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INTERIM REPORT ON ARCHAEOLOGICAL FIELDWORK AT CASTELPORZIANO

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Amanda Claridge
Classics Royal Holloway University of London

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Aims and objectives

Archaeological fieldwork at Castelporziano since 2005 is being carried out primarily in association with the geomorphological and topographical surveys which form part of the AHRC-funded project 'Rome's maritime façade'. Smaller scale operations have also continued at the *Vicus Augustanus*, in connection with the preparation of the final report on the building surveys of 1983-1991.

In 2006-7 various trenches tested the results of topographical and geophysical surveys in the zone between the Vicus and the boundary with Castelfusano (see Excavation Reports April and September 2007) and in 2007 work also began on the second study area, midway between the Vicus and Tor Paterno, around two lake-filled depressions tentatively identified as ancient fish tanks. A trial trench examined the profile of the eastern bank of D5, the smaller and shallower of the two depressions, where walling of the late 2nd or first half of the 1st century BC outcrops at the top of the bank, associated with two undated phases of concrete revetment on the lower slope (see Excavation Report 2007). More work on D5 was planned in order to clarify the overall chronology of the site, but radiocarbon dates from geological cores taken in the bottom of D5 were puzzling (nothing earlier than the 8th century AD), whereas the dates for cores from the adjacent depression D6 produced a continuous and consistent sequence from the 1st century BC to the 18th century. It was decided to leave further work on D5 pending the results of additional cores in D5 and to concentrate on D6 instead, together with the area between the two sites.

In March-April 2008 eleven trenches and a geophysical survey (see Report by T. Evans) investigated the surface and subsoil archaeology in and around D6, where substantial traces of ancient concrete walling outcrop on the banks of the depression, having been disturbed by excavations in the past, and on the level plateau between D5 and D6.

In addition three small-scale operations were undertaken at the *Vicus Augustanus*, clarifying aspects of the standing remains not covered by the 1983-1992 survey.

Methodology

All interventions were generally limited to the clearance of leaves and other low-level forest debris together with the topsoil which has formed since earlier excavations. In three cases small test excavations were made within the surface trenches to collect stratified material in association with the walls, of possible value in their dating, and to obtain samples of the underlying sand deposits for dating and geomorphological analysis.

1. D6, trenches 1-11

Geological cores from D6 produced a long and consistent sequence starting with a horizon at c. 50 BC and another c. AD 125, followed by others down through the 14th-15th to 18th centuries. The purpose of the archaeological trenches was to obtain more detailed evidence relating to the nature and chronology of the Roman buildings on the site, for correlation with the geophysical, geomorphological and environmental data. Traces of tufa-faced concrete walls and various shapeless lumps of concreted

rubble can be seen along the upper slope of the western bank, where they have been invaded by past excavations, and some walling can also be seen emerging in places along the northern bank. Only a few lumps of concreted rubble are exposed on the surface along the eastern bank, while nothing emerges on the surface of the southern bank, which is not as high as the other three. Clearance of low level vegetation and superficial excavation of the visible walling on the west and northern slopes (trenches 1-3, 5, 8-9,11) was complemented by a magnetometer survey of the plateau connecting D6 and D5, the north and east banks and their slopes, and a short section of the south bank (see Geophysical Survey Report) . Three additional key-hole excavations on the western plateau (trenches 2, 6-7) and one at the north-west corner (trench 4) helped to test the magnetometry results. A trench was also cut in two parts (trench 10N and 10S) across the middle of the south bank.

