GEORGE STREET,
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REPORT ON THE
ARCHAEOLOGICAL
EXCAVATION OF
BUILDINGS ASSOCIATED
WITH THE EARLY
TOWNSHIP, 1790 TO C.1820S.

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Leighton Contractors, Pty. Ltd.

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1.1. INTRODUCTION

The archaeological excavation of buildings associated with the early township of Parramatta was undertaken in July and August 1985 in advance of development. The site owned by the Commonwealth Government is bounded by George, Marsden, Macquarie, and O'Connell Streets, Parramatta, and includes all but the eastern part of the city block fronting onto Marsden Street (Figure 1.1).

Part of the site is leased to Leighton Contractors Pty. Ltd. for the construction of Commonwealth Government offices, the remaining north-west corner is to be developed by the Department of Housing and Construction as a Law Courts building. Figure 2.1 indicates the approximate boundary between the two developments.

Leighton Contractors first approached Edward Higginbotham in February 1985 and commissioned him to undertake a preliminary historical and archaeological investigation of the site. The report was completed in March 1985, and recommended further detailed historical research into the early township, the archaeological excavation of buildings within the town dating between 1790 and c.1820s, and also a watching brief during bulk excavation1.

After the presentation of this report the Department of Housing and Construction commissioned E. Higginbotham in April 1985 to complete the historical research into the early township, and then to recommend appropriate conservation measures, including archaeological excavation. This second report was submitted in June 19852. Apart from the
Figure 1.1. Location plan of archaeological site in Parramatta, N.S.W.
historical research, it included a statement of significance, a recommendation for archaeological excavation and a watching brief, and a research design for the excavation.

On the basis of the above two reports, the Department of Housing and Construction and Leighton Contractors Pty. Ltd. jointly commissioned E. Higginbotham in June 1985 to undertake the necessary excavation. In accordance with the policy of the Department of Housing and Construction to endeavour to comply with state legislation and the fact that the Leighton development is subject to state legislation, an excavation permit was applied for and subsequently granted by the Heritage Council of New South Wales in May 1985.

NOTES


2. E. Higginbotham, 1985b. The early settlement of Parramatta, 1788 to c.1830 and the proposed archaeological excavation of the site of the Family Law courts and Commonwealth Government office block at Parramatta, N.S.W., the Department of Housing and Construction.
1.2. ACKNOWLEDGEMENTS

I would like to thank all those who helped with the preparation, completion and writing up of the excavation. Without their assistance the project would have been of diminished value or impossible to undertake. My sincere gratitude is due to the following: Phil McHugh, Howard Dare and Mark Wilson of the Department of Housing and Construction; Bob Hunter of Leighton Contractors; Bill Diamond of the Department of Local Government and Administrative Services; Helen Temple and Meredith Hutton of the Department of Environment and Planning, N.S.W.; Brian Coleman of M.A. Coleman, builders; Roy Lawrie of the Department of Agriculture, N.S.W., for soil analysis; John Wade, of the Museum of Applied Arts and Sciences, and Judy Birmingham of Sydney University for inspection of the ceramics; Hepburn Myrtle for inspecting the porcelain; Dr. Ronald Lampert for inspecting the aboriginal artifacts; Richard Mackay, archaeologist at the National Trust of Australia, N.S.W., and also Robyn Stocks, Felicity Martin, Anthony Lowe, Natalie Franklin, Steven Ring, and Grace Karskens for their team work and valuable assistance on the excavation; Glennda Marsh who was on-call to assist with any conservation of artifacts; and finally Professor Graham Connah, University of New England for highly valued advice and encouragement.
2. BACKGROUND TO THE ARCHAEOLOGICAL EXCAVATION

The historical development of the site, the research design and proposed method of archaeological excavation have been described in detail in the two reports previously submitted. These aspects will not be repeated here unless they relate directly to the archaeological excavation or its results.

Historical research revealed that the site of the proposed development formed part of the early township of Parramatta, established in 1790 by Governor Arthur Phillip. Both George and Macquarie Streets were flanked by small timber buildings, erected in 1790 and subsequent years, and intended for the accommodation of convicts. Available evidence suggested that these buildings were 100 feet (30.48 metres) apart, and constructed immediately behind what may be termed the "building line" of both George and Macquarie Streets, respectively 205 feet (62.48 metres) and 118 feet (35.97 metres) wide.

Of the two street frontages available for archaeological excavation, only one area appeared likely to retain the remains of one or more of these early buildings in good condition. Figure 2.1 shows the presumed original street frontage of George Street with the boundaries between a number of allotments. Centrally placed on each plot is the site of a building. Only the central two of the four buildings shown appeared likely to survive, the others having been destroyed by later development.

Because the proposed date for the commencement of construction was planned for August 1985, the archaeological excavation had to be speedily
Figure 2.1. Site plan showing the location of the archaeological trenches. The north-eastern corner of the site is being developed by the Department of Housing and Construction as a Law Courts building, the remainder by Leighton Contractors as the Commonwealth Government office block. The two lines along the O'Connell Street frontage indicate the proposed street widening. Behind the George Street frontage, the original "building line" is shown, with the allotment boundaries and house sites. The archaeological remains of building 1 nearly coincide with the presumed position and the remains of building 2 are located behind it (shaded).
undertaken. It was therefore decided to open up an area large enough to allow for the archaeological inspection of one or both buildings. An area measuring 150 feet (approximately 45 metres) long, parallel to the street frontage, and 100 feet (approximately 30 metres) wide was proposed. Such an area would allow for the inspection of the buildings and also part of their allotments. Geotechnical surveys indicated a minimum depth of 0.75 metres overburden above the archaeological remains, clearly demanding in the time available that the site should be opened up by mechanical rather than manual excavation.

It was proposed that the excavated area should commence 20 feet (approximately 6 metres) north of the original George Street frontage in order to make certain that the buildings should be well within the trench. Using an excavator (Mitsubishi 120) and working from the present surface it was decided that a trial trench should be opened along the northern boundary of the proposed area excavation. Its purpose was to expose the archaeological stratigraphy and establish the appropriate depth for further mechanical excavation. It was also felt that the trial trench would be clear of any early remains behind the original street frontage.

The excavation of the trial trench indicated that the site of one of the early buildings (eastern) was totally disturbed by an extension of Meggitt's Pty. Ltd., so that no further excavation was undertaken in this immediate area. The remaining area was opened up as proposed but measured only approximately 25 metres (approximately 82 feet) long and 30 metres (approximately 100 feet) wide. The length of the
trench was considered insufficient to fully expose the second western building and the excavation was therefore partially extended by an area measuring approximately 11 metres (approximately 36 feet) long by 15 metres (approximately 49 feet) wide.

The total area opened up by machine, excluding those trial trenches in disturbed areas, measured approximately 915 square metres. Time restraints only allowed for the more thorough excavation of the northern part of the site, namely approximately 540 square metres during the six weeks excavation. In this area the remains of one early building were exposed on or near its presumed site, and in addition and totally unexpected, the remains of another contemporary structure directly behind it. (Figure 2.1)².

