

# Historic Scotland

## FORT CHARLOTTE

Archaeological monitoring  
and excavations

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<b><u>Site</u></b>	Fort Charlotte, Lerwick, Shetland
<b><u>N.G.R</u></b>	HU 475 415
<b><u>Project Description</u></b>	Excavation

## **Contents**

	<b>Acknowledgements</b>	<b>1</b>
<b>1.0</b>	<b>Introduction</b>	<b>2</b>
<b>2.0</b>	<b>Excavation account – December 2007 Trenches 1-5</b>	<b>5</b>
<b>3.0</b>	<b>Excavation account – January-February 2008 Areas A-F</b>	<b>9</b>
<b>4.0</b>	<b>Interpretation and observations</b>	<b>29</b>
<b>5.0</b>	<b>Summary</b>	<b>37</b>
<b>6.0</b>	<b>Conclusion</b>	<b>39</b>
<b>A1.0</b>	<b>List of contexts</b>	<b>41</b>
<b>A2.0</b>	<b>List of drawings</b>	<b>45</b>
<b>A3.0</b>	<b>List of photographs</b>	<b>45</b>
<b>A4.0</b>	<b>List of finds</b>	<b>51</b>
<b>A5.0</b>	<b>Illustrations</b>	<b>54</b>

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## *Summary*

*A programme of archaeological excavation and monitoring was carried out at Fort Charlotte, Lerwick, Shetland (HU 475 415) in advance of and during intrusive works near and under the east battery wall. This was the latest phase undertaken in a series of works starting in 1992. Earlier visits had located and recorded the remains of 18<sup>th</sup>-century gun platforms hidden below the current turf level, and it was necessary to carry out further minor excavation both to locate the previously excavated platforms and to reveal the northern limit of one partially revealed platform, followed by more substantial excavation to allow the insertion of reinforced concrete piles and underpinning under the east battery wall.*

## **1.0 INTRODUCTION**

The planned remedial work at Fort Charlotte, Lerwick was required to stabilise the east battery wall along the seaward side of the fort. Although it can be seen from outside the fort that the outer masonry sits directly on bedrock, previous excavations have shown that later phases of construction involved the addition of masonry along the inner face which has no such firm foundation, and this has resulted in the deterioration of the wall's structural integrity. It could be seen along most of the battery wall on this side of the fort that the inner face of the wall was falling away, and the intention was to arrest this deterioration with reinforced concrete underpinning along the underside of the wall. This was to be achieved by inserting reinforced concrete piles into the bedrock c 350 mm from the inner face of the wall, from which a horizontal soffit beam could be supported, running along the underside of the masonry. A total of 32 holes (later reduced to 30) were intended to be drilled from turf level through underlying deposits and at least 700 mm into bedrock. The holes were located to ensure enough clearance either side of the gun platforms to avoid damaging them, while still providing sufficient support to the wall.

A brief programme of monitoring and excavation was undertaken in early December 2007, starting with the excavation of five small trenches against the inner face of the east battery wall to locate buried gun platforms close to the areas affected by these works. The limits of previous excavations were still visible as re-laid turf and so the

trenches were easy to locate.

Once these platforms had been exposed, it was possible for the contractors to mark out the positions of the 32 holes to be drilled, numbered 1 to 32 from north to south. These were arranged into six groups (A to F from north to south) separated by both the buried, earlier gun platforms, and the modern concrete platforms on which the replica cannons now sit.

The first stage of the intrusive work, during early December 2007, was intended to allow the insertion of cylindrical steel casings, each 2.0 m long and 325 mm in diameter. It had been hoped that the nature of the deposits below turf level seen in previous excavations would allow the casings to be simply pushed through the deposits right down to bedrock with little resistance. In practice, this was not possible in holes 28, 29 and 30 in Group F, at the far south end, where a layer of rubble was encountered near surface level, and in holes 31 and 32, where a layer of concrete was encountered. Work was stopped in Group F while hole 29 was enlarged to examine this rubble layer. A larger trench was opened covering the intended location of holes 31 and 32, just north of gun platform 2, to ascertain the extent and depth of the concrete layer. In the end, holes 31 and 32 were not drilled any deeper than the top of the concrete. It was decided that these holes were not required, since the concrete underpinning already *in situ* was providing effective support for the wall.

In the meantime, the contractors began inserting casings in Group D, towards the centre of the east wall. It seemed that the upper deposits here, while not as problematic as the holes at the far south end, were sufficiently stony to cause resistance, and to help the casings slide into the ground more easily the contractors devised a way of adapting the casings by cutting slots at one end into which a rotating drilling rig could be inserted. This allowed the casings to be rotated as they were pushed downwards, and to be pushed past any stray stones far more easily. The exception to this was hole 18, in which concrete was encountered at a depth of 80 mm, immediately below topsoil. This was clearly a remnant of modern activity, a continuation of concrete features seen in an earlier excavation (June 2007's Trench 5) and presumably associated with 20<sup>th</sup>-century structures. The contractors used a

tungsten carbide drill to break through this concrete and it was seen to extend to a depth of 380 mm below turf level. This feature was examined more fully during the later works in 2008.

The rest of the casings were sunk to bedrock with little or no further problems, apart from occasional resistance from stones which were never met at more than a relatively shallow depth, indicating their presence in only the upper deposits.

It was noted that as the casings were being pressed in, the upper surface of the soil trapped inside finished at a level well below existing turf level, often well over a metre deep. While it was possible that this was due only to compression, it seems unlikely since there was no direct pressure on the upper surface. This might suggest that as the casings were inserted, soil in lower deposits may have been forced out laterally, a process made easier by the presence of large voided areas below the inner face of the east wall, which were seen in previously excavated trenches.

Once all the casings had been inserted to bedrock level (apart from in holes 31 and 32, left unexcavated) the soil contained within them was removed using an auger. Although this process was monitored, it was not possible at this stage to gather much meaningful information regarding the nature and depth of the various deposits encountered, mostly due to the compression and dislocation caused by the insertion of casings. However, the nature of the deposits seen as the spoil was removed could be seen to correspond broadly with the deposits revealed in previous excavations.

Once the soil had been removed from inside the casings, the tungsten carbide drill was used to drill 250 mm diameter holes a minimum of 700 mm into the bedrock. During this work the bedrock removed was reduced to a fine powder with occasional larger pieces, rarely larger than 50 mm across, and a great deal of very fine dust was produced, causing visibility problems for the contractors, particularly when the wind died away and the dust created a dense cloud around the drilling rig.

The second phase of intrusive works was carried out in January and February 2008. This involved more substantial excavation to allow contractors to insert steel cages attached to the top of the piles which had been inserted in December 2007, which then ran under the east battery wall. Initially, turf and topsoil was removed from

the whole of Areas A-F. After this, a small trench was excavated around each pile, generally c 750 mm wide (N-S), dug to a depth c 450 mm below the underside of the wall, extending under the wall (to the E) up to 500 mm, but mostly c 350 mm. These holes were excavated in a specific order, separated into three groups; the first group including holes 1, 4, 7, 10 etc., the second group 2, 5, 8, 11 etc. This staged method of excavation was required to minimise the amount of wall left unsupported at any one time to prevent any risk of the wall falling. To allow easier and safer access, and also to allow more meaningful archaeological recording, it became necessary in some areas to excavate the whole trench down to the required pile hole depth.

Once the concrete had been poured to form the E-W horizontal cantilevers, further excavation under the wall was required to allow the insertion of steel cages between the cantilevers, into which more concrete was to be poured forming a N-S soffit beam. This needed a c 250x250 mm channel under the full length of each area, under the base of the inside face of the wall.

The first stage of the work was carried out from 4 to 12 December 2007, the second from 7 January to 15 February 2008.

*Note: The feature numbers from the December 2007 excavations comprise three figure numbers, the first number denoting trench number. These trench and feature numbers were superseded during the 2008 works, during which four figure feature numbers were used. The feature numbers from the 2008 works are those shown on the illustrations.*

## **2.0 EXCAVATION ACCOUNT – DECEMBER 2007 TRENCHES 1-5**

### **2.1 Trench 1**

Trench 1 was intended to locate the southern limit of previous excavations at the far north end of the main east battery wall, where the ground slopes down steeply to the now hidden gun platform 8. The trench measured 2.00 m N-S, up to 500 mm E-W and up to 400 mm deep.

Once 80 mm of turf **101** had been taken off, the redeposited fill **102** was removed and the edge of the trench excavated in June 2007 was seen. Although the original intention was to re-excavate this trench to a depth sufficient to reveal the gun

platform, this was not thought necessary once it was noted that the intended intrusive works would be well clear of its previously recorded location, the platform's southern limit recorded at 960 mm south of the corner of the wall.

The exposed features were as recorded in previous excavations, most notably what were thought to be the footings (103) of the wall (111 in Trench 1, June 2007 excavation) seen at the far south end of the trench. It was soon realised that if this feature continued along the base of the wall right up to the modern gun platform to the south, near which a similar feature had been seen in the June 2007 excavation's Trench 2 as 204, it would prevent the insertion of piles at the desired distance from the wall. A small extension to the far south end of this new trench was excavated to ascertain whether the feature continued beyond the limit of the trench, and once it became clear that it did, no further excavation was carried out and the trench backfilled. It was assumed that this feature did indeed run continuously along the base of the wall and as a result it was decided that the line of piles, and therefore the holes drilled to accommodate them, would need to be located with centres c 550 mm from the face of the main wall instead of the desired 350 mm to be sure of giving the footings enough clearance.

## **2.2 Trench 2**

Trench 2 was intended to locate the northern edge of the previously excavated and recorded, but since re-buried, gun platform 5. The north end of this trench was 3.45 m south of gun platform 6 and the trench measured 700 mm N-S, 500 mm wide and up to 600 mm deep. This trench lay entirely within the limits of June 2007's Trench 4. After 100 mm of turf and topsoil 201 had been removed, the backfilled deposits 202 were excavated to reveal the northern limit of gun platform 5 (203) at a depth of 600 mm.

## **2.3 Trench 3**

Trench 3 was intended to locate the southern edge of the previously excavated and recorded, but since re-buried, gun platform 5. The north end of this trench was 5.85 m south of gun platform 6 and the trench measured 700 mm N-S, 500 mm wide and up to 630 mm deep. This trench lay entirely within the limits of June 2007's Trench 4.



After 100 mm of turf and topsoil **301** had been removed, the backfilled deposits **302** were excavated to reveal the southern limit of gun platform 5 **303** at a depth of 600 mm.

#### **2.4 Trench 4**

Trench 4 was intended to locate the previously unexcavated northern edge of the hidden gun platform 4. The north end of this trench was 5.85 m south of the inner corner of the 'elbow' of the wall and measured 1.35 m N-S, 400 mm wide and up to 800 mm deep. This trench was just north of June 2007's Trench 6.

Up to 100 mm of turf and dark brown topsoil **401** was removed to reveal **402**, a mid to dark brown, fairly compact clayey soil with some small stones and stone fragments, sloping steeply down from east to west up to a depth of 300 mm at the west limit of the trench. This sealed **403**, a fairly compact, dark brown, peaty clayey soil, which in turn overlay the gun platform **404**, the upper surface of which was c 600 mm below turf level. The structure of the gun platform appeared much degraded and/or robbed and had partially slipped away from the wall to the east. A deep void (to at least 300 mm below the upper surface of the gun platform) was seen at the far northeast corner of **404**, and the missing masonry at this part of the platform may well have fallen down into this space.

The full depth and extent of the fairly loose, very dark, peaty soil deposit **405** in and on which the gun platform appeared to sit was not seen, and there was no obvious cut for the platform through the deposit. No further excavation was carried out once the position of the northern edge of the gun platform was revealed.

#### **2.5 Trench 5**

Trench 5 was intended to locate the southern edge of the previously excavated and recorded, but since re-buried, gun platform 4. The south end of this trench was 4.75 m north of gun platform 3 and the trench measured 700 mm N-S, 500 mm wide and up to 750 mm deep. This trench lay entirely within the limits of June 2007's Trench 6.

After 100 mm of turf and topsoil **501** had been removed, the backfilled deposits **502** were excavated to reveal the southern limit of gun platform 4 **503** at a depth of 600 mm.

## 2.6 Trench 6

This small trench was essentially a slight enlargement of hole 4 which had been started by the contractors during their failed attempt to insert a steel casing. Holes 3, 4 and 5 all encountered a very stony layer of varying thickness and depth between 200 and 600 mm below surface level.

Hole 4, now Trench 5, was extended to meet the wall, resulting in a 500 x 500 mm hole, up to 450 mm deep. Under 100 mm of dark, peaty turf and topsoil **601** was **602**, a patchy layer of grey sand up to 100 mm thick, thicker at the west side of the trench and only seen in small patches against the wall. Below this was a fairly loose, mixed deposit **603**, 80% large angular stones (up to 150 x 200 x 500 mm, average 50 x 75 x 200 mm) and 20% sandy soil with smaller fragments of stone to a depth of 400 mm. Once the bottom of this layer of rubble was found there was no need for any further excavation and when the rubble had been removed the steel casing was inserted to bedrock without further resistance.

This sequence of deposits was repeated in holes 3 and 5. These holes were not examined in such detail as hole 4 once this similarity was seen, and it was possible to remove the obstructing stones without enlarging the holes.

## 2.7 Trench 7

During attempts to insert steel casings into holes 1 and 2, an extremely compact layer was encountered (400 mm below surface at hole 1, 570 mm below surface at hole 2, through which the casing could not be forced. Initial examination showed this to be concrete underpinning believed to have been inserted during remedial works in 1994 (pers. comm. Lawrence Fleck, MCU).

To examine this area fully, a 2.30 m north to south by 900 mm east to west trench was opened against the wall, starting from the north limit of gun platform 2.

After 100 mm of dark, peaty turf and topsoil **701** (numbered **6001** Jan-Feb 2008) had been removed, backfill deposit **702**, a mixed layer of dark, peaty, sandy soil and stone fragments, with modern refuse, was seen in all but the far south end of the trench, where the grey sand bedding **703 (6004)** for the modern platform to the south was revealed. Under **702** and **703** was a small patch of yellow mortar **704 (6005)** with

a few angular stones set within, up to 100 mm, but mostly 40 mm thick, seen against the wall to the east. Concrete underpinning **706 (6007)** was 250 mm thick to a depth of 800 mm below surface level at far north end, extending 400 mm from the wall face. Its extent below the wall was not seen. This underpinning appeared to have been inserted against an earlier area of concrete **707** to the west, which appeared likely to be the northern limit of concrete foundations for c 1930s structures known to have existed here.

### **3.0 EXCAVATION ACCOUNT – JANUARY-FEBRUARY 2008 AREAS A-F**

#### **3.1 Area A: General excavation**

Area A is located at the north end of the excavation between gun platforms 7 and 8, a distance of 9.60 m. There were six piles (1-6) in this area with spaces of c 1.30 m between them.

The upper two deposits (**1005** and **1006**) were removed from the majority of the trench, excavating it to a depth of roughly 250 mm. At the north end of the trench previous excavations (1992 & 2007) had already disturbed the deposits.

The infill of the June 2007 trench, **1004**, comprised mid brown silty clay and small stones in a fairly even mix. This deposit was cut into the south side of **1003**, a trench with fairly steep sides that bottomed onto gun platform 8 to the north and a concrete base in the south part. **1003** measured up to 1.05 m in depth and was filled with **1001** and **1002**. **1001**, the upper fill, measured 550 mm in depth and was a fairly compact mix of mid brown silty clay and stones with occasional mortar flecks throughout. Under **1001** there was a 500 mm deep deposit of loose clean grey sand, **1002**.

The turf and topsoil, **1005**, measured up to 100 mm thick. **1006**, below **1005**, was a 100 mm thick deposit of light brown gritty sand and stones with flecks of mortar throughout. The stones made up roughly 60% of **1006** and although they measured up to 300 mm by 120 mm in size the majority were 20 mm by 40 mm on average.

The brief was to now excavate the piles but for various reasons - principally because there was a step out 300 mm that was also 300 mm high at the base of the wall - it was necessary to dig the whole trench north of the 1996 trench (**TT1**) down another

450 mm. This further excavation removed two more deposits, **1008** and **1007**.

**1008** was sealed by **1006** and comprised light to mid brown sandy silt and 60% small (50 mm by 30 mm on average) angular stone fragments with many mortar flecks throughout. **1008** was on average 120 mm thick and sealed **1007**, a deposit of compact mid-dark brown silty peat with occasional small stones. Up to 500 mm of **1007** was removed but it was not bottomed.

Both **1008** and **1007** were removed in the part of Area A to the south of **TT1** but in this area a maximum depth of 200 mm of **1007** was excavated.

### **3.2 Area A: Pile holes**

The advantage of excavating the whole trench down to a depth of 800 mm was that in general it was now only necessary to cut the trenches in under the east wall.

#### **3.2.1 Pile 1**

This, the northernmost pile, was to prove awkward, since after the 1992 excavation there had been masonry reconstruction within the face of the east wall, under it and extending into the trench. Within the face of the wall there had been re-building with some of the stonework being moved down, additional stone being put in and a concrete base being poured against the gun platform to the north and under the wall (see **9006** and **9021** in **3.16** below). At the north end of foundation **9005** there was also a deeper block of footings, **9004**.

Due to the problems at the east wall this pile was excavated to a greater depth and had to be dug at a slight angle, running ESE as it went under the wall.

The trench measured 800 mm E-W and 1.05 m N-S - at **9004**, 625mm of this was under the walling but to the north under **9006** the excavation extended 360 mm under the outer face. The depth of excavation varied from 300 mm under **9006** to 550 mm at **9004**. The north edge of the trench was against concrete **9021**.

The upper part of the trench removed the backfill of the 1992 excavation and the deposits detailed above. Below the structure, **1007** was up to 550 mm deep and bottomed onto dark brown slightly silty peat, **1009**.

### 3.2.2 *Pile Hole 2*

This trench measured 800 mm N-S and was excavated 450 mm under the wall face where it was 420 mm deep, and the depth below the turf line measured 980 mm.