D6 tr. 1 (figs 1-5)

The trench, 13.70 m. long, was laid out over a visible wall [2], 74 cms wide, running N-S along the middle of the slope of the western bank and included a rectangular depression, bounded by a wall [3], 84 cms thick, abutting [2] at a right angle and by another wall [4] running parallel to [2] c. 3 m to the west (fig. 2). All three walls are constructed of concrete bonded with a hard sandy mortar and faced with tufa *opus incertum*. A curving line on the south face of wall [3] suggests they supported a concrete barrel-vault running parallel with the bank. At 2.35 m. to the north of wall [3], wall 2 returns at a right angle to the west as wall [5], which disappears into the bank. Wall 5 is apparently 74 cms thick, like wall 2, but might be narrower. It forms a passageway or wide channel with third E-W wall [6], 74 cms thick, faced with hard white lime plaster. The distance between walls 5 and 6 is 1.48 m. An intervening wall [7], which continues the line of wall 2 is a later insertion, embedded in the core of which are a lead pipe and a terracotta pipe (fig.4). Lumps of loose concrete walling to the north of wall [6] appear to have rolled down the slope from a higher level (see figs 3 and 5). Found in the topsoil in their vicinity were some large fragments of cocciopesto flooring (like that found in trenches 2 and 4, see below) and a terracotta antefix (fig. 6), all of which may have migrated from the plateau above. Wall 6 itself is split by a large crack but can be traced down the slope to a junction with a N-S wall [8], also 74 cm thick, which runs parallel with wall 2, at a distance of 1.50 m. On its east side wall 8, towards the pool, is buried in extremely compacted rubble concrete debris [13, 16].

D6 tr. 2 (figs 7-10)

Laid out on the plateau immediately to the west of tr. 1, extending back from the edge of the cut of a previous excavation, the trench (2 x 2 m) uncovered two large tufa blocks [6] (possibly re-used cornice blocks), one measuring 86 cms long by 59/60 cms wide, possibly constituting the stylobate of a colonnade running E-W. On their south side was a slight gutter (perhaps made by stone robbers) cut into a deposit [4] of fragments of white architectural stuccowork (fluted column shafts) and red painted plaster (fig.8); on the north side there are traces of decayed cocciopesto flooring [5]. The two blocks are founded on a narrower underlying wall [7], on the same E-W alignment, 45 cms thick, of concreted tufa aggregate, with a roughly mortared face on the north side and smoother *opus incertum* on the south. Occupation levels associated with wall 7 on the north and south sides contained a range of fine and cooking wares all dateable c. 150-75 BC.

D6 tr. 3 (figs 11-12)

This trench (c. 1.50 m.wide) examined a length of concrete walling c. 3.70 m. long protruding from the west bank, north of tr. 1. It has the remains of a straight face on the west side, apparently faced with tufa *opus incertum* or quasi-reticulate, but is turned at an angle that suggests it may not be in situ.

D6 tr. 4 (figs 13-14)

Positioned at the NW corner of the depression, in line with an E-W wall identified on the top of the north bank by tr. 5 (see below), the trench (2 x 2 m) uncovered the top of a wall constructed of concreted rubble tufa, c. 60 cms wide, lined on the north side with *opus signinum*, 4-6 cms thick, painted bright blue (see fig.14). The magnetometer results show that the wall is actually the south side of a basin or pool, seemingly of circular or lobate shape c. 5 by 7 m. (see Geophysics report fig. 1a bottom left corner of area framed in yellow). On the south side of the wall lay a remnant of the concreted rubble makeup for a floor, and a large fragment of cocciopesto flooring, inlaid with white marble tesserae (fig.19).

D6 tr. 5 (figs 15-18)

The trench, initially 1.80 by c 2.50 m subsequently enlarged to the south and widened to 5 m., examined a line of concrete rubble outcropping close to the top of the north bank, which proved to be the roof of a barrel vaulted chamber 2.66 m wide, facing south (fig. 17). The side walls, 86-90 cms thick, and the rear wall are faced with *opus incertum*; the concrete is of the same hard, sandy variety as those found in trench 1, and includes large fragments of black-glaze pottery (fig.18). A wall [3] of roughly laid coarse tufa rubble c. 65 cms thick, is built along the upper north edge of the vaulted chamber, partly on the vault, partly on the bank of sand to the rear. Pottery from the sand associated with the foundations of the wall [5] was not readily dateable (scraps of early impasto and plain buff wares).

