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## Editor

#### **Dear Members**

As the editor for this issue, I am glad we have such a variety of articles. I know that you will be pleased to see the write-up of two projects – the Slindon House Stables clean-up and recording, and the geophysical research and excavations at Lower Farm in Walberton. The Field Unit members worked long and strenuously on these projects and it is good to see such hard work recorded, and hopefully those members who are not so hands-on will be interested in what is done on their behalf.

Also included are notes on the Flint Finds at Lower Farm and two articles on members' research, one on those enigmatic artefacts known as Sussex Loops, and an investigation into the possible site of Cutmill medieval watermill at Broadwater, Worthing.

We have enjoyed some interesting walks this Autumn, including the memorial walk for absent friends on the Slindon Estate, and on the New Year's walk members experienced a mystical manifestation as the photo, courtesy of Chris Lane, shows.

I hope you enjoy this edition, so good reading.

**Cheryl Hutchins** 

## Slíndon House Stable Block, 2012/13

Compiled by John Green





#### A report on the clearance of the Slindon House Stable Block (See Appendix 3, page 14 for figures/photographs)

#### Introduction

Adjoining the NT office at Slindon is a row of brick arches with a door leading to a paved yard. This is all that remains of an extensive stable block that once served Slindon House. However, it is an enduring remnant and in 2012/13 Worthing Archaeological Society took on the challenge of clearing the vard and uncovering the floor plan. This revealed many details about the shape and design of the building and it was possible to inspect and measure the surfaces, which are largely intact. Research at Polesden Lacey uncovered an inventory and schedule prepared by the War Ministry which provides a detailed summary of the condition of the stables in 1940 and enables us to better imagine the lost structure.

It is easy to overlook the importance of stables; they are buildings that have largely passed from the experience of most people and vanished from the landscape but, in the age of horse transport, anyone who owned a horse had either to build a stable or pay to lodge the animal in a livery stable. On a large estate, of course, there would be many horses, heavy horses for agriculture and forestry, hacks for the family and visitors to ride, carriage horses and ponies for traps and gigs and perhaps a few thoroughbreds and hunters. There would also be a number of men and boys to look after the horses, and grooms, coachmen, and yard boys were all accommodated in the stable block along with all the horse drawn vehicles, hay, feedstuffs, tack and other equipment. Visitors too, of course, would arrive on horseback or by carriage and space would need to be kept for their mounts.

There was a long tradition among landowners of building extensive stables. There were architects who specialised in drawing plans for them and magazines for gentleman frequently featured their designs. All the principal houses, surrounding Slindon, namely Goodwood, Petworth, Wiston, Parham and Arundel had impressive stable blocks and in the construction of the Slindon block the owners of Slindon House were following a trend. There is no evidence to suggest that any of the famous architects were involved in the design of Slindon's stables; no plans have ever come to light. There is a strong vernacular style in the village of Slindon, using brick and flint, and the stable block was built in a similar style. It may well be that the stables of nearby grand houses, more often constructed in stone, were plundered for ideas but executed by local craftsmen. Certainly there were expert brick makers, flint knappers and brick layers in the village; evidence of their skills is visible in the tall walls that surround Slindon House and the many flint houses with brick quoins that are scattered throughout the village.

Although the materials may be different, the Slindon building shares several features with those of the larger estates. It was built as four connected wings. It was two storeys high and had arcades both inside and out. It had windows in the popular Diocletian style with shallow arches. It had prominent entrances with pediments. It had a clock tower and a paved courtyard. The actual stables were paved and as well as stables there were loose boxes.

The inclusion of loose boxes may be the best clue to the age of the building. Giles Worsley in his comprehensive book "The British Stable" wrote that "the most significant innovation of late 18<sup>th</sup> C design was the introduction of the loose box...this was a pen, 10ft or more square, sometimes known as the cage box, enclosed on all sides, within which limits the horse has freedom of movement as opposed to the enforced idleness of the stall....In 1785 even the most sophisticated country house stables did not have loose boxes." <sup>1.</sup> For those unfamiliar with stables, a stall is a narrow cell with a tether at the top end, where a horse is obliged to stand in the same position all the time. A loose box, with larger dimensions, allows a horse to turn round and even lie down in the space.

The accounts and papers of the Slindon Estate have been lost so it is not possible to trace the construction of the stable block or, for that matter, the many alterations to the House itself. There are however one or two clues in the Court Rolls of Slindon Manor. In 1806 it was recorded that "the Homage consents that the Lord should extend his fence from the bottom of Chispit Brow to the stables of the Lord (not injuring or incommoding the highway there) and that the Lord may enclose the Road from the West End of the said stables to the back gates of the Mansion House, the Lord making a good carriage road below at his expense..."<sup>2.</sup> This entry does not necessarily mean that the Stable Block by this date was complete; indeed it may refer to earlier stables. In fact, like modern housing estates, the road may well have been put in early to make the transport



Plan of Slindon Stable Block (red lines indicate areas that are covered or missing but are added on the assumption that the building was symmetrical)

of materials easier. The building, and both roads, are shown on the 1840 Tithe Map which is the earliest large scale map of Slindon.

A probable period for the construction might be between 1800 and 1810. The Lord at that time was Anthony James Radcliffe. Earl of Newburgh. He had inherited Slindon after his father's death in 1786. In 1788 his fortunes greatly improved when Parliament granted him and his heirs an annual pension of £2500. This probably equates to about a quarter of a million in modern money and would have given him the funds to upgrade his property. In 1789 he married Anne Webb, who was to live until she was 99 years old. Although the Earl died in 1814, she plainly continued his programme of alteration and improvements, for in 1824 there is another entry on the Slindon Court Rolls that confirms "consent to enclose one quarter of an acre of land lying on the south east side of the fence separating Slindon Common from the Highwood at the SW corner of the Common at and near the place where the said Lady is now erecting a stone gateway or entrance from the Common into the wood." This would provide a suitable entrance to the estate and a private carriage road led from this gateway through the woods to the House, offering tantalizing glimpses of Slindon House through the trees, in accordance with the best principles of landscaping. On the way visitors would pass the new stable block so it is no surprise that it was on this elevation that the clock tower was raised.

The stable block was struck by fire in the 1960s. (fig.4) There is surprisingly little local memory of this event although there are several photographs. So far no newspaper account has surfaced so these photos provide the best clues to what happened. It seems that prior to the fire the whole building had fallen into disrepair. Perhaps it never recovered from its wartime use. It was apparently used for keeping pigs and for the storage of hay and feeds. The story is that schoolboys from the adjacent school were in the habit of using one of the upper rooms as a smoking den and it is easy to imagine how the disaster developed. The photographs of the fire only show the southern wing but it was plainly well alight, sufficient to burn through the heavy timbers supporting the clock tower. The photographs do not show any fire-fighting activity, maybe the building by this time was so poorly esteemed that it was allowed to burn. Plainly, the debris was later removed down to ground level and the space was reused as a yard.

#### **Photographic Evidence**

The stable block sat on the lower slopes of the chalk hill on which Slindon House is built. We are fortunate that aerial photographs from 1935 exist, which show the plan of the building before its destruction. (fig.1) There are also a few photographs that show the exterior of the building. (fig.3) These confirm what emerged from our clearance, namely, that the stable block was a square, largely symmetrical building 150 ft square, of two storeys with a central quadrangle. From the photographs we know that the slated roof was of two spans with leaded valleys and boxed gutters. On the outside the roof overhung the walls but in the courtyard the roof was faced by a parapet with stone coping. The walls were built of bricks laid in Flemish bond with burnt headers.

Each of the wings except the West Wing had an arcade of eight arched windows on the lower storey in the Diocletian style, directly under a prominent string course. Above the string course were smaller square windows for the upper storey, one above each arch. Because of the depth of the corridors only half the number of window arches appears in the courtyard elevations. From the photographs we know that some of the outside arches were either built blind or stopped up later, while on the inner courtyard the arches held hinged windows.