The upper part of the hole was filled with **1007**; in the bottom 200 mm **1009** was seen.

### 3.2.3 *Pile Hole 3*

The excavated area around this pile measured 800 mm N-S and it extended 350 mm under the outer face of the wall. The base of the trench was approximately 1.00 m under the turf level and 350 mm under the bottom of the wall. Under the wall a depth of 300 mm of **1007** was removed and 50 mm of **1009** was also excavated but the latter deposit was not bottomed.

### 3.2.4 *Pile Hole 4*

This pile was within the 2006 excavation (**TT1**) and although a trench measuring 1.50 m N-S, 1.00 m wide and up to 1.20 m deep was excavated not all of the backfill was removed. The current excavation removed all the backfilled soil below which there was terram over gravel. The underside of the wall footings had been built up with stone, to at least the excavated depth, immediately after the 2006 excavation. It was decided that as the wall was under pinned with a wall sitting on gravel that there was no need to also run a beam under it at this point. When inserted, the reinforced concrete soffit beam swung out from the wall to the pile cap and back into the wall before continuing to piles 3 and 5. There was nothing of archaeological significance removed in this area.

### 3.2.5 *Pile Hole 5*

The excavation at this pile measured 800 mm N-S and it extended 400 mm under the outer face of the wall. The base of the trench was approximately 850 mm under the turf level and 400 mm under the bottom of the wall. Under the wall a depth of 300 mm of **1007** and 100 mm of **1009** was removed but the latter deposit was not bottomed.

### 3.2.6 *Pile Hole 6*

The trench was located just to the north of gun platform 7 and it was dug to 450 mm below the base of the wall and 790 mm below the turf line. There was some fairly

large rubble removed from this area, particularly in the west side of the trench, otherwise the material was loose and mixed. There was brick blocking in the bottom part of the main east wall and this was removed by HS MCU personnel during the excavation. At the bottom of the trench there was a peat deposit, **1009**, with patches of grey sand.

### **3.3 Area B: General excavation**

This area was located between gun platforms 6 and 7 and it measured 8.45 m in length. There were five piles within it with spaces of approximately 1.50 m between them.

The turf and topsoil, **2001**, and fairly loose dark brown peaty loam, **2002**, immediately below it, were removed from the whole length of the trench. These deposits measured up to 100 mm and between 100 mm and 200 mm in depth respectively. The trench was therefore between 200 mm and 300 mm deep with the deeper part being to the S.

E-W across the trench, at the south end, there was a 400 mm wide and 360 mm deep, **2008**, cut against the gun platform. The fills of **2008** within the trench were pale yellow sand, **2005** and dark brown peaty clay, **2006**. Under the east wall **2008** was filled with coursed red brick **2007**.

It was decided to excavate the whole trench to make digging the pile holes under the wall easier and this involved the removal of two more deposits, **2003** and **2004**. **2003** was seen in the south part of the area and comprised sub-angular sandstone blocks and mid-dark brown peaty silt in a fairly even mix. In the north part of the trench **2004** was a fairly compact deposit of mid-dark brown slightly silty peat. **2003** sealed **2004** and both deposits measured up to 250 mm in depth.

The trench was now roughly 450 mm deep and the full depth of the holes around the piles needed only to be cut under the wall.

### **3.4 Area B: Pile holes**

#### **3.4.1 Pile 7**

The wall footings were just below ground level in this area although there was structure sloping east immediately below this. An area measuring 800 mm N-S and

800 mm E-W was excavated and under it the trench measured 730 mm N-S and 320 mm E-W and was tilted slightly to avoid the 19<sup>th</sup>-century gun platform which extended to the south of the modern one constructed above it. The trench under the wall measured 500 mm in depth, the greater depth being to allow the removal of **2012**.

Under the inner face of the east wall **2012** was an area of coursed bricks built against the edge of the original gun platform.

In the north 200 mm of the trench the upper fill was grey gravel, **2009**. Below the east wall there was 180 mm of deposit **2004**. Below this the remaining 320 mm excavated was quite compact dark brown peat with occasional patches of red peat, **2010**. **2010** was not bottomed and it was not seen in the main (west) trench section. At the base of the excavation **2011** is a sandstone block with light brown yellow sand on its upper face, and it was noted that **2011** sloped down to the S.

#### **3.4.2** *Pile 8*

This trench was within the area of the 2006 excavation **TT2**. An area measuring 1.50 m N-S and 1.00 m out (west) from the outer face of the east wall was excavated to a depth of 1.50 m onto terram. All the material removed was recent backfill and below the terram the 2006 trench was filled with gravel. The underside of the east wall had been in-filled with stonework immediately after the 2006 excavation.

As there was stonework under the upstanding wall and gravel below it was decided that the soffit would come out to the position of the pile casing at this point, running back under the wall before it reached piles 7 and 9 to the north and south. There was nothing of archaeological note removed from this area.

#### **3.4.3** *Pile 9*

The excavated area around the pile measured 800 mm N-S and under the wall the trench extended 450 mm east where it hit another wall face. The trench measured 400 mm in depth and removed 300 mm of deposit **2004** and 100 mm in depth of **2010**.

#### **3.4.4** *Pile 10*

As the trench was excavated the hole was only cut under the wall; it measured 750 mm N-S, 400 mm deep and extended 315 mm east from under the walls inner face.

The excavated deposits were **2002** and **2003**. In the east section, within **2002**, there was a large angular stone that was partially covered with concrete.

#### **3.4.5** *Pile 11*

After the excavation of the trench it was noted that the area under the east wall adjacent to this pile was blocked with coursed red bricks **2013**. HS MCU personnel cut away **2013** and a trench measuring 900 mm N-S, 550 mm east from the outer face of the east wall and 300 mm below it was excavated.

Apart from **2013** only a small amount of **2004** was removed in this trench. At the base of the excavation there was the top of a large, 600 mm E-W by 400 mm N-S, sandstone slab (**2014**) seen. **2014** was located 300 mm north of the modern version of gun platform 6.

#### **3.5** **Area C: General excavation**

Area C was located between hidden platforms 5 and 6 and it measured 3.90 m N-S. There were three piles present in this trench with spaces of roughly 1.10 m between each pair. The whole trench was dug to a depth of roughly 700 mm although the north and south ends were later deepened to 900 mm and 1.00 m respectively.

The turf and topsoil, **3001**, was up to 120 mm thick. Immediately below **3001**, **3002** was a heavily rooted deposit of dark brown silty peat with 20% small (30 mm by 20 mm on average) sub-rectangular stones. At the bottom of **3002** in the south part of the area there was a 100 mm thick deposit of loose light brown sand, **3003**.

Sealed by **3003**, **3004** was a deposit of compact dark brown peat with occasional red peat patches and one or two small stones. **3004** was up to 500 mm thick. At the south end of the trench, under **3004**, **3008** comprised dark brown peat and sub rounded stones. A depth of 300 mm of **3008** was seen but it was not bottomed.

At the base of the south end of the trench and extending 120 mm into it, there were the edges of what looked to be two courses of stones, **3005**. There was no pointing noted at **3005**.

Below **3005** the upper face of a stone, **3006**, was seen. There was light brown mortar around all around **3006** and there appeared to be a thin deposit of peat between it and **3005**.



At the north edge of the trench **3007** was the south edge of two courses of structure pointed with yellow/light brown mortar. **3007** extends roughly 150 mm south of modern gun platform 6 above it.

### **3.6 Area C: Pile holes**

#### **3.6.1 Pile 12**

There was an area of coursed red brick pointed with cement, **3011**, under the wall adjacent to this pile. The excavated area measured 1.00 m N-S, extended 450 mm under the wall and was 600 mm deep. **3011** was the main deposit removed in this trench, along with a small amount of **3004**, particularly in the south part of the trench.

It was noted that gun platform 6 extended 160 mm south of the modern one above and was located 300 mm below it.

#### **3.6.2 Pile 13**

The trench was dug to a depth of 450 mm below the underside of the wall, it extended 350 mm under the outer face and measured 750 mm N-S. The material removed was **3004** which was not bottomed.

#### **3.6.3 Pile 14**

Directly under the east wall there was red brick blocking pointed with cement, **3010** - this was removed by HS MCU personnel.

The excavated area under the wall measured 800 mm N-S, and the south edge of the trench was against the north edge of buried gun platform 5, 450 mm deep, extending 350 mm east under the east wall. The majority of the material excavated was **3004** but the bottom 80 mm removed **3008**. At the base of the trench, within or below **3008**, **3009** was a large, 350 mm N-S, sandstone slab that ran back (E) 200 mm under the line of the east wall.

### **3.7 Area D: General excavation**

Area D extended both sides of the easternmost point of the east battery wall, the north part of the trench extending northwest from the point and the south end southwest from it. The trench measured approximately 11.60 m in length and there

were spaces of *c* 1.45 m between the pile casings.

Turf and topsoil **4001** was removed from the whole trench and it measured an average of 100 mm thick. Immediately below **4001** there was a 70 mm thick deposit of peat and crushed sandstone, **4003**.

In the south part of the trench **4003** sealed a deposit of loose yellow/brown sand, **4002** 2.40 m N-S and 30-70 mm thick. Similar sand, **4008**, was seen in most of the north part of the trench.

The central part of the trench was now excavated down to structural remains **4004-4007**. **4004** was an N-S line of concrete measuring 2.70 m in length and 350 mm wide; it was against the east battery wall roughly 1.40 m from the east point at either end. Part of this structure was removed to allow the trench to be dug at pile 11 and it was seen to be up to 300 mm thick. In the centre of **4004**, **4005** was a hexagonal cut measuring 500 mm N-S and at least 700 mm E-W. **4005** was excavated to a depth of 300 mm but may not have been bottomed. At the north end of **4004**, **4006** was an E-W line of concrete measuring 500 mm in length and width. Both the north and the west edges of **4006** were neat and straight, the east was against **4004** and the south one was ragged. In the area around **4004**, **4007** comprised lumps of concrete and stone fragments within mid brown silty peat.

Below **4007** in the south part of the trench and **4008** in the N, **4009** was a compact deposit of mid-dark brown peat that varied from 200-600 mm in depth. Immediately below **4009**, **4010** was a fairly even mix of sub-angular rubble (measuring 80 mm by 60 mm on average) and mid-dark brown peat. Up to 600 mm of **4010** was excavated but it was not bottomed.

Both parts of this trench were often flooded, and the always very muddy areas around piles were cleaned and recorded individually and this has led to single contexts being assigned multiple numbers. When the west section was drawn the recording was simplified, merging these numbers. Below the full description of each area is recorded.

### **3.8 Area between piles 16 and 17**

Under **4001** there was a 100 mm thick deposit of dark brown peat and crushed

sandstone, **4011**. Under **4011**, yellow/brown sand **4012** measured 220 mm in thickness.

At the north end of the trench **4013**, under **4012**, was a partially excavated straight sided cut that was in the position of the north of June 2007's Trench 7. The fill of **4013**, **4014**, is dark brown peaty loam with occasional stones.

Cut by **4013**, **4015** was fairly compact dark brown clayey peat with occasional fragments of crushed sandstone. **4015** measured up to 380 mm in depth.

Along the west side of this area **4016** was 80% loose stones with some dark brown peaty silt, the stones mostly angular pieces of basalt (150 mm by 100 mm by 100 mm on average) with only very occasional bonding material visible.

**4016** appeared to be within **4017** a possible N-S cut but as neither were excavated it was difficult to be sure.

To the east of and cut by **4017**, **4018** was a deposit of compact dark brown peat with some red patches. The upper surface of this deposit was level with the underside of the east battery wall.

**4019** is the number assigned to the upper part of the west face of the east battery wall, **4020** is the lower part. The whole of the east battery wall is described in **3.16**.

### **3.9 Area D: Excavation between piles 15 and 16**

Immediately below **4011** there was a 100 mm thick deposit of mid brown sandy silt, **4021**.

Below **4021** it appeared in this area that **4012** was in an N-S cut, **4022**. **4022** was seen toward the west side of the trench and it sloped down to the E, at the south end there were tool marks visible on the edge of the cut.

**4022** cut **4023**, a fairly compact deposit dark brown silty peat that was very sticky. The upper face of **4023** was level with the base of the east battery wall.

**4024** was the number assigned to the east battery wall.

### **3.10 Area D: Excavation between piles 20 and 21**

Immediately under **4001** there was a deposit of dark brown silty peat, **4025**. This is almost certainly the same deposit as **4003**, **4015** and **4023**. At the west side of the

trench sealed by **4025**, **4026** comprised angular rubble in mid brown silty peat. The primary deposit encountered was compact and sticky dark brown peat with some red patches, **4027**.

### **3.11 Area D: Pile holes**

#### **3.11.1 Pile 15**

This trench was at the north end of trench D and brickwork was removed from under the east battery wall prior to its excavation. The trench extended east 300 mm under the east wall and was 480 mm deep below it at the south end but to the north the masonry adjacent to the platform continued down a further 250 mm.

The excavation below the wall was through deposit **4023**.

At the base of the trench, below the lip in the east wall there was a single basalt block, **4031**, measuring 400 mm N-S and 300 mm wide. At the south end of **4031** there were further stones and cream coloured mortar attached. Only the upper face of **4031** was exposed and this sloped down to the W. This stone appeared to be within **4023** but was only uncovered, it was not excavated.

At the north edge of the hole there was the south edge of a structure, **4032**, standing up to five courses, 400 mm, high. **4032** comprised roughly dressed basalt blocks pointed with cream coloured mortar. **4032** was also seen in the 2007 excavations of gun platform 5.

#### **3.11.2 Pile 16**

The trench extended 420 mm east under the east battery wall; it measured 750 mm N-S and 450 mm in depth. Rubble **4016** was removed in the west of the trench elsewhere there was a depth of 100 mm of **4015** over **4018** which was not bottomed.

#### **3.11.3 Pile 17**

Trench 17 extended 420 mm east under the east battery wall, it measured 1.10 m N-S and between 300 mm and 500 mm in depth as the base of the wall was uneven in this area. **4016** was removed in the west of the trench and there was a depth of 100 mm of **4015** over **4018** to the E. **4018** was not bottomed.

#### 3.11.4 *Pile 18*

The trench measured 1.10 m N-S and ran 280 mm under the wall from the west face. The base of the wall sloped so that there was a depth of 400 mm excavated to the north and 500 mm at the south end. The material removed under the wall was **4015**.

This pile was immediately inside the corner at the mid-point of the east battery wall. Part of wall **4004** was removed prior to the excavation of this trench, it was probably also disturbed when the pile casing was put in.

Occupying most of the excavated area inside the east wall, **4034** was a cut measuring at least 600 mm in width and 550 mm deep. The feature was not fully excavated but could be seen to have fairly steep sides and there was a 120 mm diameter ceramic drainpipe at the base of the excavation. The fill of cut **4034**, **4033**, was a mix of peat and dark grey silt with a lot of stone and mortar fragments throughout.

#### 3.11.5 *Pile 19*

The trench at pile 19 measured 800 mm N-S, 400 mm in depth and extended 380 mm under the east battery wall. In the west 350 mm of the trench rubble **4026** was excavated and in the east part of the trench there was 80 mm of deposit **4025** over **4027**. **4027** was not bottomed within the excavation.

#### 3.11.6 *Pile 20*

The trench measured 700 mm N-S, 600 mm deep and extended 380 mm under the east battery wall. In the west part of the trench rubble **4026** was excavated and to the east there was 60 mm of **4025** over **4027**. **4027** was not bottomed.

#### 3.11.7 *Pile 21*

The trench was excavated to a depth 500 mm below the east battery wall, 960 mm below the turf. It measured 850 mm N-S and 490 mm under the wall. At the south end of the trench the north edge of hidden gun platform 4 is only 150 mm south of the pile casing and for this reason it was necessary to dig this trench at a slight angle, it runs ENE-WSW under the east battery.

At the base of the trench just to the north of the pile cap there is a block of stone measuring 300 mm by 250 mm, **4035**.

At the south edge of the trench **4030** is the north edge of hidden gun platform 4, and it extends SE-NW across the main trench and is formed with sandstone stabs and yellow/light brown mortar.

120 mm north of and running parallel to **4030**, **4028** is a possible cut. The fill of **4028**, **4029** was fairly loose dark brown silty peat with occasional small stones.

At the west side of the trench rubble **4026** was excavated. Under the wall there was 80 mm of **4025** over **4027**.

### **3.12 Area E: General excavation**

Area east was located between Hidden gun platform 4 and platform 3 and it measured 4.40 m in length. There were four piles (22-25) within it and there were spaces of 1.00 m between them. There were smaller spaces between the pile trenches here, particularly to the south where there was only 400 mm between the north edge of the excavated area around pile 25 and the south of the one at pile 24.

Deposits **5001** and **5004-5006** were removed from the whole trench excavating it to a depth of roughly 500 mm before the trenches around the piles were dug. At the west side of the trench cut **5003** was also excavated.

The turf and topsoil, **5001**, measured up to 200 mm in thickness. Under **5001** adjacent to the east battery wall **5003** was a shallow "U"-shaped cut aligned N-S and measuring 550 mm in width and a maximum of 120 mm deep. This feature had been cut away by a 2006 trench (TT3) to the north and a 1992 to the south (Trench 3). The Fill of **5003**, **5002**, was a mix of brown sand, dark brown peaty silt and stones. There were also the rusted remains of an iron pipe at the bottom of the cut.

Cut by **5003** and seen throughout the trench, **5004** is a compact deposit of dark brown/black silty peat with many pale yellow mortar fragments and some small angular stones. **5004** measured up to 120 mm in thickness.

**5004** sealed **5005**, a loose mix of stones (80%) and dark brown peat. The stones are mostly small angular gravel but there are also some medium sized chunks.

**5004** and **5005** were within **5006**, a possible cut running throughout the trench. It was noted that the base of **5006** slopes down gently to the W.