D6 tr. 6 (figs 21-22)

Laid out 3 metres to the west of trench 2, trench 6 (1 x 2 m) uncovered the continuation of the tufa stylobate, c. 10 cms below the surface. One block bears a slightly raised circular boss, c. 42 cms in diameter, which could represent the position of a column. Lying alongside the south side of the stylobate is a length of concrete faced with white stucco, apparently from the shaft of a column. A fragment of a Doric capital in travertine (fig. 21) lying on the bank between trench 1 and 2 might belong to the same order.

D6 tr. 7 (figs 23-24)

Laid out in line with the stylobate in trenches 2 and 6, a further 8.5 metres to the west, the trench (1 by 1.50 m) uncovered a tufa wall, 65 cms thick, with two others (45 cms thick) joining it at right angles from the north and south. The point of intersection was marked by a roughly circular pit (diam. C. 65 cms) which might represent the footing of a robbed-out column base.

D6 tr. 8 (figs 25-26)

The trench (1.50 by 2.40 m) investigated a quasi-reticulate tufa wall, one face of which was visible on the surface at the eastern end of the north bank. The wall is 45 cms thick, standing 3-5 courses above the level of the top of its foundations which are

set into clean sand (not excavated below c. 30 cms). A few fragments of pottery in the upper level of sand were of early impasto and buff wares (cf. Tr 5, US 5).

D6 tr. 9 (figs 27-28)

The trench (3 by 5 m) encompassed two masses of rubble concrete emerging from the slope in the middle of the northern bank. The westernmost of the two has a straight face on the west side and the trace of a plastered barrel vault on the east, suggesting that the wall belongs to a second chamber like that identified in trench 5. The rubble in the east of the trench is loose tumble, but could derive from the collapse of the eastern wall of such a chamber – the distance between the two is c. 3 m, similar to the width of the chamber in tr. 5. A deposit of burnt material in the topsoil in the northern sector of the trench produced several pieces of finewares ranging in date from 2nd century BC to c. AD 30-50.

D6 tr. 10N (fig. 30,32)

No trace of walling emerges on the surface of the south bank, but some large trees mark a break-of-slope which is also accompanied by the kind of moss which normally grows on lime-rich soil, while the bank itself is as straight as those on the other three sides of the depression. A trench, 1 by 6 m. was laid out down the lower bank, across the break-of-slope, to see if it represented the line of a wall. The outcome was negative (fig.28), but the section produced information of value for the geomorphological study.

D6 tr. 10S (fig. 31)

A second trench (1 by 7.80 m) was cut on the same line as tr. 10N but on the top of the bank, where the magnetometer survey on the ridge between D5 and D6 indicated one or more walls might return. A jumble of collapsed walling [5] in the northern half of the trench can be associated with a badly damaged reticulate wall [6], probably 45-50 cms wide, running E-W. Underlying the tumble is a solid concrete structure, of uncertain function (possibly a drain or channel) apparently predating the reticulate wall. At the foot of the south side of the wall, under a layer of hard compacted reddish sand is a deposit containing good quality white stucco and yellow painted plaster [7] perhaps deriving from the decoration of the wall. A sounding made beneath the red sand at the far south end of the trench encountered a spread of building debris overlying a layer of clean sand, under which is a hard, compacted deposit 25 cms thick composed of pebbles and fine stone rubble [19]. A similar horizon was found in the most seaward trenches of B2 trenches 7-? (see Excavation Report 2007, p.). A few fragments of pottery were found, none precisely dateable, but nothing definitely later than the early 1st century AD.

