

**OLD BETHLEHEM FARM 153
DWARS RIVER VALLEY, DRAKENSTEIN**

HOMESTEAD (T-PLAN)

**STRUCTURAL & ARCHAEOLOGICAL INVESTIGATIONS
& ASSESSMENT OF THE WALLS AND FLOORS,
PREPARATORY TOWARDS REHABILITATION**

APRIL 2013



VIEW OF HOMESTEAD WITH OAK AVENUE IN FRONT (LOOK EAST)

**Report prepared for
RESIDE PROPERTIES (PTY) LTD
Johannesburg**

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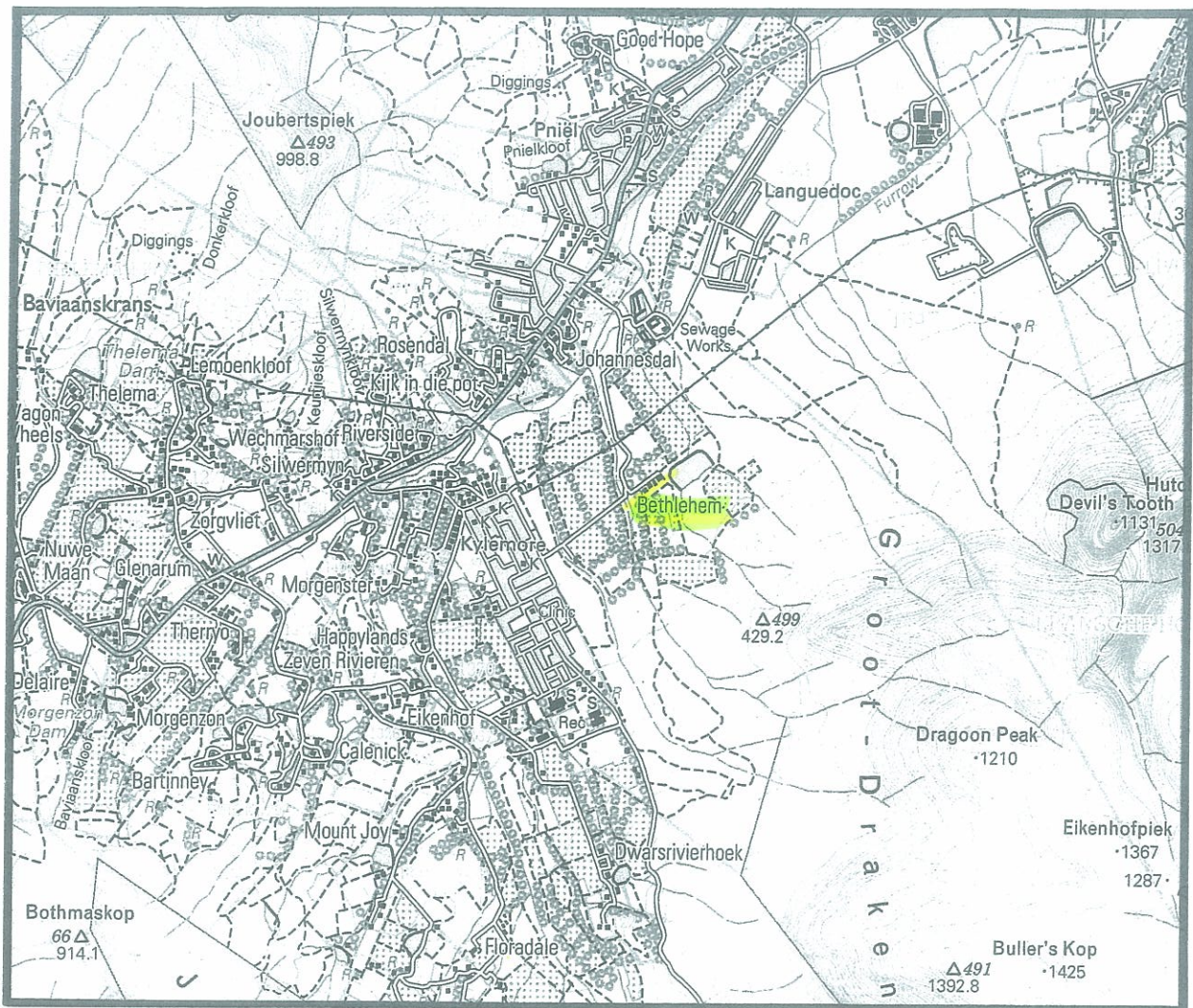
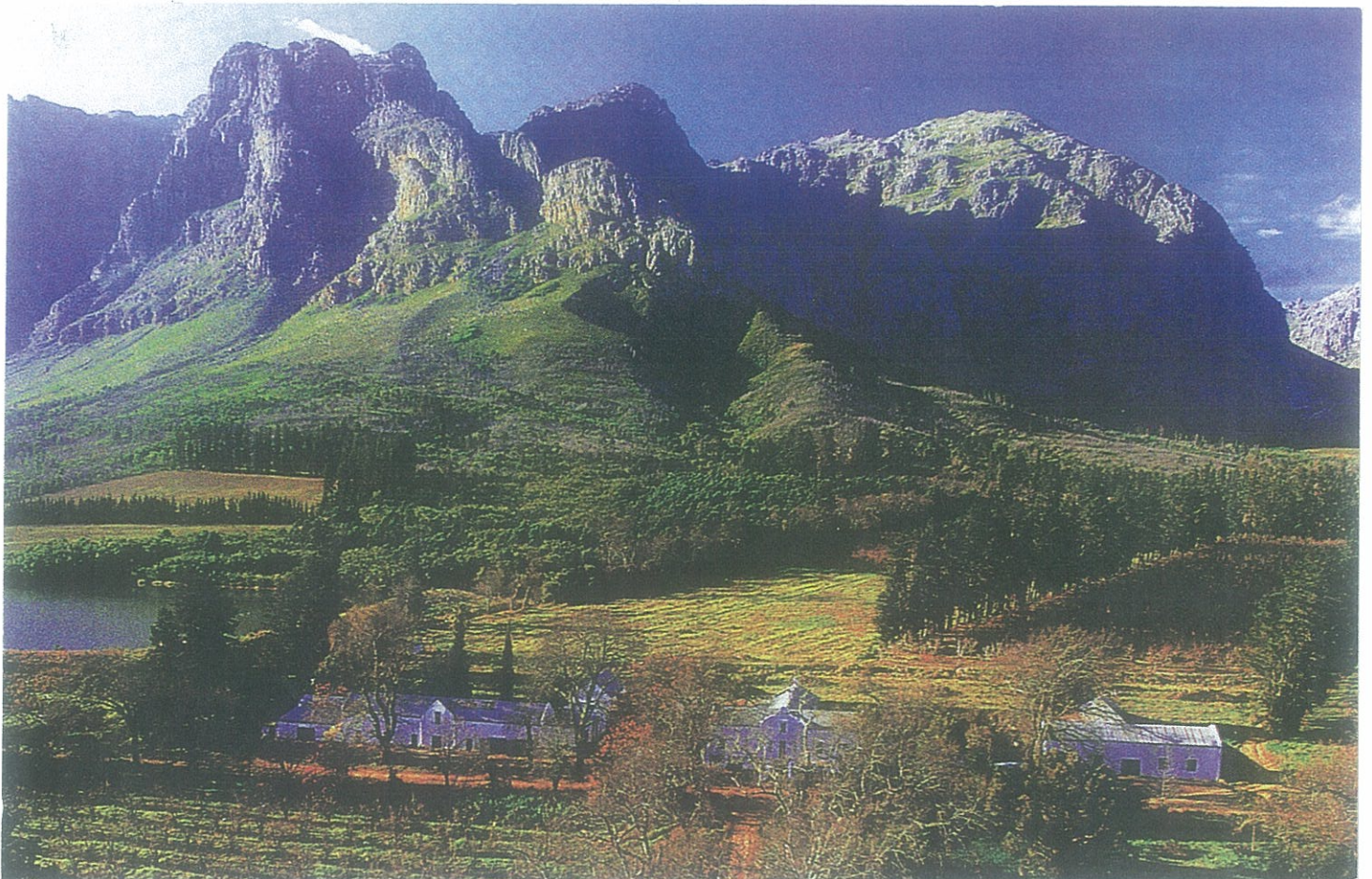


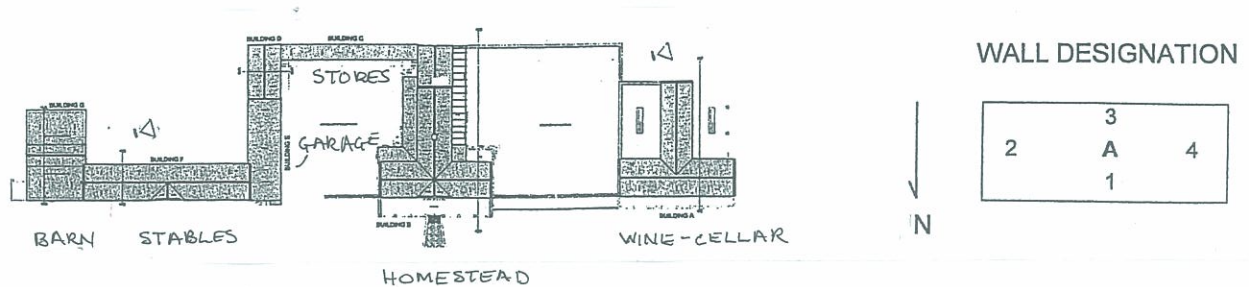
FIG.1 Topographical map of Dwars River Valley where the huge farm of old Bethlehem lies at the foothills of the Drakenstein Mountains (SB Map DD 3318, scale 1:50 000).



1. View towards the farm Bethlehem (look S) (Boschendal Catalogue 2008).

EXECUTIVE SUMMARY

Bethlehem Farm (153) is situated between the villages of Kylemore and Pniel in the Stellenbosch district. The farm grant dates from the late 1680s as home to Pierre Simond and his family, pasturing the French (Simondium) and Dutch (Stellenbosch) churches (FIG.1). A linear farmyard amidst avenues of oaks consists of four major buildings, all string together from West to East: Wine-Cellar (T-plan) 18 /19th c Homestead (T-plan) 18th to 20th c, Flat-roofed Stores & Garage 19th c, and Stables & a Barn 18th -20th century.



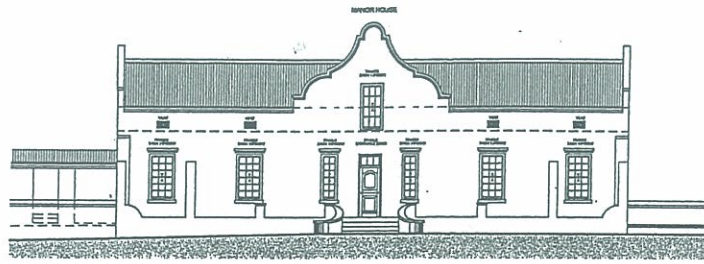
The Client (Mrs A. Enthoven) of *Reside Properties* intends to stabilize all the buildings. The architect Elizabeth Davies and team started with the western Wine-Cellar and its rehabilitation was successfully concluded in December 2012. Some archaeological investigations were also undertaken (Vos 2013).

