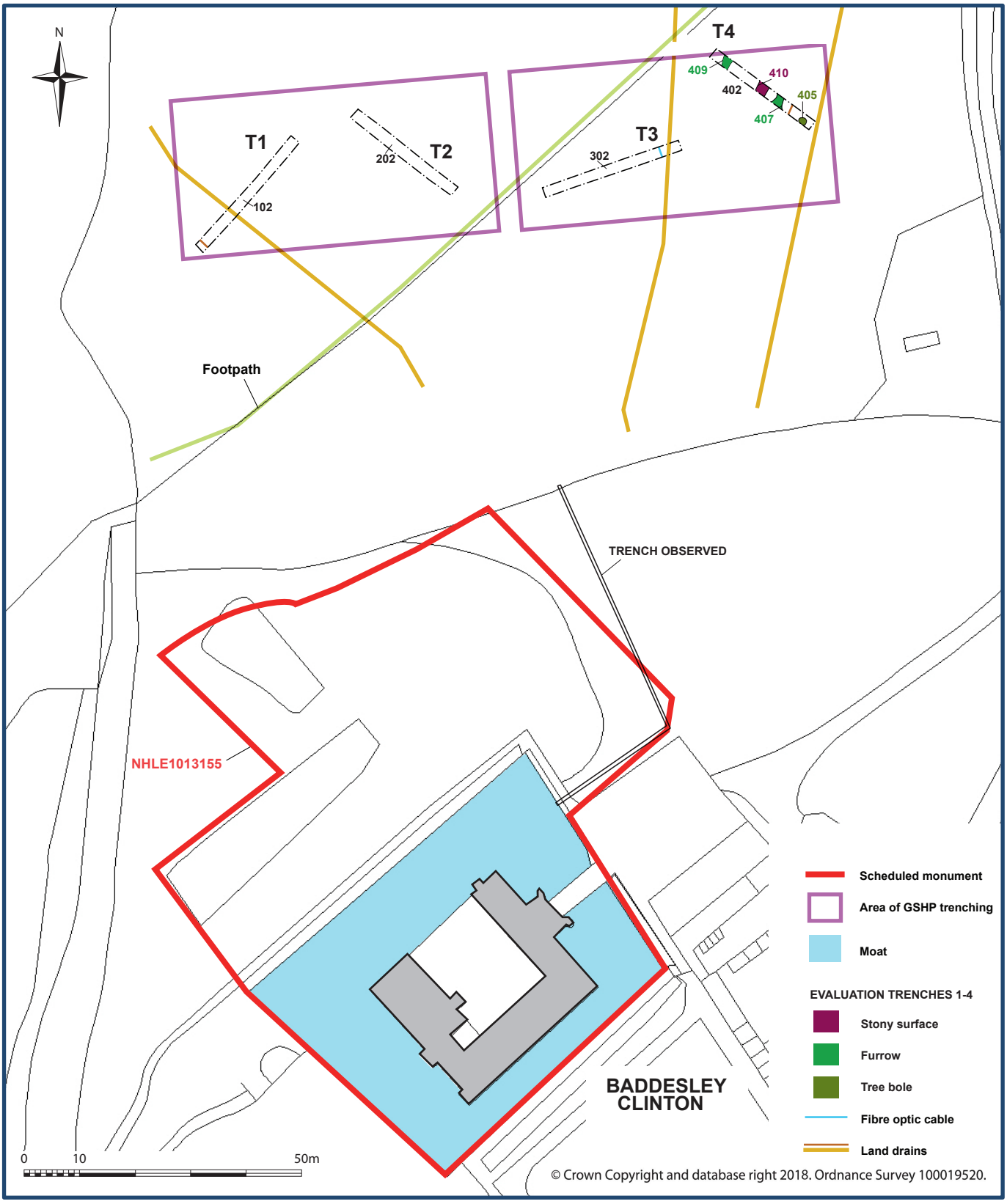


FIG 1: Location of works observed