Above the South Wing was a clock and bell tower. This appears to have been a substantial wooden structure in three sections. The lower part was faced with slates; the centre section was lead faced with clock dials on at least two elevations and glazed panels on the other sides. Above the clocks was an open section for the bell and lever arm and the whole was topped by a hipped slate roof with an ornamental weather vane.

Central to each wall was an aedicule 24 ft wide, stepped forward by one brick, with an archway supporting a brick pediment above the second storey, pierced by a bull's eye window. The gable above the pediment was supported on the outside by dentil brickwork but where the feature was repeated in the courtyard the stone coping continued over the gable. The archways on the North and South elevations were large entrances 13 ft wide and reaching to the height of the window sill on the second floor. Probably both of these had substantial wooden doors. The archway on the East side was a short and narrow pedestrian entrance. The West wing broke the symmetrical appearance of the building having an unbalanced run of archways, mostly just openings for the access of traps and wagons. On this side the upper windows appear to have been blind. (fig. 5).

#### Archaeological Evidence

North Wing, East End Apart from the arcade which abuts the NT office none of the stable block now exists above ground level. The space it occupied is enclosed within a low wall with a fence on the east side and the back of a long building belonging to the College on the south. On the north there is a fence and a pair of wooden sheds but these do not follow the original line of the building, being about 7ft inside it. The brick forecourt outside the sheds is actually the floor of the east end of the North Wing. (fig 6) It is easy to see the well-preserved floors of seven stalls that were built along this range. Each of them is 6ft wide.<sup>3.</sup> They were laid with red bricks on their sides giving a very tightly bonded surface. In front of the stalls is a brick channel, five bricks wide, laid concavely and in front of the channel is a corridor laid with the same bricks but in a herringbone style. Each of the stalls has a small central drain and there are four more, connected, drains along the channel. Between each pair of stalls are the remains of a cast iron post and a metal floor strip which would have supported the wooden shuttering between the stalls. Part of the corridor of this wing lies beneath the sheds.

East Wing Worthing Archaeological Society began to clear debris and vegetation from the stable block in the winter of 2012 and it was quickly apparent that the foundations of the building were in surprisingly good condition. First to be uncovered was the East Wing, adjacent to

\* I have chosen to give all the measurements of the stable block in feet. These are obviously the units which the builders used and, to my mind, give a better feel for the proportions of the building.

the Society's storage shed. This revealed a row of surfaces with a corridor alongside, separated by a skilfully laid channel made of five bricks laid on edge with a slight concave curve. There are two large areas and five smaller rooms with one more on the return at the southern end of the range. By their size we judge that these were loose boxes. Five of the rooms are paved with edgewise bricks, sloping slightly to assist drainage. The floors have been divided diagonally and a double row of bricks runs from the corner to the centre of the stall. Bricks have been skilfully cut slantwise to fill the triangular spaces created. Each of these rooms has a small central drain with a cast iron drain cover or an earthenware drainage tile. The three other rooms on this range are paved with hard-glazed, black, "chocolate block" pavers. These also slope to a drain. It is possible that these hard-glazed floors are a later alteration; the brickwork of the other rooms is very smooth and flush but the edges of these floors protrude and have a less finished appearance. The northernmost room is 12 ft wide, and may have replaced two stalls and the other two, which lie next to each other, measure 18ft wide, or three stalls width. The corridor is made from the same bricks laid on edge but here they are laid in a herringbone pattern.

Midway along this range there is a brief change of surface to flag stones. (fig.7) Many of these are broken and laminating but one or two are sufficiently intact to show that they were once thick stones about 18ins x 12ins. They run through the wing from the outside towards the courtyard where a substantial threshold is still in place, creating a narrow passageway. This flagged passage corresponds to the archway that can be seen in the photographs. The passage way is crossed by the herringbone corridor which runs the whole length of this wing. There is a slight evidence of thresholds where the corridor crosses the passage, suggesting that there were doorways opening both north and south, giving access into the corridor. This fits with the layout of surviving stable blocks elsewhere. Going south, the corridor stops at the last loose box which makes the corner with the South Wing.

The outer wall is two feet wide and of mixed construction. There is a single skin of bricks on both faces and the space between is filled with chalk and flints. Every couple of feet a brick is turned sideways, further confirming the Flemish bond that can be seen on the photographs and the remaining arcade. The protruding entrance feature can be clearly seen on both inner and outer walls, one brick wider for about 5ft either side of the entrance. More solid brickwork can be seen in the corner piers that would have supported the arches. The inner courtyard wall is three bricks thick and internal walls, between the stalls and alongside the passage, are two bricks thick.

South Wing The floor of the South Wing is completely different. For three guarters of the length it is surfaced with large flagstones. (fig.8) Most of these are now laminating and some are broken but it is easy to see that this was once a substantial and impressive floor. It was probably the coach house and we know from photographs that there were heavy wooden doors on both elevations that would have allowed passage both into and through the wing. There is one exception to this spread; at the start of the flags, against the inner wall of the courtyard, is a patch of thick mortar about 4ft x 6ft laid on top of the flags. This is probably the hearth for a fireplace; one is mentioned in the War Ministry Schedule and this is probably therefore the location of the saddle room which was traditionally the domain of the head groom and usually quite snug. A couple of feet away in the courtyard is a shallow drain gully, often found where a pipe empties through a wall.

Unfortunately the wall of a shed belonging to Slindon College overlays the south outer wall of the Stable block and inside this wall is a modern concrete plinth about 2ft thick, which stretches over half the length of the wing. This makes it impossible to see any evidence of the entrance on the south side, although there are several photographs of this elevation and it is plain that it matched the internal opening. The footings for the central arched feature can be clearly seen on the courtyard wall and in the centre of the entrance is a small square hole, cut for the bolt of the doors. The inner, courtyard, walls are the same thickness as on the east wing.

Photographs of the fire that destroyed the stable block show that it was fiercest in the area of the clock tower, which was above the central arch. During clearance we found burned material in this area with melted lead and thick pieces of glass. The flagstones here are darkened from burning. This cannot be confirmed as evidence of the fire however because the Trust frequently have large bonfires in the courtyard.

The flagstones end at the footings of an internal wall 26ft from the SW corner. This wall once had a narrow doorway at right angles to the inner wall of the courtyard; the slots for the door jamb can still be seen. Between this wall and the west wall of the block (still standing to half height) are the floors of four more stalls. This corner is used by NT to store building materials but we were able to move enough to establish that the first and last stalls have cobbled surfaces and the middle pair is laid with "chocolate block" paving. (fig.9) There are the remains of iron stanchions between the stalls, in this case about 12 inches high. We were also able to see that there is a concave brick channel in front of the stalls, laid in the same fashion as on the other wings with a drain outside each stall. It is reasonable to expect that there would have been a herringbone corridor in front of the drains as on the north and east wings but, if it is existed, it cannot now be seen as this area (which leads to the west door) has been overlaid at some time with concrete.

There is about a 6ft width of the original south wall still standing in this corner. It reaches the top of the arched west wall but is tumbled or broken down towards the college shed. Its construction is unexpected. We have photographs of the outside of this wall which is plainly constructed entirely of brick in the Flemish bond. The inner remnant, however, has just a brick quoin in the corner but is otherwise filled with chalk and flints in a very rough and ready fashion. Further exploration would be necessary to establish whether this was the standard inner face of the outside walls or whether, perhaps, an earlier building has been incorporated into the block at this point. This is a possibility as there is a complex of buildings still abutting to this corner. These are also the only stalls which have cobbles, known to be the usual surface of early stables. This corner was evidently a special area. It had its own outside door and window on the west front, both of which disturb the symmetry of the stable block and the War Ministry Schedule excluded this room from the requisition because there was "no entrance from the quadrangle."