D6 tr. 11 (fig. 29)

This trench (2.20 x 1.80 x 2.00 x 1.40 m) examined a lump of concrete walling tilted at an angle on the north bank to the SE of trench 9. It has two parallel faces, 80 cms apart, of roughly coursed tufa blochetti on the north side, rendered fairly smooth with mortar infill. The core is composed of hard sandy buff-coloured mortar with coarse tufa aggregate, similar to the walls in trs. 1,5 and 9. Whether the walling is in situ – or nearly so - is impossible to say without further excavation in depth. The magnetometer survey suggests that there is a substantial wall along the full length of the bank.

Summary of results

The walling on the slopes around the pool does not make coherent architectural sense at the moment but all appears to be of a similar kind, massive concrete constructions faced with *opus incertum*, for which the black-glazed pottery inclusions in the vaulting in tr. 5 provide a date of 150-50 BC. Materials and technique are similar also to the walling examined in 2007 at the top of the eastern bank of D5 (tr. 1), datable to about the same period. At least two, possibly three, barrel-vaulted chambers projected at rightangles from the bank on the north side of D6, and at least one other barrel-vaulted chamber may have lain parallel with the bank on the west side. The combined evidence of wall [8] in trench 1 and the magnetometry suggests a continuous wall near the present foot of the slope on the north, west and east sides. The geological cores from the bottom of the pool indicate that the Roman levels in the centre of the depression are located between 1.50 and 2.00 metres below the present level.

On the plateau between D6 and D5 and along the top of the north bank the walling is more lightly built (walls 45-50 cms thick) and could represent a slightly later (or more than one) phase. The stylobate found in trenches 2 and 6 and the structures plotted by magnetometry indicate a porticoed courtyard, perhaps an atrium, and other sizable buildings occupying the area around the NW corner. Pottery recovered from the site is predominantly Late Republican (150-50 BC), but there is also some material from the 1st and into the 2nd century AD, which agrees with the lower C14 date obtained from the bottom of the pool.

II. VICUS. Baths F

The bath building in zone F was planned at 1:100 in 1986 and recorded in both plan and elevation at 1:50 together with the floor levels, in 1990-2. Two small-scale surface excavations were undertaken in late March 2008, one to resolve an anomaly in the recorded shape of the apse of room F35, the other to establish the original ground level in the palaestra F50 and whether there was a portico on the west side in front of rooms F51 and F52.

Apse of F35 (fig. 34)

The 1990 survey recorded the two fragmentary sides of the apsidal end of room F35, preserved to different heights, with two different and unreconcilable arcs. In 2008, the lower levels of the structure were cleared on both sides finding traces of a praefurnium in the centre and demonstrating that the original builders had indeed made a mistake, using a different arc on one side of the praefurnium from the other. The error had been corrected on the inner face by omitting the flue tiles on the east side, but how the differences were reconciled on the outside – if at all – remains unclear.

F50/51/52 tr. 1 (figs 35-36)

The eastern walls of rooms F51 and F52 were cleaned of moss and forest debris and a trench laid out so as to include the floor level inside both rooms with an area 1.00 x 2.50 projecting eastward into the palaestra (F50). No evidence of a portico was found, but patches of concreted rubble extended from the foot of the wall, apparently at a level below the latter's foundations, for a distance of about 2 metres, tapering in thickness and becoming increasingly fragmentary to the east (fig.36). This could be the make-up for a hard counter around the margin of the palaestra, or simply construction debris. The thicker mass on the south side of the trench might be the foundation of a step leading from the palaestra to room 51, whose wide doorway coincides with the same point.

The opportunity was taken to sample the underlying sand deposits for environmental analysis and luminescence dating, after which the trench was back-filled.

