

The rectangular pond in detail

The rectangular pond in the northeast corner of the garden is about 7.5m north – south 2.34m east – west.

After prolonged rain a stream rises in the ponds to the west of Honeywood, enters the garden, and flows across the south end of the rectangular pond into a culvert under the lawn. The culvert emerges behind the house and then flows under it to re-emerge in the front garden and run into Upper Pond. In the early 20th century there was always water running through the garden but the water table has since dropped and now it only flows after a period of heavy rain usually in the late winter and spring.

The pond was cleared and studied in an archaeological investigation in the summer of 2010.¹

Where the stream enters the pond

The stream flows from the Wandle Lodge pond behind Honeywood over a modern brick weir which was probably made in 1983-4 as part of a Manpower Services Commission job creation project (figures 1 and 2).

This modern weir was not part of the garden but is of significance because it retains the pond to the west of the garden and the feeder channels to the round pond and grotto are on the upstream side of it. The weir links the two upstream ends of the retaining walls for the older weir. In plan it has a somewhat irregular curve so the centre is slightly upstream of the sides. There is a 0.8m wide section in the centre which is lower than the rest. The weir top to the north of this has a length of 2m, to the south 1.25m. The central lower section has a crown of somewhat uneven cement which is about 7cm below the top of the main part of the structure. It carries all the stream flow and has rarely been overtopped.²

The stream then flows a metre or two to another older weir on the west side of the garden boundary. This consists of a wall of yellow stock bricks with a 0.59m wide gap for a sluice in the centre. The sluice gate has gone so the weir no longer functions. On the north side the structure is topped by a 5cm thick slab of York stone and there was presumably once a matching one on the other side. The downstream edge of the crown of the weir had a total length of 2m. The downstream side is decorated with a thick steeply sloping face of burr-brick in hard greyish mortar with pale brown spots very different from that in the grotto.

There is a little limescale on the side of the sluice opening and a somewhat thicker deposit in the south side channel wall. This was presumably deposited by spray from the fall or the sluice. It is more or less absent from the bottom two courses of brick which suggests that they were normally below water level.

The garden boundary crosses the stream immediately below the weir. The boundary is marked by a segmental brick arch one stretcher thick. It has an east-west length of 0.77m. The east or garden side is of red brick decorated with a line of dentilation along the top. The back west side is plain and of yellow stock brick. There is a clear horizontal bonding break between the arch and the channel side walls.

The south end of the arch rests on the brick south wall of the pond. There is a vertical bonding break in line with the east face of the arch.

¹ John Phillips, *Excavations at Honeywood, Carshalton, 2010 and 2014*. Carshalton & District History & Archaeology Society occasional paper 8, 2015.

² It was after the exceptionally wet winters of 2000-1 and 2013-14.



Figure 1. The weir where the stream enters the garden in December 2007. View of the upstream side looking towards the garden.



Figure 2. The weir where the stream enters the garden and rectangular pond. Downstream side. Note the holes in the channel wall caused by leakage around the weir.



Figure 3. The south wall of the pond.