The Homestead is the next major project where e.g. the old corrugated roof will be replaced with a similar construction. During March 2013 select stripping of portions of wall and excavations clarified constructions. All the upper portions of the floor were damaged by the newly cast concrete floors (post-1940s).

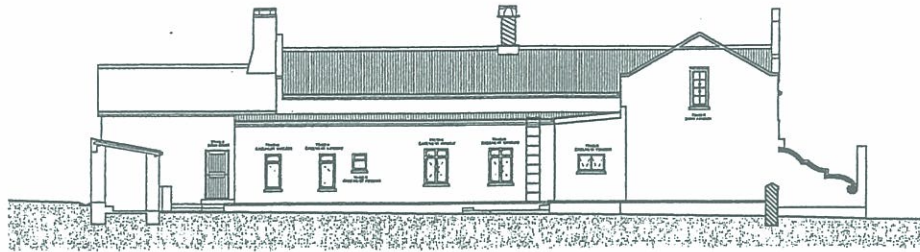
In Room C2 (Voorhuis) the blocked-up door position was exposed; earlier floor levels of fill were found, indicating the Front Rooms A/B, C and D/E were all lower during the late 18th century. Wide stone platforms indicate that on stone plinths joists rested for boarded floors, presumably in yellow-wood.

At Room F (Agterhuis), a remnant stone foundation indicated an earlier timber screen (late 18th), probably reaching till ceiling height. It is likely that a timber floor may have been installed. The old Kitchen I revealed a waterproofed clay-loam beam bedding, probably for tiles. At Wall I4 the remains of an earlier "hearth" were discovered next to the present hearth.

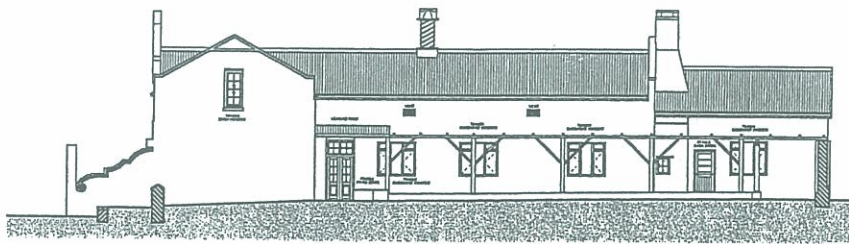
The exterior **western wall** of the T-extension with its 1960 windows, open out onto the spacious garden courtyard (towards Wine-cellar). Select plaster strips revealed some earlier openings, but inconclusive to size and function. Rehabilitation of these large window piercings is recommended in the form of late Victorian glazed doors (and sashes) to conform to the rest of the building's later style.



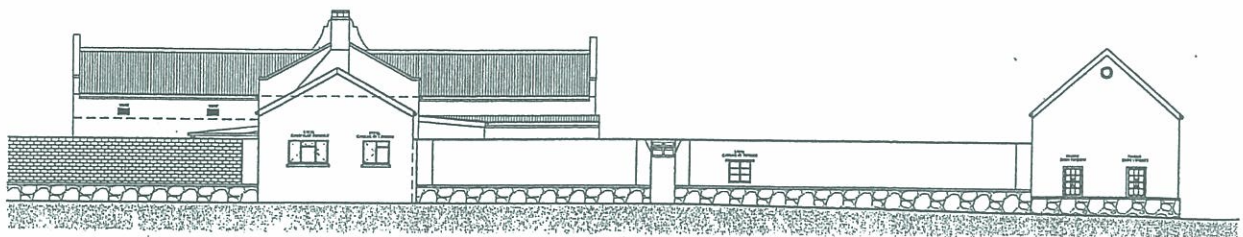
LOOK SOUTH



LOOK WEST



LOOK EAST



LOOK NORTH

FIG.2 Accurate elevations of the Homestead as extant. The central chimney (barley sugar design) is early 20th century. The >1940 windows are obvious at the rear wing (Dennis Moss Partnership 2011). the

1. INTRODUCTION

Bethlehem Farm (153) at Drakenstein is situated between the villages of Kylemore and Pniel at the foot of the soaring Drakenstein Mountains, whose valleys provide a few mountain streams irrigating the farm. I have been appointed as investigator and archaeologist of the southern Farmyard buildings since 2011. Note Miss Harriet Clift investigated the northern farmyard of ruins in 2011.

The history of the farm had previously been fully documented (Vos 2009) and the present client commissioned the structural analysis of the farmyard buildings (Vos 2011). In response to the rehabilitation of the Wine-cellar by architect Davies, I wrote a short report on the archaeological investigations (Vos 2013).

It's the intention of the client to have the farmyard buildings all stabilized and rehabilitated. Therefore minimal intervention and repairs are primary, but the alterations should harmonize with the existing old and younger fabrics. The Homestead dates to 1770s and is the second building of the rehabilitation project.

In cooperation with the architect Elizabeth Davies, the project manager, Gavin Lutge and contractor Chris Herselman, we identified areas of plaster stripping and cutting of floor sections. All excavations and investigations were completed during March 2013.

2. LEGAL REQUIREMENTS

This report is in fulfilment of the SANHR Act 1999, no.25, **Section 34**, where all structures older than 60 years are protected and need investigation. Prior to these projects a ROD (10.12.2010) had been obtained by *Dennis Moss Partnership* towards this requirement (**Add.1**). Select plaster stripping was done in accordance with it.

The other primary legal requirement is in accordance with **Section 35**, for the archaeological excavation of test sections, to inform the functional and chronological development of the constructions. A permit was issued to me, Permit No. 2011/03/005, dated 25 March 2011, which is valid till 25.3.2014 (**Add.2**).

3. GOALS OF REPORT

The GOALS of our investigations are primarily structural, complemented with archaeological data.

1. Conduct structural investigations (walls) at the Old Bethlehem Farmyard building of the Homestead (**FIG.2**).
2. Undertake archaeological test sections in the floors to clarify structural interpretations.
3. Keep a full record in notes, drawings and photographs.
4. Make provisional recommendations of how any renovation / rehabilitation process could proceed in respect of architectural features.

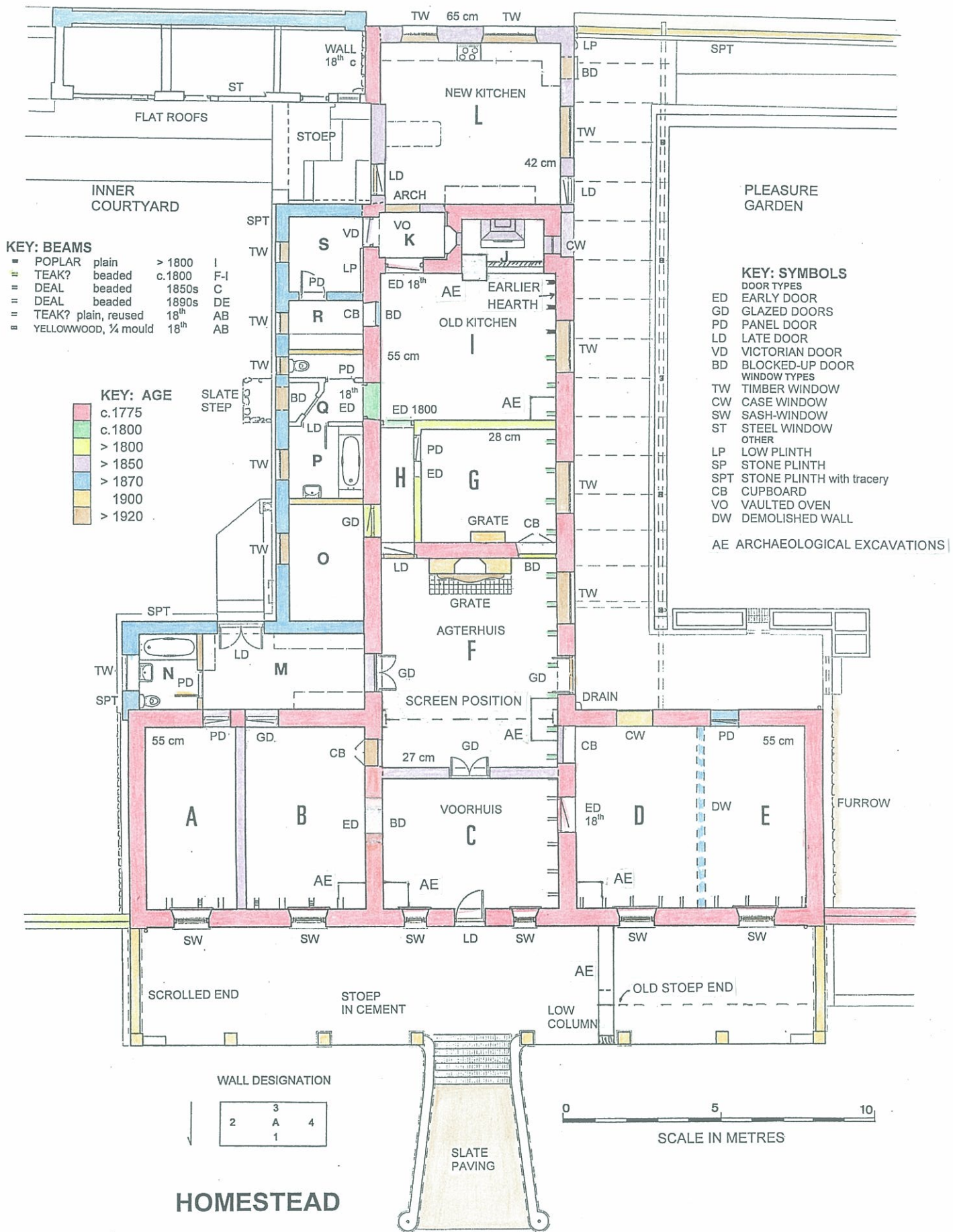


FIG.3 Site plan of the T-plan Homestead, when the latest excavations and information have been added (DMP 2011; Amendments Vos 2011, 2013).

4. METHODOLOGY OF INVESTIGATIONS

The methodology of the investigations consisted of four phases.