In spite of the complete excavation of only a part of the available area, the mechanical excavation did reveal important information regarding the overall stratigraphy of the site. The disturbance along the eastern and western boundaries of the trench indicated that archaeological remains are likely to have been destroyed beyond. Furthermore the whole trench was covered with a layer of demolition rubble and other modern material indicating that the site had been levelled recently. Beneath this layer topsoil survived only over the northern part of the trench, whereas in the southern part, which was not thoroughly excavated archaeologically, the topsoil had been removed during levelling, leaving only the subsoil sand. In the southern and eastern parts of the trench modern disturbance was more concentrated. (Although the distribution of these features was recorded photographically by photo-mosaic, or photo-planning in
black and white, it will not be further described here, but is available in the archival records of the excavation). Fortunately the site of the early building and associated structures was not heavily disturbed.

NOTES

1. See notes 1 and 2 in Section 1.

2. Most of the information contained in this section is derived from the second report submitted to the Department of Housing and Construction. See Section 1, note 2 for a full reference to it, and refer to Section 4 of that report for more detailed information.
3.1. ARCHAEOLOGICAL EXCAVATION

With the completion of mechanical excavation and the opening up of the trench, manual excavation by a small team of skilled archaeologists could commence. Within the area opened up the priority was to investigate along the original street frontage.

Mechanical excavation had removed both the upper layer of demolition rubble and most of the topsoil level. Only modern features containing material brought into the site (brick, cinder, modern artifacts, etc.) could be seen cutting into the topsoil, so that its removal was not considered to have caused any substantial loss of archaeological evidence. Over most of the remaining area of topsoil, the base of the topsoil profile was left for manual excavation.

At the commencement of the manual excavation the front portion of the site facing George Street was cleaned (shovel cleaning, followed by trowelling), photographed, recorded, levelled and planned (Figure 2.1.). The distribution of small fragments of sandstock brick whose composition was characteristic of those manufactured between 1788 and the 1820s was noted and recorded on plan. Their distribution was concentrated in the area where subsequently the two early structures were excavated.

Since no consistent series of early features could be recognised in the topsoil above its interface with subsoil sand, the next stage of the manual excavation consisted of the removal of the remaining topsoil profile by shovel cleaning and trowelling. In several cases further trowelling was necessary to define clearly those features cut into natural sand.
At this stage it was clear that part of the site was heavily disturbed by modern features and would not require further detailed excavation. This area was defined as that part of the trench to the east of a diagonal line from coordinates 3128 to 3840 on the survey grid (Figure 3.2.). (See Appendix 2 for a detailed explanation of the survey grid).

Having removed the remaining topsoil profile, the site was again photographed, recorded, levelled and planned. A large number of possibly early features could be recognised cutting into natural sand and were restricted to an area between 22 and 33 metres east, and between 28 and 42 metres north (Figure 3.1). It is this area which was to receive full attention during the remaining time available for the excavation. This area was almost completely excavated, apart from a small number of features at its south-eastern corner, and also excepting some obviously modern features which did not cut earlier ones. The concentration of the available excavation time in this manner did preclude any further investigation of other possible features in the neighbourhood of the early structures. However provisions for the recovery of any other important information have been included in recommendations for the watching brief during bulk excavation.

3.2. DISTURBANCE TO THE TOPSOIL PROFILE

The absence of any discernible early features in the topsoil profile led to the hypothesis that it had been heavily disturbed after the early structures had been removed. This was tested during the excavation in the following manner. All artifactual material from
Figure 3.1. Beside a modern feature, irregular spade-marks are easily seen cutting into the sandy subsoil. Such evidence indicates the disturbance of the topsoil after the removal of early buildings. 1 metre square grid.
the topsoil profile was collected, and differentiated from artifacts from features cutting into topsoil. The artifacts could be dated from the earliest to the most recent period, thus demonstrating that the topsoil profile had been disturbed by cultivation or other means. Further confirmation was received of cultivation when the abundance of spade-marks (spade, hoe or shovel?) was recognised cutting into the natural sand and filled with topsoil. (Figures 3.1). These marks could not be readily dated but were concentrated to the south and east of the structure on the original George Street frontage.

It must be concluded therefore that the archaeological remains of any early structures have been truncated to the base of the topsoil profile. In other words the archaeologist is only able to perceive those remains which survived between 200 and 300 millimetres below the original ground surface\(^1\). This factor was expected to a certain extent and must of course restrict the archaeological information that has survived\(^2\).

### 3.3. HORIZONTAL STRATIGRAPHY

Confronted with a large number of archaeological features, cut into natural sand, some stratigraphically related but most not, a method had to be devised to sort out and provisionally date each item. Conventionally the term "horizontal stratigraphy" is applied to sites where a large number of features is cut into a single layer, in this case natural sand, and it is the fill and artifactual contents of these features which provide the main dating evidence. A similar method was adopted at Parramatta: a plan was drawn up as the features were exposed and before they
were excavated and for each feature a number of items were recorded on plan. These included the proportion of each soil type and other components, as follows:

Soil types

- topsoil
- yellow sand
- orange sand
- grey sand
- grey clay

Other components

- cinder
- sandstock brick without frog, or "flat sandstock"
- modern brick (dry-pressed or semi-plastic)
- other modern artifacts
- bone concentration
- charcoal

The completed plan, which is not published here but remains among the site records of the excavation, provided an important initial tool whereby an understanding of the archaeological remains was gained.

The proportions of each component, especially since they were based on information gained prior to the excavation of each feature, cannot be considered as more than a rough estimate. Nonetheless the presence or absence of various components was interpreted as being diagnostic for dating purposes. For example, grey sand, grey clay, and "flat sandstock" brick were considered to indicate early features. It was
suspected that the grey clay, which is not found naturally on the site, was used for plastering walls. Historical documentation indicates that wattle and daub was used as walling material in the early buildings at Parramatta. In contrast later features were characterised by the presence of cinder, modern brick, other modern artifacts and bone concentrations. The latter were restricted to a small number of pits, frequently associated with other modern components, and comprised mainly of well preserved chicken bones. Clearly their context was modern. Excavation was to confirm the correctness of interpretations concerning the dating of every diagnostic component or soil.

3.4. THE EXCAVATION OF EARLY FEATURES, 1790 TO 1820S

The next stage of the archaeological investigation comprised the excavation of most of the features in the area defined in Section 3.1 (Figure 3.2). On the basis of fill and artifactual evidence all the features could be divided into two main periods, namely early and modern. These will be defined in more detail below, but provisionally the early period may be dated from 1790 to 1820s, the modern period from the mid-nineteenth century to the present day. Modern features will be described in a subsequent section.