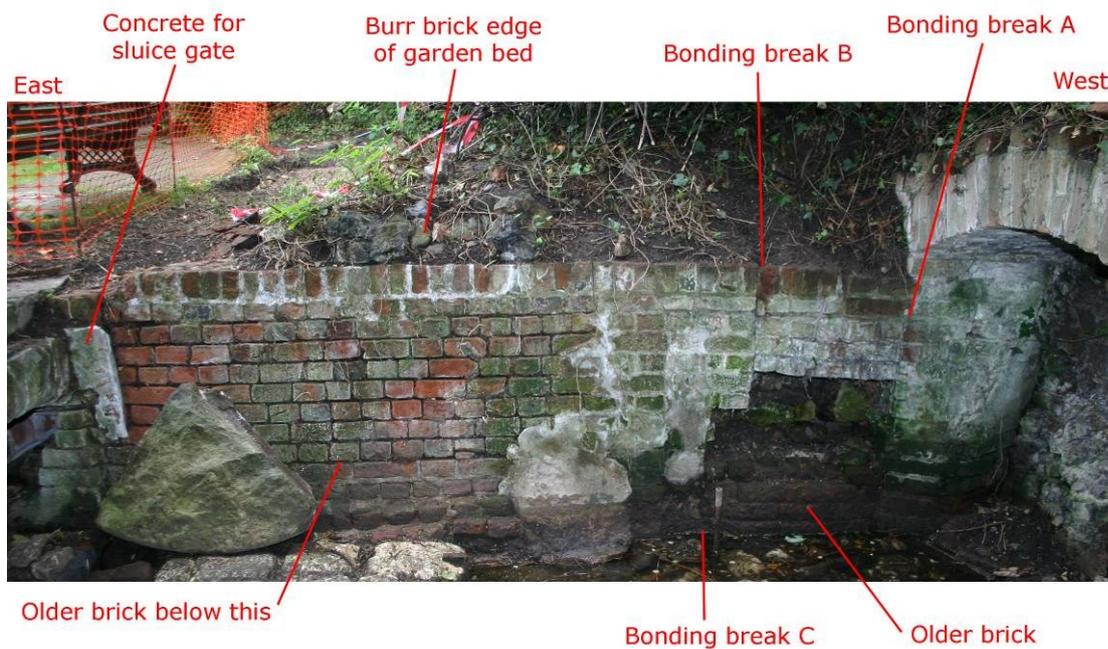


Figure 4. Interpretation for figure 3 showing the south wall of the rectangular pond.

The south wall

This is largely of brick with some areas of cement rendering. At the west end there is a bonding break in line with the face of the arch which carries the garden boundary over the culvert (A on figure 4).

The lower few courses of the wall appear to be of older soft red brick while the upper parts are of more recent looking paler red brick. There is a soldier course along the top. There have been repairs and re-pointing with hard grey mortar but the mortar deeper in the joints has not been investigated.

There is a bonding break in the upper part of the wall 0.54m from the west end (B on figure 4) The upper part of the area between the two breaks consists of five courses of brick including the soldier course that runs along part of the top. Below this there is a void where the brick has fallen away exposing soil and chalk rubble.

The lower part of the void has a width of 0.72m as it widens eastwards to another bonding break (C on figure 4). The area below the void is filled with older red brick into which bonding break B probably does not extend.

At the west end of the wall there is a slot in the brickwork and an area of concrete which appears to have provided the setting for a sluice gate (see below).

The entrance to the culvert under the lawn

The stream leaves the rectangular pond through a culvert passing through the south end of the east wall and running under the lawn to emerge at the back of the house (figures 5 and 6). The main part of the culvert has a shallow segmental brick arch.

There are the remains of a sluice about 1m wide at the entrance to the culvert. This consists of slots in the brickwork on both sides of the channel and a slot in the floor with a wooden beam in it. The south wall also has a patch of concrete which appears to have sealed the gap between the timber and brickwork. The sluice must have regulated the water level in the pond.

Beyond the sluice the channel passes through the east wall of the pond which is represented by broken stubs on both sides of the channel. It widens on both sides to a total width of about 1.9m. Both sides of the channel are made of rather roughly laid brickwork. A stoneware drainpipe from the oval pond enters the south side through a rough break. The central part of the channel floor below the sluice is covered with red bricks laid on end. The full extent of these is unknown. The roof is a segmental arch of brick which rests on the south side wall of the channel and the broken ends of the east wall of the rectangular pond.

This section of the channel has a length of 0.89m. The roof then drops and the channel continues under a very low segmental brick arch with only a narrow gap between it and the gravel stream bed.



Figure 5. The exit from the rectangular pond into the culvert. Note the higher outer arch and the lower inner one. The stacked brick on the left-hand side of the pond floor had been placed to retain the backfill. The Portland stone block leaning against the wall to the right has been in the pond for many years but is of unknown origin.