1. The project team (Davies, Vos, Lutge and Herselman) identified and marked the selected sections on the walls (for plaster stripping) and on the floor for excavation in certain rooms. Minimum intervention was of primary importance (see **FIG.2**).
2. The Contractor and his team then cut carefully and stripped the wall plasters, which I later extended. They also cut through the 8-14 cm concrete beds below the parquet-floors or carpet, and then stopped. Mostly corner sections were chosen as they are out of the way, least disturbed and supply information on the bonding of wall corners.
3. I then came in on subsequent days and with the aid of a labourer systematically excavated each section. All phases were documented.
4. Finally, the whole project team met again to inspect, discuss and make recommendations on what could be implemented to harmonize with the existing building. All my drawings are made on 1:20 scale, which include both ground plans and cross-sections. No cultural artefacts were found in any of the excavations.

5. SUMMARY DESCRIPTION OF HOMESTEAD

For the sake of clarity I am including a short description of the Homestead, obviating reference to previous reports (Vos 2011:21). I prefer to call the main dwelling the *Homestead*, due to its unpretentious simplicity, a hallmark of mid-18th century Cape architecture. The Homestead with its rear wing, was built primarily as a contemporary unit, though minor adjustments were made over time. The Homestead is in good condition and sturdily built and its room layout is typical and predictive: a *Voorhuis* (Entrance Hall), two rooms on the left and two Rooms on the right, an *Agterhuis* (Living room), an *Agterkamer* (Bedroom G) and the Kitchen I (Dining Room) with its hearth and oven, all partially intact.

In most rooms the old beams (yellowwood and poplar) and ceilings (second or third generation) are intact. All gable outlines have been rebuilt (1900s) and the roofline was raised to accommodate a corrugated roof of the 1880s, with a broad stoep and steps of post-1900. Its dimensions include the façade of 22.3 m, the exterior width of the front rectangle at 5.78 m and the length of the rear wing at 24.22 m.

As expected, numerous alterations were incorporated into the Cape-Dutch homestead. Fortunately much of them have been incorporated into flat roofs by the appropriate addition of the 19th century lean-to on the eastern side, accommodating passages, cupboards, bathrooms and sculleries. A New Kitchen L has been introduced into a 19th century (earlier lean-to) pitched extension, forming the final unit of the main T-wing. A detailed site plan (amended) is included (**FIG.3**).

ROOM B
CORNER SECTION B 4/1
GROUND PLAN

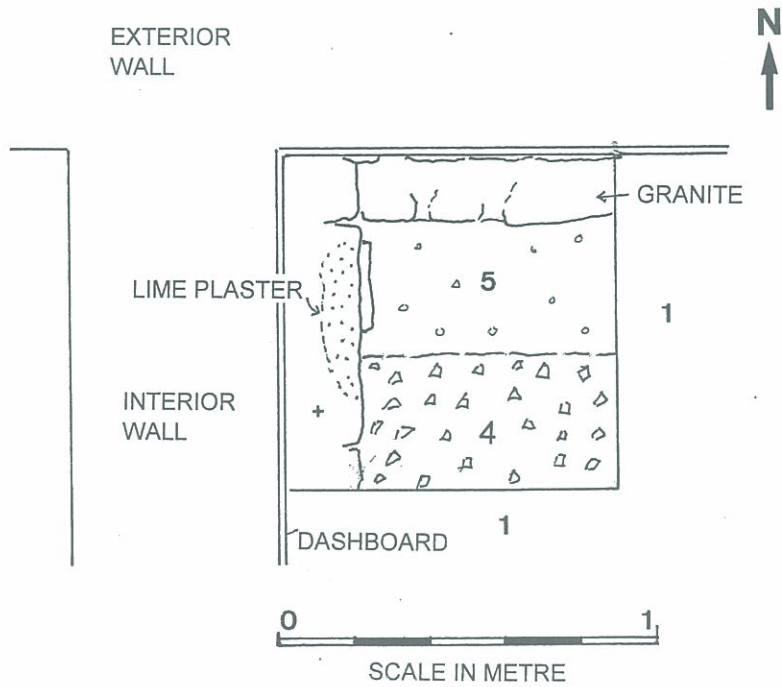
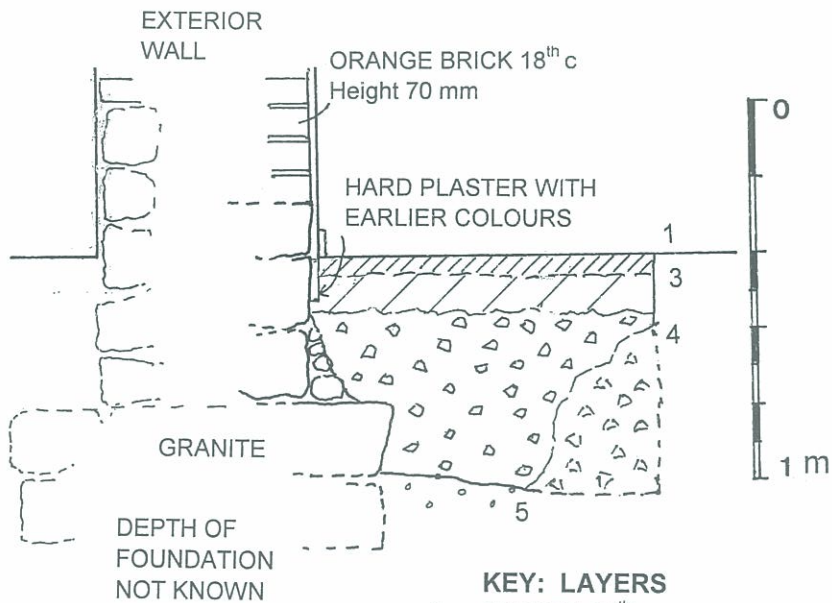


FIG.4.1 Ground plan of corner-excitation B1/4 in Room B. Note the wide stone plinths for earlier boarded floors (Vos 2013).

ROOM B
CORNER SECTION B 4/1
CROSS-SECTION
LOOK EAST



KEY: LAYERS

1. CARPET 20th c
2. BLOCKED-FLOOR ABSENT
- 3.1/2 CEMENT-LIME & CONCRETE BEDS 1940s
4. FILL OF GRAVEL (30-50 mm chips) 1940s
5. TRAMPLED SURFACE of hard brown-grey 18th c soils with orange brick specs & broken raw brick

FIG.4.2 Elevation of the excavation B1/4 which reached about 60cm below floor level (Vos 2013).

6. HOMESTEAD: FLOOR AND WALL INVESTIGATIONS

6.1 ROOMS A/B

6.1.1 Floor excavation B 1/4

Rooms A and B, with a later dividing wall, would be similar in construction. Corner section B 1/4 (about 90cm²) where the 1970s carpet rests directly on concrete bedding of about 140 mm, with gravel chips as a base and as waterproofing, both postdating 1940s (FIG.4.1).

What is obvious are the unusual wide granite plinths of about 200 mm, with the B4 plinth partially covered in a thin, hard lime plaster. These plinths are surely to support regular joists for boarded floors. The layer 5 appears to be a trampled surface when the house was built in 1770s (FIG.4.2).



2. In Room B the corner excavation is surrounded by the tools of the trade for documentation (look NW).



3. Assistant looking at the large volume of gravel excavated from corner section B1/4 (look NW).

4. In this close-up of B1/4, the corner 18th c bricks bond perfectly (1). At wall B4 the earlier plaster band and floor level is visible (2). Note the wide stone plinth (3) (scales 1m, 50 cm) (look N).



6.1.2 Wall investigation B 1/4

Within the excavation, a 100 mm strip of c.1900 plaster, very hard like cement/lime, showed some early colours. Immediately at its base, are impressions of endboards. This would indicate the Rooms A/B were once at the same level as the Front Rooms C and DE (all 10cm lower). A portion of plaster was stripped above the floor level (carpet), where the cement plaster was already loose. It showed the mid-late 18th century orange brickwork (70 mm high) above the granite footing, the latter for damp proofing.



5, 6. At wall B4 even the interior wall was built-up in stone. Note the earlier floor level (c.1900) with the skirting plaster and the two yellow *in situ* plaster strips below, showing floor board impressions (look W) (scale 50 cm).



**ROOM C
CORNER SECTION C 1/2
GROUND PLAN**

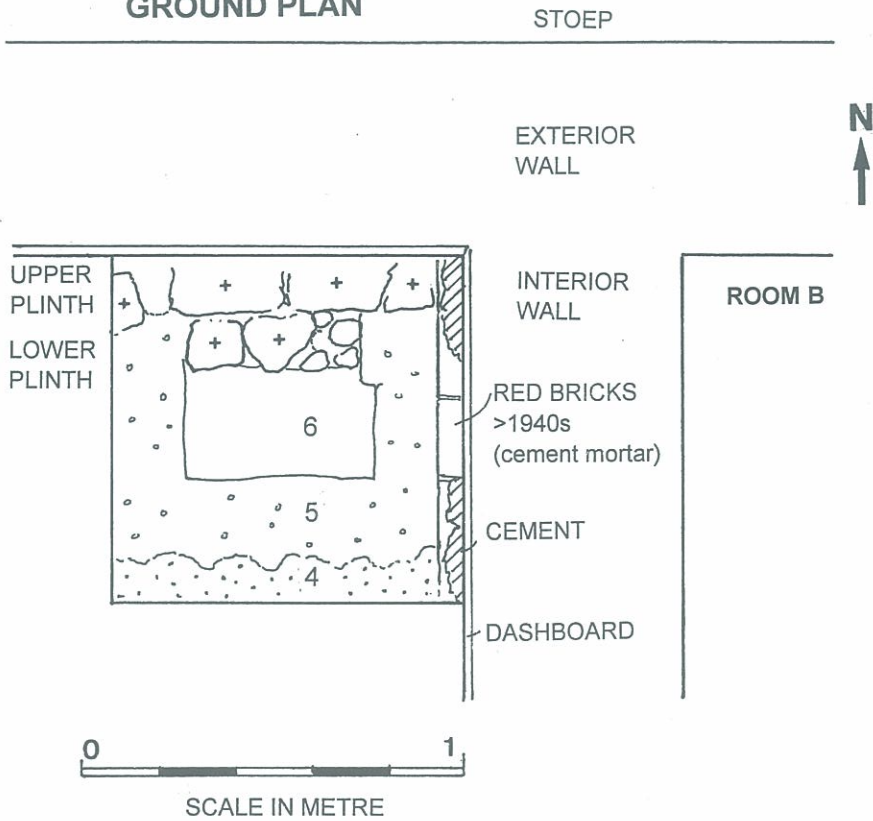


FIG.5.1 Ground plan of corner excavation C1/2 in Room C. The upper plinth would have carried the joists for a boarded floor.