Excavation revealed that the early features fall into a limited number of categories, namely post-holes, pits, shallow depressions, trenches or slots, and spade-marks (spade, hoe, shovel?). The distribution of early features and modern disturbance is illustrated in Figure 3.2.
Figure 3.2. This complex archaeological plan of part of the whole trench illustrates the area in which the remains of early buildings were located. The shaded features represent modern disturbance, which has cut through and destroyed earlier features. The early features consist of post-holes (posts are shaded black), pits and shallow features. The stippled areas represent only a small number of the more regularly spaced spade-marks. The earlier features may be more clearly seen in Figure 3.3.
3.4.1. POST-HOLES

Post-holes are defined as those features within which the original position of the post is defined by the remains of a wooden post or by soil discolouration where the post has rotted away (post-pipe). It was soon recognised that the fill of the post-pipes of early post-holes was characteristically uniform, namely a friable dark greyish brown silty sand (Munsell colour 10 YR 4/2)\(^5\).

From the distribution and dimensions of the many post holes two distinct groups could be recognised:

**Group 1, (building 1).** The post-holes in group 1 vary from being square to subrectangular with near vertical sides and range from 400 by 400 millimetres (1 foot 3-3/4 inches square) to an upper limit of, for example, 700 by 700 millimetres (2 feet 3½ inches square) or 1 metre by 600 millimetres (3 feet 3½ inches by 2 feet 11½ inches).

The bases of these features range from 8.1 to 8.68 metres AHD, the majority being between 8.22 and 8.40 metres AHD. The surface of the subsoil, or the interface between topsoil and subsoil ranges between 8.7 and 8.9 metres AHD (Figure 3.3), and original topsoil would therefore have been approximately at between 9 and 9.2 metres AHD\(^6\). The average depth of the post-holes as originally cut would have been c. 800 millimetres (2 feet 7½ inches) below topsoil, the maximum depth being 1.1 metres (3 feet 7½ inches).

The post-pipes range from being circular to sub rectangular in section, and vary between 160 and 240 millimetres (between 6 and 9½ inches) in diameter or
Figure 3.3. Simplified archaeological plan excluding more recent features. Building 1 (group 1 post-holes) is located on the north side of building 2 (group 2 post-holes). Note that the west wall of building 1 is reconstructed using four post-holes, and that 2 other post-holes (hatched) are presumed.
thickness. Between 9 and 10 out of the 17 post-holes in this group contain evidence of being recut, thus indicating the re-erection or replacement of between 9 or 10 posts. None of the post-holes have any evidence for the intentional extraction of posts, thus suggesting that the structure collapsed and was not demolished by means of post extraction.

The post-holes in this group are restricted to an area north of 35 metres north and clearly define three sides of a rectangle. The western side of the rectangle has been destroyed by modern disturbance but clearly it ended somewhere within this feature as no post-holes are recognised beyond the disturbance. The original length of the rectangle must therefore have measured between 7.2 and 10 metres (23 feet 7½ inches and 32 feet). The width of the rectangle varies between 3.5 and 3.8 metres (11 feet 6 inches and 12 feet 5½ inches). The posts in the end wall are approximately 1.2 metres apart (4 feet) and in the side walls vary between 0.7 and 1.2 metres (2 feet 3½ inches and 4 feet).

Historical documentation to be discussed below indicates that the original buildings erected beside George Street measured 24 by 12 feet (7.31 by 3.65 metres). The archaeological and historical evidence therefore coincides well. Further confirmation that the archaeological remains belong to a building erected between 1790 and 1792 is found in the position of the building compared to the street plan, and in the artifactual evidence. Both of these topics will be discussed below. (Figure 3.3).

Group 2, (building 2). The post-holes in group 2 vary from being circular to subrectangular, from near
Figure 3.4. Three sides of the rectangle forming building 1 (group 1 post-holes) can be easily seen in this photograph taken from the eastern end of the building. Scale 1 metre, with 500 millimetre divisions. Note that building 2 has not yet been excavated in this photograph.
vertical sides and flattish base, to sloping sides and a rounded base. They range from 250 by 300 millimetres (10 inches by 1 foot approximately) to 450 by 450 millimetres (1 foot 6 inches square approximately).

The bases of these features range from 8.16 to c.8.68 metres AHD, the majority being between 8.38 and 8.66 metres AHD, and an average of approximately 8.52 metres AHD. Using the same calculation as in the first group of post-holes, original topsoil may be reconstructed at a height of between 9.1 and 9.3 metres AHD (Figure 3.3). The average depth of the post-holes as originally cut would have been c.680 millimetres (2 feet 2-3/4 inches) below topsoil, the maximum being 1.07 metres (3 feet 6 inches).

In this group of post-holes was included a number of pits in which no post-pipe was recognised but which are otherwise similar in distribution and dimensions. In general the post-pipes were more difficult to recognise than in group 1 but were normally filled with the same soil types. The post-pipes were circular to subrectangular in section, and ranged between 100 and 240 millimetres (approximately 4 to 9½ inches) in diameter/thickness. Only 3 post-holes contain evidence for a recut, indicating that this structure or structures was never substantially repaired by having posts reset or replaced. It is however possible that a number of individual post-holes are replacements for others close by.

The majority of the post-holes in group 2 are located south of a line drawn at 37 metres north on the survey grid (Figure 3.2) with only a small number of exceptions. The exceptions to group 2 may fall into
Figure 3.5. Building 2 (group 2 post-holes) is in the foreground of this photograph, and building 1 is in the background or northern end of the site. George Street is beyond the excavation. Scale 1 metre, with 500 millimetre divisions.
another group or groups of post-holes, but their only major difference to group 2 lies in their location. Two post-holes are situated at the north east corner of the rectangle formed by group 1 post-holes, 3 others are found within the rectangle, and 1 other on its south side.

The main group of group 2 post-holes are contained within a rectangular area measuring approximately 8.2 by 9 metres (26 feet 11 inches by 29 feet 6 inches). This group of post-holes is more difficult to interpret than group 1. Group 2 is more closely associated with other types of archaeological features such as shallow depressions, trenches and slots. It should be noted that a number of group 2 post-holes are found within trenches or slots, perhaps making another sub-category of group two. Further interpretation of the structure or structures defined within this second rectangular area will be delayed until the other categories of archaeological features have been described. Suffice it to say at this point that the structures defined by groups 1 and 2 post-holes are most probably contemporary. Evidence to confirm this hypothesis is not only found in the similar fill and artifactual material but also in the juxtaposition of the two groups. Both structures are placed so close to each other, and on the same alignment yet respecting each other's boundaries, that it is extremely unlikely that one could have been built without the other already standing.

3.4.2. PITS

Only a small number of pits which belong to this early period could be identified. Two of these may belong to group 1 post-holes, since the post-pipes may have
been destroyed by later disturbance. These are found one within, the other on the south side of the rectangle defined by group 1 post-holes ((Figure 3.2 and 3.3). A small number of other pits in which no post-pipe was recognised may belong to group 2 post-holes.

There only remain two other pits, which were certainly not post-holes. On an archaeological site of this nature one might have expected a large number of rubbish pits, but their rarity in this case is a topic which will receive full consideration below. Nor is it known definitely whether the two pits discovered were in fact rubbish pits or pits dug for other purposes.