Below **5006**, **5007** comprises compact peat with occasional small-medium angular stones throughout. This deposit was only seen in patches but was over 200 mm thick, and was not bottomed anywhere. **5007** was only excavated below the east battery wall within the pile trenches.

### **3.13 Area E: Pile holes**

#### **3.13.1 Pile 22**

The north side of this trench was only 50 mm south of the north edge of gun platform 4 and the trench had to run ESE under the east battery wall to avoid clipping the structure of it.

The trench measured 650 mm N-S, 500 mm in depth and it extended 420 mm under the east battery wall. The deposit removed under the east wall was **5009** and the bottom of the peat was not seen.

#### **3.13.2 Pile 23**

This trench was excavated entirely with the backfill of the 2006 trench TT3. The inner face of the east battery wall in this area had partly collapsed and an area of masonry, measuring 1.70 m N-S and up to 350 mm high, had been replaced since the 2006 excavation. Below the wall and within the trench to the same level has been infilled with gravel, above this in the trench the material excavated in 2006 was used as backfill.

The trench measured 700 mm N-S and the gravel was removed to 450 mm below the underside of the east wall.

#### **3.13.3 Pile 24**

The trench measured 650 mm N-S, 500 mm in depth and extended 400 mm under the east battery wall. A small area at the base of the east battery was unsafe and had to be rebuilt as part of the current work.

The north half of the trench was within the 2006 trench (**TT3**). In the south part under **5007**, **5008** comprises 70% angular basalt chunks and 30% dark brown/black peat. **5008** was only seen in an area 200 mm N-S and 200 mm thick against the west section.

In the bottom part of the trench, below 5008, and also only seen against the west section 5009 is dark brown/black peat with occasional red peat patches and also pan tile and mortar fragments throughout. 5009 was excavated to a depth of 300 mm but not bottomed.

It was noted at this trench that the wall face that is seen is only a 600 mm thick facing onto a peat bank.

#### 3.13.4 *Pile 25*

This trench was located against the north edge of gun platform 3 and the area under the east battery wall had been in-filled with red bricks. HS MCU personnel cut away the brick and a trench measuring 800 mm N-S, 450 mm deep and 300 mm under the wall face was excavated.

At the south end of the trench close to the gun platform there is a line of masonry, 5010, measuring at least 550 mm E-W and seen in an area of 250 mm N-S. At the top 5010 comprised flat basalt slabs sloping down to the east with medium sized pieces below. The upper slabs projected north 50 mm beyond the lower masonry. There was abundant fine, pale yellow, mortar throughout.

5007 was removed under the east wall and at the base of the excavation 5011 comprised large blocks of roughly dressed basalt with pale yellow mortar attached. 5011 measured at least 900 mm N-S and 450 mm E-W and the upper faces of the stones sloped down to the W. There is a gap of 300 mm below the base of the wall and the top of 5011. This feature looked to continue under 5010 but it was difficult to be sure in the excavated area.

#### 3.14 **Area F: General excavation**

This, the southernmost area, was the most problematic. The inner face of the east battery wall was cracked and often falling away and it was necessary to re-build a large part of the north end of it. The trench measured approximately 8.00 m in length and there were five piles within it, 26-30. The spaces between the piles were c 1.40 m.

Over most of the trench the turf and topsoil, 6001, was around 100 mm thick.

Immediately under 6001 toward the south end of the trench, 6002 was a deposit of



compact pale yellow/brown sandy mortar with occasional small (5 mm in diameter) stones. **6002** was seen in an area of 1.45m N-S and it measured between 50 mm and 100 mm in thickness.

Sealed by **6002**, **6003** was a deposit of fairly loose dark brown peaty loam with roughly 30% stone fragments. **6003** was seen at the south end of the trench and measured 50 mm in thickness.

Across the south end and extending between 200 mm and 400 mm into the trench **6013** is an E-W aligned trench with fairly irregular edges. The fill of **6013**, **6004**, was loose mid grey sand and gravel.

Against the east battery wall and cut by **6013**, **6005** was a fairly loose deposit of pale yellow/brown gritty mortar. **6005** was seen in an area measuring 1.00 m N-S, 300 mm wide and up to 200 mm deep.

Below **6005**, **6007** is a 250 mm thick block of concrete under and extending 400 mm west at the south 3.00 m of the east battery wall. Along the west edge of **6007**, **6008** is a 30 mm plank placed on edge. To the west of **6008**, **6009** is another area of concrete. Against the west edge of **6008** there are three vertical timbers **6010**. Under **6007-6009**, **6011** is an area of large irregularly shaped stones measuring up to 400 mm by 200 mm and 200 mm but the majority are 200 mm by 100 mm and 100 mm. The limits of **6011** were not seen and it measured 120 mm in depth.

Extending SW-NE toward the south end of the trench, under **6009**, **6014** was an 800 mm wide cut that was excavated to a depth of 250 mm but not bottomed. It was noted that the sides of **6014** were fairly steep and that it cut **6020**.

A cut into **6011** showed a deposit of dark silty peat, **6012**, below it. Only a small area of **6012** was uncovered and it was not excavated within the original trench.

In the north part of the trench **6019** was an N-S cut measuring over 1.90 m in length (truncated to the north by the 1992 trench at gun platform 2) and 500 mm in width. **6019** had steep sides and was excavated to a depth of 400 mm. The fill of **6019**, **6018** comprised 80% medium-large (up to 500 mm by 300 mm) angular basalt chunks with 20% dark grey silty clay. Only **6001** sealed **6018** and **6019** cut **6015**.

Located in the west part of the north end of the trench **6015** was a compact strip of

bitumen and rounded pebbles. **6015** extended 400 mm into the trench from the west baulk. It measured 2.10 m N-S and was 50 mm thick. South of **6016** was another area of bitumen and pebbles continuing the line of **6015**.

In an area measuring 3.40 m N-S, 600 mm wide and up to 150 mm thick in the middle of the trench, **6017** was a deposit of clean yellow sand. **6017** was directly under **6001** and it sealed **6016**.

Below **6015** and **6016** in the northern 5.50 m of the trench **6020** was a fairly compact mix of dark brown silty peat (70%) and pale grey mortar chunks and flecks. **6020** measured up to 200 mm in depth in the east part of the trench but tailed away before the west baulk.

Seen alongside the west baulk in most of the trench (cut away by 1992 trench at gun platform 3 to the north and **6014** to the S) cut **6022** measured 900 mm E-W and was excavated to a depth of 500 mm but not bottomed. It was noted that this feature sloped down to the E. **6021** the fill of **6022** is a compact deposit comprising 80% small-medium sized chunks of basalt, that often have voids between them, and 20% dark brown silty peat.

Sealed by **6022**, **6023** is a deposit of compact dark brown peat with occasional small stones throughout. **6023** was seen in areas of deeper excavation throughout the trench and measured up to 380 mm in depth. There were artefacts including clay pipe and pan tile fragments recovered from **6023**.

### **3.15 Area F: Pile holes**

#### **3.15.1 Pile 26**

The north side of this trench was against south side of modern gun platform, it was dug to a depth of 450 mm below underside of wall and measured 800 mm N-S.

The upper material was backfill of the 1992 trench and this bottomed onto terram. Below the terram there was a 150 mm deep layer of dark, peaty soil, possibly more backfill, although may have been an unexcavated remnant of **6023**.

Below **6023**, **6027** was a deposit of fairly loose mid brown sandy loam with frequent small stones and fragments of crushed sandstone, was seen toward the bottom of the excavation. The upper surface of **6027** sloped down from west to east and was at

roughly the same level as buried gun platform 3 immediately to the north of the trench.

At the base of the excavation there was a very large stone, **6025**, removed during the excavation. The removal of **6025** revealed further masonry below and to the north of it, and more yellow/light brown sandy mortar bonding. The stone removed measured 750 mm by 500 mm and 150 mm thick and those left *in situ* were of similar size. **6025** ran under the modern gun platform to the north where it was obscured by modern grey sand/gravel and brick underpinning. The south edge of the feature was 800 mm south of the modern gun platform. **6025** was partially covered by, and possibly bonded to, the earlier east wall with crumbly, mid yellow, sandy mortar that was very similar to the mortar seen over the early gun platforms.

Also seen at the bottom of the trench, deposit **6026** comprised very dark brown peat with very occasional stone grits. **6026** was only uncovered, not excavated.

### 3.15.2 *Pile 27*

The trench was excavated to a depth of 450 mm below the base of the east battery wall and it extended back from the west face 300 mm under the wall.

The deposits removed were rubble layer **6021** peat **6023** and the 100 mm thick, brown, stony layer **6027**. The upper surface of **6027** was 750 mm below turf level in the west section.

The eastern limit of **6027** was 450 mm from, and parallel to, the east wall. It should be noted that in very cramped and badly lit conditions under shoring, and with the pile having been driven through at this point, it was very hard to see relationships here.

Below **6027** the reddish brown, cleaner peat **6026** was seen. **6026** was not bottomed and excavation stopped 850 mm below turf level.

It was not certain, but it appeared that **6027** may be filling a cut through the peat. At least as likely is the possibility that **6027** is a spread of material over the peat.

In the trenches at pile holes 26& 27 it was noted that the upper surface of **6027** is at a depth very similar to the upper surface of the buried gun platform just to the north of hole 26.

### 3.15.3 *Pile 28*

The trench measured 800 mm N-S and 450 mm in depth below the base of the east battery wall; it extended 320 mm east under that wall.

At the base of the excavation there was a deposit of vivid brick red peat, **6024**, that fades to very dark brown in colour after it has been exposed to air. There were occasional patches of vegetation preserved within **6024**. There appeared to be an N-S cut through this area 380 mm west of the line of the east battery wall - this may have been the continuation of **6022**.

The majority of the material removed in this trench was **6023**.

### 3.15.4 *Pile 29*

The trench measured 800 mm N-S, 500 mm in depth and extended 250 mm under the west face of the east battery wall. The wall foundations in this area extended out (west) 150 mm from the wall face and one of these stones was loose and had to be removed. The excavation under the wall removed **6023** and 220 mm of **6026**.

### 3.15.5 *Pile 30*

The trench measured 800 mm N-S and was excavated 350 mm east under the west face of the east battery wall, it was dug to 400 mm below the underside of the wall.

Remains of rubble layer **6021** were removed in the upper part of the trench. Below **6021** the excavation was through **6023**, which was not bottomed. The trench was excavated to a depth 800 mm below turf.

After removal of **6021**, the lowest course of the east wall collapsed over *c* 2.10 m length running south from hole 27, centred roughly over hole 28. The remaining masonry then slipped down by up to 120 mm. This was to be repaired as part of the current project.

### 3.16 **Description of features seen in west face of east battery wall**

**9001** forms the south side of the embrasure above gun platform 8 and extends 1.60 m S, it measures 850 mm in height. **9001** was formed with sub-rectangular sandstone blocks that were heavily lime mortared and measure 500 mm by 250 mm thick on average. Below **9001**, **9002** was formed with similar blocks that extended 200 mm

further S. **9002** has been altered since the 1992 excavation with some of the blocks having been moved and others replaced.

To the south of **9001**, **9003** is the walling between gun platforms 7 and 8; it measures roughly 8.00 m in length and 1.50 m high. **9003** was formed with mortared, roughly rectangular sandstone blocks (450 mm by 250 mm on average) with occasional small pinnars between the blocks. This wall was roughly coursed and the construction followed the slope down to the N. Below most of **9003** there are two courses of footings, **9005**. The stones used in **9005** were sub-rectangular blocks and the extend out (east) 300 mm from the east face of **9003** up to 400 mm high. At the north end of **9003** **9005** extends into a roughly square construction, **9004**. **9004** extends north and down from **9005** and measures up to 800 mm N-S and 800 mm in height. It has fairly neat edges and is formed with sub rectangular blocks. **9004** also extends east from the east face of the battery wall.

In the bottom part of the north end of the wall various stones had been moved and others replaced - this area was numbered **9006**.

**9003** is built over **9004** and **9005** and against **9007**.

The structure forming the wall at gun platform 7, **9007**, measures roughly 4.00 m in length, although a step out at the base of the north side extends the bottom three courses to 4.10 m N-S, and 1.65m high. The firing slot is central within the upper part of the structure and measures 1.00 m in height and 520 mm wide. There are eight courses of stonework at **9007** the upper five (those alongside the central aperture) are neatly coursed and use blocks that are usually rectangular and measure 450 mm by 200 mm on average. The bottom three courses are fairly neat at the sides but in the central part, under the slot, a lot of smaller and more rounded stones are used.

The walling between gun platforms 6 and 7, **9008**, measured 6.50 m in length and it was 1.50 m high. The stones used were rectangular and sub-rectangular and roughly coursed. It was seen during the excavation that this structure was little more than a facing. Seen only 150 mm behind **9008** and then curving away east so it reached 300 mm east of **9008**, **9009** was a wall face only glimpsed during the current work.

**9008** was constructed against **9007** and **9010** and it is also thought to be built onto **9009**.

**9010** is the structure forming the base and the north side of the structure at the embrasure above platform 6, it measures 3.10 m N-S at the base and 1.80 m N-S at the top (where the south limit forms the north side of the gun slot) and it is 1.60 m high. There are seven courses of stones, the upper five are rectangular and coursed while the bottom two, under the aperture, are sub-rectangular and only roughly coursed. The aperture to the south measures 1.05 m in height and 550 mm wide.

The south side of gun embrasure 6 and the upper part of the wall south of it is formed with **9011**. **9011** measures roughly 27.20 m N-S and an average of 1.00 m in height, the stones are mainly sub-rectangular and roughly coursed. There are possible features within this - joints or cracks but nothing that could be strongly identified as the edge of an embrasure or other feature. The most notable join seen was at the east point of the wall, where it changes direction. Both ends of the feature have dressed stones and form the south end of embrasure 6 and the north end of embrasure 3, to the north and south respectively.

Below the north part of **9011** and against both **9010** and **9013**, **9012** was the bottom part of the wall between gun platforms 5 and 6. There were up to four courses of stone at **9012**, measuring a total of 850 mm in height, but the bottom course was only seen at the north end and here it had been disturbed by red bricks put in below it and against the south side of embrasure 6.

**9013** was to the south of **9012** and measured 4.00 m N-S and up to 750 mm in height. Only the north and south ends of **9013** were seen as the central part (over hidden gun platform 5) was not re-excavated during this work. The stones were roughly coursed and rectangular with larger stones forming two courses to the north while there were three courses at the south end.

Both **9012** and **9014** were constructed against **9013** and **9011** is built over it.

To the south of **9013** and under **9011**, **9014** is a 10.50 m long section of walling that is on average 300 mm and a maximum of two, and often only one, course(s) high. **9014** was stepped out (west) slightly from **9011** and immediately below, and following the

same line as it, **9015** was stepped out slightly further. Both **9014** and **9015** had slightly uneven bases particularly at the east point of the east battery wall where an area sloped notably.

At the base of embrasure 4 **9016** measures 4.20 m in length and is 800 mm high, it is formed with a mix of rectangular and sub-rectangular blocks in four rough courses. **9015** and **9017** are both built onto **9016** and **9011** is built over it. There is no sign of a break in the build of **9011** over this feature.

In the 5.00 m south of **9016** the base of the wall is formed with **9017**, very roughly coursed walling, usually two courses high. There are various modern repairs at the base of **9017** and part of it could have been disturbed.

To the south of **9011** and **9016**, **9018** forms the south side of the aperture at embrasure 3 and it continues 1.80 m south, 1.80 m high. The upper five courses, to the base of the slot, are neat - below this they are rougher and smaller stones fill the area under the aperture. The gun slot measures 1.00 m high and 680 mm in width.

**9019** is the 6.70 m of wall between **9018** and the south limit of the recorded area - it is built with roughly coursed sub-rectangular blocks and measures up to 1.30 m in height. Below **9019**, **9020** is a single course of sub-rectangular stones measuring roughly 300 mm in height.

Both **9019** and **9020** were in very poor repair with quite large cracks visible and movement of some of the stones was evident. A substantial part of the wall needed to be rebuilt during the current work.

## **4.0 INTERPRETATION AND OBSERVATIONS**

### **4.1 Summary of phases**

These phases correspond to those described in earlier reports, although not all were represented during these works.

- **Phase 1:** The hill before the construction of earthworks, pre 1665.
- **Phase 2:** The early bank, 1665.

- **Phase 3:** The lower walling, 1665-1701.
- **Phase 4:** The later bank and wall, 1783.
- **Phase 5:** Heightening the stone ramparts 1883-1925
- **Phase 6:** Second World War 1939-45
- **Phase 7:** Demolition and landscaping 1963
- **Phase 8:** Repairs after the 1992 excavation.

## 4.2 Phase 3 features

### 4.2.1 Area G - Phase 3 features

Seen behind (east of) **9008** at the back of the trenches at piles 8 and 9, **9009** was on a different alignment to the phase 5 wall.

## 4.3 Phase 4 features

### 4.3.1 Area A - Phase 4 features

**1007** looks to be part of a peat bank and the top of it is roughly 500 mm below the present ground surface.

Dark brown slightly silty peat, **1009**, was below **1007** and is seen at the base of pile holes 1, 2, 3, 5 and 6 but was not bottomed in any of them. This is thought to be part of this phase.

### 4.3.2 Area B - Phase 4 features

**2004** was thought to be the top of the peat bank - it was only 250 mm below the present ground surface in the north part of the trench but 500 mm below it to the south.

Toward the bottom of the trenches by most of the pile holes in this area peat **2010** was probably a lower deposit in the later bank.

Sandstone block **2011** is difficult to interpret since only a small part of it was seen but similar stones are seen adjacent to other platforms and it may be that these stones are part of a structure supporting or revetting the base of the peat bank constructed between the embrasures.



At the base of the trench at hole 11 sandstone slab **2014** may have been a similar feature to **2011**.

#### **4.3.3** *Area C - Phase 4 features*

**3004** is the upper part of the peat bank and it measured up to 500 mm in thickness.

Peat **3008** was not bottomed and is therefore difficult to interpret with certainty but this may be the bottom part of this bank.