Figure 6. The remains of the sluice at the exit from the rectangular pond. Seen from above with west at the top. Note the timber cill beam and the slots for the gate.

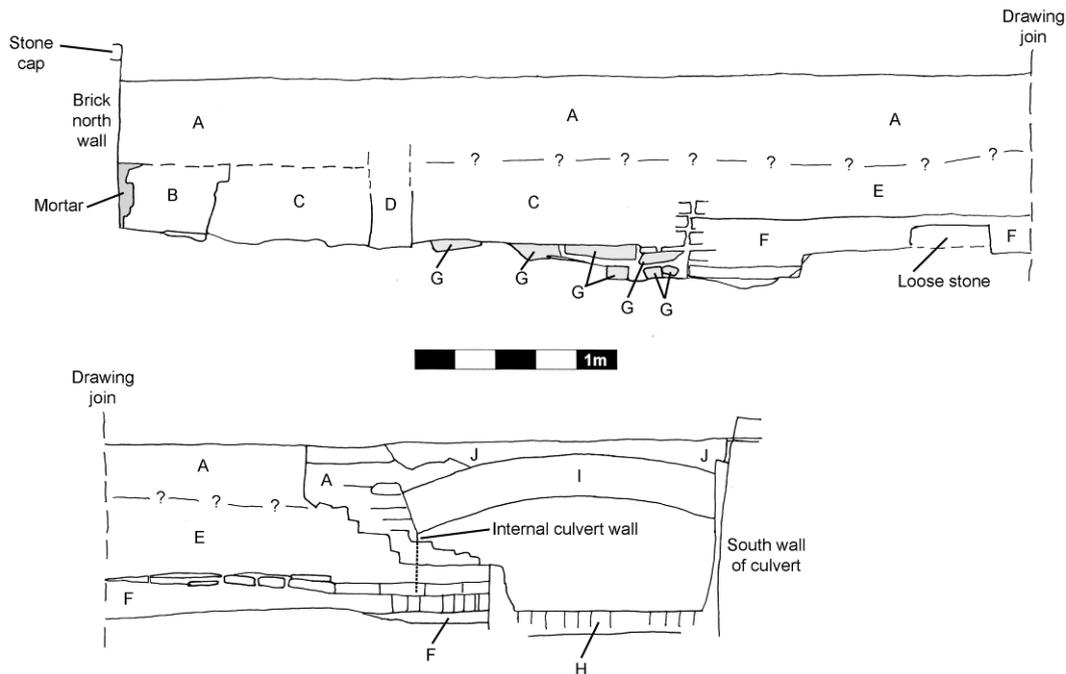


Figure 7. The east wall of the rectangular pond.

- A Three courses of dark red brick with a fourth soldier course at the top. The pointing is in poor condition and they are disturbed. The brickwork looms different from the area E below but this may be the result of its poor condition. It is more or less laid in English bond.
- B Red brick similar to C.
- C Brickwork similar to E. Possibly the same as A more or less in English bond.
- D Shallow slot in the brickwork.
- E Brickwork similar to C. Possibly the same as A more or less in English bond.
- F Red brick earlier than C and E. In places peg tiles and part bricks have been used to
- G Chalk blocks.
- H Culvert floor of bricks laid on their ends.
- I Brick arch over the exit culvert.
- J Modern concrete.

The east wall

This wall is largely of red brick and has an obvious history of alteration. The lower part of the wall is divided by a bonding break 1.8m from the northeast corner of the pond (figures 7, 8 and 9). The lowest courses to the south of this appear to be older than the brickwork above and towards the culvert part bricks and peg tiles have been used to level up the structure before it was raised or refaced.

To the north of the bond break the lower part of the wall is chalk for about 1.25m. The wall above can be divided into two sections, upper and lower. The difference in appearance may be due to the poor condition of the upper courses rather than the original construction. The wall is topped by a soldier course of yellow stock bricks.

There is a shallow 0.2m wide slot cut into the lower part of the wall 1.24m from the northeast corner of the pond.