The first pit is located on the south side of the rectangle defined by the group 1 post-holes, at 2837 on the survey grid (Figure 3.3). It is sub-rectangular in shape, with steeply sloping sides and flattish base, and has three fill layers. The pit measures 1 by 1.1 metres, and its base is at 8.38 metres AHD, indicating that its original depth from topsoil was c.500 millimetres. From the irregularity of the fill layers it appears that the pit may have been dug and then rapidly refilled. Very little was found within the pit apart from a number of large sandstock brick fragments, and a thick lens of charcoal.

The stratigraphic relationship between this pit and the structure defined by group 1 post-holes has been destroyed by later disturbance. Indeed the pit has been cut by 7 or 8 later features, and must be one of the earlier features on site. It is possible that the pit is cut by a recut group 1 post-hole (Figure 3.3).
The pit respects the south wall of the structure defined by the group 1 post-holes and all evidence points to their contemporaneity.

Apart from the artifacts within it, the second pit has more in common with another group of archaeological features namely shallow depressions. It is located on the north side of the rectangle defined by group 2 post-holes, at 2536 on the survey grid. Both the pit and the artifacts in it will be described below, the former in the section on shallow depressions.

3.4.3. SHALLOW DEPRESSIONS

A number of irregularly shaped shallow depressions were located mostly within the rectangle defined by group 2 post-holes. In all cases these represent the bases of features that were cut into topsoil, the upper portions of which were disturbed by the processes affecting topsoil at a later date. In several of these features the original fill has been partially spread out by the above processes across the interface between topsoil and subsoil sand, so that the features become less well defined. This has also occurred on a number of post-holes.

A good example of this spreading process is the group of 3 features on the western side of the rectangle of group 1 post-holes. One of the post-holes cuts a lozenge shaped feature and another feature is adjacent to the two others, the fill of which forms the upper surface of all three (Figures 3.2 and 3.3). The lozenge shaped feature contained a well defined burnt out tree-root, so that a large amount of charcoal was contained in it. This was cut by the post-hole, so that the lozenge shaped feature may represent
the clearing of forest prior to the construction of the building. Neither the burnt out tree-root nor the post-hole were well defined until the fill of the third feature, a shallow depression, was removed. This last feature contained large quantities of grey clay and charcoal and was initially interpreted as a fireplace before removal of the fill. Subsequently the presence of large amounts of charcoal could be explained equally by a fireplace or by the presence of the burnt out tree-root below. However the extent of grey clay could not have been derived from the post-hole or tree-root alone, and does suggest the base of another feature however ill defined. Clearly charcoal could be derived from one or both postulated sources and the presence of a fireplace is therefore not ruled out (Figure 3.6).

The remaining shallow depressions were located within the rectangle of group 2 post-holes, 3 in a north-south line towards the eastern edge, and north-east corner, another on the north side, and another two being associated with shallow trenches or slots, the first being at 2633 and the latter at 2328 on the survey grid. All are irregularly shaped with irregular bases, and vary between 8.7 and 8.8 metres AHD. In other words their original depth below the surface varied 300 and 400 millimetres. All of these features contain within them the bases of one or more post-holes or pits belonging to group 2 post-holes. These latter became visible only with the excavation of the shallow depressions, and had similar fill. Post-pipes were only visible where a feature cut through the base of the shallow depression. Both the depressions, pits and post-holes must be regarded as being stratigraphically contemporary. The fill of these features is predominantly redeposited topsoil,
Figure 3.6. Cut by one of the post-holes in the east end wall of building 1 is an archaeological feature containing a burnt-out log or tree-root. This feature partly explains the amount of charcoal in the vicinity. Scale 500 millimetres, with 100 millimetre divisions.
with some sand, grey clay, and charcoal flecks. Only in one case (survey grid 2633) were spade-marks clearly visible in the base of the shallow depression, but it is possible that individual excavation skills may have rendered other examples unobservable. Finally it should be noted that the depression in the north-east corner of the rectangle formed by group 2 post-holes obscured the location of one group 1 post-hole until its fill was removed. This not only illustrates the characteristic spreading of the fill of these features as mentioned earlier but also demonstrates the stratigraphic contemporaneity of these features.

3.4.4. SLOTS, TRENCHES, AND SPADE-MARKS

Another category of early archaeological features is slots and trenches, a small number of which were located within the two rectangles formed by groups 1 and 2 post-holes. These features may be divided into three sub-categories, the first of which may be discounted as caused by natural processes. Two linear features aligned on a north-south axis within the rectangle of group 1 post-holes were defined by the concretion of topsoil and subsoil sand regardless of the boundaries of archaeological features. Neither was there any evidence of a cut having been made into the subsoil (Figure 3.2). The interpretation placed upon these two features suggested that the concretion of the soil was caused by the leaching out of chemicals at an increased rate possibly caused by standing water. The phenomenon could be caused by faulty sewer pipes or even cart tracks, both of which are possible contenders in this case.

The remaining two sub-categories comprise broad and
narrow linear slots. Their distribution within the rectangles formed by groups 1 and 2 post-holes can be clearly seen in Figures 3.2 and 3.3. The narrow slots up to 100 millimetres wide with their bases at between 8.76 and 8.85 metres AHD represent features that were cut barely to the base of the topsoil profile, between 300 and 350 millimetres in original depth. In most cases the narrow slots appear to be cut by group 2 post-holes, but in one case the fill of a post-hole and slot is undifferentiated, indicating contemporaneity. In one other case a narrow slot cuts what may be a recut of a group 1 post-hole.

The broader slots, up to 300 millimetres wide, and at similar depth to the narrow slots, form a group which is more easily related to the distribution of group 2 post-holes. In the example at the south side of the rectangle the slot is not only associated with group 2 post-holes, set at intervals within the trench, but its irregular base is also formed by well defined spade-marks. Unfortunately this slot was one of the last features excavated on the site. Previous to this time no pattern in the spade-marks cutting into natural sand has been noted. Careful observation confirmed that the majority were irregularly placed, but also demonstrated that a number may form the bases of linear slots, which were otherwise unrecognisable. The distribution of a number of regularly placed spade-marks is illustrated in Figures 3.2 and 3.3, but it must be noted that this distribution does not include the majority of apparently randomly placed spade-marks.

Spade-marks in general were defined as small cuts into the natural sand, mostly infilled with redeposited topsoil. They are usually lozenge shaped, sometimes
Figure 3.7. The slot on the south side of building 2 (group 2 post-holes) with regularly spaced post-holes within it, with the spade-marks in the base clearly visible. This photograph is taken looking east, the scale is 500 millimetres, with 100 millimetre divisions.
100 by 300 millimetres when placed singly, or larger when more overlap each other. They rarely extend beyond 50 millimetres below the topsoil, subsoil interface. The term "spade-mark" has been used, but it is not clear what tool caused these marks. It could have been a hoe, spade, or shovel.