Slab **3009** in the base of the trench for pile 14 is a similar feature to **2011** in Area B.

At the base of the south end of the trench, **3005** may be the remains of a sidewall at the north edge of gun platform 5. Below **3005** stone **3006** was thought to be part of the buried platform. The thin deposit of peat between **3006** and **3005** may have been trample deposited during construction. At the north edge of the trench **3007** is the south edge of gun platform 6 under the modern platform.

At hole 12 it was noted that the south edge of the modern platform was constructed 160 mm north of and 300 mm above the modern one.

#### **4.3.4** *Area D - Phase 4 features*

The bank material in this trench was mid brown sandy silt, **4021**.

The upper deposit of the peat bank in the area between holes 16 and 17 was re-numbered **4018**, and it was noted that the top of it was level with the underside of the east battery wall.

Between piles 20 and 21 the top of the peat bank was **4027**.

At the base of the trench for hole 15 basalt block **4031** may have been part of the base for the bank. At the base of the trench for hole 21 just to the north of the pile there was a large stone block **4035** that may have been a similar feature, but it was in a different position to the others, west of the east battery wall rather than under it. Perhaps **4035** is simply a slab within the peat bank.

At the north edge of hole 15, **4032** was the south edge of gun platform 5. Similarly at the south edge of hole 21, **4030** is the north edge of gun platform 4.

Parallel to **4030**, **4028** was a possible cut and its location would suggest that it was for the platform's construction. It must be remembered that there have been trenches

against most of the platforms and one of these may have resulted in this feature.

#### 4.3.5 *Area E - Phase 4 features*

5007 is the upper part of the bank and is seen mainly in the trenches around the piles.

Stones and peat 5008 and dark brown/black peat 5009 below it are thought to form the bottom part of the bank in this area.

At the bottom of hole 25 5011 was a flat stone similar to those above but it could be seen in this area that there were others associated with it. There is a gap of 300 mm below the base of the wall and the top of 5011.

At the south end of hole 25 5010 is the north edge of gun platform 3.

#### 4.3.6 *Area F - Phase 4 features*

Dark silty peat, 6012, was uncovered but not excavated within the original trench. This was probably the top of the bank.

Seen in the pile trenches 6023 seems likely to be a deposit toward the base of the same bank.

The upper surface of 6027 sloped down from west to east and was at roughly the same level as gun platform 3 immediately to the north of the trench.

6025 did not seem to be part of gun platform but was thought likely to be contemporary. It is similar to structural features seen close to the sides of other early gun platforms along the east wall. 6023 sealed 6025 which was thought to be over 6026.

#### 4.3.7 *West face of east battery wall - Phase 4 features*

9001 is the south side of gun embrasure 8 and it extended 1.60 m south. Below 9001, 9002 was formed with similar blocks that extended 200 mm further S. 9002 has been extensively altered since the 1992 but the construction of it is in this phase.

The structure of gun embrasure 7, 9007, has a firing slot central within it. The stone work below the slot uses small rounded stones and it is possible that this is a sign of an alteration; perhaps the slot was made smaller.

The north side of gun embrasure 6 is formed with **9010** and **9011** (Phase 5) forms the south side. The aperture to the south measures 1.05m in height and 550 mm wide.

**9013** is the bottom part of the construction at gun platform 5 and could be quite clearly seen although the embrasure above it was no longer there. Similarly **9016** is the base of embrasure 4 but there is no sign of that feature in **9011** above.

**9018** forms the south side of the aperture at embrasure 3 and continues 1.80 m south - it was noted again that small stones fill the area under the aperture. The gun slot measures 1.00 m high and 680 mm in width.

#### **4.4 Phase 5 features**

##### **4.4.1 *West face of east battery wall - Phase 5 features***

To the south of **9001** (Phase 4) **9003** is the walling between gun embrasures 7 and 8 - it ran downhill as it extended north. Below the majority of **9003** footings **9005** were constructed. At the base of the south end of both **9003** and **9005**, **9004** is a square block of stonework used as additional foundations at the downhill end of the wall.

Between gun embrasures 6 and 7, **9008**, was a 6.50 m length of roughly coursed wall. It was seen during the current work that this structure was only a facing onto phase 3 structure **9009**.

Between the south side of gun embrasure 6 and the north end of embrasure 3 the upper part of the wall south of it is formed with **9011**. Although there are occasional possible features there is no obvious construction for platforms 4 or 5. The assumption is that the whole of this wall has at some point been rebuilt. A possibility is that during Phase 6 **9011** was rebuilt as the east side of structures or perhaps just as a repair to the boundary. The fact that the south edge of embrasure 5 and the north edge of embrasure 3 are included in this build may show these features being altered, perhaps narrowed during this phase.

**9012** was the bottom part of the wall infilling between embrasures 5 and 6, under **9011**. The remainder of the walling under **9011**, **9014**, was stepped out slightly from that feature and may be a remnant of the original wall in this phase, suggesting that **9011** is a rebuild. **9015** was stepped out slightly from **9014** and is probably foundation for that feature.

In the 5.00 m south of gun platform 4, **9017** forms the base of the wall and there are various modern repairs at the base of it.

**9019** is the walling between gun position 3 and the south limit of the recorded area and **9020** is the foundation for this wall.

#### **4.5 Phase 6**

##### **4.5.1 Area D - Phase 6 features**

At the east point of the east battery wall **4004** was the east wall of a structure and it measured 2.70 m in length (N-S) and it is difficult to see the structure extending any further as it meets the east battery wall at both ends. At the north end of **4004**, the west limit of **4006** looked to be a genuine edge and only extended 500 mm from the north wall; this looked like a base rather than a wall. There were lumps of concrete and stone spread through the surrounding area in **4007**. There was certainly a structure in this area but perhaps **4006** suggests that we are seeing the base for it rather than the walls, perhaps a concrete base for a wooden shed.

Seen in most of the hole 18 cut **4034** was a drainage trench probably associated with the Phase 6 structures.

##### **4.5.2 Area east - Phase 6 features**

**5003** was the trench for an iron gas pipe now largely rusted away.

##### **4.5.3 Area F - Phase 6 features**

At the south end of the excavated area **6009** may be a remnant of the Second World War period (or slightly earlier). **6010** is the remains of the shuttering for **6009** and **6011** is the hardcore bottoming for it.

Aligned SW-NE toward the south end of the trench, under **6009**, **6014** may be the cut for that feature.

In the north part of the trench **6019** was a N-S cut measuring over 1.90 m in length and 500 mm wide filled with rubble **6018**. It was speculated that this may be an attempt to provide some stability to this part of the wall, which was in poor repair.

**6015** and **6016** were compact strips of bitumen and rounded pebbles on the same N-S alignment. These may be remnants of the base for a wall.

In the northernmost 5.50 m of the trench **6020** may have been imported as a hardcore base for a structure in this phase. **6021** and its fill, **6021**, alongside the west baulk in most of the trench were similar features, perhaps a foundation trench.

#### **4.6 Phase 7 features**

##### **4.6.1 Area A - Phase 7 features**

The turf and topsoil, **1005**, and make up for it, **1006**, were probably part of the 1963 landscaping but **1006** may also have been added to after the 1992 work. These deposits raised the ground level by around 300 mm.

**1008** was also thought to be part of this phase and the stones and mortar within it may be indicative of demolition and/or clearance.

##### **4.6.2 Area B - Phase 7 features**

**2001** and **2002** are thought to be part of the 1963 landscaping and they have made the ground level in Area B between 200 mm and 400 mm higher. Within **2002** in hole 10, there was a large angular stone partially covered with concrete - this may be evidence for clearance of later buildings.

In the south half of Area B **2003** included a lot of rubble that may have been remnants of demolished Second World War buildings.

##### **4.6.3 Area C - Phase 7 features**

**3001- 3003** were all thought to be deposited during landscaping, raising the ground level by approximately 400 mm.

##### **4.6.4 Area D - Phase 7 features**

In Area D **4001** and **4003** are the modern make-up deposits that have raised the ground level by 150 mm-300 mm. Sand patches **4002** and **4008** were probably imported, or perhaps simply trampled at the start of this phase of landscaping.

In Area D **4003**, **4015**, **4023** and **4025** were excavated separately within individual hole but are believed to be the same deposit.

**4016** and **4017** are thought most likely to belong in this phase - they appear to relate to the demolition of Phase 6 structures - perhaps the demolition debris has been used as levelling.

In the area between piles 15 and 16, **4021** may have been a robber trench dug during the demolition of the Phase 6 structures.

Toward the west side of the trench, **4022** is a N-S cut, perhaps part of the demolition of the Phase 6 structure or a service trench although there was no pipe seen within it.

Peat **4009** was over a thick deposit of sub-angular rubble and peat, **4010**; these deposits were over 600 mm deep and seemed to show demolition debris and peat being used as landscaping. There seems to have been more disturbance in this area, and the ground level has been raised more than elsewhere but perhaps the demolition of structures here necessitated this.

At the west side of the trench in the area between holes 20 and 21, sealed by **4025**, rubble **4026** was demolition debris used as infill.

#### **4.6.5** *Area east - Phase 7 features*

Turf and topsoil, **5001**, raises the ground level by around 200 mm.

**5004** and **5005** are demolition debris used as infill in cut **5006**, which may be a service trench.

### **4.7** **Phase 8**

#### **4.7.1** *Area A - Phase 8 features*

**1004** was backfill of a June 2007 trench, **1003** was the south edge of the 1992 trench at gun platform 8 and **1001** and **1002** were fills of that trench.

Across the south end of Area B cut **2008** is the north end of the 1992 trench at gun platform 6 and coursed red brick **2007** is a repair to the east battery wall after that excavation.

Under the east wall immediately south of platform 7 **2012** was a 1992 brick repair and at the north end of gun platform 6 **2013** is a similar feature.

There were also brick repairs at the base of the east battery wall at the south side of gun platform 6, **3011** and at the north side of gun platform 5, **3010**.

In Area D **4011** and **4012** were over **4014**, the fill of the partially excavated cut **4013**. **4013** was in the position of the June 2007 Trench 7.

At Area F, cut **6013** is the edge of the 1992 trench at the south side of gun platform 3. The deposits sealing and filling **6013**, **6001-6003** also date to this period.

Deposit **6005** and concrete block **6007** under both it and the east battery wall are part of repairs in this area after the 1992 excavations, underpinning the wall. **6008** is the remains of shuttering along the west edge of **6007**.

In an area measuring 3.40 m N-S, 600 mm wide and up to 150 mm thick in the middle of the trench, **6017** is a deposit of clean yellow sand probably waste from the construction of **6007**.

#### **4.7.2** *West face of east battery wall - Phase 8 features*

**9006** is a 1992 repair probably undertaken when the poor state of the wall became apparent during the excavations at that time.

**9021** is a concrete base under the south end of the recoded area of the east battery wall.

## **5.0** **SUMMARY**

### **5.1** **Phases 1& 2**

Not seen during the current work presumably because the trenches were not dug to a great enough depth to encounter features from those phases.

### **5.2** **Phase 3**

Only represented in the east battery wall, where wall **9008** showed a different line to the rest of the east battery wall and was seen to the east of the present wall face during this phase. Elsewhere the trenches under the east battery wall did not extend east far enough to see this feature.

### **5.3** **Phase 4**

The construction of the gun emplacements and the earth bank between them and it was seen in most of the areas excavated.

The peat bank was seen in all of the Areas, the top of it usually around 500 mm below the present ground surface and it continued below the excavated levels.

There were flat slabs at the base of the excavations at the south side of gun platform

7, the north side of platform 6, the north and south sides of platform 5, the north side of platform 4 and the north and south sides of platform 3. It is not unlikely that these were present at both sides of all the buried platforms and that the excavations were not deep enough to see them in some areas. These stones look to be deliberately placed alongside the original platforms. Perhaps these stones were part of a rough base for the earth rampart that was to be placed between the embrasures. If this is so the excavation at some of the pile trenches had reached the bottom of the bank.

Where the original gun platforms were seen they appeared to be wider than the modern reconstructed ones above. The reconstructed platform and its bedding generally started around 300 mm above the original platforms.

The recording of the west face of the east battery wall suggested that only the structure at the gun emplacements survives in this phase but not at all of them.

#### **5.4 Phase 5**

This phase sees walling constructed between the gun emplacements and completes the circuit. It is also possible that the upper part of the wall is rebuilt and the embrasures narrowed at this time. This phase is represented but features seen only as part of the east battery wall.

#### **5.5 Phase 6**

In Area D, at the easternmost, central point of the east battery wall, **4004**, **4006** and **4007** are thought to be related to the construction of a fairly small structure. This building could be either 1930s or 1940s in date. **4034** is a drainage trench associated with this structure and/or others of a similar date.

In Area E **5003** was a gas pipe also likely to date to the 1930s or 1940s.

At the south end of Area F **6009** is thought to be an attempt at repairing the east battery wall, probably 1930s or 1940s. The principle reason for dating this repair so early is that the concrete used was distinctively different from the later material seen elsewhere and there was a later (Phase 8) repair over this. It was also thought that rubble filled trench **6019** was part of this phase of repairs.

Also in Area F **6015** and **6016** were thought to be the base for an N-S wall.



Similarly 6020 had been imported as hardcore and 6021 may be a construction trench for structures in this phase.

#### **5.6 Phase 7**

This landscaping phase raised the ground level by around 300 mm over most of the site although there may be Phase 8 work hidden within this, raising the ground around the new gun platforms.

Included in the material of this phase there is a notable amount of broken stone and mortar, perhaps indicating that there was demolition immediately preceding it. This would likely be the clearance of 1930s and World War Two structures.

#### **5.7 Phase 8**

This phase includes works carried out by HS MCU personnel since the 1992 excavation and has no real archaeological interest. The work was generally made up of attempts at stabilising the east battery wall and these have been superseded with the current project.

### **6.0 CONCLUSION**

Since much of the area had been examined in some detail during previous excavations, this latest programme of works has not added a great deal to the interpretation of the sequence of construction in this part of Fort Charlotte. Also, the methodology itself, the deliberate avoidance of the more significant structures, the gun platforms, made any new archaeological discoveries less likely. The relatively shallow nature of the excavated areas resulted in no further evidence of the earliest phases being seen.

The excavations were often undertaken initially in relatively small areas, separated both physically and by being staged over a period of several weeks. Despite this, it was still possible to undertake the works in accordance with recognised archaeological practice. Any work involving the excavation of previously undisturbed deposits was carried out by, or under the strict supervision of, the archaeologists present. This was made possible by the co-operation of all those involved in the works – the archaeological team, the HS MCU personnel and the

contractors. The project has shown that engineering work on this scale can be undertaken without causing significant harm to archaeologically significant structures, and where disturbance takes place proper archaeological excavation and recording can still be undertaken.

Although this phase of work has not greatly increased our understanding of the site, the methodology and general approach under difficult circumstances during substantial engineering works ought to inform the planning of similar projects in the future, and with this in mind it may justify publication in some form.

## A1.0 APPENDIX 1: LIST OF CONTEXTS

### A1.1 December 2007

Ctxt	Description
101	Dark, peaty turf and topsoil up to 80 mm deep
102	Mixed deposit, July 2007 trench backfill
103	Footings of east wall (as July 2007 F111, F204?)
201	Dark, peaty turf and topsoil up to 100 mm deep
202	Mixed deposit, July 2007 trench backfill
203	Gun platform
301	Dark, peaty turf and topsoil up to 100 mm deep
302	Mixed deposit, July 2007 trench backfill
303	Gun platform
401	Dark, peaty turf and topsoil up to 80 mm deep
402	Mid to dark brown, fairly compact, clayey soil with some small stones and stone fragments
403	Fairly compact, dark brown, peaty clayey soil
404	Gun platform
405	Fairly loose, very dark, peaty soil
501	Dark, peaty turf and topsoil up to 100 mm deep
502	Mixed deposit, July 2007 trench backfill
503	Gun platform
601	Dark, peaty turf and topsoil up to 80 mm deep
602	Patchy layer of grey sand up to 100 mm thick
603	Fairly loose, mixed deposit, 80% large angular stones (up to 150 x 200 x 500 mm, average 50 x 75 x 200 mm) and 20% sandy soil with smaller fragments of stone to a depth of 400 mm.
701	Dark, peaty turf and topsoil up to 80 mm deep
702	Mixed layer of dark, peaty, sandy soil and stone fragments, with modern refuse
703	Grey sand bedding for gun platform 2
704	Patch of yellow mortar
705	Wall
706	Concrete underpinning
707	Earlier (1930s?) concrete founds

### A1.2 January-February 2008

Ctxt	Area	Piles	Description	Phase
1001	A	1-6	The upper fill of 1003, fairly compact mix of mid brown silty and stones with occasional mortar flecks throughout.	8
1002	A	1-6	Loose clean grey sand, lower fill of 1003.	8
1003	A	1-6	Steep sided cut, 1990's trench.	8
1004	A	1-6	2007 trench, TT1.	8
1005	A	1-6	Turf and topsoil.	7
1006	A	1-6	Deposit of light brown gritty sand and stones	7
1007	A	1-6	Compact mid-dark brown silty peat	4
1008	A	1-6	Light-mid brown sandy silt and 60% small angular stone fragments.	7
1009	A	1-6	Dark brown slightly silty peat	4