A short section of the back of the wall was exposed in an archaeological trench in 2010. It had a complex history of alteration which appeared to date back to the 18th century. The south end of the wall is also exposed in the culvert. There it is 0.5m thick and consists of one uniform mass of brick unlike the much-altered structure found in trench B.

The north end of the wall curves slightly to the east as it approaches the northeast corner of the pond.



Figure 8. The bond-break in the east wall of the pond.



Figure 9. The south end of the east wall adjacent to the culvert. Note the packing to level up the lowest brick courses.

The north wall

The north wall of the pond is of brick with patches of applied decoration and a York stone cap (figures 10 and 11).

The brickwork is divided into two parts by a vertical bonding break about 0.5m from the northeast corner. The shorter section, to the east of the break, consists of recent looking brick with a soldier course below the stone capping. This blocks off a 19th century brick culvert seen in an excavation in 2010.

The other longer section to the west is of red brick with a soldier course along the top. The lower part of the east end has a patch of flint decoration with some heavily glazed over-fired brick at the bottom. Both are bonded with brown Roman cement.

There is a further patch of surviving decoration in the northwest corner which consists of slag flint and a shell all bonded with brown Roman cement.

The wall top is partly capped with York stone slabs which do not respect the bond break.

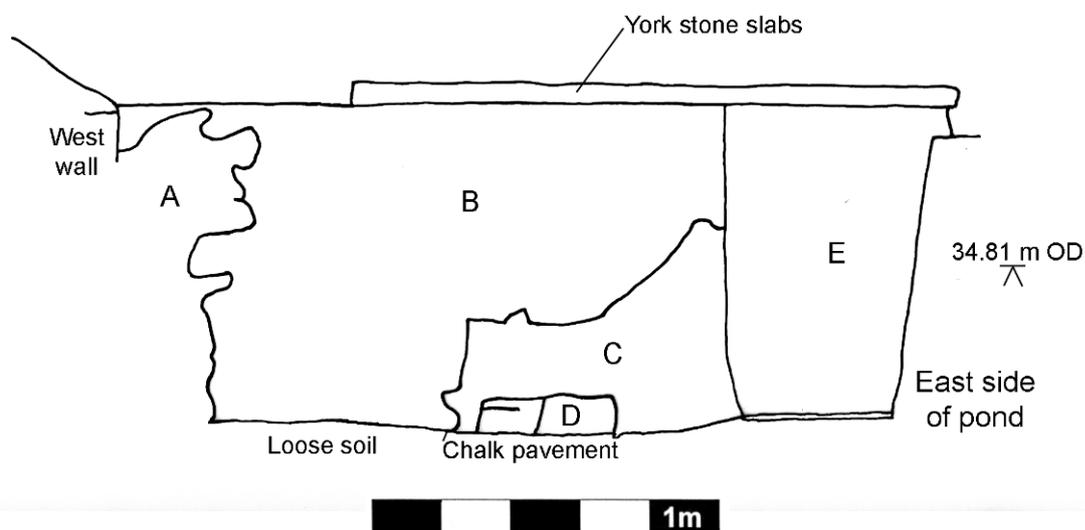


Figure 10. The north wall of the pond.

- A Decorative facing consisting of burr-brick, shell and slag.
- B Red brick.
- C Flint bonded with brown Roman cement.
- D Heavily glazed brick.
- E Recent looking red brick.



Figure 11. The north wall of the pond.

Evidence for a summer house north of the pond

The first edition 25-inch Ordnance Survey map of 1868 appears to show a small building at the north end of the rectangular pond. The structure also appears on the 1896 and 1913 maps but had gone by 1933. It may be the ‘framed temporary summer house with boarded floor back and side Boarded and felt roof’ mentioned in the 1869 inventory of landlord’s fixtures.³ The 2010 excavation exposed part of a rough foundation on the site (figures 12 and 13). This consisted of brick, a salt glazed stoneware slab, flint, concrete, the ceramic side of a fire grate and a York stone slab forming a rough surface with large soil filled gaps between the materials. There was an irregular grey concrete foundation on the east side of this. The materials suggest a 20th century date, perhaps a later rebuild.