The lower part of this corner is thickly plastered with mortar to about 5ft above the ground. There is a clear edge to the plaster and it slopes diagonally down towards the door on the west wall, suggesting that this was the original finish inside the stalls. There is no evidence that the plastering ever continued any higher.

West Wing The outer wall of the West Wing is still standing (fig.10) and therefore ought to give the best clues to the construction and appearance of the stable block. However it can only provide limited information as it is atypical. While we are fairly certain from both photographs and floor plans that the other three wings resembled each other and were symmetrical this wing breaks the pattern, on the external face at least. The other wings each had eight arches on the lower storey, regularly spaced; this wing had two wide arches either side of the central arch and pediment, balanced by a narrow window arch at each end but also pierced by a low doorway near the south end. The two arches at the northern end have been incorporated into the NT office and, at some time, the four central arches have been partially bricked up to nearly half their height. This infilling has been carefully added to match the original

brickwork and to correspond to the height of the original window sill beside the stable door. The upper windows on this front were probably blind on the outside but there may have been opening windows onto the courtyard. Indeed, it is likely that the inner face of this wing matched the other three.

The floors at the southern end of this wing have been concreted over, more than once, and there is a series of post holes about a foot away from the line of the inner, courtyard, wall. These look as if they might have supported a fence or partition and probably relate to some repurposing of the space after the fire. They would not make sense if the inner wall was still in place. Nearer the arches the floors have been broken by a service trench but there is no evidence of the brick floors present in the other wings. There are at least four internal walls running at right angles to the arches and it seems that each arch opened to a room behind. Some of the arches have the pins for gate hinges or doors. Because of the concreting it is not clear whether there were any connecting doors between the rooms. The pillars of the three central arches have chamfered brickwork which would ease the passage of vehicles so we can assume that these rooms were used to store carts, traps and waggons and perhaps, from the early twentieth century, motor cars. The main yard surface continues as a drive for the width of the centre arch. (fig.11)

A lot of timber is stored in this area so it was not possible to inspect the floors thoroughly at the northern end. However, by probing we were able to find sufficient evidence to confirm that the plan of the building corresponds to the layout of the other wings.

North Wing, West End This is the least distinct area of the stable block. Inside the yard it is largely overlaid by timber stacks and by wood chippings to a depth of about a foot. The northern wall lies outside the present fence in a sloping area of grass and brambles. This wall would originally have joined the western arcade several feet from the corner of the NT office. There is a remnant of this junction among the brambles. (fig.13)

A full excavation would be necessary to establish the exact layout of this end of the north wing but by probing we have been able to discover a few details. The footings of the inner courtyard wall can be seen where it meets the entrance passageway, although the floors appear to be very broken up. We found parts of a channel with drains to match that visible on the other side of the gateway and this suggests that there was another set of stalls at this end. However, the brick channel is much distorted either through tree damage or by collapse or subsidence. It may be that this corner of the building had begun to slip away. Interestingly, the 1940 Schedule reports that the floor surface in this corner was, "old, worn, undulating, stones disintegrating and generally very dilapidated."

Another possibility is that this NW corner, like the opposite SW corner incorporated an older building. The remnant in the undergrowth and the rear wall of the NT office are of a different construction to the exterior shown in the photographs. Again, these may be glimpses of a less well finished internal face but could also be the result of patching or alterations. (fig. 12)

The gateway on the north wing matches the dimensions of that on the south side. The footings for the walls here can still be traced and, within the gateway on the east side there is a stone threshold that would have given single door access to the internal corridor and probably the stairs to the upper floor.

<u>Upper Floors</u> We have little archaeological evidence for the upper floors but there is a description in the War Ministry Schedule. From this we learn that there was a stair case of two flights to the upper floor in each wing, with a handrail and a single, lockable, panelled door at the top. In the north wing the stair gave access to corn stores and hay lofts with hay chutes that led to the stables below. In the east wing, the first section seems to have been a utility room with a cupboard and a sink, a W.C., a ten gallon copper and a galvanised storage tank. Further along this loft is an area described as a coachman's living quarters, with a passage, two bedrooms, a fireplace and a kitchen and scullery.

There is more accommodation in the south wing with a flat containing a bathroom, a long passage, three or four bedrooms, a store room and W.C. and a kitchen and scullery with a small cooking range. Both of these living areas were divided by partitions and panelled with match lining so they are probably not original but were in place when the building was requisitioned by the War Ministry. A Victorian photograph of the Stable Block shows a wooden stairway in the southeast corner to the upper floor of the south wing and a wooden door in place of the last window.

Also on the upper floor of the south wing south wing was the loft to the clock tower. The structure of the tower was visible in this room with two floors supported by heavy baulks of braced timber resting on two10 x 6 inch RSJs. There was a single, bulls-eye window.

There seems, from the description in the Schedule, to have been a continuous loft in the west wing with five sash windows overlooking the courtyard. This corresponds with one of the entries in Jimmy Dean's diary, where he mentions "a large ball room up over the stables called the Rink."

The Stable Yard The stable yard was paved with large, yellow bricks, moulded with four wide spaced lozenges on the top surface. These bricks are largely still in place although covered with an inch or two of mud and, in some areas, piles of timber. They meet the inner walls of the courtyard with a brick fillet and extend as driveways into the central entrances on the north and west wings. Because these bricks are soft the top surfaces have sometimes laminated or been worn away but it is easy to see that they would have created a tidy and impressive yard. Only the edges of the yard were cleared in our exploration.

In the middle of the yard is a small drain, 19 inches square. Its central position suggests that it was the main drain for the regular sweepings and sluicings of the yard. When there is heavy rain the central area becomes very muddy and sometimes floods, suggesting that the drain is blocked.

Nearby is a brick built manhole. It has no cover and is full of earth. The Schedule describes two such manholes. Our suspicion is that these gave access to an underground cistern for storing rain water from the roof. (See appendix 1) Near to this manhole is a large concrete slab several inches thick which may be covering another opening. What we have not found are two soak-aways with iron grills that are mentioned in the Schedule.

There are also small drains in the south east and south west corners of the courtyard and another beside the pedestrian entrance on the east wing. All have cast iron grids though they may not be original. These three drains appear to be part of the original build and probably had downpipes carrying rain water from the roof. No doubt there were similar drains in the other corners which are still covered with debris or buildings.

We uncovered two more drains in the courtyard. Both have cast iron grids. One is against the inner wall on the southern end of the east wing and was probably below an outdoor tap; the other is against the inner wall of the south wing, to the east of the doorway. This last drain has a shallow surface gully, plainly a later addition, and looks like the kind of drain that would serve a pipe from a sink. It is on one of the wings where we know that there was living accommodation at the time of the wartime requisition.

<u>Outside the building</u> The final feature of note is beyond the line of the east wing. The Schedule describes it as a "dwarf brick wall, 2'3" high with saddle brick coping. To the bottom of the wall is an old brick channel about 12" wide falling to a gully in the centre, complete with grid." (fig.14) Although the wall is still intact, now capped by a fence marking the boundary between the NT yard and the College beyond, the channel has collapsed for much of its length. However, enough remains to show that it was constructed of the same bricks as the stable floors, with five or six laid edgewise with careful cambering to create a concave channel exactly like those inside the stables.

The College ground rises quite steeply behind this wall and our best guess at the purpose of this wall is that it was built to overcome a problem with seepage. It may not have been part of the original design but added later to drain water out of the slope, hence the channel to direct the seepage to the gully.

The gully is directly opposite the pedestrian entrance on that wing and immediately outside the threshold is a square drain with a grid. This, in turn, lines up with the central drain in the courtyard, leading us to suppose that the gully connected to the main drainage scheme. We sought permission to investigate this further with a proper excavation of the drain (see appendix 1) but found what appeared to be a supply pipe. If the gully connects to the courtyard drain it must do so at a much deeper level.