The distribution of broad slots and linear groups of spade-marks can be compared with group 2 post-holes. Both the north and south sides of the rectangle formed by the latter also contain slots, and furthermore the mid-line of that rectangle on an east-west axis contains linear groups of spade-marks and a broad slot. The slot on the south side of the rectangle does not appear to continue for the full length of the rectangle but modern disturbance may have destroyed features at its south-eastern corner. This slot is connected to two others on a north-south axis, but their original extent is unclear.

### 3.5. INITIAL INTERPRETATION OF EARLY ARCHAEOLOGICAL FEATURES

The following categories of early archaeological features were excavated, namely:

- post-holes - group 1 (building 1)
  - group 2 (building 2)
- pits
- shallow depressions
- trenches or slots - narrow
  - broad
- spade-marks

The initial identification of the rectangle formed by group 1 post-holes as one of a series of small
buildings (building 1), measuring 12 by 24 feet, erected in the first two years of the township of Parramatta between 1790 and 1792 has already been noted. The full historical and archaeological documentation for this building will be discussed in a subsequent section.

For more difficult to interpret because of the paucity of relevant historical documentation is the rectangle formed by group 2 post-holes (building 2), and associated shallow depressions, trenches or slots, and spade-marks. Only the eastern and western sides of this structure are well defined although at least two other distinct lines of post-holes parallel to the two such-mentioned can be seen evenly spaced within the rectangle. The north and south sides are not well defined by lines of post-holes, although the north side clearly respects the south wall of building 1. (Figure 3.8).

The broad slots or trenches together with the spade-marks appear to define a rectangular area, which respects both the north and west sides of the rectangle formed by group 2 post-holes, and also one north-south internal division (Figure 3.9). There is also some indication of a slot along the east wall.

The problem with any interpretation is that undoubtedly there will be a number of archaeological features which do not fit into a particular structural design or type. One must seriously question that there may be latent within the archaeological record the remains of several structures rather than just one. However it is very difficult to establish any sound basis for such an hypothesis due to the near complete absence of vertical stratification, and the predominance of "horizontal
Figure 3.8. Simplified plan of early archaeological features showing possible interpretation of building 2 (group 2 post-holes).
stratification", which relies on other methods altogether. Only in a few instances can any group 2 post-hole be shown to be cutting another, and where groups of features are occurring together they are more often stratigraphically contemporary. The question whether this renders the multi-structure hypothesis untenable cannot be readily answered.

Furthermore the absence of any recognisable early archaeological features in the topsoil profile is a serious constraint. Clearly the topsoil contained the majority of remains associated with these early structures. Only those features which were excavated 300 millimetres or more below the original surface will survive. The basal levels of such features as shallow depressions, slots, trenches and spade-marks indicates that these categories are on the borderline of archaeological survival and that their total original distribution may not have survived.

There are various factors which suggest that the rectangle formed by group 2 post-holes and other categories was a roofed building. The grey clay was predominantly associated with the group 1 post-holes, and its most likely use was in constructing wattle and daub walls. Grey clay is also found in a large number of group 2 post-holes and other associated features, but does fall off in quantity further away from building 1. There are thus two possible interpretations:

1. The grey clay indicates wattle and daub walls in building 1 alone, and its spread over a larger area is due to the processes of collapse and erosion.
Figure 3.9. Simplified plan of early archaeological features showing possible interpretation of building 2 (group 2 post-holes).
The roofing materials available during this period, 1790 to 1820s, were tile, thatch, bark or shingles, and all required a relatively steep pitch. Taking into account the soft nature of the subsoil sand may overcome this difficulty.

The grey-grey indicates wattle and daub walls in both structures, but less frequent use in building 2.

Whatever the correct interpretation, it is almost certain that any wattle and daub wall of timber post construction is part of a roofed structure, since without further the most obvious interpretation for slots associated with regularly spaced post-holes is construction using vertical posts and sill-or sleeper-beams. The only difficulty with such an interpretation is the uneven base of the slot in question, which appears to be a contiguous series of spade-marks rather than the resting place for a sill-beam. However factors such as the soft nature of the subsoil sand may overcome this difficulty.

In general therefore it is possible to conclude that the rectangle defined by group 2 post-holes and associated features is evidence for at least one roofed structure and other structural elements. 

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this factor into account, and with some knowledge of the building materials actually used, it is possible to suggest a number of hypothetical reconstructions.

To roof a large rectangular structure defined by the distribution of all group 2 post-holes may have proved difficult. The total area involved measures approximately 8.2 by 4 metres (26 feet 11 inches by 29 feet 6 inches). The possible alternatives are as follows:

1. a single span pitched roof. This roof type appears to be least likely because of the extreme height which would be required by the ridge. Furthermore the number of internal post-holes would suggest a more segmented roof-type.

2. two or more contiguous pitched roofs with box-gutters. Again such an elaborate roof-type on a crudely made timber building seems unlikely.

3. a single pitched roof with an additional skillion or skillions. This latter segmented roof-type would appear to be the most likely alternative. It involves no complicated construction techniques, and is a roof-type which occurs frequently in contemporary illustrations, historical documentation, and as surviving examples.

One of the difficulties in reconstructing this building is the extent of disturbance at its south-eastern and south-western corners. The configuration of early archaeological features if any at the corners cannot now be ascertained. In spite of this factor an attempt will be made at some hypothetical
reconstructions.

It is possible to look at either the post-holes or the slots with post-holes as the most important structural elements. To look upon the post-holes as more significant renders it necessary to regard the southernmost slots as a possible extension to a rectangular design. At this juncture the disturbance of the southern two corners of the rectangle is critical, and does not allow a conclusion to be reached as to whether or not the east and west walls as defined by post-holes reached the south wall as defined by the slot. In spite of this, the four north-south lines of post-holes (figure 3.8) which appear with greater definition among the group 2 post-holes, suggest a structure with a central pitched roof, 3 metres wide (9 feet 10 inches), with skillions on either side also of 3 metres width. This of course is a standard roof type of some traditional farm buildings surviving today and might suggest that building 2 is a barn, stable or other farm building.

The alternative is to regard the slots and their regularly spaced post-holes as a determining factor. If one accepts this, then a rectangular structure becomes apparent, measuring 8.2 by between 5.3 and 6 metres (26 feet 11 inches by between 17 feet 4 inches and 19 feet 8¼ inches). In this case the main axis of the structure is also at right-angles to the 12 by 24 foot building, and the single line of post-holes on the eastern side may simply be a skillion. Such a structure might suggest an extension to the living space provided by building 1, but could also be interpreted as a farm building.

As mentioned earlier not all post-holes can easily be
fitted into any one interpretation. Ancillary structures may be present, or alternatively a number of internal divisions. With the removal of early features in the topsoil by natural and human processes prior to excavation, it is difficult to suggest any particular floor type. It is unlikely that a raised timber floor was present in either building on this site, so internal post-holes may not be accounted for in this manner. Bearing in mind that there is archaeological and historical evidence for timber post and wattle and daub walling, and possibly sill-beam construction with either timber or wattle and daub walling, it is far more likely that the flooring was of stamped earth or clay, split logs or other timber construction directly onto the ground surface.