³ Sutton Legal Honeywood deed bundle item 19.



Figure 12. The western end of trench C looking east showing the top of layer [C4] interpreted as a rough floor or foundation for a summer house or similar building associated with the concrete foundation [C3] which can be seen the background.

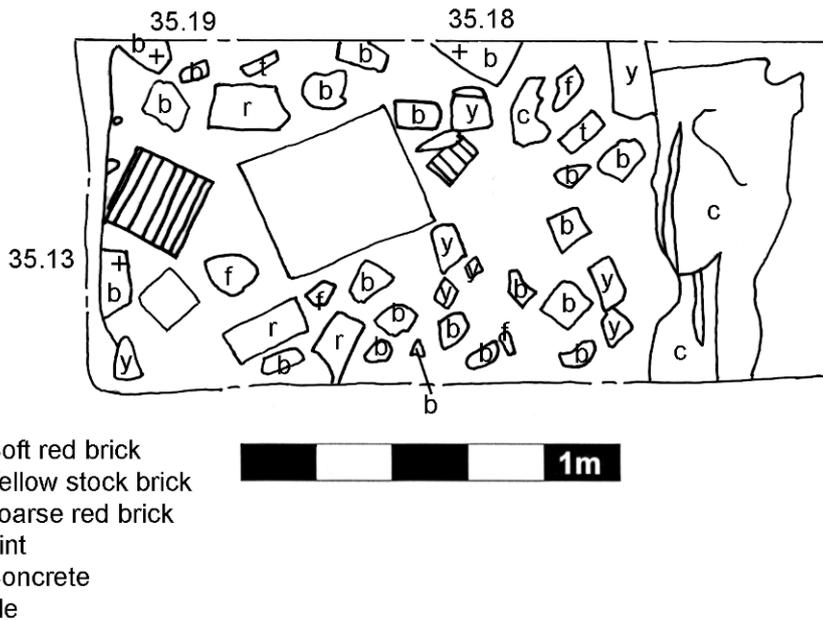


Figure 13. The top of layer [C4]. North at the top.

The culvert running from the northeast corner of the pond

The area of recent brickwork at the east end of the north wall of the rectangular pond blocked off a northward running culvert. The culvert was constructed in two sections separated by a bonding break. One section, at the south end, ran about 0.7m from the pond to the bonding break while the other continued to the northeast (figures 14 and 15). Two bricks were removed to allow a view of the inside.

The arch of the first section was almost flat and was of bricks laid on edge with the long side parallel to the line of the culvert. The bricks were joined with hard brown mortar probably containing Parker's Roman cement or similar material. The side walls – which could only be seen within the culvert – were vertical, five or six bricks high and covered with mortar and probably lime scale. The floor was flat and covered with fine silt 3 or 4cm thick. The internal height was about 0.5m and width about 0.46m. The arch was about 0.1m thick. This section was aligned at about 344 degrees from magnetic north and the culvert floor was at 34.29m OD.

The second or northern section was only seen through photographs of the inside. It turned to the northeast and had an oval cross section with the floor in the form of an inverted arch. After a short distance the culvert continued as a large ceramic pipe.

A small retaining wall [C7] crossed the top of the culvert close to the north side of the trench (figures 14 and 15). It consisted of two courses of soft red brick. The top one was of half-headers which were roughly broken off at the south end. The wall below this was roughly constructed. On the north side the mortar bonding the top course had spilled out over the brick suggesting that it is not a fair face. The second course also stepped out about 6cm at the base. The wall was not excavated below this. At the west end the wall appeared to turn at about 60 degrees and almost immediately passed into the north side of the trench. The wall is bonded with soft brown sandy mortar which is both softer and coarser than the mortar in the first section of the culvert.

The relationship between the wall and the underlying culvert was not entirely clear. There appeared to be a bonding break along the south side of the retaining wall but it was partly concealed by mortar. A break was visible from the underside but its exact position could not be determined from the photos. Neither side of the wall was convincing as a fair face.