#### **Conclusions and recommendations**

Apart from the archaeological interest of this surprising ruin, there was a practical purpose to our clearance of the site. We understood that National Trust were keen to completely clear and repurpose the yard, perhaps as a car park. There was talk of a visitor board with pictures and information about the stable block. To this end, we made a thorough clearance where we could reach with the understanding that other spaces would be cleared later.

Unfortunately, this has not happened. More rubbish and building materials have been dropped in the yard; heavy vehicles have been driven over exposed surfaces and, worst of all the vegetation has been allowed to grow back. This last is a most worrying threat to the archaeology; the working groups removed nettles, brambles, willow-herbs and elders which were mostly growing with lateral roots in thin soil above the paved surfaces. Because the surfaces have now been opened to the air but have not been treated with weed killer, pernicious seeds have worked their way into the cracks between the bricks and pavers. This has led to sturdier weeds taking deep root and there is a real risk of lasting damage to the surfaces and foundations.

No doubt there are many considerations involved in developing a strategy for the future of the yard. We are aware that there are some special habitats within the enclosure which may need protection. If the archaeology is not to be lost then perhaps a covering of sand or wood chippings might be a possible way forward but this would demand another clearance and selective use of weed killer.

There is another consideration. Our research suggests that underneath the courtyard is at least one large cistern that was designed to take the rainwater from the roofs. We have the mention of "a large deep tank in the stable yard" in Jimmy Dean's Diary, (see appendix 1) the manholes and soak-aways mentioned in the Schedule, and the twin- gabled design of the roof which would have maximised the collection.

In addition there is anecdotal evidence. Mrs Harding, who lived above the stables as a girl (see appendix 2) remembers dropping stones through an iron grid and waiting several seconds for the sound of the splash. An estate worker was present when a large slab was lifted in the vard to reveal what was thought to be a sewer, fashioned with brick pillars and arches, but which is probably a cistern. Given the fact that there are no springs in the village and wells in Slindon all have to be dug very deep, the storage of grey water under the yard makes perfect sense. The Schedule records that there was a pump on the east wall of the courtyard; if the slab on the opposite side hides an entrance this suggests that the cistern may be very extensive, stretching the entire width of the courtyard.

There is an obvious implication here. Any development, especially if it involves the weight of heavy vehicles will demand caution. Investigation of the cistern, its condition and safety, will probably be necessary, even to continue with the present uses of the yard. This will be a job for experienced surveyors but if Worthing Archaeological Society can assist with any aspect of this investigation, we will be happy to do so.

There are other, archaeological, investigations that might be undertaken. Both the south west and the north west corners of the stable block appear to be different from the rest of the construction and may have been parts of an earlier building. There is also archaeology hidden under the grassed area outside the fence on the north. For a better understanding of the building it would be good to explore these areas further but this would require a proper excavation with deep trenches.

This is a significant building and part of the history of Slindon, albeit largely unknown. We would be keen to cooperate with any exploration that could extend our knowledge of the Slindon Stable Block.

#### Footnotes

<sup>1.</sup> The British Stable (2004) An Architectural and Social History (based on Worsley's PhD thesis), photography by William Curtis Rolf, Paul Mellon Centre for Studies in British Art, Yale University Press, ISBN 978-0-300-10708-1

<sup>2.</sup> The old highway mentioned here is now the driveway to Slindon College and the NT base camp and its original route can still be seen continuing through the shrubbery towards the new road.

<sup>3.</sup> Clifford recommended in 1565 that a stall should be 5ft wide and this seems generally to have remained standard until the late eighteenth century. William Ward, writing in 1776, recommended that stalls should be 6ft wide and this became the common width for stalls.

Appendix 1: Report on the Excavation at Slindon Stable Yard, May 2013, Pete Brannlund



Figure 1. Plan of trench. The line of section was drawn along A-B.



Figure 2. Section to show depth of the foundation

This excavation was carried out by Worthing Archaeological Society on 25<sup>th</sup> and 26<sup>th</sup> May, 2013, with the permission of the archaeologist of the National Trust. A single trench (trench 1), measuring 3.16 by 2.1m, was opened on the eastern side of the stable yard, covering the area between the exposed eastern wall of the stables and the retaining wall. The trench was excavated by hand, all identified contexts were recorded and the trench planned (see Figure 1), a section drawn (see Figure 2) and photographed (see Figure 3) before being backfilled on the 27<sup>th</sup> May. Artefacts were only recovered from open contexts; these were not retained but returned to the same context during backfilling.

### **Objective 1.** To see the condition of the preserved remains below surface

This objective needs to be rethought in the light of further archival research. The trench provided a very limited snap shot of the below surface structure, which appeared to be in very good condition and stable. However, a recent archival 'discovery' suggests that there is a large water storage facility beneath the courtyard of the stables and further work needs to be undertaken if we are to ascertain its condition.

# Objective 2. To ascertain the depth of the foundations of the stable block and their construction method

In the area excavated the foundations extend to a maximum depth of 17cm, being founded on solid chalk. They are essentially a leveling feature (composed of brick in mortar) on which the wall was constructed.

### Objective 3. To investigate possible phasing regarding the drains in that area

Prior to the excavation it was assumed that feature 2 (see Figure 4, an interpretation of the features seen in trench 1), the drain attached to the eastern retaining wall, would link up with the drain that runs beneath the internal corridor.



Figure 3. Photograph of part of Trench 1 looking south west

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Esster	n Passagrivas				
	Water Pipe		Number	]]	
Extend 9	6 al (1962)		Entrance to		External Wall (992)
	<u> </u>			Subsurface	

Figure 4. Interpretation of figures seen in trench 1

However, there is no subsurface connection between the two features and we currently think that feature 2 lead to a soak away. It, and the associated brick built drain, appear to have been added to the eastern retaining wall, almost certainly to cope with a drainage problem that arose after the construction of the stables.

Context (007) is the shattered remains of a ceramic pipe leading to context (011), the manhole. Initially this was interpreted as a drain, possibly to deal with runoff, via guttering and downpipes, from the roof. Although we have been unable to date any of the materials used in construction, the ceramic pipe is glazed suggesting a late 19<sup>th</sup>, early 20<sup>th</sup> century date for construction. In addition, the bricks used in the construction of the manhole are bigger than those used in the wall of the building, again suggesting a different phase of construction. The pipe, though shattered and very fragmentary, appears to angle into the manhole in a direction that would lead away from the stables.

Subsequent to the excavation, an archival search, at WSRO, of Jimmy Dean's diaries uncovered the following entry; "At the death of Anne, Countess of Newburgh, in 1861, Slindon House was shut up and locked with a large chain around the gates. The workmen had to go round and get into the place best they could for a time. All the milk to Slindon villagers was stopped for a time and the villagers (prevented) from getting water from the very large, deep tank at Slindon House Stable Yard."

We have heard anecdotal evidence of this water tank before, but this is the first documentary evidence uncovered. We had, wrongly, assumed that the tank might be used for drainage, but this source indicates that it was for water supply rather than disposal. That being the case, it is likely that originally it was used to collect rainwater (there are no streams or springs in the immediate vicinity) possibly from the roof of the stables. However, when piped water was bought into the village it may have been filled from the mains, and we therefore suspect that the shattered pipe in trench 1 may have been a water pipe leading from Top Road into the stables. This obviously requires more work to establish.

#### Appendix 2: Recollections of Mrs. N. Harding

## INTERVIEW with Mrs. Norah Harding and Mr. John Chamberlain, 16.07.2013

Mrs. Harding and John Chamberlain, her brother, lived with their parents above the garages in the south wing of the Slindon Stable Block. They had six brothers and sisters. Their father, Mr. Chamberlain, was chauffeur to the Wootton Isaacson family and, along with several other members of staff, had come with them to Slindon in 1913.