<b>Ctxt</b>	<b>Area</b>	<b>Piles</b>	<b>Description</b>	<b>Phase</b>
2001	B	7-11	Turf and topsoil.	7
2002	B	7-11	Dark brown peaty loam	7
2003	B	7-11	Sub angular sandstone blocks and mid –dark brown peaty silt.	7
2004	B	7-11	Fairly compact deposit of mid-dark brown slightly silty peat	4
2005	B	7-11	Pale yellow sand, fill of 2008.	8
2006	B	7-11	Dark brown peaty clay, fill of 2008.	8
2007	B	7-11	Coursed red brick blocking, fill of 2008.	8
2008	B	7-11	N edge of a cut.	8
2009	B	7-11	Fairly loose grey gravel.	
2010	B	7-11	Compact dark brown peat with occasional red patches.	4
2011	B	7-11	Sandstone block at the bottom of pile trench 7.	4
2012	B	7-11	Coursed red brick blocking under the wall immediately S of platform 7.	8
2013	B	7-11	Coursed red brick blocking under the wall immediately N of platform 6.	8
2014	B	7-11	Large, 600mm E-W by 400mm N-S, sandstone slab.	4
3001	C	12-14	Turf and topsoil.	7
3002	C	12-14	Dark brown silty peat with some stones.	7
3003	C	12-14	Loose light brown sand.	7
3004	C	12-14	Compact dark brown peat with occasional red patches.	4
3005	C	12-14	Wall at the edge of buried platform 5.	4
3006	C	12-14	N edge of buried platform 5.	4
3007	C	12-14	S edge of buried platform 6.	4
3008	C	12-14	Deposit of dark brown peat and sub rounded stones.	4
3009	C	12-14	Large sandstone slab under 3008 and the line of the E wall.	4
3010	C	12-14	Coursed red brick pointed with cement under the E wall immediately S of modern platform 5.	8
3011	C	12-14	Coursed red brick pointed with cement under the E wall immediately N of modern platform 6.	8
4001	D	15-21	Turf and topsoil.	7
4002	D	15-21	Loose yellow/brown sand in the S part of the trench.	7
4003	D	15-21	Deposit of peat and crushed sandstone.	7
4004	D	15-21	N-S line of concrete, structural remnant.	6
4005	D	15-21	Hexagonal cut within 4004.	6
4006	D	15-21	E-W line of concrete, structural remnant.	6
4007	D	15-21	Deposit of lumps of concrete and stone fragments within mid brown silty peat.	6
4008	D	15-21	Loose yellow/brown sand in most of the N part of the trench.	7
4009	D	15-21	Compact deposit of mid-dark brown peat	7
4010	D	15-21	Mix of sub angular rubble and mid-dark brown peat.	7
4011	D	15-21	Dark brown peat and crushed sandstone deposit.	8
4012	D	15-21	Yellow/brown sand under 4001.	8
4013	D	15-21	Straight sided cut, N edge of the 2007 trench, TT7.	8
4014	D	15-21	Fill of 4013, dark brown peaty loam with occasional	8

Ctxt	Area	Piles	Description	Phase
			stones.	
4015	D	15-21	Fairly compact dark brown clayey peat with occasional fragments of crushed sandstone	7
4016	D	15-21	Loose stones with some dark brown peaty silt.	7
4017	D	15-21	Possible N-S cut.	7
4018	D	15-21	Deposit of compact dark brown peat with some red patches.	4
4019	D	15-21	Upper part of the W face of the E curtain.	5
4020	D	15-21	Lower part of the W face of the E curtain.	5
4021	D	15-21	Deposit of mid brown sandy silt.	4
4022	D	15-21	N-S cut, seen toward the W side of the trench sloping down to the E.	7
4023	D	15-21	Fairly compact deposit of dark brown silty peat	7
4024	D	15-21	W face of the E curtain.	5
4025	D	15-21	Dark brown silty peat immediately under 4001.	7
4026	D	15-21	Angular rubble in mid brown silty peat.	7
4027	D	15-21	Sticky dark brown peat with some red patches	4
4028	D	15-21	Possible cut parallel to 4030.	4
4029	D	15-21	Fill of 4028, fairly loose dark brown silty peat with occasional small stones	4
4030	D	15-21	N edge of hidden gun platform 4.	4
4031	D	15-21	Single basalt block at the base of the trench at pile 15.	4
4032	D	15-21	Structure at the N edge of hidden gun platform 5.	4
4033	D	15-21	Mix of peat and dark grey silt filling 4034.	6
4034	D	15-21	Service trench.	6
4035	D	15-21	Block of stone at the base of the trench at pile 21.	4
5001	E	22-25	Turf and topsoil.	7
5002	E	22-25	Fill of 5003, a mix of brown sand, dark brown peaty silt and stones.	6
5003	E	22-25	Shallow "U" shaped cut.	6
5004	E	22-25	Compact deposit of dark brown/black silty peat with many mortar fragments and some small stones. Fill of 5006.	7
5005	E	22-25	Mix of stones and dark brown peat. Fill of 5006.	7
5006	E	22-25	Possible cut.	7
5007	E	22-25	Peat with occasional small-medium angular stones throughout.	4
5008	E	22-25	Deposit of angular basalt chunks and dark brown/black peat.	4
5009	E	22-25	Dark brown/black peat with occasional red peat patches.	4
5010	E	22-25	Line of masonry measuring at least 550mm E-W and seen in an area of 250mm N-S. There was abundant fine, pale yellow, mortar throughout.	4
5011	E	22-25	Large blocks of roughly dressed basalt with pale yellow mortar attached.	4
6001	F	26-30	Turf and topsoil.	8
6002	F	26-30	Deposit of compact pale yellow/brown sandy mortar.	8

<b>Ctxt</b>	<b>Area</b>	<b>Piles</b>	<b>Description</b>	<b>Phase</b>
6003	F	26-30	Fairly loose dark brown peaty loam with roughly 30% stone fragments	8
6004	F	26-30	Fill of 6013, loose mid grey sand and gravel.	8
6005	F	26-30	Fairly loose deposit of pale yellow/brown gritty mortar.	8
6006	F	26-30	W face of the E curtain wall	5
6007	F	26-30	250mm thick block of concrete under and extending 400mm W at the S end of the curtain wall.	8
6008	F	26-30	30mm plank placed on edge at the W end of 6007.	8
6009	F	26-30	Concrete.	6
6010	F	26-30	Three vertical timbers.	6
6011	F	26-30	Area of large irregularly shaped stones	6
6012	F	26-30	Dark silty peat	4
6013	F	26-30	E-W aligned trench with fairly irregular edges.	8
6014	F	26-30	800mm wide cut, not bottomed.	6
6015	F	26-30	A compact strip of bitumen and rounded pebbles.	6
6016	F	26-30	Area of bitumen and pebbles continuing the line of 6015.	6
6017	F	26-30	Deposit of clean yellow sand.	8
6018	F	26-30	Fill of 6019, medium-large angular basalt chunks with 20% dark grey silty clay.	6
6019	F	26-30	N-S cut measuring over 1.90m in length.	6
6020	F	26-30	Mix of dark brown silty peat and pale grey mortar chunks and flecks.	6
6021	F	26-30	Fill of 6022, compact deposit of voided small-medium sized chunks of basalt and dark brown silty peat.	6
6022	F	26-30	Cut seen alongside the W baulk in most of the trench.	
6023	F	26-30	Deposit of compact dark brown peat with occasional small stones throughout.	4
6024	F	26-30	Fairly compact brick red peat, fades to dark brown on exposure.	
6025	F	26-30	Very large stone that was removed during the excavation.	4
6026	F	26-30	Very dark brown peat with very occasional stone grits	4
6027	F	26-30	Deposit of fairly loose mid brown sandy loam with frequent small stones and fragments of crushed sandstone	4
9001	wall	----	Upper part of wall forming S side of gun embrasure 8 and extended 1.60m S from it.	4
9002	wall	----	Lower part of wall forming S side of gun embrasure 8 and extended 1.60m S from it.	4
9003	wall	----	Walling between gun embrasures 7 and 8.	5
9004	wall	----	Foundations for 9003.	5
9005	wall	----	Block foundations under the N end of 9003 and 9004.	5
9006	wall	----	Modern repairs in the W face of the E curtain wall.	8
9007	wall	----	Structure forming the wall at gun embrasure 7.	4
9008	wall	----	Walling between gun embrasures 6 and 7.	5
9909	wall	----	Wall face behind (E of) 9008.	3
9010	wall	----	Structure forming the base and the N side of gun embrasure 6.	4

Ctxt	Area	Piles	Description	Phase
9011	wall	----	S side of gun embrasure 6 and the upper part of the wall S of it.	5
9012	wall	----	Bottom part of the wall between embrasures 5 and 6.	5
9013	wall	----	Structure at gun platform 5.	4
9014	wall	----	10.50m long section of walling S of 9013.	5
9015	wall	----	Foundations of 9014.	5
9016	wall	----	Structure at the base of embrasure 4.	4
9017	wall	----	Walling S of 9016.	5
9018	wall	----	S side of the aperture at embrasure 3.	4
9019	wall	----	S end of E curtain wall.	5
9020	wall	----	Foundations for 9020.	5
9021	wall	----	Modern concrete base.	8

## A2.0 APPENDIX 2: LIST OF DRAWINGS

### A2.1 December 2007

No	Scale	Description	Date
1	1:200	Location plan	8/12/07
2	1:20	Trench 1 sketch plan	10/12/07
3	1:20	Trench 4 plan	10/12/07
4	1:10	Trench 4 N facing section	10/12/07

### A2.2 January-February 2008

No	Scale	Description	Date
1	1:200	Location plan	1/2/08
2	1:20	East battery wall, west elevation	1/2/08
3	1:20	Plan of far S end of Area F showing concrete underpinning	2/2/08
4	1:20	Section drawing – entire excavated area – W section, E facing	2/2/08

## A3.0 APPENDIX 3: LIST OF PHOTOGRAPHS

### A3.1 December 2007

No	Description	From	Date
4222	Trench 1 completed showing F103	N	6/12/07
4223	Trench 1 completed showing F103	NW	6/12/07
4224	Trench 1 completed showing F103	NW	6/12/07
4225	Trench 1 completed showing F103	S	6/12/07
4226	Trench 4 N edge of gun platform revealed	W	6/12/07
4227	Trench 4 N edge of gun platform revealed	N	6/12/07
4228	Trench 4 N edge of gun platform revealed	W	6/12/07
4229	Trench 4 N facing section	N	6/12/07
4230	Trench 4 N facing section	N	6/12/07
4231	Trench 4 N facing section	N	6/12/07
4232	Hole 29 before archaeological excavation	W	6/12/07

No	Description	From	Date
4233	Hole 29 before archaeological excavation	W	6/12/07
4234	Hole 29 before archaeological excavation	W	6/12/07
4235	Trench 2 N edge of gun platform 5 revealed	W	6/12/07
4236	Trench 2 S edge of gun platform 5 revealed	W	6/12/07
4238	Work in progress... steel casing being inserted		6/12/07
4239	Work in progress... steel casing being inserted		6/12/07
4240	Work in progress... steel casing being inserted		6/12/07
4242	Work in progress... steel casing being inserted		6/12/07
4243	Guidelines for holes Area B marked out	S	6/12/07
4247	Hole 18 showing concrete	W	6/12/07
4248	Holes 12-17 after casings inserted	S	6/12/07
4250	Auger		6/12/07
4253	Trench 6	W	7/12/07
4257	Trench 7 completed	E	8/12/07
4258	Trench 7 completed	N	8/12/07
4259	Trench 7 completed – N end	W	8/12/07
4260	Trench 7 completed – S end	W	8/12/07
4261	Trench 7 completed – N end	S	8/12/07
4262	Trench 7 S facing section	S	8/12/07
4263	Trench 7 N facing section	N	8/12/07
4264	Trench 7 N facing section	N	8/12/07
4265	Trench 7 completed – N end	SE	8/12/07
4266 to 4301	General views of site and work in progress		11 - 12 /12/07

### A3.2 January-February 2008

No	Area	Description	From	Date
1	F	Topsoil removed from the trench, general shot.	SW	09/01/08
2	F	Topsoil removed from the S end of the trench.	NW	09/01/08
3	F	Topsoil removed from the central part of the trench.	NW	09/01/08
4	F	Topsoil removed from the central part trench.	NW	09/01/08
5	F	Topsoil removed from the N end of the trench.	NW	09/01/08
6	F	Working shots.	NW	09/01/08
7	F	Working shots.	NW	09/01/08
8	D	The re-excavated 2006 trench 7.	SW	10/01/08
9	D	The re-excavated 2006 trench 7.	SW	10/01/08
10	D	Walls 4004 and 4006, general view.	S	10/01/08
11	D	S end of the trench, wall 4004.	W	10/01/08
12	D	N end of the trench, detail of wall 4006.	W	10/01/08
13	D	Detail of hole 4005 in wall 4004.	SW	10/01/08
14	E	N end of the trench after the removal of 6015.	SW	11/01/08
15	E	Extreme N end of the trench after the removal of 6015.	NW	11/01/08
16	E	Working shot.	----	11/01/08
17	E	Working shot.	----	11/01/08
18	E	Working shot.	----	11/01/08
19	E	Cut 6019 post excavation.	NE	11/01/08
20	D	Area between pile holes 15 and 16 post excavation.	SW	11/01/08



No	Area	Description	From	Date
21	D	S facing section to the S of pile hole 16.	S	11/01/08
22	D	Area between pile holes 16 and 17 post excavation.	SW	11/01/08
23	F	N facing section through cut 6022, N side of pile trench 29.	N	14/01/08
24	F	N facing section through cut 6022, N side of pile trench 29.	N	14/01/08
25		Finds from 4011.		14/01/08
26		Finds from 4012.		14/01/08
27		Finds from 4023.		14/01/08
28		Finds from 4016.		14/01/08
29	A	S end of curtain wall at area A.	W	16/01/08
30	A	N end of curtain wall at area A.	NW	16/01/08
31	A	N end of curtain wall at area A.	NW	16/01/08
32	B	S end of curtain wall base in area B.	W	16/01/08
33	E	S facing section across area.	S	16/01/08
34	E	E facing section, S end of the trench	E	16/01/08
35	E	E facing section, central part of the trench.	E	16/01/08
36	E	E facing section, central part of the trench.	E	16/01/08
37	E	E facing section, N end of the trench.	E	16/01/08
38	F	E facing section, S end of the trench.	SE	16/01/08
39	F	E facing section, S end of the trench.	SE	16/01/08
40	F	E facing section, central part of the trench.	SE	16/01/08
41	F	E facing section, central part of the trench.	SE	16/01/08
42	F	E facing section, N end of the trench.	SE	16/01/08
43	F	E facing section, N end of the trench.	SE	16/01/08
44		View of the site from the car park.	W	16/01/08
45	C	Pile hole 10 post excavation.	NW	21/01/08
46	C	Pile hole 10 post excavation.	NW	21/01/08
47	C	Pile hole 10 post excavation.	NW	21/01/08
50	B	Pile hole 13 post excavation.	NW	21/01/08
55	D	Pile hole 16 post excavation.	N	21/01/08
56	D	Pile hole 16 post excavation.	N	21/01/08
58	D	N edge of gun platform 4, plan view.	S	21/01/08
59	D	N edge of gun platform 4, W end of S facing section.	N	21/01/08
60	D	N edge of gun platform 4, W end of S facing section.	N	21/01/08
61	D	N edge of gun platform 4, E end of S facing section.	N	21/01/08
62	D	N edge of gun platform 4, the platform and all of the S facing section.	NW	21/01/08
63	D	Unidentified.		21/01/08
64	D	N edge of platform 4.	W	21/01/08
65	D	N edge of platform 4.	N	21/01/08
66	D	N edge of platform 4.	W	21/01/08
67	D	N edge of platform 4.	W	21/01/08
69	D	Trench at pile 19.	SW	21/01/08
70	D	Trench at pile 19.	SW	21/01/08
71	D	Area around the N side of platform 4, hole 21.	W	22/01/08
72	C	Trench at pile hole 12.	SW	22/01/08
73	C	Trench at pile hole 12.	NW	22/01/08
74	C	Trench at pile hole 12, and rubble along the W side.	W	22/01/08
78	C	S end of the trench.	N	22/01/08

No	Area	Description	From	Date
79	C	S end of the trench.	N	22/01/08
80	C	Gun platform 3005/3006, W end.	N	22/01/08
81	C	Gun platform 3005/3006, E end.	N	22/01/08
82	C	E facing section at the S end of the trench.	NE	22/01/08
83	C	E facing section at the S end of the trench.	NE	22/01/08
84	C	E facing section at the S end of the trench.	NE	22/01/08
85	C	E facing section at the S end of the trench.	NE	22/01/08
86	C	Voided part of the curtain wall N of gun platform 5.		22/01/08
87-89		General views.		22/01/08
91	E	Gun platform 4 at the N end of the area.	S	23/01/08
92	E	W end of gun platform 4 at the N end of the area.	N	23/01/08
93	E	Gun platform 4 at the N end of the area, E end.	S	23/01/08
94	E	Gun platform 4 at the N end of the area, E end.	S	23/01/08
95	E	Gun platform 4 at the N end of the area, E facing section.	SE	23/01/08
96	E	Trench at pile 25, post excavation.	SW	23/01/08
97	E	Trench at pile 25, post excavation.	SW	23/01/08
98	E	Trench at pile 25, post excavation. View of base of the trench.	S	23/01/08
99	E	Trench at pile 25, post excavation. View of base of the trench.	N	23/01/08
100	C	Trench at pile 14, post excavation.	NW	29/01/08
101	C	Trench at pile 14, post excavation.	N	29/01/08
102	C	Trench at pile 14, post excavation.	NW	29/01/08
103-119		Local celebrations.		29/01/08
120	D	Trench at pile 17, post excavation.	N	29/01/08
121	D	Trench at pile 17, post excavation.	N	29/01/08
122	D	Trench at pile 17, post excavation.	NW	29/01/08
123	D	Trench at pile 17, post excavation.	NE	29/01/08
124	D	Trench at pile 20, post excavation.	W	29/01/08
125	D	Trench at pile 20, post excavation.	NW	29/01/08
126-133		More local celebrations.		29/01/08
134	F	Trench at pile 29, post excavation.	S	29/01/08
135	F	Trench at pile 29, post excavation.	S	29/01/08
136	F	Trench at pile 29, post excavation.	SE	29/01/08
137	F	Trench at pile 29, post excavation.	SW	29/01/08
138	A	Trench at pile 5, post excavation.	W	29/01/08
139	A	Trench at pile 5, post excavation.	NW	29/01/08
140	A	Trench at pile 3, post excavation.	NW	30/01/08
141	A	Trench at pile 3, post excavation.	NW	30/01/08
142	B	Trench at pile 8, post excavation.	SW	30/01/08
143	B	Trench at pile 8, post excavation.	SW	30/01/08
144	D	Trench at pile 15, post excavation under the curtain wall.	SW	30/01/08
145	D	Trench at pile 15, post excavation. S edge of gun platform 5.	S	30/01/08
146	B	Trench at pile 9, post excavation.	SW	30/01/08
147	B	Trench at pile 9, post excavation.	SW	30/01/08