III. VICUS: Baths A, floor of room 21

When Building A, a large public bath of Severan date (c.AD 200), was surveyed in 1983-4 (*Castelporziano I*, pp. 72-78, fig.5) an irregularly tessellated marble floor in the centre of room A21 was partly visible, having been cleared by Gabriella Simonazzi Masarich in the late 1960s (Masarich 1973, p.303 'ambiente I/5' and pl. IXa). This was sufficient for the purposes of our initial record, and to protect the floor from damage during conservation work on building A in 1984-5 it was covered with a thin layer of soil, with the intention of carrying out a more detailed study at a later date. In April 2008 all the loose marble, brick and tile scattered around the room was collected together and sorted, and just over half the floor itself was uncovered on the western side of the room (fig. 37). The aim was to obtain more information about the style and technique, the marbles represented, the nature and extent of the 'Y' shaped motif to which Dott.ssa Masarich referred in her report. Having removed the soil, parts of the floor were washed with a sponge and water to facilitate study.

The floor belongs to a late phase in the history of the building, dating from the 4th century AD, when the tepidarium (A21) and caldarium (A25) were sub-divided to form a much smaller suite of baths (see *Castelporziano I*, p.74f). Room A21 became an apodyterium and frigidarium, with two small plunge pools set into the de-commissioned hypocaust at its north end. The floor was laid after these pools had been made, for it clearly respects the marble veneer on the outside of their containing walls (fig.38); on the other hand it continues under the bench along the western wall, demonstrating that this (and presumably its companion on the eastern side of the room) was a later addition, perhaps substituting for a predecessor in wood or bronze or marble.

The bulk of the surface is of the type called ‘mosaico marmoreo a grandi tessere irregolari’ i.e. composed of small pieces of fractured marble veneer, including a number of fragments of inscriptions, ranging in size from c. 2 x 4 cms to c. 4 x 7 cms but averaging about 5 x 6 cms, some approximately square or rectangular in shape, others roughly triangular or shapeless. Some areas are laid quite neatly in rows forming square patches, others in circular clusters, which might reflect concerted attempts to create different textures or different ways of working on the part of different workmen. There is a distinct line across the floor in line with the south side of the doorway to room 25. In a sample area 80 x 80 cms (fig. 39) containing 180 tesserae, about 70% of the background marble is white (mainly medium-grained translucent whites, perhaps Thasian and Parian) or greyish white, with occasional pieces of white with strong grey streaks of *marmo scritto* types. Another 20 % is the variegated green marble *cipollino*, from Carystos in Euboea, sometimes alternating with the white and grey, sometimes forming patches. It is possible that the intention was to achieve the same overall watery, wavelike effect that would have been produced by complete slabs of *cipollino* had they been available. The remaining 10% consists of a mixture of brighter colours, liberally sprinkled amongst the white and greenish: a bright, fleshy pink lumachella, apparently *occhio di pavone rosso* (Gnoli 1971 fig. 217; Price 2007, 162) imported from Kutluca near Izmit in Turkey (Lazzarini 2002a, 251f; 2002b), some possibly *lumachella rossa di Sibilio* (Gnoli 1971, fig. 210) and a variegated pink-and-white limestone breccia, probably *breccia corallina* or marmor Sagarium (Gnoli 1971, fig. 247; Lazzarini 2006; Price 2007, 111). Elsewhere in the floor there are also pieces of yellow - either Numidian yellow limestone (*giallo antico*) or a yellow lumachella (perhaps *astracane dorato* from Tunisia (Gnoli 1971, fig. 209; Price 2007, 160), some *africano* from Teos (Gnoli 1971, fig.197; Price 2007, 136-7) and some black slate.