Their accommodation was accessed by the stairs in the arch centre of the south wing. Mrs. Harding had no recollection of the wooden staircase to the upper floor shown in the 1880 photograph of the staff. She remembers bedrooms, a kitchen and scullery, a "horrid bathroom" and one room which was kept as a best sitting room. Both she and her brother were born in these rooms. Mrs. Haves, the wife of the groom was, conveniently, a midwife. The grooms, Bob Witmer and Mr. Hayes lived above the west wing. The ground floor was used to garage the cars, a Riley, a Sunbeam and an Armstrong Siddeley. The entrance to the garage was by the large doors from the central courtyard. Another of her father's duties was to wind the clock, which kept good time.

The family left the village when the house was requisitioned for war use and went to the West Country with the Isaacsons. Their furniture was put into storage in the building now used as the National Trust office but when they returned after the war they found that the Canadian troops had burned it.

Norah and John's memories were clear and corresponded closely with the schedule prepared for the War Department. They confirmed the existence of the deep water cistern(s) under the stable yard. Norah remembers two "wells" with iron grids; she was told not to drop stones down these shafts but frequently did and her recollection is that it was quite a drop. She said that the covers would have taken two men to lift but does not remember any pump or system for raising water from the cistern. She said that there was a pump outside the block on the SE corner, on the pathway to the house. She also remembered the mounting block, which was in the NW quadrant of the yard. Lady Beaumont mounted here. She rode side saddle and often joined the Hunt. She had several hunters which were kept in the stables with other, working, horses. There were also carthorses which had their own stable in the SW corner of the block, which was accessed from outside by the doorway in the arches.

The loft in the north wing was used to store hay and fodder and Norah thinks there were trapdoors to the stables directly below. The hay was loaded upstairs by bringing the hay wain alongside and pitching it through the open windows.

The west wing was used in those days to store carts and wagons. Mrs. Harding allowed me to copy photographs taken from outside the stable block showing this range and it is clear to see that these were open arches with bays behind them and that the first arch was equipped with stout doors. It is also clear that the outside windows on this range were bricked up, or built blind.

John and Norah also said that the Isaacsons kept hounds in the kennels behind what is now the Base Camp. This area was where their mother hung the washing; there was also a chaff cutter and a gadget for making "pimps", short bundles of hazel twigs bound by wire for laying fires.

They agreed with the story about the accidental burning of the building, attributed locally to schoolboys smoking in their old flat. They thought that Mr. Hart came as headmaster in 1960 and that the fire occurred two or three years later. They do not remember what happened to the building following the fire but by this time John was on National Service and Norah was bringing up her children. However, she does not think much fuss was made about it locally so it may not have been such a big event as we had imagined.

#### Appendix 3: Photographs



www.britainfromabove.org.uk/cy/image/EPW047746 copyright English Heritage



Figure 3. South Wing and Clock Tower



Figure 2. Staff of Slindon House photographed in

the Stable Block Courtyard , c.1880

Figure 4. The clock tower collapses as fire takes hold of the building

Figure 1. Aerial View of Slindon House Stable Block, photographed in 1935



*Figure 5. The West Wing, from a sketch published in the newspaper c.1930 by Mr. V. Slaymaker* 







Figure 7. Floors of stables, passageway and loose boxes on East Wing, and foundations of outer wall



Figure 8. Flagstones of the coach house floor on the South Wing

*Figure 9. South west corner showing chocolate block pavers, cobbles and stanchions* 



Figure 10. The brick arches of the west wall showing concrete floors and partition walls



Figure 11. Paved driveway from blocked up central arch, showing chamfered piers, concrete overlay and the trench carrying modern services



Figure 12. Irregular build of north west corner at end of arcade



Figure 13. End of the west wall abutting NT office

Figure 14. Retaining wall, brick channel and gully on the east boundary of the site

## Sussex Loops-a summary of the collection

By Amie Friend

#### Introduction

The Sussex or Brighton Loops are a unique collection of Middle Bronze Age (MBA) twisted bands found almost exclusively within the area now defined as the Sussex South Downs. The Loops have generally been thought to have originated during the Taunton Phase of bronze development, a period spanning approximately



Figure 1. Sussex Loop—Near Lewes (Photograph by Author—with Permission of the British Museum)

1400-1275 BC, and which is often referred to as the ornament horizon.

There are currently thirty-four known Sussex Loops the first of which was found in 1825 during an excavation at the site of Hollingbury Camp on the outskirts of Brighton. Following this discovery Loop hoards have been located throughout Sussex and the Downs during the latter 19th and early part of the 20th century including those at Hollingbury Castle, Falmer Hill and Black Rock. There have been only two recent finds of Sussex Loop hoards, the Near Lewes hoard of 2011, which to date is the largest single collection consisting of five examples, and the Near Oakham hoard of 2013, which remains the only hoard outside of modern Sussex.

These Loops are an intriguing regionally specific collection for which there is little collated data or interpretation. As such I attempted to draw together within my Masters thesis what is known of the Sussex Loops, fully catalogue the collection, map the find sites and consider the context of

each Loop in order to study how these artefacts fitted into the tapestry of MBA Sussex.

#### Aims of the Project

Despite local interest in the Sussex Loops there has been little serious academic interest in the collection. The Loops have always been popular in a local context becoming symbols of Brighton societies and clubs, including a morris dancing group, however information about the Loops has been scattered and sporadic leading to limited interpretation. During the 19th century early archaeologists considered the Loops to have been the upper armbands of eminent local personages, such as female members of a druidic order. Modern ideas have considered the Loops in terms of a practical, cultural or religious symbol; hoarded material ready to be recycled into a new product; part of a votive offering; or the finished work of a regional craft workshop.

As such the aims of this thesis was primarily to collate the known information and from this new platform evaluate the posed arguments concerning the Sussex loops. The thesis strove to;

- Fully catalogue the known Sussex Loops
- To map and find sites of the Sussex Loops
- To compare were possible the context of the find sites and the hoard collections within which the Loops were found
- Interpret the finds both individually and within the context of the collection
- To attempt to assess why the Loops were made, possibly by whom, and why primarily the Sussex Loops have only been found within the Sussex South Downs.

#### The Catalogue Data

Whilst all of the Sussex Loops conform to the twisted band design there are vast differences in the construction of each Loop. Primarily there are two forms of a Sussex Loop. Firstly there is a Lozenged sectioned example (figure 2) which accounts for 56% of the collection and secondly a Rounded design (figure 4) which is demonstrated by 18% of the examined Sussex Loops. Unfortunately at the time the catalogue was complied only 22 of the 34 known Sussex Loops could be fully studied. Those such as the Falmer Hill Loops are not held by any known museum and were potentially donated privately in the years following their excavation, sometime in the late 19th or early 20th century. Similarly others could not be made available for study at the time of the survey, such as the three Loops from the Black Rock site, and the new Near Oakham pair, for which only limited data was available.

However the catalogue demonstrates that the Sussex Loops ranged greatly in terms of weight (702 - 74g), interior diameter (76 - 59 mm), exterior diameter (98 - 77 mm) and the thickness of the construction rod (15 - 4 mm) used. Indeed other than the Handcross pair, in terms of construction no two Sussex Loops are sufficiently alike to call them a linked pair.

Decoration can be identified on four Loops and potentially two others which could not at this time be studied. The Handcross pair exhibited a nicked style of decorated consisting of many parallel lines carved into the face of the Loops bronze surface and which follow the apex of the Lozenge shape (figure 3). This pattern is similar to that on the Chichester example except that in the case of the Handcross pair the decoration extends over the Loop hook. However the Patching Loop while exhibiting a nicked style of decoration is completely different exhibiting a zigzag design between the points of the lozenge profile in addition to the







Figure 3. Sussex Loop 11—Handcross Nicked decoration across the Loop Hook (Photograph by Author—with Permission of the Great North Museum)

nicked parallel lines which follow the lozenge apex. Similarly the Handcross examples only demonstrate decoration to the Face of the Loop whilst the patching Loop has decoration on both its face and side. Whilst these four are all lozenge in profile there is an example from the Black Rock hoard where decoration, again of nicked parallel lines, has been included on a rounded profile Loop.