No	Area	Description	From	Date
148	B	Trench at pile 9, post excavation.	SW	30/01/08
149	B	Trench at pile 9, post excavation.	SW	30/01/08
150	E	Trench at pile 24, post excavation.	NW	31/01/08
151	E	Trench at pile 24, post excavation.	N	31/01/08
152	E	Trench at pile 24, post excavation.	W	31/01/08
153	F	Wall at group F.	W	31/01/08
154	F	Wall at group F.	W	31/01/08
155	F	Wall at group F.	W	31/01/08
156	F	Crumbling footings of the curtain wall.	W	31/01/08
157		General view.	SW	31/01/08
159	C	Trench at pile 12, post excavation.	S	31/01/08
160	C	Trench at pile 12, post excavation.	S	31/01/08
161	B	Trench at pile 11, post excavation.	NW	31/01/08
162		Finds from 3001.		01/02/08
163		Finds from 5002.		01/02/08
170	A	Hole 6 showing recent underpinning to the N.	W	04/02/08
171	A	Hole 6 showing recent underpinning to the N.	W	04/02/08
172	A	Trench at pile 2, post excavation. General view under the wall.	W	04/02/08
173	A	Trench at pile 2, post excavation. General view under the wall.	NW	04/02/08
174	A	Trench at pile 2, post excavation.	NW	04/02/08
175	E	Trench at pile 23, post excavation. Showing masonry to the E.	NW	04/02/08
176	E	Trench at pile 23, post excavation. Showing masonry to the E.	NW	04/02/08
177	D	Trench at pile 21, post excavation. Showing masonry to the E.	NW	04/02/08
178	D	Trench at pile 21, post excavation. Showing masonry to the E.	NW	04/02/08
179	D	Trench at pile 21, post excavation. Plan view.	NW	04/02/08
180	D	Trench at pile 18, post excavation.	W	05/02/08
181	D	Trench at pile 18, post excavation. Plan view.	W	05/02/08
182	D	Trench at pile 18, post excavation. View under the wall.	W	05/02/08
183	D	Trench at pile 18, post excavation. N facing section.	N	05/02/08
184	D	Trench at pile 18, post excavation. Plan view.	N	05/02/08
185		Work in progress!		05/02/08
186	A	Trench at pile 6, post excavation. View under the wall.	NW	05/02/08
187	A	Trench at pile 6, post excavation. Plan view, shows rubble at the W side.	N	05/02/08
188	A	Trench at pile 6, post excavation. Plan view, shows rubble at the W side.	N	05/02/08
189	A	Trench at pile 6, post excavation. Plan view, shows rubble at the W side.	N	05/02/08
190-197		Work in progress.		05/02/08
198	F	Trench at pile 25, post excavation.	W	05/02/08
199	F	Trench at pile 25, post excavation. N facing section.	N	05/02/08
200	F	Trench at pile 25, post excavation. Plan view.	S	05/02/08
201	F	Trench at pile 25, post excavation. Gun platform 5010	N	05/02/08

No	Area	Description	From	Date
		detail of the W end.		
202	F	Trench at pile 25, post excavation. Gun platform 5010 detail of the E end.	N	05/02/08
203	F	Trench at pile 25, post excavation. View under the wall.	W	05/02/08
205	A	Wall foundations at the N end of area A.	W	06/02/08
206	A	Wall foundations at the N end of area A.	SW	06/02/08
207	A	Wall foundations at the N end of area A.	SW	06/02/08
208	D	Soffit cages in place at either side of pile 20.	W	06/02/08
209	F	Large stone at the N end of area F.	W	06/02/08
210	F	Large stone at the N end of area F.	W	06/02/08
211	F	Large stone at the N end of area F.	W	06/02/08
212	F	Large stone at the N end of area F.	W	06/02/08
213	F	Large stone at the N end of area F.	W	06/02/08
214	F	Plan view of pile hole 26, masonry 6025.	W	06/02/08
215	F	Plan view of pile hole 26, masonry 6025.	W	06/02/08
216- 239	All	W face of the E curtain wall photographed from S-N.	W	06/02/08
240- 244		General views	W	07/02/08
245- 256		E (outer) face of the E curtain wall photographed from S-N.	E	07/02/08
257		General shot.		07/02/08
258		General shot.		07/02/08
4627	F	Trench at pile 27, post excavation.	SW	12/02/08
4628	F	Trench at pile 27, post excavation.	W	12/02/08
4629	F	Trench at pile 27, under wall, post excavation.	W	12/02/08
4630	F	Trench at piles 26 + 27, general view of masonry	W	12/02/08
4631	F	Trench at piles 26 + 27 general view of masonry	W	12/02/08
4632	F	Trench at piles 26 + 27 general view of masonry	NW	12/02/08
4633	F	Trench at pile 26, general view of masonry	W	12/02/08
4637	F	Area F general view	W	12/02/08
4638	F	Area F general view	W	12/02/08
4649- 4655	F	Trench at piles 26 + 27, general view of masonry	W	12/02/08
4657	F	Trench at pile 27, post excavation showing 6027	E	12/02/08
4658	F	Trench at pile 27, post excavation showing 6027	E	12/02/08
4676	F	Further finds taken from Area F, discarded		15/02/08
4677- 4703	F	General views of masonry, far S end of e battery wall		15/02/08

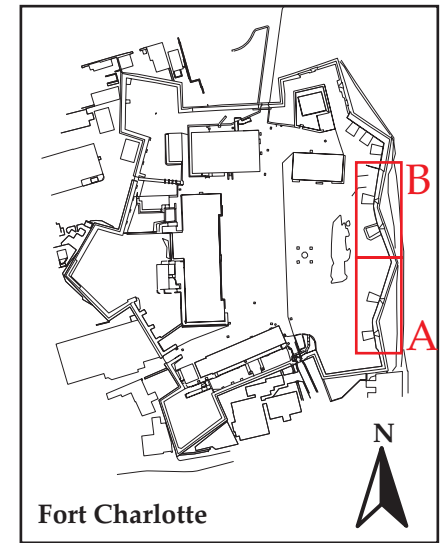
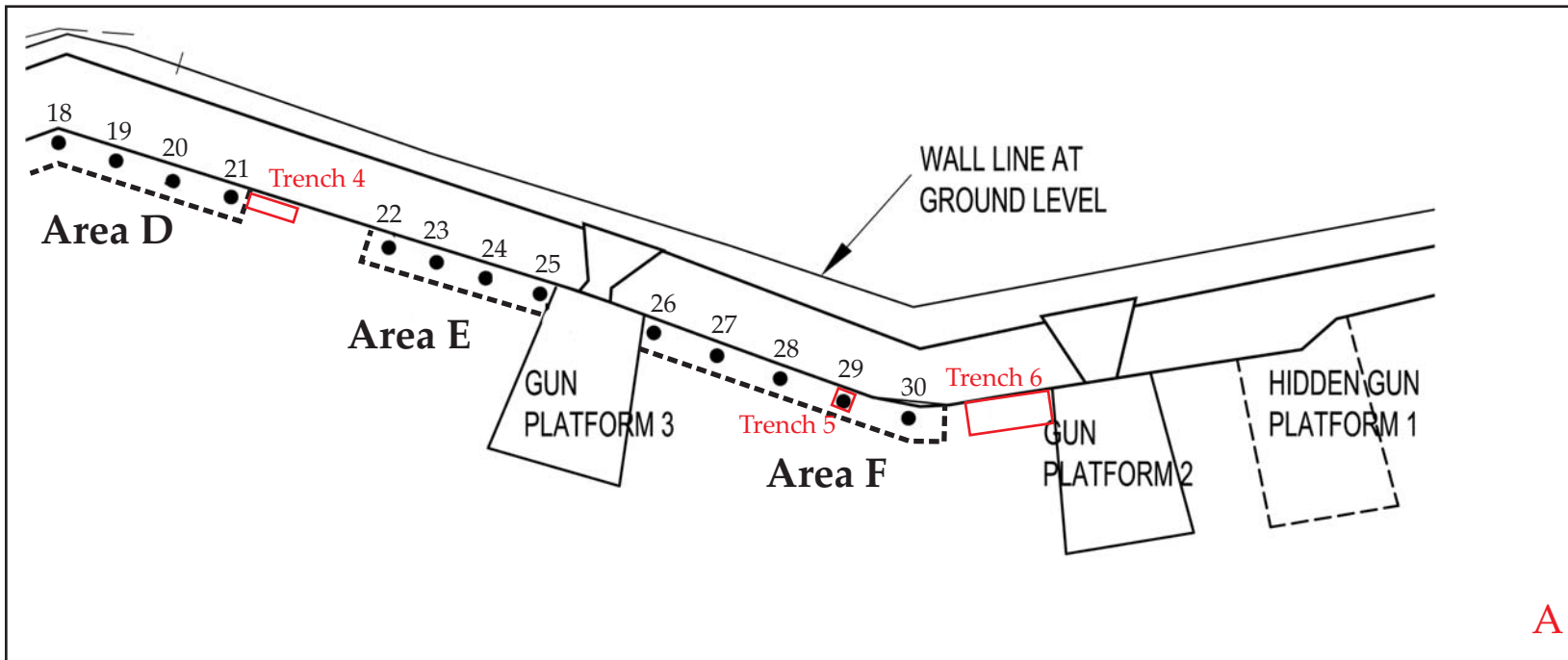
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## APPENDIX 4: LIST OF FINDS

Bag	Area	Ctxt	Material	Quantity	Description	Retained
1	A	1006	Ceramic	4	Pan tile fragments.	No
1	A	1006	Ceramic	2	White earthenware body sherds.	No
1	A	1006	Glass	1	Fragment of window glass.	No
1	A	1006	Iron	1	Nail.	No
1	A	1006	Iron	1	Handle.	No
2	A	1007	Ceramic	4	Red ceramic fragments varying from 40mm by 40mm to 100mm by 70mm. Probably pan tile.	No
3	A	1007	Ceramic	3	Red ceramic fragments largest a triangular piece up to 100mm by 80mm and 20mm thick. Probably pan tile.	One was kept.
4	A	1009	Ceramic	10	Red ceramic fragments, probably pan tile.	Yes
4	A	1009	Ceramic	2	Clay pipe stem fragments.	Yes
4	A	1009	Ceramic	1	Pot sherd.	Yes
5	A	1007	Ceramic	1	Red earthenware body sherd.	Yes
5	A	1007	Ceramic	1	Clay pipe bowl fragment.	Yes
5	A	1007	Ceramic	2	Thin clay pipe stem fragments.	Yes
5	A	1007	Ceramic	1	Large clay pipe stem fragment.	Yes
5	A	1007	Ceramic	1	Thick clay pipe stem fragment with decoration.	Yes
5	A	1007	Glass	1	Window glass fragment.	Yes
5	A	1007	Flint	1	Gun flint	Yes
6	B	2004	Ceramic	1	Curved red earthenware fragment, roof tile?	Yes
6	B	2004	Ceramic	1	Red earthenware bowl fragment with light brown external glaze and brown slip on interior.	Yes
7	C	3001	Ceramic	8	Pan tile body fragments.	No
7	C	3001	Ceramic	1	Pan tile rim fragment.	No
7	C	3001	Ceramic	1	Floor tile fragment.	No
7	C	3001	Ceramic	1	White earthenware rim sherd, geometric transfer decorated.	No
7	C	3001	Glass	1	Sherd of painted window glass	No
8	D	4009	Ceramic	1	Pan tile body fragment.	Yes
8	D	4009	Ceramic	1	Pan tile rim fragment.	Yes
8	D	4009	Ceramic	3	Clay pipe stem fragments.	Yes
8	D	4009	Glass	1	Vessel glass sherd.	Yes
8	D	4009	Bone	2	Animal vertebrae with butchers marks	Yes
9	D	4009	Ceramic	7	Pan tile fragments	No
9	D	4009	Ceramic	1	Clay pipe stem fragment.	No
10	D	4010	Ceramic	1	Clay pipe stem fragment.	Yes
11	D	4011	Ceramic	1	Clay pipe stem fragment.	Yes
11	D	4011	Bone	3	Animal bones; 1 butchered vertebrae, a rib fragment and a small	Yes

Bag	Area	Ctxt	Material	Quantity	Description	Retained
					unidentified bone.	
12	D	4012	Bone	2	Cattle long bone, butchers marks at either end.	No
13	D	4012	Iron	1	Small iron lump.	No
14	D	4016	Ceramic	1	Edge fragment of pan tile.	No
14	D	4016	Ceramic	3	Body fragments of pan tile.	No
15	D	4016	Ceramic	1	Pot body sherd, dark speckled external glaze with white slip internally.	No
16	D	4016	Ceramic	4	Body fragments of pan tile.	Yes
17	D	4018	Ceramic	4	Body fragments of pan tiles.	No
17	D	4018	Ceramic	1	Edge fragment of pan tile.	No
18	D	4023	Bone	1	Butchered long bone.	No
19	D	4023	Slate	1	Roof slate, nail hole present.	No
19	D	4023	Ceramic	1	Drain fragment.	No
19	D	4023	Wood	1	Wood scrap.	No
19	D	4023	Copper	1	Thin cable sheath.	No
19	D	4023	Iron	1	Door hinge	No
20	D	4011	Bone	2	Small fragments of bird (?) bone.	No
20	D	4011	Bone	1	Small fragments of sheep or cattle bone.	No
20	D	4011	Bone	1	Fragment of burnt bone.	No
20	D	4011	Ceramic	1	Red earthenware body sherd with dark brown glaze.	No
20	D	4011	Ceramic	1	Clay pipe stem fragment.	No
21	D	4025	Ceramic	5	Pan tile body fragments	Yes
21	D	4025	Ceramic	1	Clay pipe stem.	Yes
21	D	4025	Iron	1	Iron lump.	Yes
22	D	4026	Bone	1	Animal bone fragment	No
23	D	4027	Bone	1	Animal bone fragment	No
24	D	4033	Ceramic	5	Red ceramic fragments, one looks to be pan tile and the others probably are too.	1 fragment kept.
25	D	4033	Ceramic	2	White earthenware body sherds	No
25	D	4033	Ceramic	1	Stoneware body sherd with light brown external glaze and brown slip on the interior.	No
26	E	5002	Iron	1	Fragment of gas pipe.	No
26	E	5002	Lead	1	Lead pipe fragment.	No
26	E	5002	Glass	2	Sherds of window glass	No
26	E	5002	Wire	1	Piece of wire.	No
26	E	5002	Ceramic	2	Rim sherds dark brown and cream glazed redware bowl.	No
26	E	5002	Ceramic	1	Body sherd dark brown and cream glazed redware bowl.	No
27	E	5007	Ceramic	2	Clay pipe stem fragments.	Yes
28	E	5009	Ceramic	1	Pan tile edge fragment.	No
28	E	5009	Ceramic	1	Clay pipe stem fragments.	No
29	F	6020	Ceramic	1	Pan tile body fragment.	No

Bag	Area	Ctxt	Material	Quantity	Description	Retained
29	F	6020	Ceramic	2	Clay pipe stem fragments	No
29	F	6020	Bone	2	Butchered cattle ribs.	No
30	F	6021	Glass	1	Window glass sherd.	Yes
31	F	6023	Glass	1	Window glass sherd.	Yes
32	F	6023	Ceramic	1	Clay pipe bowl with a stamp on the base.	Yes
33	F	6023	Ceramic	1	Pan tile body fragment.	Yes
33	F	6023	Ceramic	1	Clay pipe stem fragment.	Yes
34	F	6023	Ceramic	15	Pan tile body sherds.	Yes
34	F	6023	Ceramic	3	Pan tile edge fragments.	Yes
34	F	6023	Ceramic	6	Clay pipe stem fragments	Yes
34	F	6023	Ceramic	1	Clay pipe bowl fragment.	Yes
34	F	6023	Iron	1	Nail	Yes
35	F	6023	Bone	3	Burnt bone fragments	Yes
35	F	6023	Bone	6	Animal bone fragments.	Yes
35	F	6023	Glass	1	Sherd of vessel glass.	Yes
35	F	6023	Glass	1	Sherd of window glass.	Yes
36	F	6023	Ceramic	4	Clay pipe stem	No
36	F	6023	Ceramic	1	Clay pipe bowl	No
36	F	6023	Bone	1	Animal tooth, probably from a sheep.	No
36	F	6023	Glass	1	Light brown bottle glass, part of bottle neck, poss. 19th-20th C	No
36	F	6023	Ceramic	3	Glazed white earthenware body sherds.	No
36	F	6023	Ceramic	1	Red earthenware. Orange-brown glaze on one side with narrow cream glaze stripe	No
36	F	6023	Ceramic	2	Red earthenware sherds with mid brown glaze both sides. 1 poss. Rim, other slightly curved. Grit inclusions visible.	No
36	F	6023	Ceramic	3	Pan tile body fragments.	No
36	F	6023	Ceramic	1	Pan tile edge fragment	No