The southern section of the culvert may have originated as a small bridge giving access to the summer house at the northern end of the rectangular pond. The second section would then represent the culverting of a previously open channel.

The culvert is heading towards the Festival Walk channel immediately north of the garden but there is no sign of a junction with it.

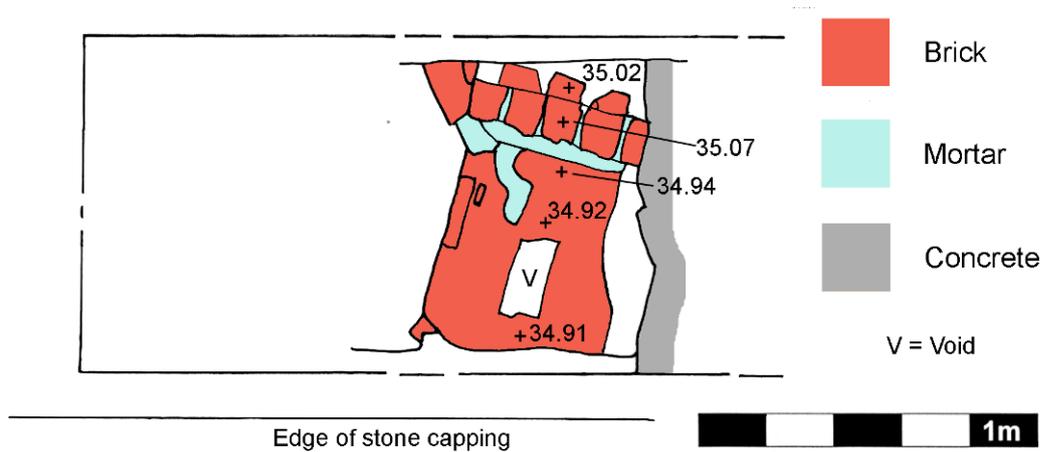


Figure 14. The top of culvert and the retaining wall. North at the top.



Figure 15. The top of culvert [C12] with retaining wall [C7] at the top. North at the top.

The west wall and grotto

The west wall of the rectangular pond is of brick. Towards the north end there is a little grotto-like niche above a small sloping cascade. The south end of the wall curves around to form the north wall of the channel which brings water into the pond. The curved section runs across the broken stub of an earlier wall which appears to have run along the east side of the channel (figures 20, 21 and 23).

The grotto and cascade are built into and against the west wall of the rectangular pond (figures 16, 17, 21, and 22). The structures consist of:

1. Grotto foundation and water entry channel.
2. The grotto niche itself.
3. The crown of the weir at the top of the cascade.
4. The sloping cascade.

Grotto foundation and water entry channel is of dark red brick and is roughly triangular with the water inlet rising at the back. The floor, which is well made of brown Roman cement, slopes steeply down from the crown of the weir to the water inlet. The water inlet is corbelled out over the tapering sides of the channel base (figure 17). The top of the channel is covered with a stone slab. A second slab can be seen further in and set at a lower level.

On the south side the top of the grotto foundation is level with the bottom of the soldier course which caps the adjacent pond wall. On the north side there is no soldier course and the pond wall rises two and a bit courses above the top of the grotto foundation.

There is a thin course of part bricks at the top of the foundation on which the grotto niche is built.

The grotto niche. This consists of clumps of burr-brick bonded with brown Roman cement. The upper part of the niche is missing.

The crown of the weir at the top of the cascade which is made of at least two courses of ceramic tiles. These are of the same size and colour as those on the floor of the greenhouse in the garden.

The sloping cascade consists of flint, shell and other decorative materials joined with Portland cement. The foot of the structure has been broken or eroded by seeping water exposing a core of dark earth which contained a piece of electric flex suggesting that it is of no great antiquity. The core is similar to the soil overlying the lower part of the cascade prior to clearance.