**ROOM C
CORNER SECTION C 1/2
CROSS-SECTION
LOOK EAST**

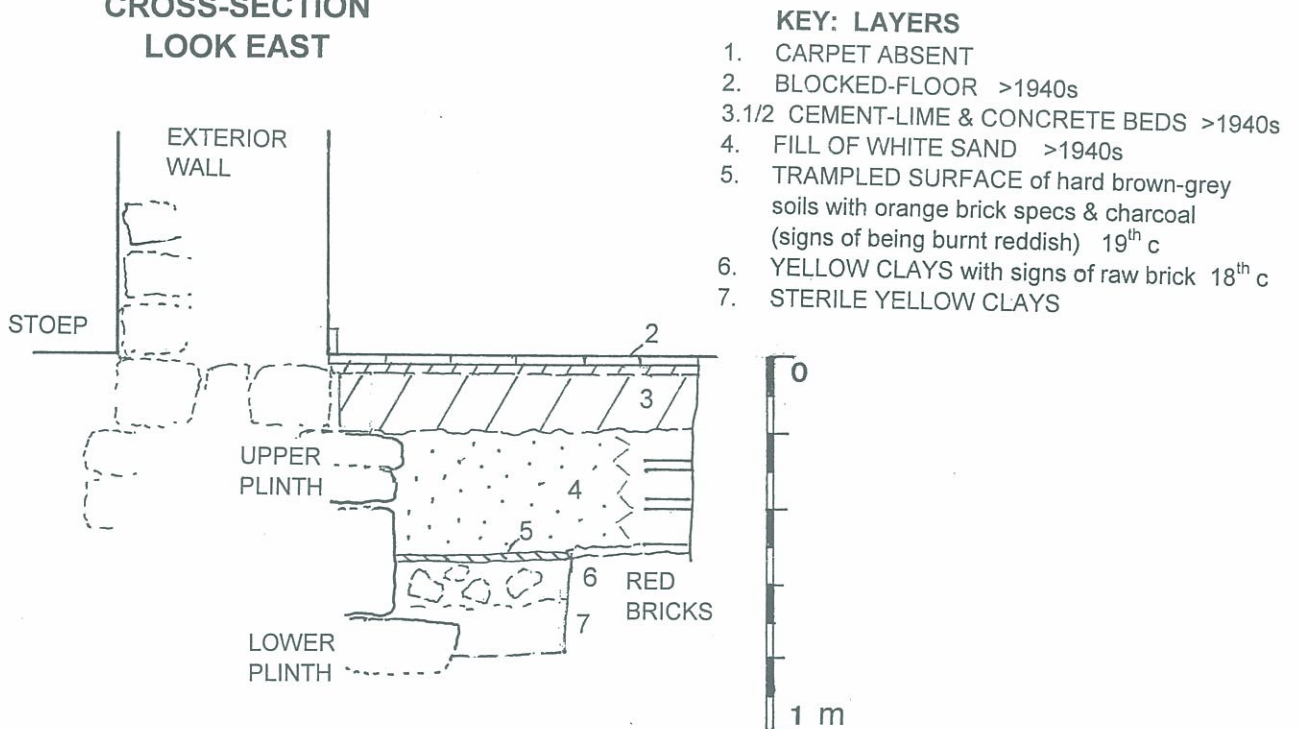


FIG.5.2 Elevation of the excavation C1/2, till the sterile clays at the base.

6.2 ROOM C (VOORHUIS)

6.2.1 Floor excavation C 1/2

This section was also filled during post-1940s with a concrete bed (for the *blokkiesvloer*) and filled for a depth of 30 cm of fine white sand (**FIG.5.1**). Below wall C2, next to the stone foundation, a layer of modern, hard-fired red brick in cement mortar, prevented any water seepage to the side. Any gravitational water drainage would have gone straight north below the stoep and unto the yard.

At the façade wall C1, there is again a wide plinth of granite stone, indicating a platform for joists and a boarded floor. Surface 5 shows signs of having been burnt reddish and hard, with charcoal specs and other building rubble present. It may represent the trampled surface when the dwelling was built. Below it (layer 6) still contained some fill of raw brick and then sterile clays followed (**FIG.5.2**).

Voorhuis C and Rooms DE are a 100 mm lower than the rest of the dwelling. I believe this has all to do with the old interior door C4/D2, which dates to about 1740s or later. Note the low upper lintel (you easily bump your head) and the lower board of the door sawed in half, so as to fit the already raised floors of early 1900.



7. In Room C, corner section C1/2, is taken fully to the lowest level by assistant Jackson (look N).



8. View towards Wall C1, with the volume of white sand removed unto layer 5. Note the upper stone plinth for floor boards (look N) (scales 1m, 50 cm).



9. Same view, exposing the lower plinth of stones as a rough base for the upper granite foundation (look N) (scale 50 cm).

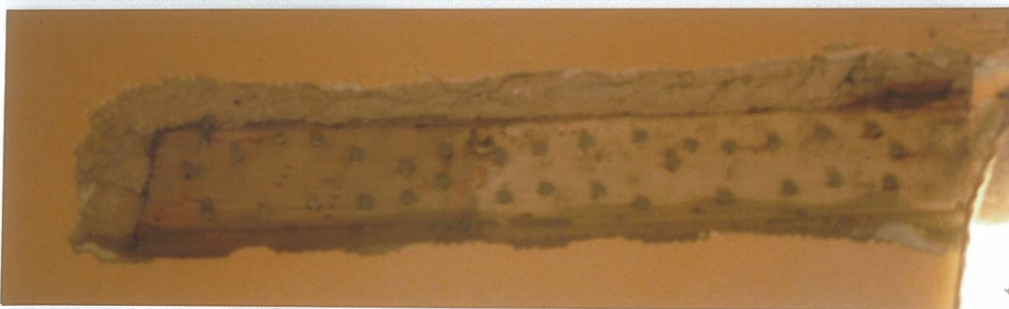
6.2.2 Wall investigations

.1 Wall C1: Front Door

The present front door (>1940?) is rather incongruous. The architect desired particularly to strip plaster along the c.1810 lintel, to determine width of any previous door opening. Fortunately the paint lines versus bare wood were clearly visible. As the oblique width of the painted reveal measures c.135cm, the width of the double doors (c.1810-20) would be slightly less.



10. View in Room C, showing the front entrance (C1). Note the exposed lintel above the bright fanlight (look N).



11. The left portion of the lintel shows paint lines. Nails were hammered in afterwards (1900s) to allow plaster to adhere (look N).

12. The right portion of painted lintel versus unpainted (look N).



.2 Wall C4: Door

When some plaster was stripped at the lintel level, the brickwork proved to be original with no obvious signs of alteration. At present the lower board was unceremoniously halved to accommodate it above the raised floor (post-1900). As the *Voorhuis* C is already prone to water infiltration from the stoep (same level), it would be functional to raise the floors of Rooms C and D/E to those of the rest of the house. At the back of Room DE3 the veranda stoep is already 10 cm higher!

When the floors of Rooms CDE are raised, then the old Door C4 should be raised a mere 20 cm, which would allow its lower board to be "restored" to its correct dimensions. Architectural mouldings at the reveals can also be restored.



13. View towards wall C4 with the oldest door (mid-18th) with its surrounding architrave. Note its low position and the c.1880 beams overhead (scale 2m) (look W).



14. Close-up of the brickwork above the early lintel, indicating original *in situ* fabric (scale 50 cm) (look W).
15. Close-up of the bottom board of the 18th c door, which barely allows the strap-hinge (other side) to be fastened (look W).



.3 Wall C2: Blocked-up Door

Note that the *Voorhuis* side doors C2 and C4 are situated central unto the demolished wall/screen in *Agterhuis* F (see FIG.2). Minimum plaster was stripped to show the distinction between the *in situ* orange brick, and the filled-in-door, already done during the 19th century. It is recommended that the old door C4 be reproduced and fitted at door C2 to complete the old *Voorhuis* interior.



16. View in Room C2/3, where the earlier, blocked-up door is on the left (scales 2m, 1m, 50 cm) (look E).



17. Close-up of the original brick versus fill-in. Its lines are traced along the filled-in brickwork (look E).

**ROOM D
CORNER SECTION D 1/2
GROUND PLAN**

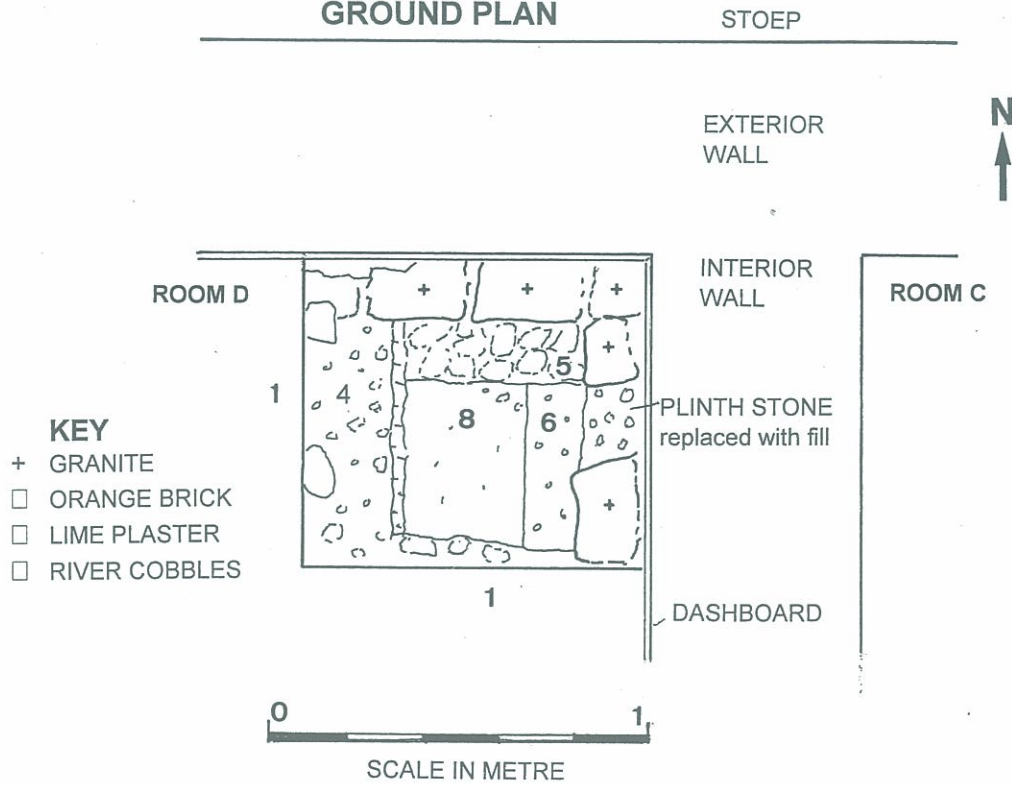


FIG.6.1 Ground plan of corner section D1/2 in Room D. Note the similar wide stone plinths as in Room B, for boarded floors. There was no gravel or sand fill of the post-1940s.