In general terms the lozenge shaped Loops tend to be smaller and thinner however this is certainly not always the case. There is also no cohesion in terms of the bronze colouring of the Loops and indeed some of the colours exhibited argue that the mixtures of bronze used in their construction were deliberately coloured with trace elements. Some are very dark whilst two are crafted from bronze with a very distinguishable golden hue (Handcross SL10 & 11) and others varying degrees of a more coppery red (SL18 Near Lewes).

#### **Distribution and Depositional Context**

The Sussex Loops until the discovery of the Near Oakham hoard in 2013 have exclusively conformed to a very specific regional context, indeed the majority within a 15 mile radius of modern Brighton's town centre.

Each of the Loops, with the single exception of the Patching Loop which came from a disturbed context near to the Patching reservoir, was recovered as part of a carefully composed Bronze Age hoard along with a varying range of other objects. These accompanying artefacts include examples of palstaves, rings, spiral twisted torcs, flint scrapers, amber beads, a spear head, gold appliqué disks, necklace fragments and both quoit headed and urnfield pins. Each hoard is unique in the make up of its deposition and there does not seem to be correlation in terms of the Loops construction and their associated artefacts.



Figure 4. Sussex Loop 8—East Dean Round Form Loop (Drawing by Author)

Sussex Loops are usually located in equal numbers the most common quantity being two, which has fuelled arguments that they came in pairs or sets. Of the 34 strong collection only one Loop has ever been found singly (Patching) whilst only the Near Lewes and Black Rock hoards seem to have been created with an uneven number of deposited Loops. In general the Loops have been found in areas of soft hilly terrain offset by areas of flatter ground, which constitute some of the most picturesque areas of Sussex's natural landscape and which also plays host to a multitude of contemporary and near contemporary sites. These sites include many settlement and potential settlement sites as well as the LBA hill forts which follow the Loop tradition by only a relatively short period, and in the case of Hollingbury Camp were constructed around a previous Loop hoard, the knowledge of which was potentially still available to the local community.

There are some oddities to several of the hoarded contexts the most drastic being that of the Patching Loop. This Loop was located in a considerably damaged state the result of having a large flint jammed through its centre. Unfortunately as this Loop was known to have been disturbed only speculation is possible as to whether this damage was a result of the Loops deposition or its disturbance. Yet among the collection there are examples which suggest deliberate damage was inflicted on a Loop prior to deposition. Nearly all the Loops show post depositional damage however there are examples such as Sussex Loop 21 from Near Lewes, which demonstrates a clean break through the Loop arm at the base of the Loop face, which does not seem to have been the result of recent accidental force.

#### Interpretation

Within the thesis I evaluate the gathered evidence in light of several possible interpretations of the Loops use, and the motivations behind both their construction and deposition. The Loops are in essence regionally specific, valuable in terms of both materials and workmanship and as a collection demonstrates great variation in terms of appearance. As such a key interpretation of the Loops within Bronze Age society has remained that they functioned as a symbolic expression of social power. Indeed the Loops have been likened to the later golden Torcs of the Iron Age. This power may have been of a religious nature, as suggested by the early excavators, but may equally have delineated persons of political influence within society, or a combination of both these forms of social leadership. The Loops are constructed from materials found great distances from the source of their use and other than two examples are only to be

found in one very controlled area of influence suggesting their significance was understood only in a regional context.

Alternatively the Loops distinctly regional context may demonstrate a more practical influence. It has often been wondered whether regionally specific objects could hold the key to discovering bases of local craftsmanship or craft workshops. The Sussex Loops may indeed have been the signature piece of a particular local craftsman the tradition of which was either only understood in the local area or its aesthetic value only appreciated within that area. If this was the case from the distribution of the Loops find sites it would seem that the modern Brighton area may be a good candidate for a locally based craft shop. The hoards themselves may have consisted purely of completed orders of jewellery, finery and imported goods waiting to be distributed to the intended customer.

However whilst this interpretation seems to fit well for several of the hoarded collections in many cases the make up of the Sussex Loop hoards seems to have been particularly eclectic and comprised of objects which were likely curated. This may still indicate a craftsman's hoard, the materials bought from local communities waiting to be scrapped and recycled into new merchandise. However in many cases the inclusion of objects such as flint daggers and scrappers as well as the assorted mixture of palstaves, pins and other items would suggest that the Loops were



Figure 5. Sussex Loop 13—Hollingbury Castle (Drawing by Author)

included in hoards created for other purposes. The Sussex Loops would appear to be objects of some value, and or social meaning. Therefore it is perhaps most likely that they were bracelets that became appropriate for deposition in community or individual votive offerings or were valuable enough to find their way into hoards designed to safeguard an individuals wealth.

Whatever the direct social meaning of the Sussex Loops was archaeology will probably never know, however these enigmatic pieces of Sussex history clearly demonstrate that the region of the Sussex South Downs, which was to grow into a dominant archaeological landscape in the next few centuries, was, during the MBS and area of wealth, social organization, and distinct culture, a culture which in some manner the Sussex Loops expressed.

Possible site of Cutmill Watermill, Broadwater

#### By Alex Vincent

Broadwater near Worthing is mentioned in the Domesday Book of 1086 as "Bradewatre" where a church and a mill are recorded. The mill would have been a watermill in the vicinity or it could have been a tide mill as an inlet of water once came up to the village. A windmill existed at Greenfield in Broadwater Manor in 1300 and a Cutmill Watermill in the same year. Both of these mills were destroyed by 1493. Broadwater church had received 14 shillings from mill tithes in 1341.

The medieval windmill may have stood on the site, which was later occupied by Broadwater Windmill, which was built in 1780. This ceased working in 1901 and was demolished in 1920. The site is now in woodland at the north-western end of Hill Barn Golf Course. The club house at the golf course (once stables for Hill Barn Farm) is cruciform in shape and may have been modelled on the sails of Broadwater Windmill.

The site of the Cutmill Watermill is not known. In 1616 and 1635, a Cutmill Lane was recorded. In the same area a Millpond Meadow existed in the 18<sup>th</sup> century, which was probably the site of the watermill. This millpond was north of Decoy Pond. The latter is now occupied by industrial buildings in Decoy Road.

The author believes that the Cutmill Watermill may be on the site, which was occupied by a factory called "Chessell". This was part of the Eurotherm Group, which is now demolished. This factory was possibly on the site of the millpond as there is a large dip there. The watermill itself maybe at the south-eastern end where there is a slight rise in the ground in Dominion Way. This is centred at TQ 158043. A new factory is now being constructed on the site.

During 2012/14, the author has explored the area and found pieces of brick and tile on the site. These are medieval in date, which was confirmed by a member of the Worthing Archaeological Society. These may have been part of the watermill or from another building associated with it such as a miller's cottage or out-building. Some of the artefacts are roof tiles. Other things such as millstones, pottery etc might still be on the site waiting to be found.

The author also believes that the site of Cutmill Lane is now Harrison Road. This road comes off Dominion Road in Broadwater and goes in an easterly direction to the site. The western end is now residential. The eastern end was just a track in use as a footpath. This was blocked off for a while, but it is now opened again. Excavations by future archaeologists on the site are needed to confirm if this was the site of the Cutmill Watermill. Although another factory is being built, field work and excavations can still be carried out on the site.

At the western end of Harrison Road was Decoy Farm (demolished in 1909). It was probably built on the site of Pechwick Farm, which was recorded in c. 1280. This farm probably brought corn to the watermill for grinding into flour. Further west in Broadwater Street East is an Inn called "The Old House At Home". Just west of the Inn are modern multi-storey flats, which were probably built on the site of a malthouse, as the area was once known as "Malthouse Row" and "Malthouse Yard".