The west wall of the pond has several patches of decoration attached to it. In the northwest corner of the pond there is a clump of shell, slag and flint fixed with a thick layer of brown Roman cement. A second patch above the north side of the cascade includes a vitrified brick shallow segmental sectioned frog and angular flint with fresh fractures. This is also bonded with thick Roman cement. There is an area of thick decoration to the south of the cascade and also patches of thin slag stuck directly to the wall.



Figure 16. The grotto and cascade. Note the electric wire protruding from the bottom left hand side of the cascade.



Figure 17. The grotto base on 10 August 2012.

The date of the grotto cascade

The foot of the cascade has been broken or eroded by seeping water exposing a core of dark earth which contained a piece of electric flex suggesting that it is of no great antiquity. It was not part of the 1990 garden work as there is a photo taken at the time showing pond with the lower part of the cascade covered with newly laid or newly cleared soil (figure** 44). A second photo shows Sandra Willis, the parks service landscape architect, standing by the south end of the pond before it was cleared (figure 19). The floor was covered with ivy and other weeds but there appears to have been a substantial amount of soil in the bottom. Sandra Willis planned to turn the pond into a bog garden and she may have had additional soil laid. This is consistent with the stratigraphy found in the 2010 excavation. This showed that the south side of the cascade overlay a deposit of dark soil and rubble. Similar soil also overlaid the lower part of the cascade. There must, therefore, have been two deposition episodes, one before the cascade was constructed and one after. There two deposits were, however, very similar and could not be clearly distinguished in the excavation. Both contained recent finds. If the cascade was not built by Sandra Willis in 1990 it must be the result of some other fairly recent episode. The obvious candidate was a Manpower Services Commission job creation project which restored various features along the Carshalton Wandle in 1983-4. The weirs of Margaret's Pool and the Wandle Lodge pond immediately behind Honeywood were rebuilt at this time but I have not found any evidence for work in the garden at Honeywood. It is however, likely.⁴



Figure 18. Sandra Willis by the rectangular pond before the 1990 clearance.

⁴ The archaeological work was supervised by Hugh Waterhouse who died before the project was written up. Some of the finds are in the London Borough of Sutton's museum collection accession number 2007.3 (site code RWS83 and RWS84).



Figure 19. The rectangular pond in 1990 after clearance. More soil has been added covering the cascade.

The pond floor

The pond floor was covered with a thick layer of earth contained many very recent finds. This was cleared in 2010 exposing a floor of large chalk blocks of variable character. A line of large blocks carries the line of the entrance channel across the pond (figure 20). To the north of this the blocks gradually become smaller and less well arranged those at the north end being particularly small and irregular. There are several gaps in this area either where the chalk blocks are missing and there is dark soil over gravel or they have been replaced by other materials. The area where the stream crosses falls into two parts. At the west end below the weir the blocks are missing or displaced and a hollow has been washed in the underlying gravel. This is clearly a plunge pool eroded by the water falling over the sluice. The blocks survive at the eastern end. A series of iron pins have been installed along the upstream edge of the surviving blocks to keep them in place. In some places the grotto cascade can be seen to cover the chalk blocks.

The culvert below the lawn

The culvert carries the stream from the rectangular pond to the back of the house. It has a width of about 1.9m, low side walls and a shallow segmental arch. The eastern end can be crawled but most of the western end is so low that it is inaccessible. At the east end the south wall appears to be of chalk, the north of brick. Part of the western end collapsed in the past. A camera survey showed that this section had straight side walls supporting a recent metal roof. Both walls appeared to be brick and there was no evidence that this section had ever been vaulted.

A soft red brick wall crosses the culvert exit immediately behind the house. This consists of two courses of brick with traces of a third on top. It 0.23m thick from west to east.