**ROOM D
CORNER SECTION D 1/2
CROSS-SECTION
LOOK EAST**

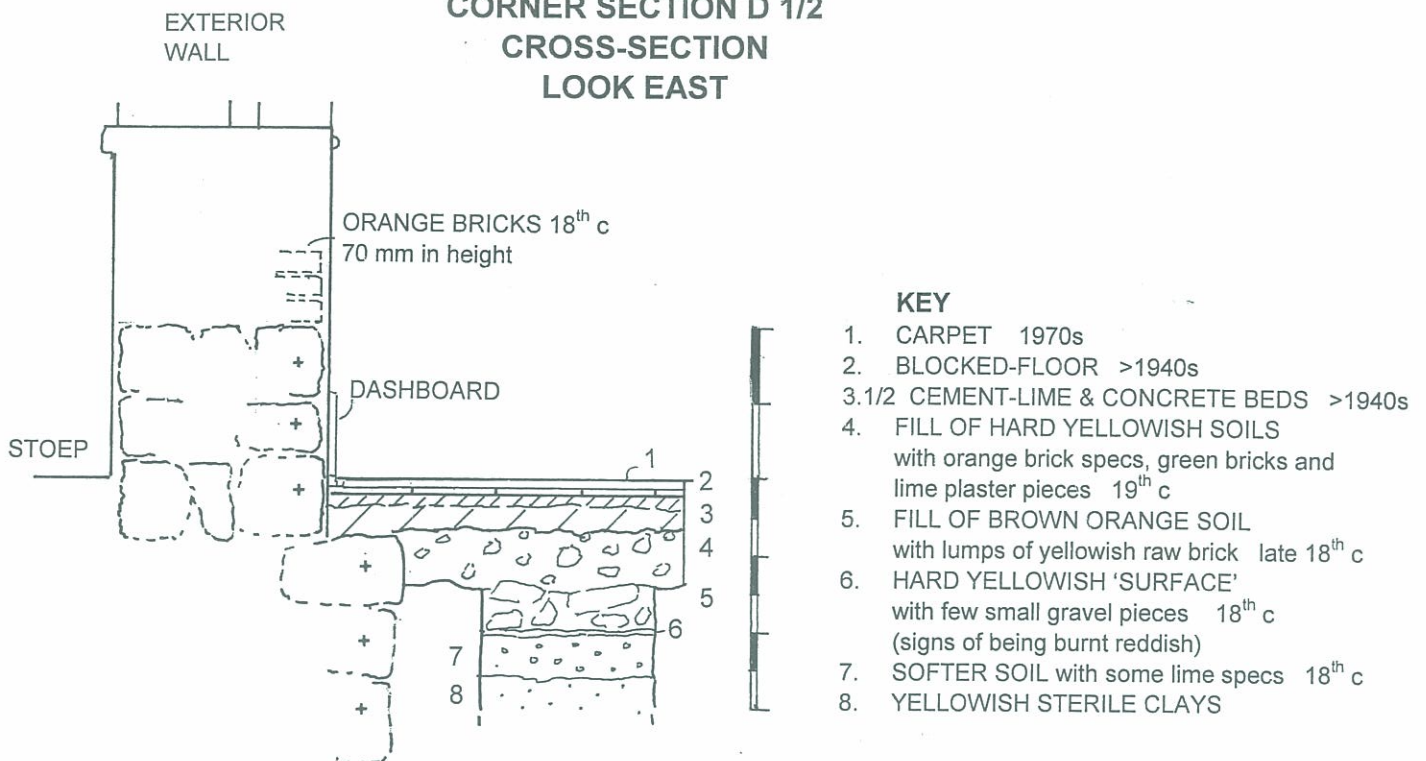


FIG.6.2 Elevation of the excavation D1/2, containing more earlier fill of raw brick and lime plaster than the other sections.

6.3 ROOMS DE: SECTION D 1/2

In Rooms DE only one floor corner section D 1/2 was dug, which appeared to contain more fill than the other two front rooms (**FIG.6.1**). Note layer 4 with brick rubble (19th c), layer 5 with yellow raw bricks, lens 6 with charcoal and layer 7 with initial fine rubble, both layers of the 18th century (**FIG.6.2**). Note that Section D1/2 and Section B1/4 have similar wide plinth platforms for joists supporting boarded floors. The exterior façade wall is depicted in elevation till window-sill height. The depth of all the foundations was not determined due to a lack of space for digging, which would have destroyed all layers.



18, 19. View of the corner section D1/2, where an early, filled-in layer (4) lies at the top. Lower down, layer 5 with its brown raw brick pieces, is evident. Note again the two wide stone plinths for joists of boarded floors (scales 1m, 50 cm) (look N).



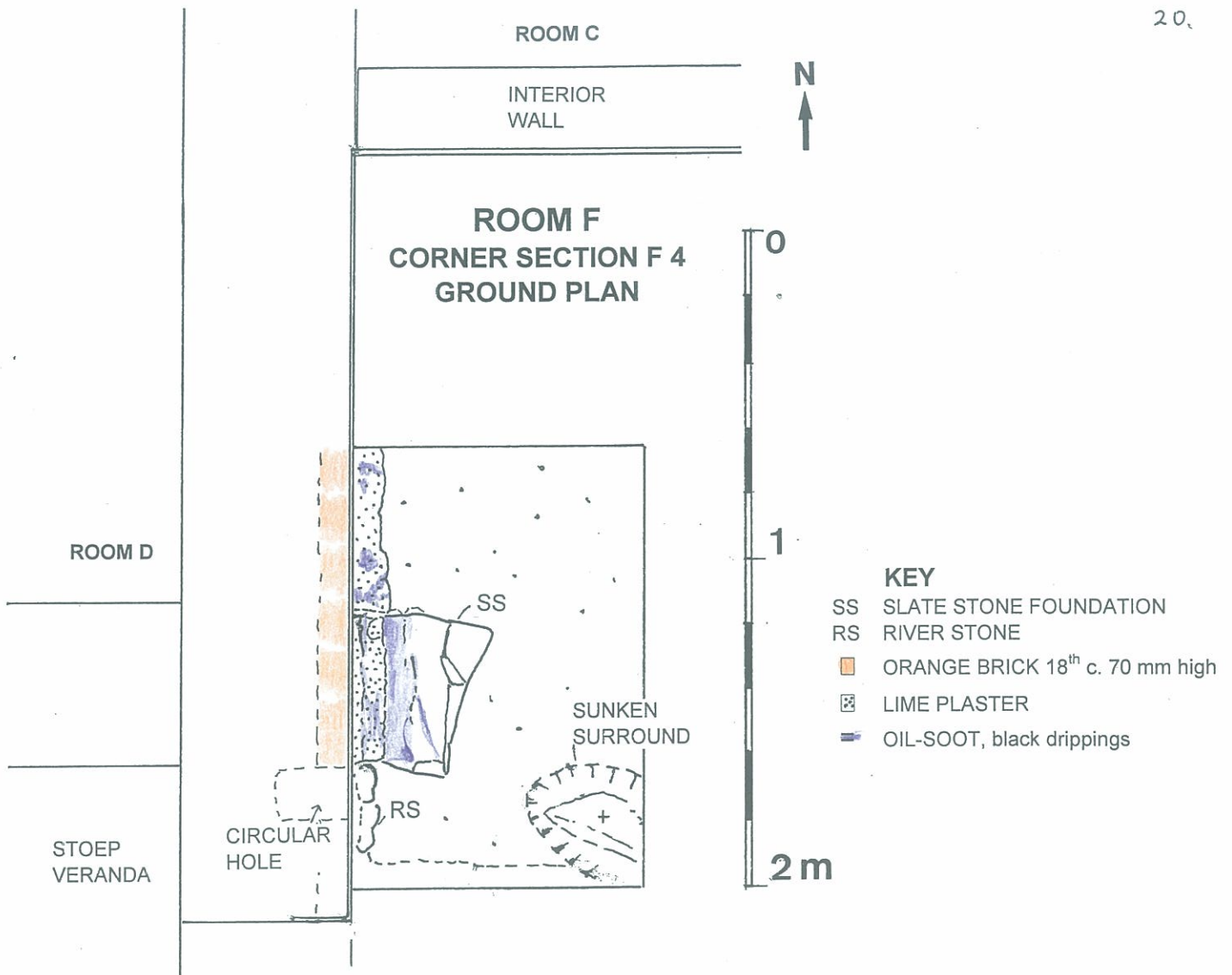


FIG.7.1 Ground plan of section F4 in Room F (*Agterhuis*). The slate slab (no further foundations) as a base for a full width screen. Note the oil-soot drippings.

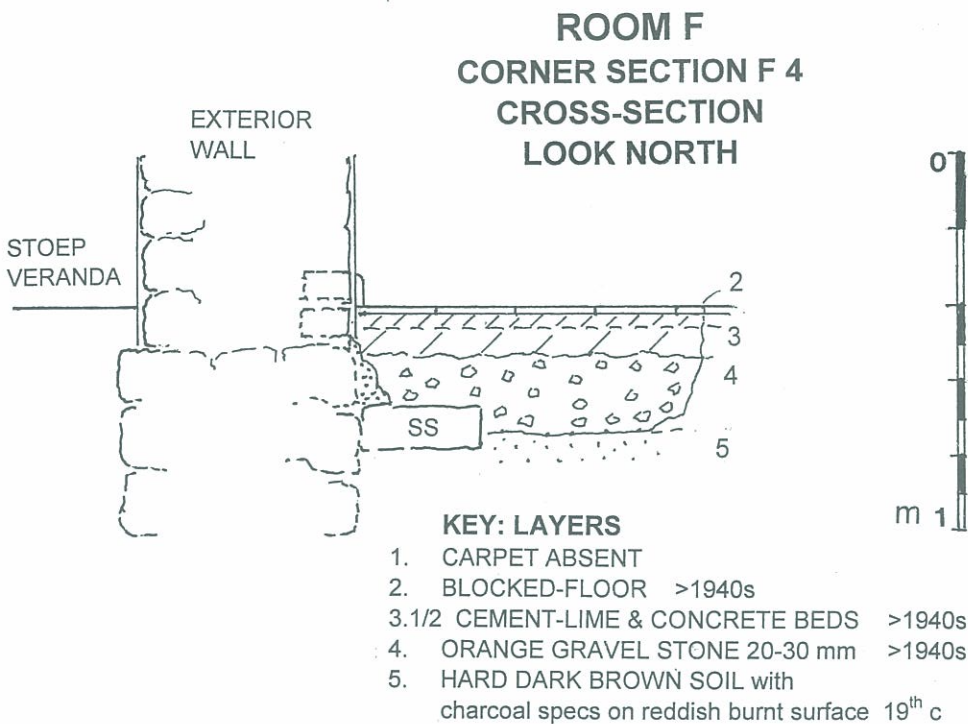


FIG.7.2 Elevation of the excavation F4, filled with gravel (>1940s) till 30cm below floor level.

6.4 ROOM F (AGTERHUIS)

Note that all the following rooms of the T-wing are about 10cm higher than that of the *Voorhuis* and Room DE.