## Lower Farm, Walberton, Report 2013-14

By Peter Brannlund & Ian Robertson

#### Acknowledgements

The archaeological investigations were funded by Worthing Archaeological Society, the work being carried out by the Societies' members. Their commitment to the work is duly acknowledged. The work would not have been possible without the permission and encouragement of Luke Wishart, the landowner. The advice, enthusiasm and support of John Mills (archaeological officer for West Sussex County Council and WAS President) are also gratefully acknowledged.



Figure 1. Site location



Figure 2. 3D view of the site with the Resistivity results superimposed. Note the plateau like nature of the site

The diggers especially wish to thank Malcolm (don't know his surname), whose generosity and minidigger saved a lot of blood, sweat and tears.

#### Summary

Excavation by Worthing Archaeological Society on a site at Lower Farm, Walberton, recovered evidence of pre-historic occupation, possibly followed by land usage in the Romano-British period.

#### Background

This report details the investigations at Lower Farm, Walberton (see Figure 1), owned by Mr Luke Wishart. In the early summer of 2013, a WAS member had the opportunity to fly over the area and took many photographs (see Figure3) of the crop marks observed. These revealed a series of features that were discussed at a meeting on 25.09.13. Of particular interest were the photographs showing a field at Lower Farm adjacent to the grain drying facility. John Mills (West Sussex County Archaeologist) suggested that these might include a (possibly late Bronze Age) field system, with some of the field boundary ditches being centred on an earlier (possibly early Bronze Age) barrow. The landowner (Mr Luke Wishart) also informed the meeting that this particular field was under grass in anticipation of the construction of a large solar array. WAS was therefore asked to investigate some of the crop marks before construction started. A project design was drawn up, starting with an initial phase of geophysical survey, followed by evaluation trenches to test the results, with further, targeted excavations if time allowed.

#### Site Location & Geology

The site is in the parish of Walberton, centred on SU 986047 at a height of c.4.5m above sea level. To the east the ground slopes sharply down to the Walberton rife, to the west there is a gentler slope into the adjacent field whilst to the south it slopes down to the railway track there being a break in slope at about the 3.5m mark. It therefore forms a fairly flat plateau surrounded on three sides by lower ground and is most likely a river terrace associated with the River Arun, which is c2km to the east (see Figure 2)



Figure 3a. Oblique view across the site from the southeast looking towards the grain drying facility. Note the strong linear feature running from bottom centre towards top left, also the central circular feature.



Figure 3b. View taken closer to the vertical of the central area of the field. North is to the top of the photograph. Note the strong linear and circular features.



Figure 4. The results of the resistivity survey

Geologically, there is a thin brickearth soil (c30-35cm) above a layer of fine, well-sorted yellow sand.

Archaeologically, several other sites are known within the immediate vicinity. About a kilometre to the north is the Walberton Roman villa; whilst about 1/2km to the west is a multiperiod site with phases ranging from the Late Bronze age through to the late Roman periods. The aerial photographs showed a plethora of crop marks in the surrounding fields, attesting to a prolonged period of human activity in the area.

#### The Geophysics Survey

The field was divided up into 20m squares orientated parallel to the national grid. A large area was surveyed using magnetometry, but this produced no meaningful results showing a random scatter of minor anomalies. A smaller, more targeted area was surveyed using resistivity. This was initially carried out with readings every 0.5m, but, based on results, over the majority of the area readings were taken every 1m. The results are shown in figure 4.

The resistivity results show very clear linear anomalies within the area surveyed. Comparison between the resistivity results and aerial photographs showed a high degree of correlation, with certain features being very notable. Based on these results, excavations were planned to further investigate the three features labelled on Figure 3b as follows: -

**Feature 1** A strong linear feature, which runs for at least 80m in a southeast northwesterly direction across the site.

**Feature 2** A circular feature. Based on the width of the 'tram-lines' caused by farm machinery, this should have a diameter of 18-20m and have linear features leading off from it in at least four locations.

**Feature 3** Another linear that leads away from Feature 2 running roughly southwards and crosses Feature 1.

#### The Excavations

Excavations were carried out on three separate occasions in November 2013, August 2014 and October 2014. A total of nine trenches were planned, though only 7 were actually dug due to time constraints and ground conditions.

Trench A 8m by 2m, designed to section Feature 1

Trench B 8m by 2m, designed to section Feature 3

Trench C Not excavated

Trench D 6m by 3m, designed to section Feature 1

Trench E 6m by 2m, designed to section Feature 1

Trench F 8m by 3m, designed to section Feature 3

Trench G 30m by 1.5m, designed to try to locate any evidence of Feature 2

Trench H Not excavated

Trench I 6m by 6m, designed to investigate the junction between Features 1 and 3.

#### The Results

#### Feature 1

This proved to be a ditch, maximum width 2.3m and maximum depth 2.10m, with steep sides (between c 55 and 70 degrees from the vertical) and a V-shaped profile (see Figure 5) It was sectioned in 4 places (trenches A, D, E & I) and was virtually identical in shape in 3 of the sections. The exception was Trench I where there appeared to be a very clear recut, the recut producing a shallower (1.36m deep) feature with a wide U-shaped profile. The fill of the ditch varied with locality, though a general pattern was that there was a lower fill of mottled clay with coarser material above and little apparent stratigraphy. No dateable artefacts were recovered from the any of the fill.



Figure 5. Sections across the ditch seen in Trenches A, D, E & I



Figure 6. Section in Trench G showing the 'metalled area' with gullies to either side

#### Feature 2

This feature was harder to define, showing greater variation along its length. It was sectioned in three locations, trenches B, F and G, being best defined in the latter (see Figure 6). Here it was 3m wide with a maximum thickness of 0.4m, its top being approximately 20cm from the surface. It consisted of a mass of water rolled flints in a sand and clay matrix. 0.85m west of it was a shallow gully, c0.6m wide with a base 0.48cm below the surface. This was filled with a coarse, gritty deposit. There was a corresponding gully to the east, of similar dimensions but more poorly defined. No dateable artefacts were recovered from any of the deposits associated with this feature, though it is worth noting that there was a high number (relative to the site) of worked stone objects associated with its top surface.

The feature was similar in trench B, with the suggestion of a gully on the western side. In trench G it was wider at 3.5m, and extended to greater depth (maximum 0.7m below the surface. There was no indication of gullies in this trench.

#### The Intersection of Features 1 and 2

Both the aerial photographs and resistivity results appear to indicate that these two features cross. Trench I was positioned at the junction of the two features (see Figure 7). The ditch crossed the trench, virtually at right angles, and was very clear, both in plan and section. Although there were concentrations of flints, it was not possible to locate the feature to with any degree of accuracy. However on the eastern side of the trench three postholes were located. These had a maximum width of c.0.5m and extended to a depth of 0.76m. They were filled with a coarse flint grit matrix with water rolled flints at the base and around the sides. They appear to run in a line roughly parallel with the western edge of feature 2 and formed the core of a harder band within the subsoil.