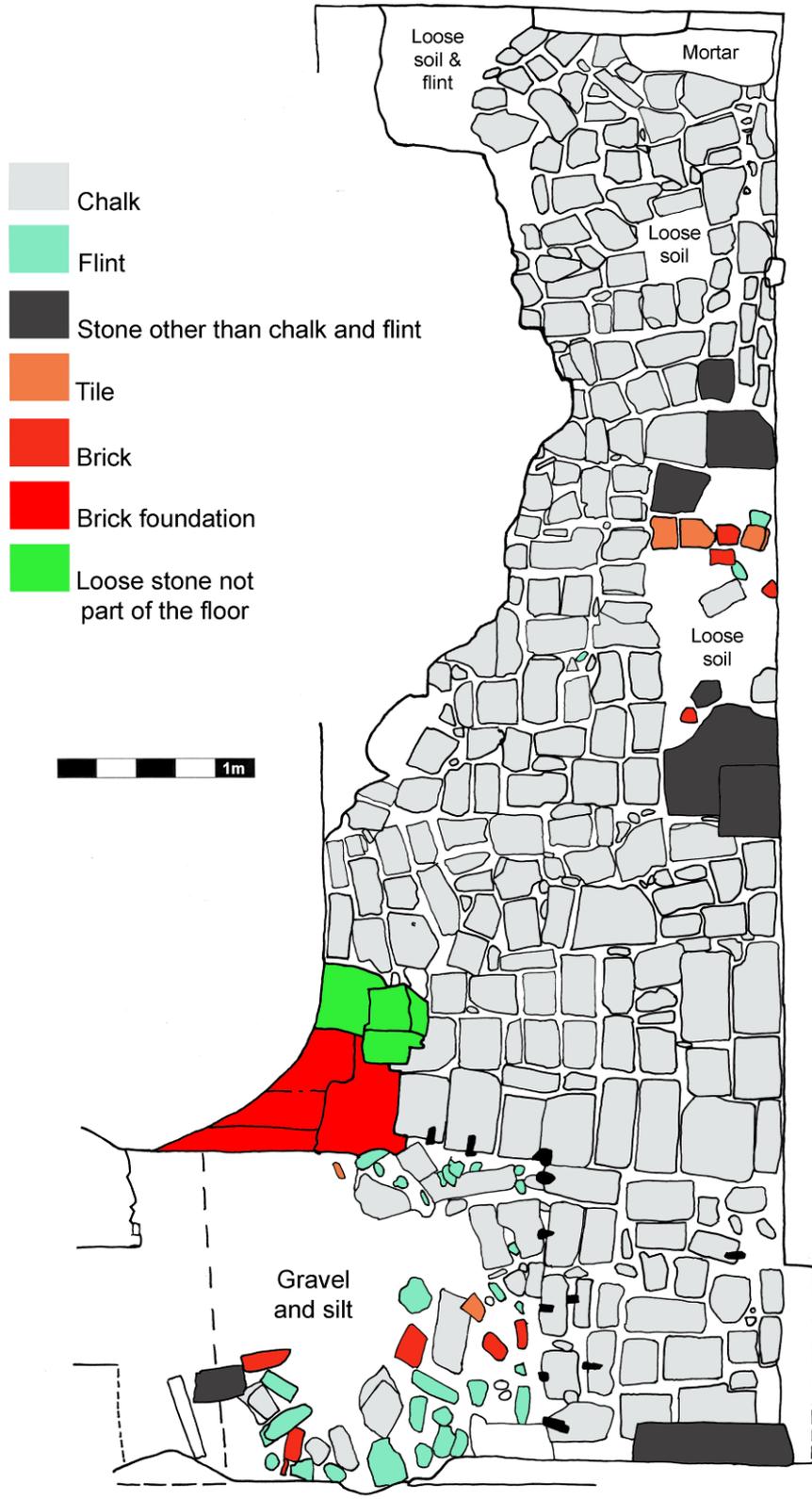


Figure 20. The pond floor showing the materials used.



Figure 21. The pond floor looking north.



Figure 22. The pond floor looking south.



Figure 23. The pond floor where the stream enters. Note the damage to the floor, the iron pins used to secure the edges of the chalk blocks and, on the right, the foundation projecting from below the west pond wall.