6.4.1 Floor excavation F4

This section was dug specifically to locate any features, possibly a demolished wall, in line with the rear wall (FIG.7.1). It was somewhat of a surprise to find only a thick, dark slate slab of about 50cm wide, with no other supporting stones below it. Against Wall F4 was a raised lime plaster section of c.10 cm wide, which indicates a *pilaster* outline (FIG.7.2).

An isolated piece of granite protruded from the surface, but enlarging its area showed no other stones (see FIG.7.1). A thin iron peg was hammered into the soil along the foundation "line", but no sub-surface stones were encountered. The height of layer 5 being a mere 30 mm lower than the slate stone, indicates either the placement of tiles in Room F, or a very shallow boarded floor.



20. In Room F, wall 4, a 50cm wide stone footing was exposed. Volumes of gravel cascade from the sides. Note the granite stone (out of context) on the left (scale 50 cm) (look W).

Black creosote oil drippings were present over the slate and the lime plaster (see drawing & photos). The slate bedstone, with no foundations, the black oil drippings and pilaster columns are indicative of a timber screen, with folding doors, probably stretching to the ceiling timbers. The present yellowwood beams have a beading of early 1800, which probably replaced the earlier $\frac{1}{4}$ mould beams. A fire of early 1800 probably razed the floorboards, screen and beams and roof structure. On the surface of layer 5 charcoal specs were also encountered on the burnt surface.

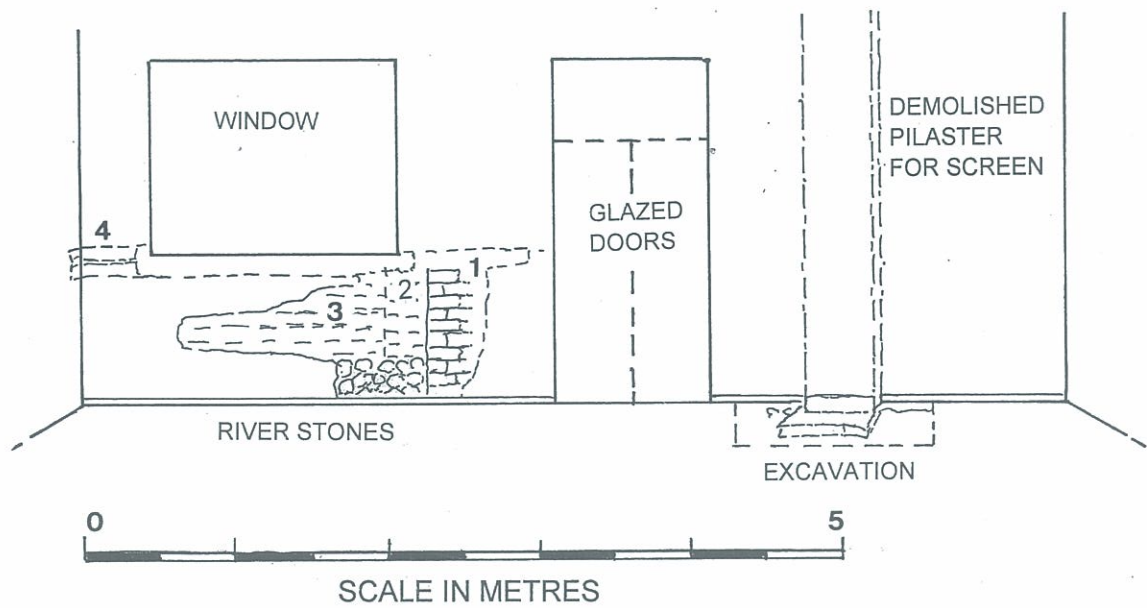


21. A view of excavation F4 with the blocked-floor on the cement bed in the surround (scale 1m, 50 cm) (look W).



22. A close-up of the slate slab with the trickled creosote at the position of the timber screen. Note the rectangular portion of whitish lime plaster of the "pilaster". On the upper left is a circular hole (scale 50 cm) (look W).

ROOM F (AGTERHUIS)

WALL F4
LOOK WEST

KEY

- | | | |
|----|---|--------------|
| 1. | LIGHT ORANGE BRICK in grey mortar | height 70 mm |
| 2. | ORANGE BRICK in grey mortar | height 80 mm |
| 3. | LOW-FIRED & RAW BRICK
with charcoal specs inside brick | height 80 mm |
| 4. | ORANGE BRICK | height 70 mm |

FIG.8 Elevation drawing of Wall F4 of Room F (*Agterhuis*). Excavation on right with reconstruction of pilaster for screen. Traces of earlier openings visible on the left on the exposed brickwork.



23. View in Room F (*Agterhuis*) towards wall F4, with its window and glazed doors. Compare with FIG.8 above (look W) (scale 1m).

6.4.2 Wall Investigations F4

As much of the plaster was loose below modern window F4, a large portion broke away, facilitating searching for earlier openings (FIG.8).

Next follows **4 different portions of brickwork.**

1. Adjacent the glazed door, a large solid section (80cm wide) in brickwork from floor level, was built in the c.1770 orange brickwork in grey mortars. A definite vertical joint in brick (alternating short versus long bricks) indicated an opening.
2. A 36cm wide portion of "fill" of 80 mm high, light orange bricks in grey mortar, and above a 30 cm high quartzite stone footing followed. I interpreted the section as of 1800.
3. Then another section of coarse raw brick, or low-fired brick in grey colours, followed above the river stone footing. A few (5%) of the bricks were orange in colour (well-fired) and all of them about 80 mm high. What am I to make of this? Either it can be interpreted as brick fill of the early 19th c or it is possibly of the mid-late 18th century?! (uncertain).
4. Finally a 34 cm portion of c.1770 orange brick followed again in the corner.

The large horizontal modern window has fully destroyed all evidence towards accurate interpretation. The remnant wall indicates signs of earlier openings, possibly casement or sashes, which have been enclosed. We suspect this would be the case with most of the walls, and particularly the T-wing's western walls (F G I L 4), all opening out unto the western courtyard. The two extant glazed panel doors (F2 & F4), are placed symmetrically opposite each other in a late Victorian style. A similar period sash-window in place of the large post 1950 window would be acceptable.



24. Close-up of wall F4 below the window-sill, of the different portions of brickwork (1 to 4) (scale 1m).



25. Another detailed view of the contrasting bricks and vertical lines (F4), indicating previous openings (look W) (scale 1m).

26. Similar view, close-up of the brickwork containing the original clay embedded with charcoal. (A whole section of *in situ* clays at the back of the Wine-Cellar, confirms the local production of bricks (scale 30 cm).





27, 28. View in Room G (*Agterkamer*) of wall G4 and the plaster stripped. Note in the close-up the older 18th c brick (1) and the filled-in brick and yellowish mortar on the left (2) (look W) (scales 1m, 50 cm).



6.5 ROOM G: WALL INVESTIGATION G4

In order to determine if there were also any early openings in exterior wall G4, some plaster was stripped, where large cement portions pulled loose from the wall exposing a variety of bricks and brick lines.

A stone footing of river stones (quartzite) in grey mortar was built-up to a height of 40 cm above the blocked-floor. Orange brickwork (1810) with a definite vertical joint was obvious. To the left (south) was a large amount of river stone fill in yellow mortars, overlaid with a plastering of yellow clays till below sill height.

Apparently a larger opening has been filled in during the 19th century. The large post-1950s timber window (surrounded in machine brick) broke through the rest of the old opening, which size is therefore undetermined. It appears a door / a sash was installed previously here. Either of such instalments would be appropriate, executed in the late 19th c. style.

Note the grate G1 was opened up to reveal a domed, niche opening, typical of the late Victorian period. I recommend a cast-iron grate to be installed again.



29. View of Room G4/1 of the plaster stripped, the blocked-up cupboard door and the opened-up grate of the late Victorian/Edwardian period (look NW) (scales 1m, 50 cm).

**ROOM I (KITCHEN)
CORNER SECTION I 1/4
GROUND PLAN**

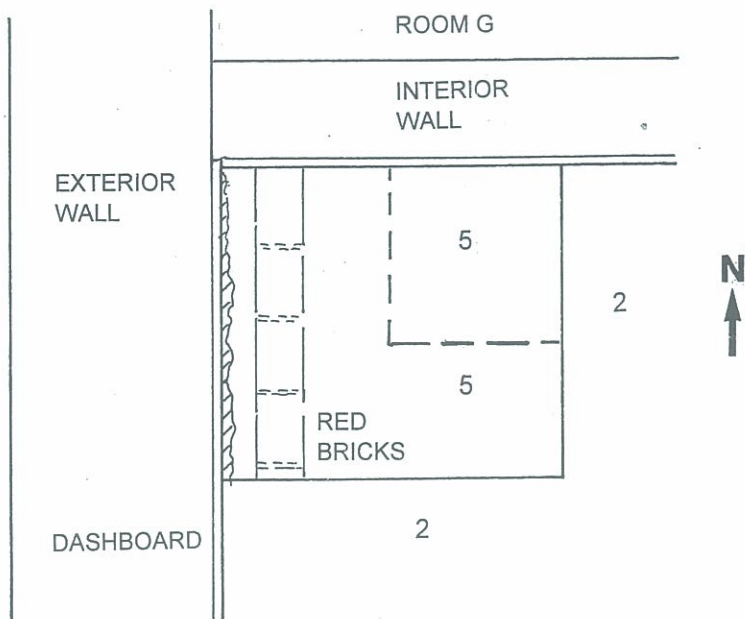
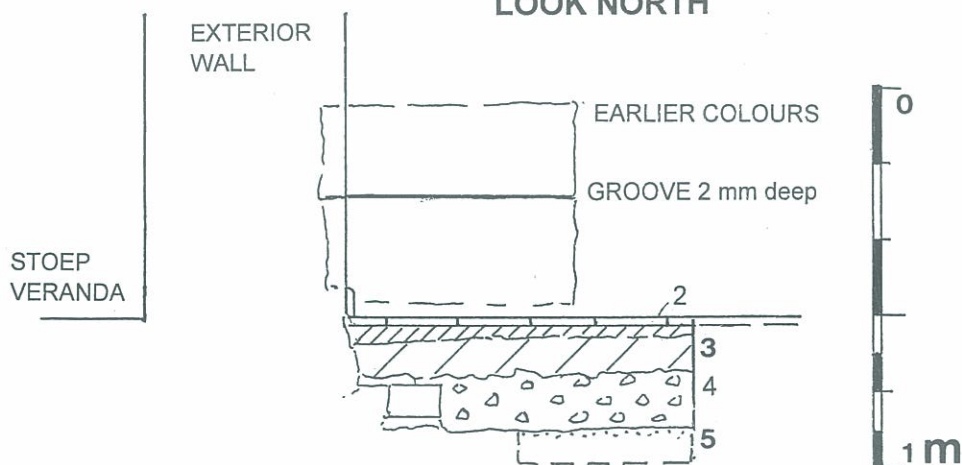


FIG.9.1 Ground plan of the excavation I1/4 in old Kitchen I. Ribbed red brick of >1940s to waterproof the left exterior wall.