#### Feature 3

This proved elusive. By correlating features on the aerial photographs with similar features positioned on the resistivity survey it was possible to identify the general area of this circular feature. Trench G was located to cross this area and was of sufficient length to ensure that it extended beyond the possible limits of the feature. No features were encountered within the trench that could confirm the existence of a circular feature within the ground.



metre

Figure 7. Plan of Trench I showing the ditch (context 149) with three postholes to the east

#### Discussion

It is clear that feature 1 is a ditch that runs in a southeast to northwesterly direction across the peninsula of land that forms the site. It is not a straight feature, consisting of several curvilinear arcs with 'dog-legs' between them. No dateable artefacts were recovered associated with the ditch. Having acknowledged that, comparison with other sites on the coastal plain of Sussex suggests that it is more substantial than a field boundary, and, given its location and stratigraphy, is not likely to have functioned as an artificial drainage feature. Indeed, it bears comparison with pre-historic territorial boundaries. This latter suggestion is worth further consideration and investigation. The site forms a small plateau like promontory that juts into what is now lower land, but in the past was almost certainly wetland. This is backed up by an augur survey of this area. This encounter sticky clay, bearing all the hallmarks of alluvial clay, at 1.4m depth. So what we might have is a dry site, surrounded by water on three sides, with a major ditch crossing it and, potentially, a circular feature on the landward side of the ditch. The site is remarkably clean archaeologically. Few artefacts were recovered from the top soil and sub soil, mainly flint tools and debitage, two small sherds of prehistoric pottery, tentatively identified as late Bronze Age, one small sherd of Iron Age and a few small abraded sherds of Medieval and Post-medieval pot and ceramic building material. Some might argue that this bears strong resemblance to a ritual area at the margin of a territory, i.e. a statement of ownership.

Feature 2 is currently being considered as a trackway by the excavators. It appears to consist of a central, poorly metalled track with side gullies to assist drainage. If this interpretation is correct, then it is most likely to date to the Romano-British period. If this is the case, the question arises as to the purpose of such a track-way. It is interesting to think of it within its context. Less than 1km to the north is the Romano-British villa at Blacksmiths Corner, and the 'track-way' is running in an orientation towards it. To the south of our site, the land slopes away before levelling just before the modern railway, there being a notable drop of about 1.5m some 50m south of the known position of the track-way. In earlier times this area was all part of the flood plain of the river Arun, with our site forming a small peninsula that juts into that flood plain. It is possible, indeed likely, that the area south of our site was under water in past times, and may have allowed access to sea going barges, a method of transport important to the Roman economic culture. It is possible to speculate that the track-way may have linked the villa at Blacksmiths Corner (which would have been the hub of economic activity locally) with a wharf or jetty allowing barges to dock. This would have facilitated the export of materials (presumably grain) from the villa and also the import of materials and goods. This latter is significant. The villa a building at Blacksmiths corner has well built foundations, c.0.9m wide and surviving to a maximum depth of 0.86m. The foundations are constructed of mortared flints, the flints being water rolled. Given the size of the building, with a ground plan of c44m by 8.5m, with 5 internal walls, a minimum of 100 cubic metres of flint would have been required for construction of the extant remains, let alone any above surface construction. The most likely source would be beach flints found along the coast locally, thus requiring transport to the construction site, making water bourne access even more desirable.

It was hoped that excavation of trench I would provide evidence to enable relative dating of features 1 and 2. This proved not to be the case, with no evidence of either cutting the other, indeed there was no clear evidence of the trackway in trench I. Rather there was the 3 postholes adjacent to the ditch on the same alignment as the track-way. It is also interesting to note that it was in trench I that the ditch appeared to have been recut. One possibility here is that the ditch existed before the construction of the track-way, and that rather than filling the ditch to allow the track-way to cross it the ditch was bridged. Close examination of the resistivity results show that there is a gap in the anomalies between the trackway and ditch on the eastern side, exactly where the postholes were found. Could it be that the postholes were for the wooden piles that supported a bridging structure, and that the ditch had been recut to stabilize it prior to bridging it?

#### Feature 3

This feature remains unfound in the ground. It is very clear on the aerial photograph but does not appear to be present in the area of the resistivity survey, Further work will be necessary to confirm its existence and function.

#### General

Prior to the 1970s the archaeological record of the coastal plain of Sussex was little known and understood. More recent works at Selsey, Knapp Farm (Bosham), Yapton, Rustington, Climping, Westhampnett, Ford Airfield and Titnore Lane have shown that there was extensive occupation throughout the prehistoric period, especially the first millennium BC. Settlement has been located at Rustington and Titnore Lane, the other sites consisting of groups of pits and isolated pits suggestive of site decommissioning. It is possible that further investigation of the extensive crop marks at Lower Farm will help to crystallize our understanding of the nature of that early phase of occupation.

Lower Farm, Walberton, Excavation Finds

By Gill Turner

Lower Farm, Walberton Excavation

Site Code: LFW.13 and

**LFW.14** 

#### Notes on Excavation Finds

The majority of the finds were recovered from the top soil context 101 with only a small number from the subsoil 103 and other contexts.

#### **Small Finds**

There were no 3-dimensionally recorded finds from the 2013 excavation and only 3 from 2014, all being Worked Stone.

The Non 3D finds from both years have each been given a unique SF number for identification purposes and comprise Worked Flint Tools, Pottery, Worked Stone, Metal and Glass.

#### Worked Flint Tools

In taking the two years together, the tools total 145 of which 60 can be attributable to the Later Mesolithic/Early Neolithic period, 2 to the Neolithic, 50 to the Later Neolithic/Early Bronze Age, 33 to the Later Bronze Age.



Starting top left (left to right SF 608 Notched Blade SF 515 Backed Knife SF646 Piercer

Bottom left to right SF514 Backed Knife SF518 Piercer SF556 Retouched Flake The Retouched flakes & blades account for the most tool types found, followed by Scrapers, Knives, Notched flakes & blades, Awls and Piercers, Combination Tools and Retouched Pieces. There is only 1 Burin and 1 Hammer Stone.

#### <u>Pottery</u>

In the 2 years, 7 sherds of pottery were recovered, 5 from the top soil 101 and 1 from the subsoil 103. All are small in size and abraded. Recovered from 101, a sherd of Late Iron Age Sand Tempered Ware, 2 Medieval sherds of unglazed Earthenware of 15<sup>th</sup>/16<sup>th</sup> C. date and 2 Post-medieval sherds of brown glazed Red Earthenware 17<sup>th</sup>-19<sup>th</sup> C. From 103, 2 probable 'lumps' from the same pot of possibly Early Bronze Age date, although these could be earlier or later.

#### Worked Stone

The majority of the Worked Stone has been described as Whetstones or Rubbers with 7 pieces from the top soil 101 and 7 from the subsoil 103. Most appear to be Sandstone but others require identification.

#### Metal

All 16 items were recovered from the top soil and consist of 2 unknown CuA objects, Fe Nails and Objects. One Nail has been identified as being Roman, Manning Type 1.

#### <u>Glass</u>

All are from vessels and of Modern date.

#### **Bulk Finds**

Worked Flint Debitage has been quantified and Ceramic Building Material – Brick & Tile, Burnt

Flint, Chalk and Foreign Stone have been quantified and weighed. The Burnt Flint, Chalk and Non- diagnostic CBM have been discarded.

#### Worked Flint Debitage

Some of the Debitage can be attributed to the Later Mesolithic/Early Mesolithic but a large number cannot be specifically identified so have been described as Neolithic. Only 3 pieces have been attributed to the Later Bronze Age.

#### **Ceramic Building Material**

There are a few small abraded pieces of Tile that maybe Romano-British or Medieval. These require specialist identification of the fabric.

#### Foreign Stone

Some of the Foreign Stone was recovered from the top soil 101 but the majority came from context 103 with 7 from other contexts. All the stone fragments are fairly small. Some have been identified as Slate, Sandstone, Quartzite, Ironstone, Limestone,? Granite and a tiny grain of Jasper but there are others that require identification.

#### **Augur & Survey Finds**

A water rolled Retouched Flake was recovered with the augur at a depth of 1.24 m and could possibly be attributed to the Later Mesolithic/ Early Neolithic. Also 2 fresh Pressure Flakes were found at a depth of 70 cm and a Flake from 30 cm. These Flakes may also be of the same date. 2 small pieces of Burnt Flint were recovered from a depth of 40 cm together with a small nodule of Iron & Manganese.

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#### Journal

All contributions to the newsletter are very welcome!

Please supply in pdf format if possible, and photos as separate jpegs, send to Secretary, Cheryl Hutchins

Any views and/or opinions expressed in this newsletter are not necessarily those of the Society nor its membership

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