THE EXCAVATION OF MODERN ARCHAEOLOGICAL FEATURES

The archaeological remains of more recent date will not be described in detail in this report. A complete description of all recent features is contained within the site records but only a summary will be included here. These features combine with the historical research already completed and provide a more succinct outline of the development of the allotments on this part of George Street, Parramatta¹⁰.

The excavated area falls within allotment 1 of section 13 of the Town of Parramatta. The allotment was granted to W.C. Wentworth on 19 October 1831 but sold to James Smith on 20 March 1837. A small building was standing on the O'Connell Street frontage of this allotment in 1823. Smith raised a 500 pound mortgage on the property which may indicate that he proposed to build upon it. The allotment was subdivided between 1870 and 1882. The Park Gate Hotel had been built by
Figure 3.10. Sandstone and brick footings of an early to mid-nineteenth century building fronting onto the present narrower George Street alignment. This photograph is taken looking east and the scale measures 1 metre with 500 millimetre divisions.
1895 on the corner of O'Connell Street.

The archaeological excavation recorded the remains of a timber building that appears within the subdivision of allotment 1, occupied by the hotel. Furthermore the remains of the fence line at the subdivision were identified along with rubbish pits, and an insubstantial timber structure or framework within the hotel grounds. To the east of this fence line and on the George Street frontage of this subdivision the rear of a building was identified having sandstone and sandstock brick footings. On the basis of brick type part of this building may have been constructed in the 1820s, but it was later substantially extended and connected with the municipal sewerage system. (Figures 3.10). This building is however not shown on the 1895 map before mentioned, and indeed a substantial part of the George Street frontage comprising allotments 2 and 3 and part of 1 is shown as vacant land at this date.

Most of the more recent archaeological remains may be dated to the late nineteenth century or thereafter. A substantial increase in disturbance however is noted in the twentieth century signifying an increase in industrial and demolition activities on allotment 212.

An important factor allowing the remains of the early structures to survive was the abandonment of the wider street pattern that had been set out in 1790. It is clear that soon after the 1820s a number of buildings were built in front of the original "building line", thus removing the concentration of archaeological disturbance from the vicinity of the earlier buildings.
The reconstructed depth of topsoil at this site was discussed with Roy Lawrie, Department of Agriculture, N.S.W., and it was agreed that its original depth would have varied between 200 and 300 millimetres. E. Higginbotham, 1985b, p.29.

All these soil types were fully described in the excavation records and are summarised in Appendix 1.

This brick type became known on site as a "flat sandstock", and was abbreviated to FS in most site records.

See Appendix 1.

The original depth of topsoil over subsoil sand is considered to be between 200 and 300 millimetres. Personal communication: Roy Lawrie, Department of Agriculture, N.S.W. 1985.

Evidence for a re-cut post-hole was scrutinised very carefully, and was indicated by what may be termed a post-hole within the original post-hole. In each case it was noted that the secondary post-packing went to the same depth as the secondary post-pipe. If it did not do so then the archaeological evidence could have been interpreted as the natural decomposition of the post and final collapse of the upper fill of the post hole. In the majority of cases secondary packing and secondary post-pipe did go to an equal depth. In none of the cases of recutting was the original post-pipe visible.

Demolition by post extraction may be indicated by the absence of a well defined post-pipe in the archaeological record. In such cases the post-pipe may be only defined at the base, the remainder of the fill forming an inverted cone where packing has been disturbed. The fill of the post-pipe may be deposited by natural processes, but may have been intentionally backfilled in which case it may include a mixture of soil and demolition materials. In most cases the post-pipe survived for a substantial depth, thus indicating that demolition by post extraction is an unlikely interpretation.

Personal communication: Roy Lawrie, Department of Agriculture, N.S.W. 1985.
10. See Note 1, Section 1.

11. See Note 1, Section 1, Figure 2.5.

12. Most of the discussion in this section is based on historical research contained within a previous report, namely Higginbotham, E. 1985a. (See Note 1, Section 1). Historical documentation is supplemented by archaeological evidence which may be consulted in the records of the excavation.
4.1. ARTIFACTUAL EVIDENCE

The identification of the early structural remains found by excavation was primarily confirmed by historical evidence. Further confirmation may be obtained from the dating and typology of the artifacts recovered from these early archaeological features. However apart from dating, artifacts offer a means by which a more complete picture of the way of life at that time may be obtained. In this case the artifacts provide further evidence for the construction of the buildings, and also for the way of life of the convicts, and later occupants.

Only a very limited range and number of artifacts were obtained from post-holes or other features associated with either of the two early buildings. This was in contrast to the quantity and wide range of artifacts from later features and from topsoil.

4.2 BUILDING 1, PHASE 1

Building 1 may be defined as that structure formed by the rectangular distribution of group 1 post-holes. Several of these post-holes were re-cut and it is assumed here that only one period of reconstruction is indicated. The historical evidence for this will be discussed below. Contained within this structure is one pit, which may pre-date the reconstruction, and also a small number of other post-holes, which form a sub-category of group 2 post-holes.

Examining the group 1 post-holes prior to any re-cut (phase 1), only one post-hole contains any artifacts. These are two small fragments of cream coloured flat sandstock brick, one small fragment of a nail, and two silcrete flakes of aboriginal production. These and
other aboriginal artifacts are reported upon separately in Appendix 4, but it should be noted here that evidence suggests that this aboriginal occupation substantially predated the arrival of Europeans at Parramatta.

To this small group of artifacts one may add the contents of the pit which may belong to this first phase of occupation, namely 18 fragments, some quite large, of predominantly cream coloured flat sandstock brick (there was only one small fragment of red coloured brick) and three small fragments of one animal bone.

Although the sub-category of group 2 post-holes within building 1 cannot be dated to phase 1 or 2 with any certainty, the artifacts derived from them does not substantially enlarge the assemblage. These consist of 15 cream coloured, and 10 red coloured flat sandstock brick fragments, 1 shell fragment (unidentified) and 1 small piece of green bottle glass belonging to a square gin.

It is doubtful then whether the assemblage of artifacts from phase 1 of building 1 contains anything but structural materials. Although one would not necessarily expect a large amount of material to have been discarded in post-holes nonetheless the paucity of material cultural will be discussed in a subsequent section.

4.3 BUILDING 1, PHASE 2

The second phase of building 1, as indicated by the recut post-holes presents a greater range of artifacts (Table 4.1). These will be considered below in conjunction with those from building 2.
Table 4.1. Range and quantity of artifacts from building 1, phase 2, and building 2.

Quantities indicate number of fragments rather than number of complete articles.