Trench 2 excavations Dec 2007  
 Area A excavations Jan-Feb 2008

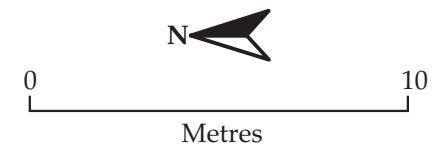
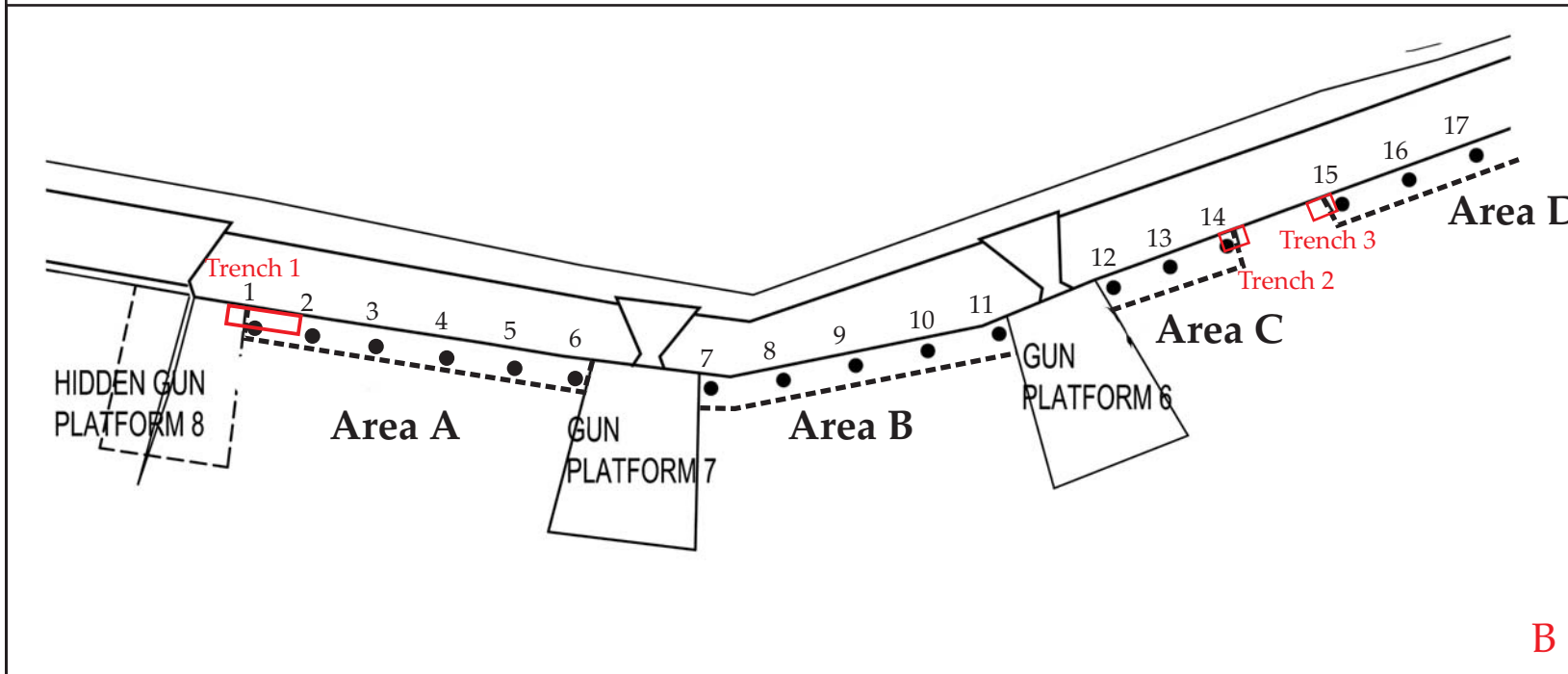
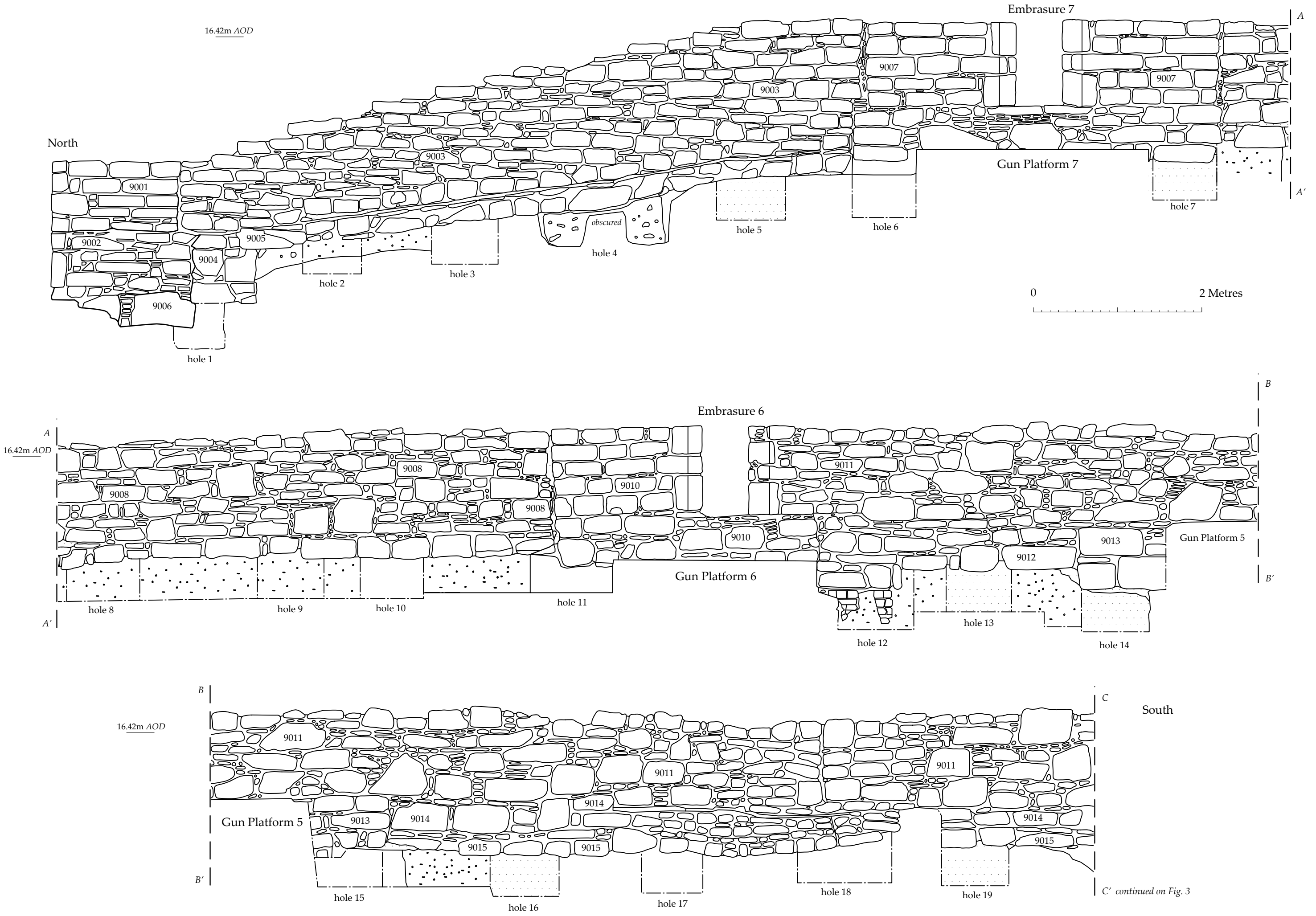


Fig. 1 : Plan (1:200) showing location of excavations and Holes 1-30





**Fig. 2 : North end of elevation of interior face of east wall (1:40)**

C' continued on Fig. 3

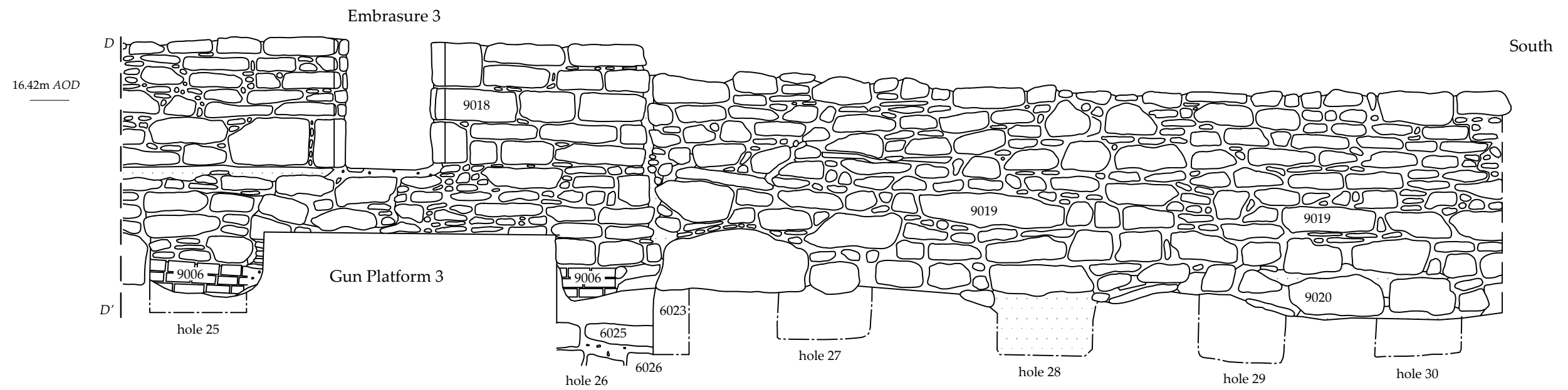
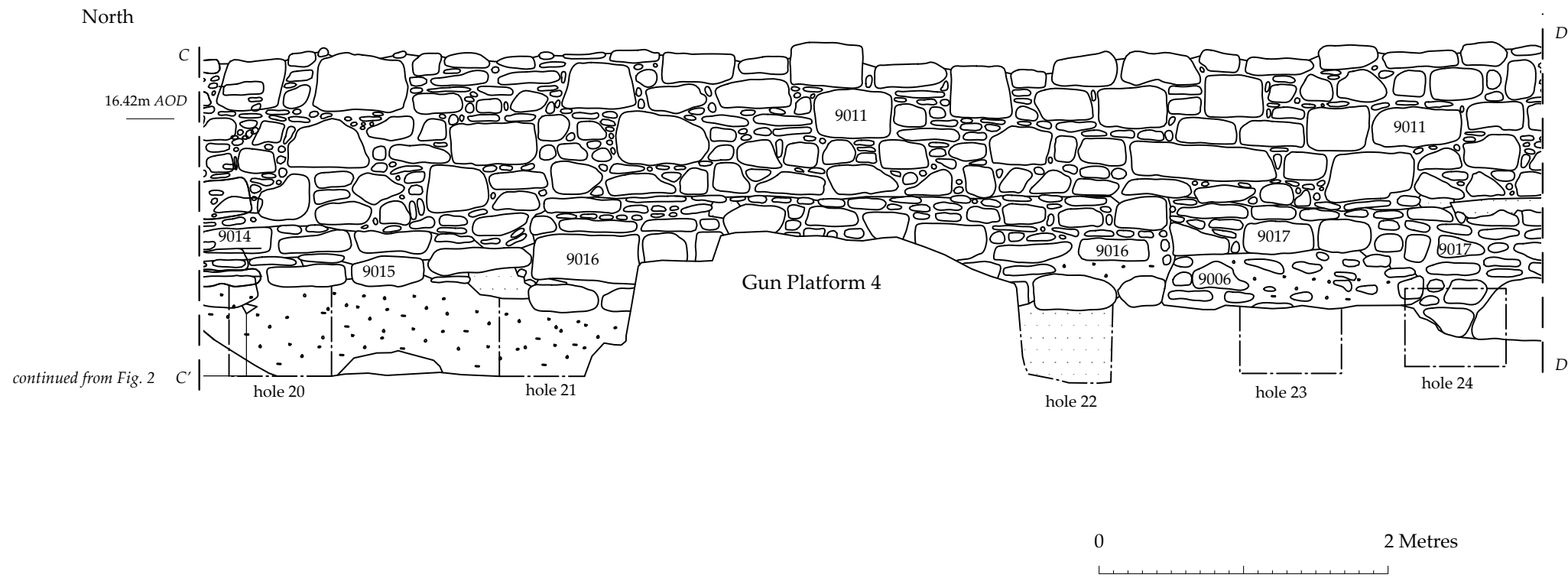
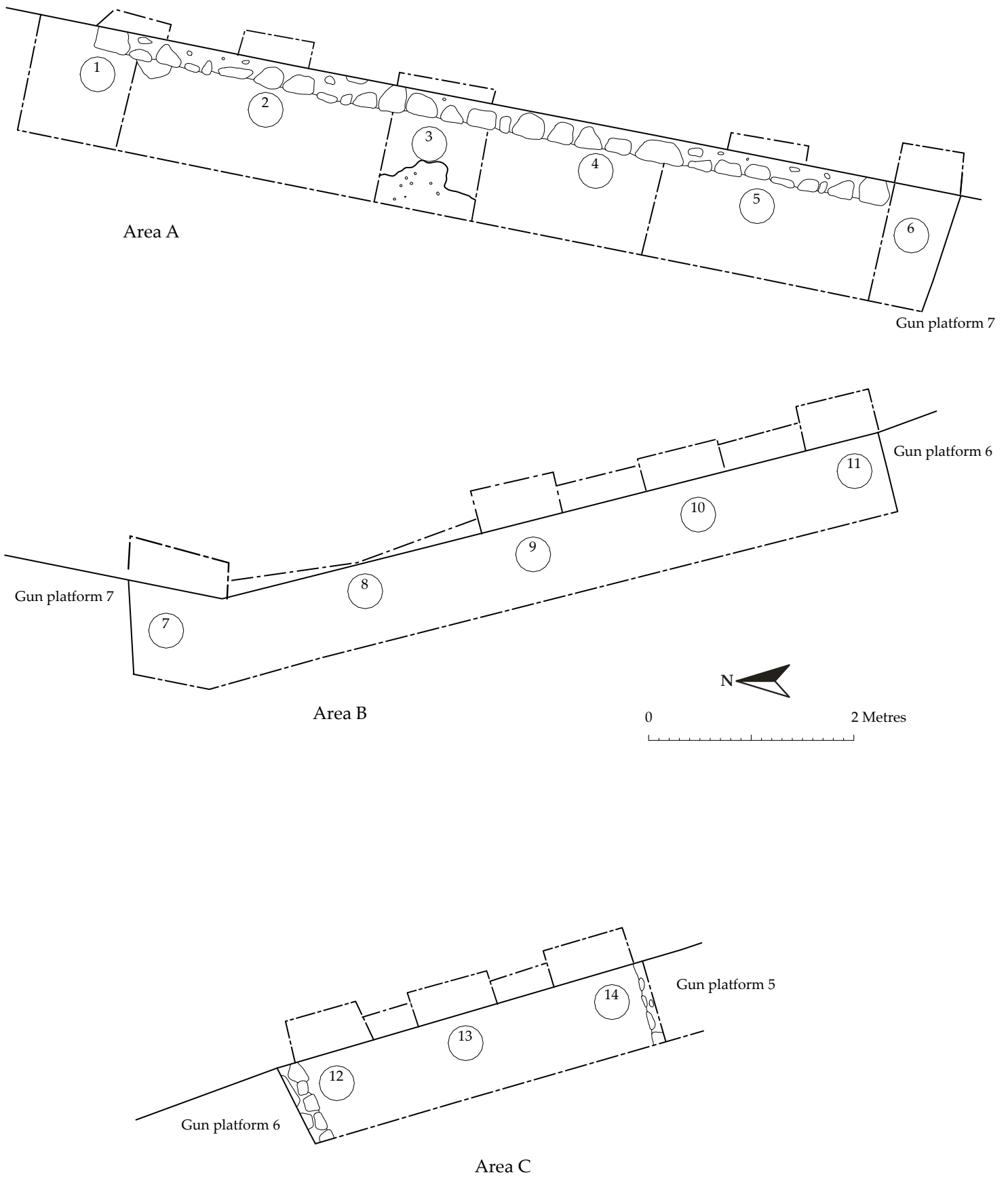


Fig. 3 : South end of elevation of interior face of east wall (1:40)