**ROOM I
CORNER SECTION I 1/4
CROSS-SECTION
LOOK NORTH**



KEY

1. CARPET ABSENT
2. BLOCKED-FLOOR >1940s
- 3.1/2 CEMENT-LIME & CONCRETE BEDS >1940s
4. ORANGE GRAVEL STONE 20-30 mm >1940s
5. PICK-HARD BLACK LOAM 18th c
with charcoal & lime plaster specs
on trampled surface

FIG.9.2 Elevation of the excavation I1/4. Gravel rested immediately on hard black clay. Some earlier (1900?) dado bands are visible.

6.6 ROOM I (OLD KITCHEN)

6.6.1 Floor Excavation I 1/4

This excavation revealed completely different information than the other rooms (**FIG.9.1**). Below the blocked-floor the usual c.1940 concrete beds were encountered and also the small sized gravel fill of the same period. It ended upon a layer of pick-hard black loam that is imported and not natural to the Bethlehem site. A small section was deepened by means of a pick, but extremely difficult to break up (**FIG.9.2**).

I interpret this black loam layer, impervious to water penetration, as an 18th century technique to waterproof a floor layer of Cape tiles (28 cm²). Tiles are the general floor covering for this period. It appears that during 1940s the loam floor was also lowered for the gravel and concrete insertion. Water penetration from the exterior stoep courtyard probably played a major role with water infiltration. Note the red-ribbed, brick line in cement parallel to wall I4 to obstruct damp. No wonder many of the walls were replastered in cement.



30. Within the Old Kitchen I, a corner section I4/1 only exposed a black matrix of hard clay-loam, its upper portion removed and filled-in with gravel (scales 1m, 50 cm) (look N).



31. Corner section I 4/1 with its deep section as excavated by Jackson. Note the 1940 red bricks on sides I4 and I1 (scales 1m, 50cm) (look N).



32. Next to the hearth (I3), another section also exposed the 1940 bricks (1) and a large stone (2), probably part of an earlier foundation (scale 1m) (look S).

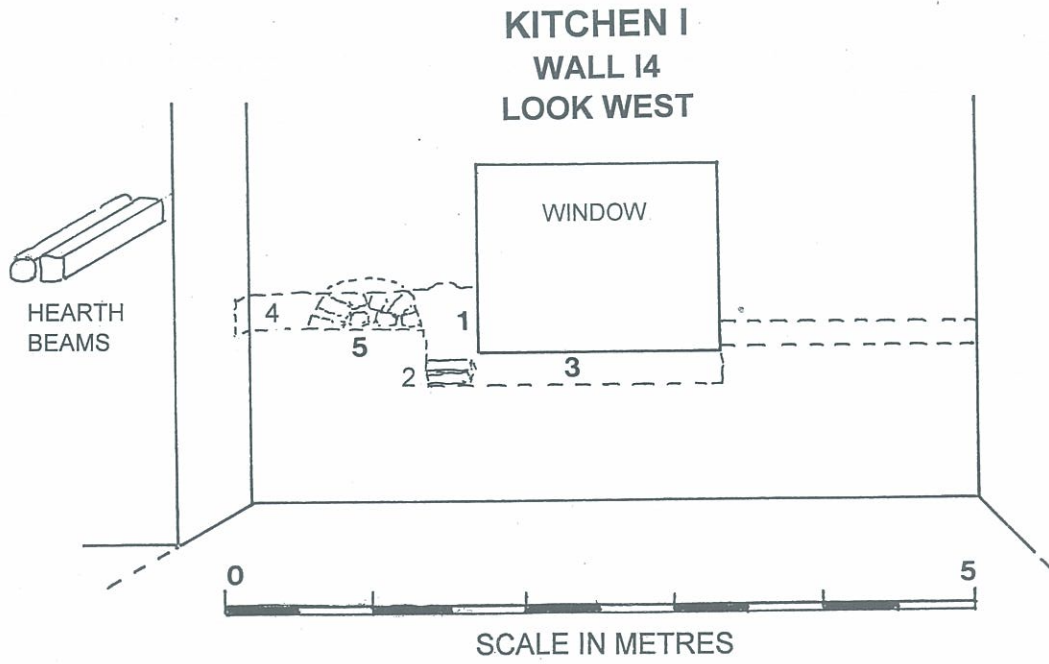
6.6.2 Wall Investigation I 1

Above the corner Section I 1/4 a portion of the earlier paint layers (1900 or earlier) were encountered. The dark brown layers are more typical of the 19th century and later. Note the grooved line (2 mm deep) at a height of 20 cm. In the *Voorhuis C*, Wall 2, something similar is to be seen. The grooved line probably represents a technique to facilitate structuring paint layers, or indicative of an earlier high skirting or dashboard.



33, 34. A close-up of the corner section I1, where the two lower portions of the painted dado is separated by a horizontal groove (scale 1m) (look N).





KEY

1. BLACK SOOT ON ORANGE BRICK & GREY MORTAR
2. DITTO, BRICK SIZE 224 x 120 x 60 mm
3. ORANGE BRICK IN LIGHT YELLOW MORTARS 66 mm h (>1800)
4. LOW-FIRED BRICK IN GREY MORTAR, SIZE 230 x 120 x 75 mm
5. FILL BRICK IN ARCHED REMNANT OF OVEN OPENING

FIG.10 Elevation of Wall I4 of the old Kitchen I. Note the filled-in arch (oven) and black soot of earlier hearth (mid 18th?).



35. View within Kitchen I of Wall 4 where plaster was stripped in bands. The excavation is on the right (look W). The next photo (36) is of the left-hand corner.

6.6.3 Wall Investigation I 4

A continuous 20 cm band of plaster stripped horizontally across the whole of Wall I4, revealed some interesting data (**FIG.10**). The hard-fired orange brickwork (66 mm in height = mid-18th century) was laid in a light yellow mortar, and not the usual grey mortar of the 18th century. This would indicate the reuse of older brickwork in reconstruction.

The portion between the modern window and the hearth beam wall brought another surprise. A thin black soot layer adhered to mortar and to orange bricks (60 mm height), laid in dark grey clay mortars. The architect first noticed that a portion of an arched, fill-in brickwork was also extant. All indications are that an earlier hearth (1760-70) was once situated against wall I4, with an oven opening. Finally, coarse brownish brickwork (230 x 120 x 75 mm), rather low-fired and laid in grey mortars, completed the stretch to the corner. They may date to the late 18th century, but is rather enigmatic.

The original exterior door of the kitchen was situated in Wall I2 (east), where there is an 18th century door and possibly another blocked-up door or window (see **FIG.4**). In late 2012 signs of the kitchen refuse midden were located behind and east of the "Modern Kitchen L". It is therefore uncertain if there was any original door in Wall I4, but certainly a window (casements or sash-window). As the Kitchen contains much early material (primarily early 1800), the historicity of this room need to be respected.



36. Corner section, where the hearth wall I3 shows modern brickwork on the left (look S).



39. Wide-angled view of Kitchen, wall I3 of the hearth, the excavation (scale 1m) and the vertical band on the right (scale 2m) (look S).



40. The band at the back shows homogeneous, well-fired orange brick with a stone plinth 35 cm high (scale 2m) (look S).



37. This southern section of Wall I4, show where the arched over opening has been filled in (1), as well as the black soot over bricks and mortar (2) (photo 38) (scales 2m, 1m) (look SW).

37

38



1
↑
START OF
ARCH

2

6.6.4 Hearth Investigation I 3

The Contractor neatly opened up a small section in the hearth floor, which we cleaned out. Once again it contained gravels but also >1940 brickwork which prevented any further digging, a large granite stone, probably part of a demolished foundation line (see Photo).

The height of the original flat hearth (destroyed 1940s) can be determined from the height of the oven opening (Room K4) and so also its width. The present intrusion of "kitchen chimney" with c.1940 oven would have to be demolished, but the metal grate could be reused somewhere else in the complex.



41. Another view of the c.1940 grate, hood and sloping chimney built-in position of the earlier hearth. The 1m scale stands about where the low original hearth would begin and raised about 45 cm (look SE).



42. A view of the poplar beam heavily charred during a house-fire of the 19th c (look W).

Two adjacent hearth beams were exposed. The front one, possibly reused and mended with iron hardware, also showed signs of being carbonized towards wall J4 (exterior, west). A second circular, blackened beam (poplar) was inserted to strengthen the upper wall of the hearth chimney. When a portion of the hearth ceiling was removed, the chimney stack looked fully intact.



44. A view up the chimney, blackened by soot since 1800s. The structure on the right and the iron bars, date from the 1940s.

43. The other side of the carbonized poplar, circular beam where it resides next to the square hearth beam, mended with an iron strap to stabilize a crack in the wood (look E).



6.7 ROOM L (MODERN KITCHEN)

According to my structural report (Vos 2011:62) Room L represents a flat-roofed addition of post-1860, built in clay brick and mortars. None of its doors or windows survived, all replaced with post-1960 doors and windows. A thin bond of plaster was removed all along the walls by cutting through the tiles. Not much new was revealed.

Due to its many alterations, it is recommended that the (mid to) late Victorian period furniture (glazed doors and sash-windows), in the style of the *Voorhuis* façade be incorporated to harmonizing with the rest of the dwelling. The c.1940 tiled floor is still adequate and suitable. Something very similar would have been in the old Kitchen I.



45.1/2 The walls of the modernized Kitchen L were fully tiled. Though a narrow band was cut along the walls, little new information was gained (look W & S).