The ‘mosaic’ background was laid around a linear pattern formed of a small number of complete square and hexagonal tiles (re-used *opus sectile*) in the same range of marbles. Down the longer axis of the room, slightly off-centre, is a line of 8 squares, c.20 x 20 cms, placed on their diagonals. The last two at the south are of *breccia corallina* and three in the middle are of *marmo scritto*, the others are missing. At either end the line branches into two arms (the ‘Y’ seen by Masarich). The longer southern arms were composed, like the central line, of squares, c.20 x 20 cms (in one case a rectangle 18 x 22 cms), placed on the diagonal. Nine survive, of which five are of white marble, two grey *scritto*, one of *breccia corallina* and one of bright pink lumachella. The arm may once have extended further (the loss of the floor at the south end of the room has probably been caused by the collapse of the underlying hypocaust; further remnants may be preserved at a deeper level, which we did not

disturb). The shorter northern arms were made of six hexagons (13 cms per side), with a pair added at the end. All surviving hexagons on both sides are in black slate (*ardesia* from Lavagna in northern Italy). Four more hexagons (missing but identifiable by their imprints) formed a star-like cluster in the open field between the two western arms. Slightly off centre to the south of the plunge pools was a drain, probably once covered with a white marble grating, 46 x 38 cms, of which a fragment of suitable thickness was identified amongst the loose debris.

A close parallel for the range of marbles, the size of the tesserae and the pieces of inscriptions is found in a floor in the 'nymphaeum' of a late Roman building near the Arch of Titus in Rome, dateable sometime after the mid 4th century, perhaps into the early 5th (Guidobaldi/Guiglia Guidobaldi 1983, 230-37, figs 66-68). No precise comparanda for the larger insertions, or the double Y motif have been identified as yet.

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Fig. 1. Western bank of D6, from south, prior to excavation.

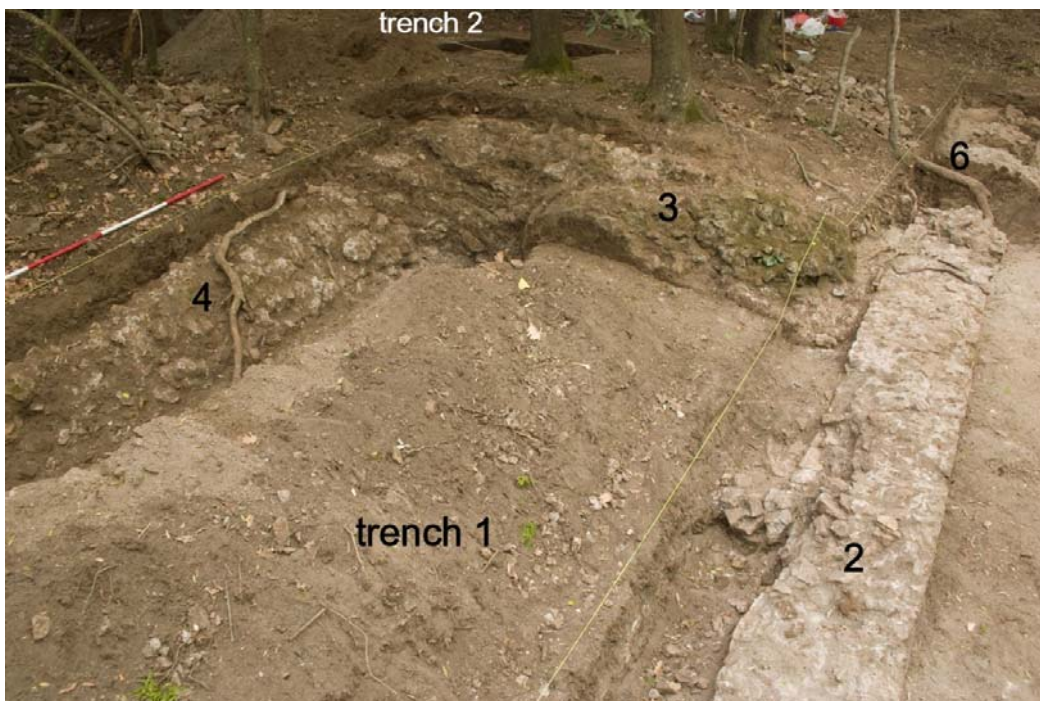


Fig. 2 Western bank of D6, trench 1, from south.



Fig. 3 Western bank of D6, trench 1, from north



Fig. 4 Western bank of D6, trench 1, wall 7 and lead pipe, from east.