<table>
<thead>
<tr>
<th></th>
<th>Building 1</th>
<th>Building 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Phase 2</td>
<td></td>
</tr>
<tr>
<td>Sandstock brick</td>
<td>165</td>
<td>202</td>
</tr>
<tr>
<td>clay tile</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>earthenware</td>
<td>5</td>
<td>25</td>
</tr>
<tr>
<td>creamware</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>porcelain</td>
<td>-</td>
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<td>23</td>
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<tr>
<td>clear glass</td>
<td>-</td>
<td>5</td>
</tr>
<tr>
<td>window glass</td>
<td>12</td>
<td>3</td>
</tr>
<tr>
<td>nails</td>
<td>13</td>
<td>47</td>
</tr>
<tr>
<td>iron fragments</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>bone</td>
<td>23</td>
<td>48</td>
</tr>
<tr>
<td>shell (incl. oyster)</td>
<td>8</td>
<td>13</td>
</tr>
<tr>
<td>sandstone</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>shale</td>
<td>2</td>
<td>-</td>
</tr>
</tbody>
</table>
4.4. BUILDING 2

Building 2 may be defined as that building formed by group 2 post-holes and other associated features. As with building 1 the quantity and range of artifacts recovered from these features was limited (Table 4.1) and will be discussed below.

4.5. ARTIFACTS FROM BUILDING 1, PHASE 2 AND BUILDING 2

As indicated in Table 4.1, a limited range and quantity of artifacts was found in features associated with building 1, phase 2 and building 2.

4.5.1. BUILDING MATERIALS

A number of building materials were recovered including flat sandstock brick, clay tile, window glass, nails and possible sandstone or shale. The sandstock brick is of a type that could have been manufactured up to the 1820s, although its production may have continued later in less developed areas\(^2\). However it is more closely associated with the cream and red coloured bricks used in the construction of Old Government House at Parramatta from 1790 onwards\(^3\). Historical documentation discussed below indicates that building 1 at least may have had a brick chimney, although no definite trace of it was discovered during the excavation. Alternatively the brick may have been used nearby and only subsequently have been discarded on the site.

The clay tiles found in both buildings are identical to those already found at First Government House, Sydney, the Gateway site, Sydney, Elizabeth Farm, Parramatta, and Old Government House, Parramatta. The first roof
tiles were manufactured in 1788 for Government House, Sydney, and tile production seems to have continued until at least 1793 after which more successful roofing techniques became common. As with the bricks there are two possibilities, the tiles were used on site, or were used elsewhere and discarded on site. The tiles may not have been used for roofing, although that may have been the primary purpose, but they could also have been used in general brickwork, for example in forming arches.

Other building materials include nails and window glass. All the nails are in a very corroded condition but generally have a squarish section. They may have been hand wrought or cut from a nail plate, and may be classed as flooring brads or horseshoe nails. This type of nail was in common use in building construction for a variety of purposes until the 1830s. It is difficult to argue from the absence of nails in phase 1 of building 1 that nails were not used, but it is a hypothesis that should be followed up. It is well known that in the first years of the penal colony various materials were very scarce, nails included. If it could be established that they were not used in phase 1, then it would confirm the general interpretation of a simply made structure. The presence of a number of nails in phase 2 and in building 2 implies an improvement in construction and perhaps also different building techniques.

Only a small number of fragments of window glass were found. They are all of a slightly greeny blueish tinge, and the thickest piece is less than 2mm thick. Only one original edge is preserved but shows doubtful traces of the use of putty or similar material. The amount of glass preserved is only about 600 sq.
millimetres. Such glass may not only have been used in glazing windows but also in small framed pictures or other objects.

4.5.2. POTTERY

A range of pottery wares were found in building 1, phase 2, and building 2, including earthenware, creamware, and porcelain.

Earthenware. Only 25 fragments of earthenware, out of a total of 175 pieces, were found in archaeological features associated with buildings 1 and 2. The remainder were located as residual artifacts in more recent features including a substantial quantity in topsoil.

None of the earthenware associated with the two buildings was glazed, although a small proportion of the residual material was lead glazed. All the pottery was wheel-made.

The earthenware may be divided into four provisional categories, as follows (figure 4.1):

1. poorly mixed white to very pale brown coloured clay.
   (Munsell colour 10 YR 8/2 to 10 YR 7/3, one burnt example being 7.5 YR 6/4).
   Unglazed, mostly unslipped, however some of the better fired examples may have had a slip applied, consisting of slurry made from the same clay.
   Generally poorly fired, but some well fired examples.
Figure 4.1. Earthenware pottery.

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
<th>Context</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>322</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>003</td>
</tr>
<tr>
<td>Similar to 4</td>
<td>1</td>
<td>007</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
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<td>3</td>
<td>252</td>
</tr>
<tr>
<td>11</td>
<td>4</td>
<td>007</td>
</tr>
</tbody>
</table>
Types include:

Bowl or basin (1), flat base, steeply sloping sides, rounded and crimped rim. Average body thickness 8mm and tapering. Average base thickness 8mm. Rim diameter 255mm (10 inches). Height 90mm (3.5 inches). Without slip, poorly fired.

Bowl or basin (2), flat base, steeply sloping sides, beaded rim. Average body thickness 8mm. Rim diameter 255mm (10 inches). Another example (3) of a similar bowl has a crimped rim with average body thickness of 12mm. Well fired with a slip applied on some examples.

dish or lid (4), flat base, near vertical sides. (Only one base and body shard). Average base and body thickness 6mm. Basal diameter 76mm (3 inches). Height 27mm (1-1/16 inches). Unslipped, poorly fired.

plate or dish (5), flat base, flared sides, thickened and squared rim. Average body and base thickness 7mm. Rim diameter 203mm (8 inches). Well fired with a slip applied.

Mug or cup (6), (Figure 4.2), flat base, slightly convex near vertical sides, smoothly tapered rim, handle crudely applied. Average body thickness 5mm. Average base thickness 7mm. Rim diameter 102mm (4 inches). Height 70mm (2.75 inches). Well fired, with no slip.
Figure 4.2. Unglazed earthenware mug.
2. Poorly mixed pink to reddish yellow coloured clay.
(Munsell colour 7.5 YR 7/4 to 5 YR 7/6).
Unglazed and without slip.
Generally poorly fired, but some well fired pieces.
Types include:

Shallow dish (1), flat base, sloping but straight sides, rounded rim. Average body thickness 7mm. Poorly fired.

Shallow dish (2), flat base, sloping sides, flared rim, squared off. Average body thickness 7mm. Well fired.

Bowl or basin (3), flat base, convex sloping sides, out-turned and slightly rounded rim. Average body thickness 14mm. Another possible example has a beaded rim. Poorly fired.

3. Poorly mixed yellow to reddish yellow coloured clay.
(Munsell colour 10 YR 8/6 to 7.5 YR 7/6).
Unglazed, but with slip applied on both inside and out. The slip varies from a very pale brown to a yellow, but appears to have been made from a slurry of the same clay used in the body. (Munsell colour 10 YR 8/4 to 10 YR 7/6).
Splashes of lead glaze on the base of one example indicate that this earthenware has been manufactured in the vicinity of lead glazed articles.
Generally well fired.
Types include:

bowl or basin (1), flat base, near vertical sides, rolled beaded or slightly squared off rims. Average body thickness 10mm. Rim diameter 255mm (10 inches).