**Fig. 4 : Plan of Areas A, B& C (1:50) showing location of excavations**

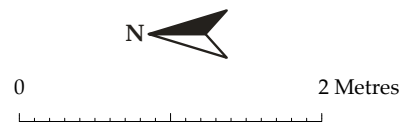
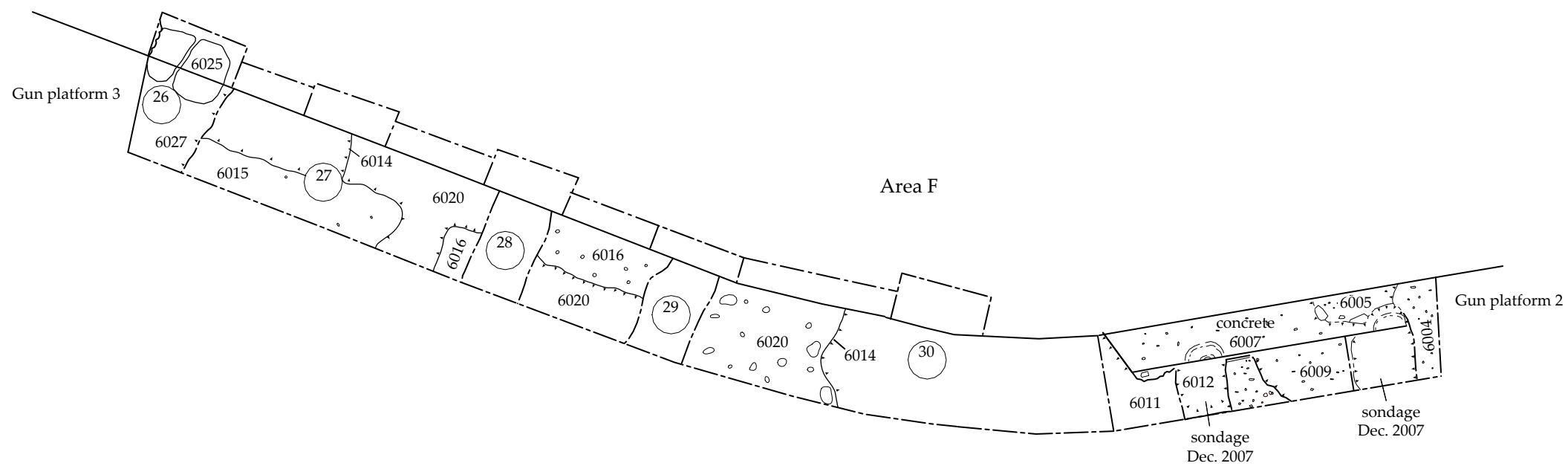
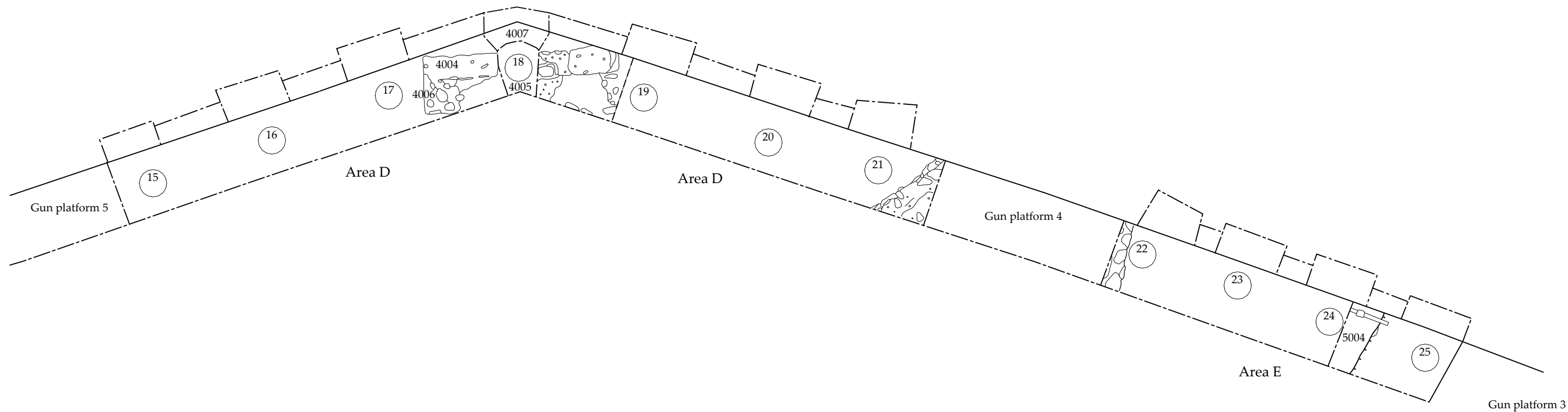


Fig. 5 : Plan of Areas D, E& F (1:50) showing location of excavations

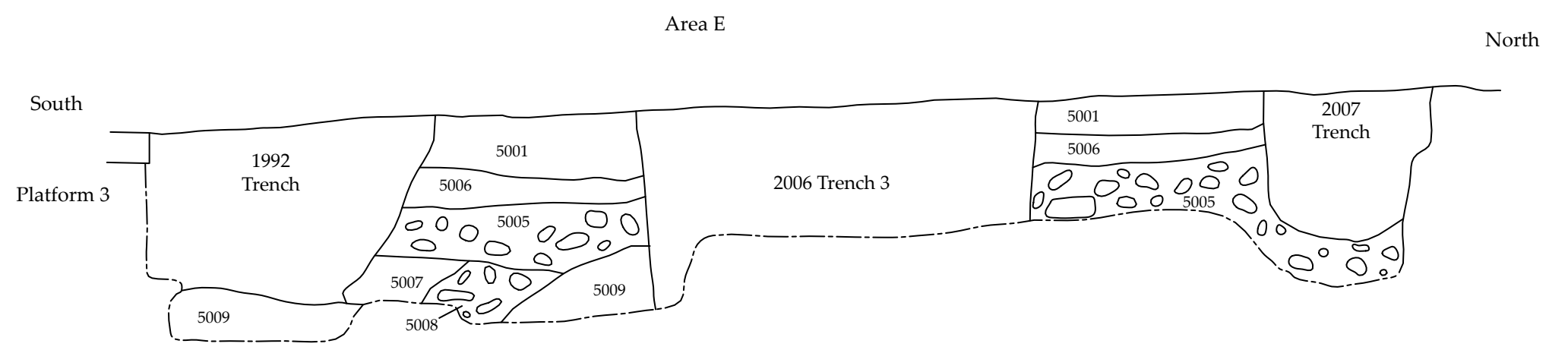
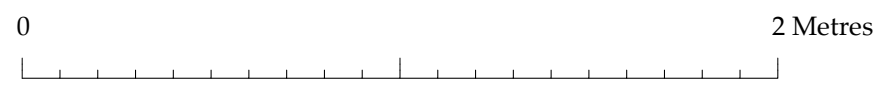
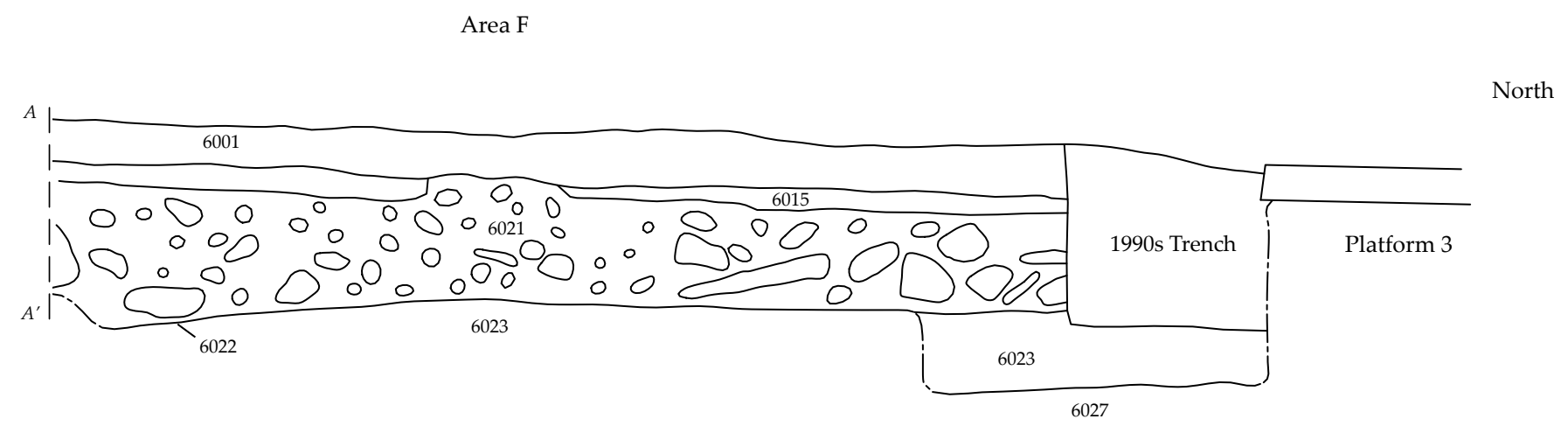
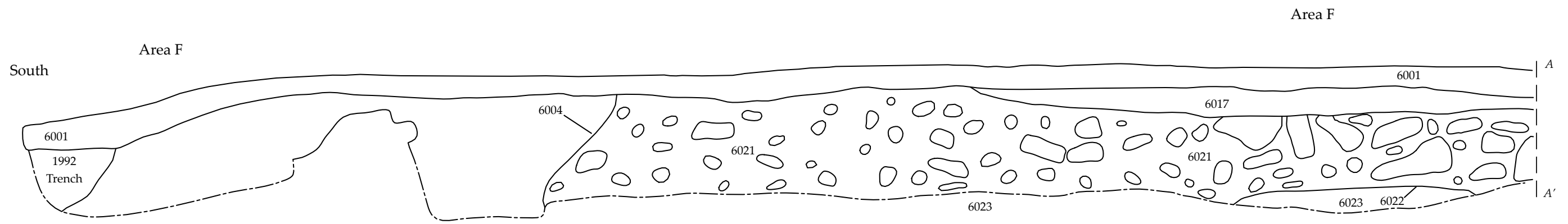


Fig. 6 : East facing section drawings (1:20) of Areas E& F

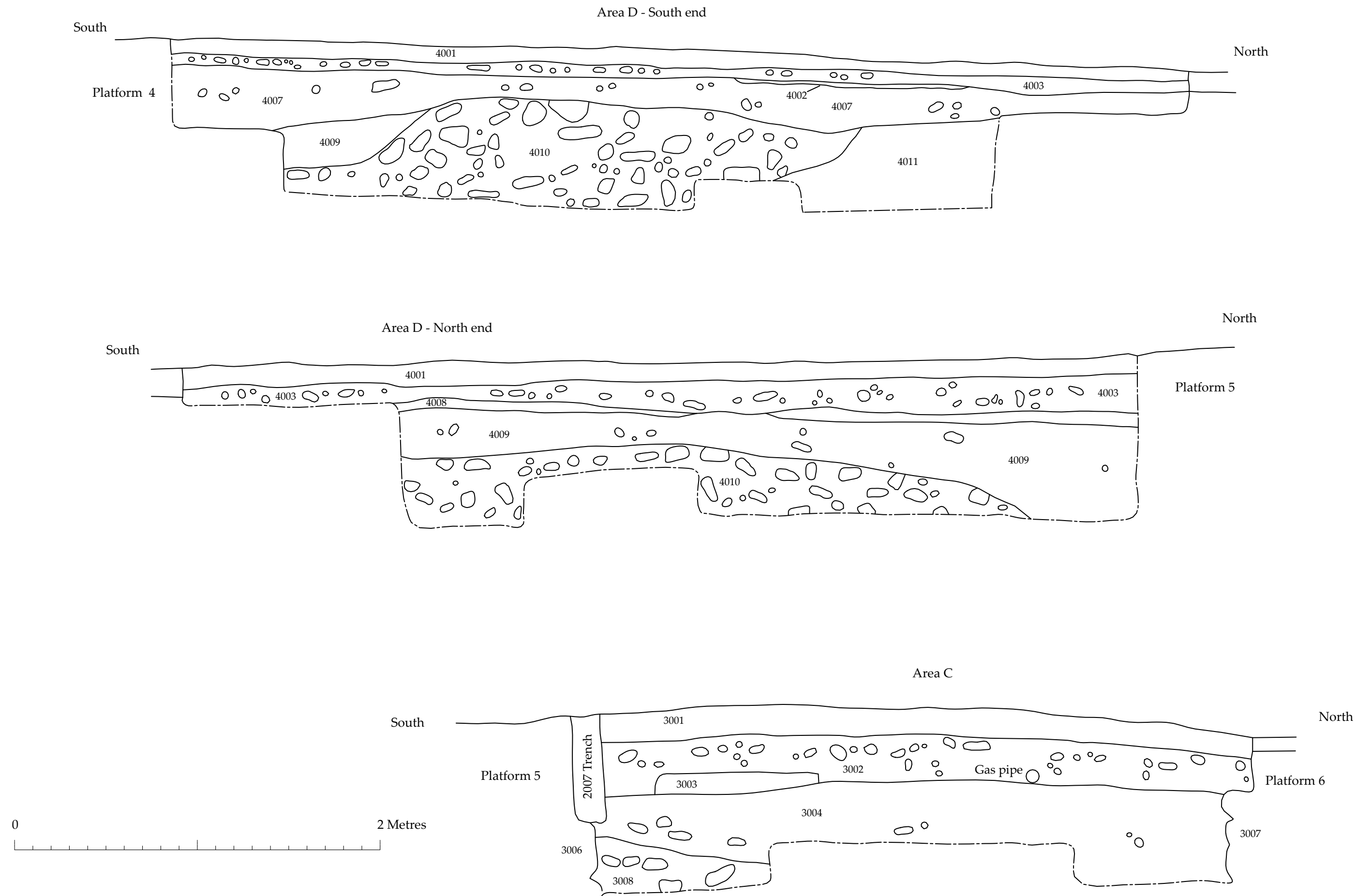


Fig. 7 : East facing section drawings (1:20) of Areas C& D

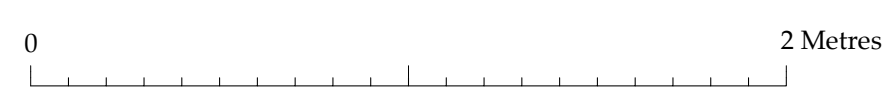
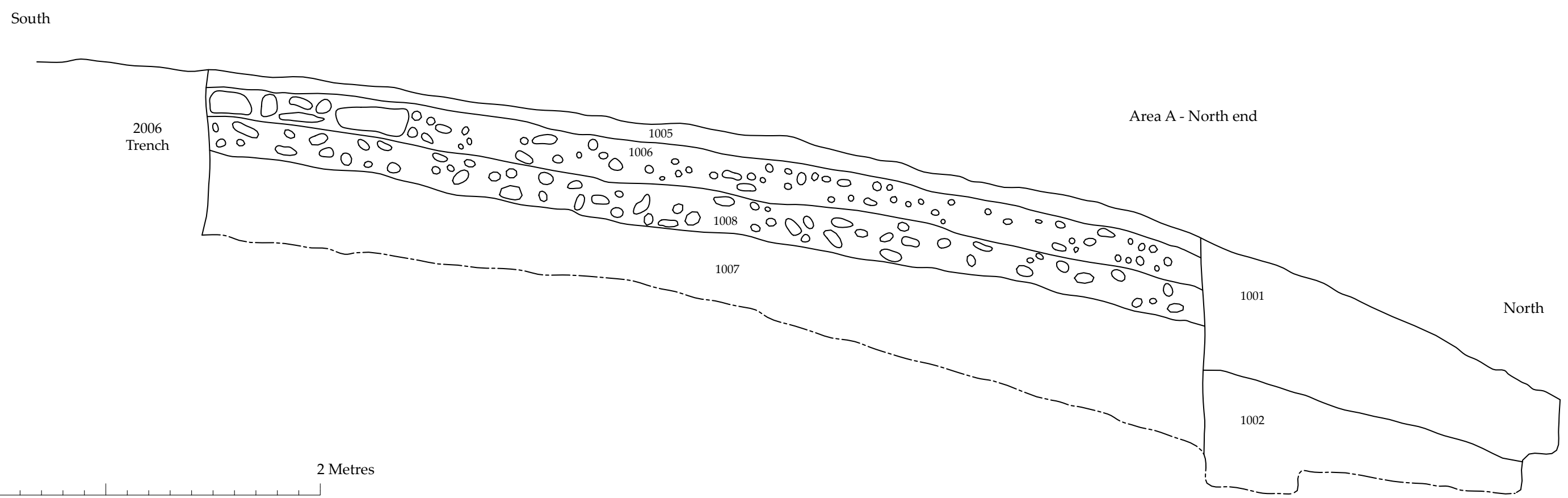
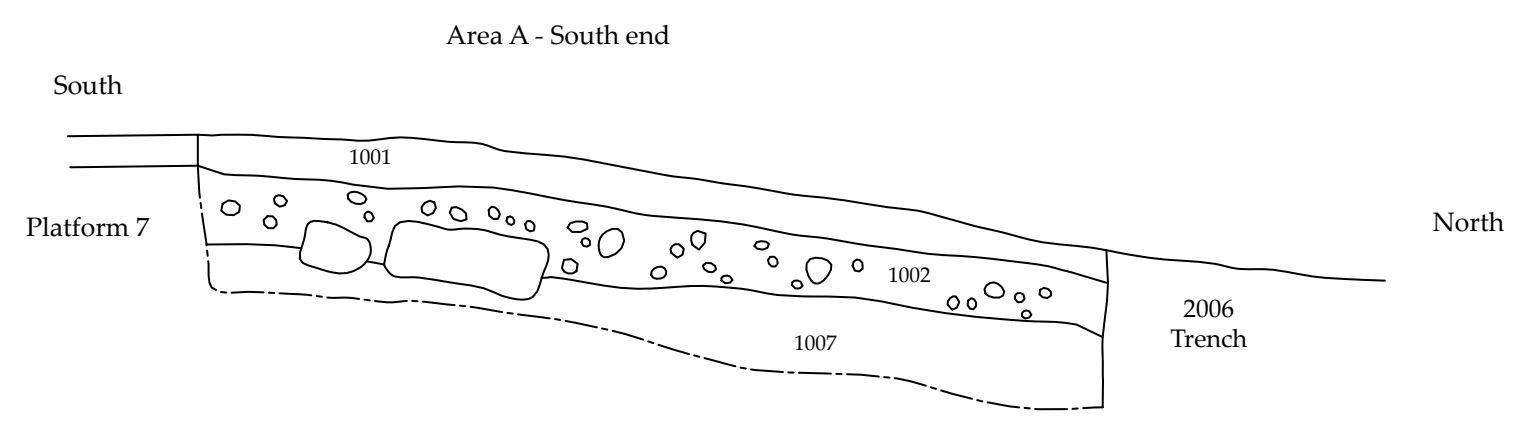
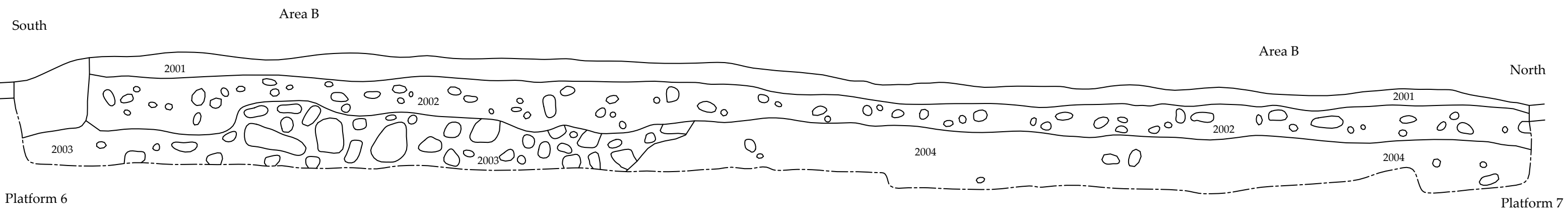


Fig. 8 : East facing section drawings (1:20) of Areas A& B