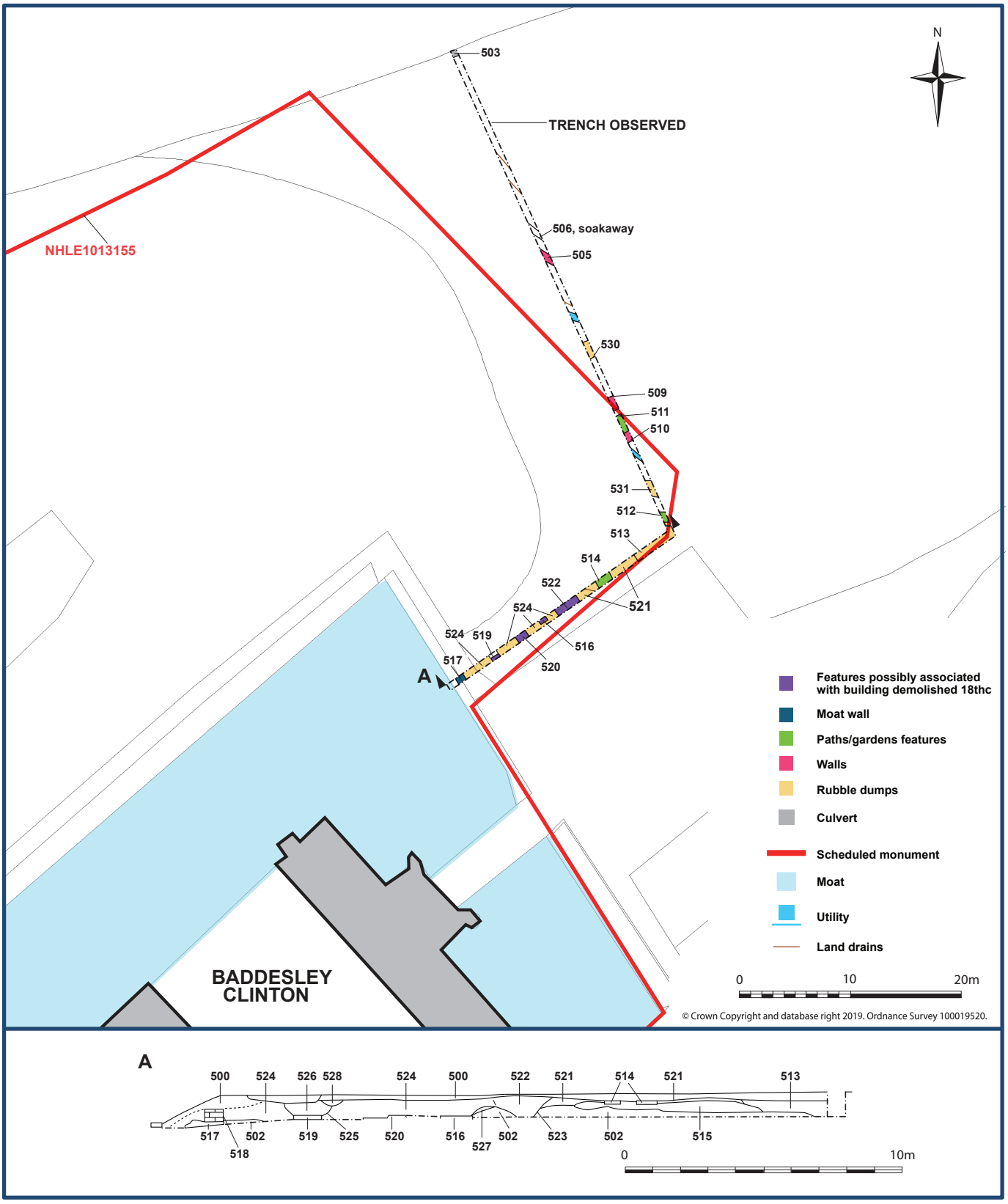


Fig 2: Ground source heat pump trench observed