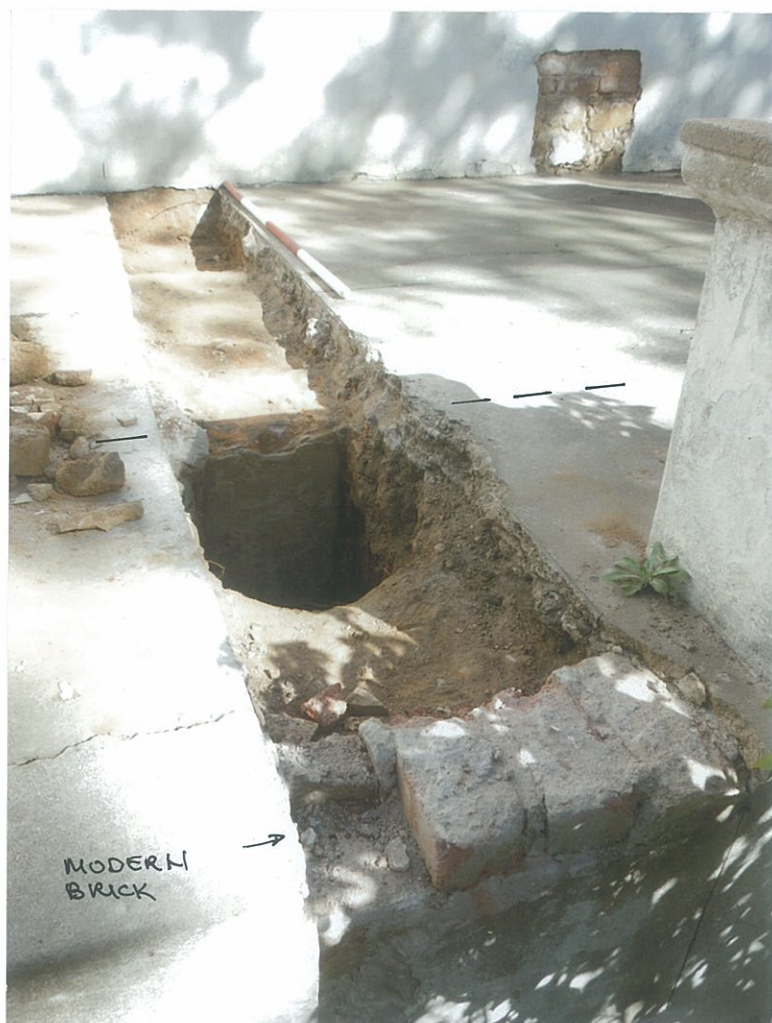


6.8 ROOM M

Room M is part of a flat-roofed addition of 1880s to 1900. A modern ceiling hid the old tongue-and-groove boards ceiling of the earlier period. It could be repaired or replaced with something similar.



46, 47. In Room M, the modern ceiling was fully removed, exposing the c.1890-1910 tongue-and-groove boards of the flat-roofed additions (look E).



49. The contractor neatly cut a furrow along the broad stoep (see FIG.3), just to the right (west) of the front gable. The earlier 2.5m wide stoep with its plaster still adhering was revealed. Note the modern nose bricks (>1920s) of the broad stoep (look S).



50. Close-up of the well-fired orange bricks (50 cm wide) to stabilize the front section. Tiles probably covered the 1770s stoep (scale 50cm) (look N).

6.9 FRONT STOEP

All of the existing broad front stoep and staircase are additions of the early 1900s, as is the existing front gable. All built in a somewhat Cape-Dutch revival style. I believe the stoep is an important element that actually enhances the Homestead and gives it a more solid appearance.

A band of cement plaster was stripped over the full length of the stoep by the Contractor. Some shallow fill was removed and then the width of the earlier 18th century stoep was located at 2.5 m. Its front was still plastered with lime and its nose bricks were composed of medium-fired, orange bricks in clay mortar, but all much eroded.

At the extended stoep's front of 1920s, the hard-fired nose bricks were encountered (Unfortunately my photos in the contrasting sun/shadows do not do justice to the stoep discovery).

My recommendation is that the c.1920 stoep be retained, but tiled up to the 1920 nose brick, which should be reinstated. The correct stoep incline would also drain water away from the house façade, which is presently not the case.



48. View of the Homestead, where the broad stoep and entrance staircase lend some status to the plain facade (look S).



51. The old Kitchen I reflects most of the late 18th/early 19th century features of doors, ceilings, beams and hearth. The floor would certainly have been tiled with at least a sash-window in wall I4. The excavation is in progress (look N).



52. View of the western facades of the rear of the building, all facing the garden. All the visible windows and doors are late. Glazed doors and sashes would be more functional & harmonize with the earlier structure (look E).



53. In the Voorhuis C, the glazed doors leading to the *Agterhuis* can be used as a stylistic marker (scale 2m) (look S).

7. DISCUSSION AND RECOMMENDATIONS

7.1 FLOORS (INTERIOR)

During the late 18th century the floors of the Homestead were at a lower level. This is confirmed by the broad stone plinths in Rooms AB, C and DE of the Front. One can be sure that floorboards were in use and yellowwood would be the general rule.

Originally there was a timber screen dividing the *Voorhuis* and *Agterhuis*. With one, if not two, disastrous fires, the earliest windows, ceilings and floors were gutted or replaced due to neglect. Care should be taken of any exterior timberwork as veld fires could easily sweep from the mountain down unto the buildings. This may have been the case with an earlier fire, as ALL the farm buildings were involved in the conflagration.

The floor of the *Agterhuis* F may actually have been tiled due to the low fill-in next to the screen's slate footing. At Bletterman House (1790) (H-plan), Stellenbosch, e.g. both the *Voorhuis* and *Agterhuis* were tiled. Yet numerous houses of the late 18th c. also had an *Agterhuis* that was boarded.

Note that the floors in Room C and DE should be raised to functionally harmonize with the remainder of the dwelling. The Old Kitchen I should be reinstated with "Cape" tiles, generally of the size 28-30 cm². With a minimum of alteration the old hearth can be reconstructed, which could function as an open fire hearth cum-grate.

7.2 DOOR / WINDOW OPENINGS

One of the most important elements of the house is certainly the *Voorhuis* C. Its front door, should be reinstated and the wide dimension (c.130 cm) would certainly have required two early 1800 panelled doors. As Door C4 represents the oldest element in the house, and carries a weighty heritage factor, I recommend its duplication on the opposing side (C2), which gives entry to Room B. This would restore the earlier house layout.

In our discussions, the quandary was how to handle the windows / doors facing the western courtyard, so that the outdoor social space can be accessed. Most of the alterations to the house date after 1800, with "Georgian" beams and doors, followed by the mid-late Victorian windows (sashes) and glazed double doors of particularly Room F (*Agterhuis*).

As a major stylistic element, I recommend glazed double (or single) doors (see glazed Door B3), to be installed in Rooms G and L, but have reservations about the old Kitchen. Here a single sash-window (post-1800) may allow enough fresh air and light. Note the evidence for the earliest hearth and oven against wall I4 should not be compromised with destruction. In Room DE, both the Window and Door (DE3) are later intrusions. Glazed doors and sashes would be more functional and stylistically correct. All the western facing walls (FGL & DE) show earlier alterations in the wall fabrics, as has been shown during the investigations.

REFERENCES

VOS, H.N.

- 2009 Bethlehem Farm 153, Dwars River Valley, Drakenstein. Historical survey of its owners & the early French congregation. Unpublished report.
ARCape Consultancy, PO Box 379, Stellenbosch.
- 2011 Old Bethlehem Farm 153, Dwars River Valley, Drakenstein. Structural and archaeological investigations & assessment of the farmyard buildings since the 18th century. Report prepared for *Reside Properties*, Johannesburg.
ARCape Consultancy, PO Box 379, Stellenbosch.
- 2013 (January) Old Bethlehem Farm 153, Dwars River Valley, Drakenstein. Structural & rescue investigations during Wine-cellar renovations 2012. Report prepared for *Reside Properties*, Johannesburg.
ARCape Consultancy, PO Box 379, Stellenbosch.

**ADD.1 HWC ISSUE OF A ROD (10.12.2010), FOR SELECT REMOVAL
OF PLASTER FROM BETHLEHEM BUILDINGS.**

Enquiries: Shaun Dyers
E-mail: shdyers@pgwc.gov.za
Tel: (021) 483 9689
Fax: (021) 483 9842
Date: 10 December 2010



RECORD OF DECISION

Heritage Western Cape hereby notifies:

Dennis Moss Partnership
17 Market Street
Stellenbosch
7600

Of its Comments and Recommendations in terms of

**Section 34 of the National Heritage Resources Act, 1999 (Act 25 of 1999)
and Regulation 3(3)(a) of PN 298 (29 August 2003)**

For: Removal of Plaster.

At: Farm 153/6, Old Bethlehem Farm, The Manor House and Outbuildings, Stellenbosch.

DECISIONS: Heritage Western Cape approves the application for removal of small sections of plaster, for investigative purposes with regards to previous openings and fabric analysis.

NOTE:

- This decision is subject to an appeal period of 14 working days.
- The applicant is required to inform any party who has expressed a bone fide interest in any heritage-related aspect of this record of decision. The appeal period shall be taken from the date of being informed. It should be noted that for an appeal to be deemed valid it must refer to the decision, it must be submitted by the due date and it must set out the grounds of the appeal. Appeals must be addressed to the official named above and it is the responsibility of the appellant to confirm that the appeal has been received within the appeal period.
- Work may not be initiated during this 14 day appeal period.
- If any archaeological material or evidence of burials is discovered during earth-moving activities all works must be stopped and Heritage Western Cape must be notified immediately.
- This approval does not exonerate the applicant from obtaining any necessary approval from any other applicable statutory authority.

Please feel free to contact this office for any other information.

Yours faithfully


Shaun Dyers

For Accounting Officer: Heritage Western Cape

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ADD.2 HWC ARCHAEOLOGICAL PERMIT FOR BETHLEHEM FARM, 25.3.2011.



25 March 2011

**HWC APPLICATION No. 2011/03/APM 005
HM/CAPE WINELANDS/DRAKENSTEIN/DWARS RIVER VALLEY/OLD BETHLEHEM
FARM/STELLENBOSCH**

PERMIT NO: 2011/03/005

Issued under Sections 48(2) of the National Heritage Resources Act, Act No. 25 of 1999 and the Western Cape Provincial Gazette 6061, Notice 298 of 2003. Permission is hereby given:

To: Mr H. Vos
of: PO Box 379, Stellenbosch, 7599
for: Excavation
of: Archaeological Material
from: Old Bethlehem Farm
at: Farm 153, Dwars River Valley, Groot Drakenstein

The following conditions apply:

1. If the permit holder is not to be present on the site at all times then HWC must be provided with the names and qualifications of the authorized representatives.
2. Adequate recording methods as specified in the Regulations and Guidelines pertaining to the National Heritage Resources Act must be used.
3. A final report MUST be submitted to HWC on or before **25 March 2014**. An extension to this permit can be granted on submission of a progress report (if work was initiated) and a letter stating reasons for the extension. HWC reserves the right to withhold further permits if progress is not deemed satisfactory.
4. All material collected and excavated, as well as field notes and records, will be curated by the Iziko: South African Museum.
5. Reprints of all published papers or copies of theses or reports resulting from this work must be lodged with HWC.
6. If a published report has not appeared within three years of the lapsing of this permit, the report in terms of the permit will be made available to researchers on request.
7. It is the responsibility of the permit holder to obtain permission from the landowner for each visit, and conditions of access imposed the landowner must be observed.
8. HWC shall not be liable for any losses, damages or injuries to persons or properties as a result of any activities in connection with this permit.
9. HWC reserves the right to cancel this permit by notice to the permit holder.

This permit is valid until **25 March 2014**.

Jenna Lavin
Heritage Officer (Archaeology)
For: Accounting Authority: Heritage Resources Management Services.
Pp Heritage Western Cape

www.capegateway.gov.za/culture_sport

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