Fig. 5 Western bank of D6, trench 1, walls 6 and 8, from east.



Fig. 7 Western plateau of D6 trench 2, from north



Fig. 6 Terracotta antefix, animal-headed sea creature with necklace (CPS08 D6 trench 1, from topsoil north of wall 6)



Fig. 8 Painted plaster and moulded stucco (CPS08 D6 trench 2, layer 4)



Fig. 9 Western plateau of D6, trench 2, from south-east, showing tests excavated on both sides of wall 7, down to the bottom of its foundations.



Fig. 10 Western plateau of D6, trench 2, from south, showing facing of wall 7



Fig. 11 Western bank of D6, trench 3, from north



Fig. 12 Western bank of D6, trench 3, from south



Fig. 13 North-western corner of D6, trench 4, from north-west.



Fig. 14 North-west corner of D6, trench 4, from north, showing blue-painted opus signinum on north side of wall



**Fig. 15 Northern bank of D6, trench 5, from north-east.
Trench 1 is visible in the distance**



Fig. 16 Northern bank of D6, trench 5, from south-east



Fig. 17 Northern bank of D 6, trench 5, vaulted chamber, from south-west



Fig. 18 Northern bank of D6, trench 5, *vernice nera* potsherd in concrete vault



Fig. 19 Large piece of cocciopesto floor inlaid white marble tesserae (CPS08 D6 Tr 4)

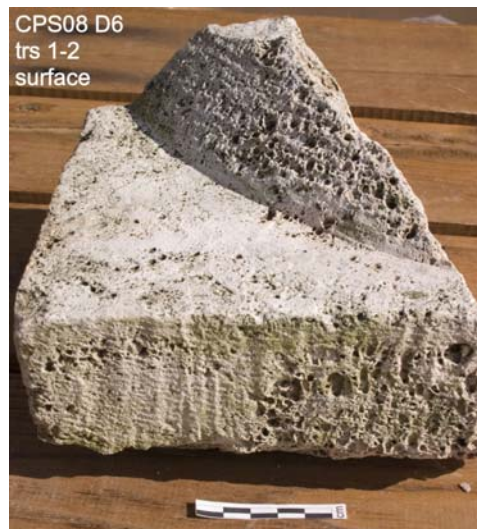


Fig. 20 Fragment of a Doric capital (?) in with travertine (CPS08 D6, surface find between trenches 1 and 2)



Fig. 21 Western plateau of D6, trench 6, from west (trench 2 and D6 pool in distance)



Fig. 23 Western plateau of D6, trench 7 from east (D5 pool in distance)



Fig. 22 Western plateau of D6, trench 6, from south-west, with collapsed stuccowork column beside stylobate.



Fig. 24 Western plateau of D6, trench 7, from north, intersection of ?stylobate and two smaller walls



Fig. 25 Northern bank of D6, trench 8, from east



Fig. 26 Northern bank of D6, trench 8, north face of wall



Fig. 27 Northern bank of D6, trench 9, general view from west. (Trench 11 to right)



Fig. 28 Northern bank, trench 9, from north-east corner, showing springing of barrel vault on near side of far wall



Fig. 29 Northern bank of D6 trench 11, viewed from west
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Fig. 30 North bank D6, magnetometry in progress



Fig. 31 South bank of D6, trench 10 N from north Fig. 32 trench 10 S from north



Fig. 33 South bank of D6, trench 10 N, from south-east.



Fig. 34 Vicus F35 apse, view from south



Fig. 35 Vicus, zone F, north-west corner of palaestra (F50), viewed from F37



Fig. 36 Vicus F50/51 trench 1, viewed from east



Fig. 37. Vicus A21 from south



Fig. 38 Vicus A21 junction of floor with south face of plunge pool A22



Fig. 39 Vicus A21 floor, sample area 80 x 80 cms