4. Poorly mixed very pale brown to reddish yellow coloured clay.
(Munsell colour 10 YR 8/4 to between 7.5 YR 7/6 and 5 YR 7/6).
Partially lead glazed on interior and some exterior faces. Lead glaze varies in quality and colour. In some cases the glaze has chipped off the underlying body. The lead glaze varies from a pale yellow to a yellowish red.
(Munsell colour 5 Y 7/3 to 5 YR 5/8).
Unglazed surfaces appear to have been slipped and fired to a reddish yellow colour or burnt to a grey or dark greyish brown colour.
(Munsell colour 7.5 YR 7/8, 5 R 7/6, or 10 YR 5/1, 5/2 and 4/1).
Poorly fired to well fired.
Types include:

bowl or basin (1), flat base, steeply sloping sides, rolled, squared and beaded rim types.
Average body thickness 10mm. Rim diameter 255mm (10 inches). Base thickness may vary up to 15mm, although one example, possibly of this type, had a base thickness up to 20mm.
bag shaped pot (2), flat base, convex, near vertical sides, rolled rim. Average body thickness 7mm. Average base thickness 9mm. Base diameter 152mm (6 inches). Highly fired. No example of this type is glazed.

bowl or jug (3), flat base, steeply sloping sides, possibly convex. Average body and base thickness 8mm. Basal diameter 100mm (4 inches). Well fired and with a high quality lead glaze.

bowl or dish (4), sloping or slightly flared sides, beaded rim. Average body thickness 7mm. Rim diameter 255mm (10 inches).

mug or cup? (5), one thin and finely made handle (2 shards), lead glazed, and possibly belonging to a cup or mug.

The provisional division of the earthenware requires some discussion. Although four categories were recognised it is possible that each may represent a single stage in the production process. For example categories 1 and 2 may be the biscuit firing prior to the application of lead glaze in category 4. Category 3 may represent partially unglazed but finished articles, the lack of glaze being the only difference between categories 3 and 4.

However evidence against this hypothesis is provided by the low frequency of comparable types between categories. One could argue that with a larger sample there would be more concurrence.
There are thus various possible interpretations which will be outlined below, namely:

1. The two buildings excavated are situated near the site of a pottery, so that a range of wares in varying stages of production are apparent. The absence of wasters and other kiln remains not only is evidence against the kiln having been on site but also acts against this interpretation.

2. The predominance of unglazed pottery is indicative of the early date of production, since glazing materials were not available until imported from England. In other words the four categories of earthenware need not represent stages in production, but wares as they were marketed over a period of time, perhaps from the 1790s onwards.

The range of clay colours in the earthenware was available both in Sydney and Parramatta, and indeed at other locations in the vicinity. Such crudely made pottery, because of its fragility and low value, is unlikely to have been marketed over a large area. Potteries in Sydney are known to have come into production sporadically from 1791 onwards, although Parramatta may also have been a production area at an early stage. Further historical research is necessary to establish the details of any such development.

The four earthenware categories include types of pottery which were commonly manufactured in Britain at or before this time. This type of pottery has been found on a number of archaeological sites in the Sydney region, including First Government House, Hyde Park, and other locations.
Park Barracks, and the Gateway Site{11}. Thorough research is required of all available documentary resources to elucidate further the early history of pottery production in New South Wales. Undoubtedly future excavations will increase not only the quantity of this pottery available for study, but also the known archaeological contexts about which more detailed socio-economic interpretations and hypotheses may be established.

Creamware. Only 4 very small fragments of creamware with a very fine earthenware paste, and clear glaze were recovered from buildings 1 and 2, two of which may belong to a tea-cup or similar article. Creamware was manufactured in England from the 1760s onwards{12}.

Porcelain. A very interesting collection of porcelain was recovered from features associated with buildings 1 and 2. Eight of the 12 fragments located were associated with the pit or shallow depression near the north wall of building 2 at 2536 on the survey grid. Six of these fragments belong to one vessel described below:{13}

- **bowl**, blue underglaze, late Ming, Chinese (1368–1644). Export ware designed for the S.E. Asian rather than the European market. Coarse porcelain manufacture, possibly South China. (6 fragments of 1 bowl), (Figure 4.3). Rim diameter 203mm (8 inches). Height 42mm.

- **tea bowl?**, fine porcelain, overglaze ferric oxide (red and black) enamel, depicting the top of a man's head. Chinese, but possibly
Figure 4.3. Chinese porcelain bowl.
Japanese, eighteenth to early nineteenth century. (One fragment, pierced).

**tea bowl?**, blue underglaze, fine porcelain, Chinese, c1725 to 1800. Ferruginous rim. A piece of export ware designed for the European market. (One fragment).

All the above pieces were found in the one pit mentioned above. The second example was pierced, as if it had once been repaired. This attempt appears not to be professionally undertaken, since the porcelain has chipped severely around the hole, and is by no means a clean cut.

The remaining shards include:

fragments, overglazed enamel, fine porcelain, Chinese export ware, possibly from a tea set (3 fragments).

fragment, blue underglaze, fine porcelain, Chinese export ware, possibly 17th or 18th century.

4.5.3. **CLAY PIPES**

Only a very small number of kaolin pipes for tobacco smoking were discovered, namely two small fragments of pipe-stem, and one stem and bowl fragment with pointed spur or heel. All the above were from building 1, phase 2, and had no other identification marks.

A further single piece was found in the same pit as the porcelain above mentioned. It is made of fine
earthenware rather than kaolin. The inside of the bowl is of standard shape, but the stem is intended for the hafting of a wooden stem or similar extension. The exterior of the pipe shows that it has been cut with a knife while the clay is only leather dry in order to shape the bowl, stem and heel. It is possibly a locally produced article, and can be compared in colour to the local earthenware (Figure 4.4).

4.5.4. GLASS

A number of small fragments of green bottle glass were located, along with five fragments from one piece of clear glass.

The green glass represents both square gins and ordinary bottles. The small size of the fragments precludes further comment other than to state that they are of a type commonly produced from the late eighteenth to early nineteenth century.

The five fragments of clear glass all came from the one pit, the same source as the porcelain and pipe stem and bowl mentioned above. The fragments form a small beaker or glass, 63mm in rim diameter (2.5 inches) and 66mm (2.625 inches) in height. The glass varies in thickness from the base which is 5mm in thickness to the well rounded rim, just under 2mm in thickness. The glass rather than being truly clear is slightly smokey, with slight opalescence, and appears to be worn. As with one of the pieces of porcelain the glass has been repaired by piercing the body and securing with a copper base wire or rivet. The remainder of each hole has then been filled with a putty like substance. Again the mending work is not
Figure 4.4. Pipe stem.
professional or is crudely carried out. Copper wire is not a suitable material since it stretches easily. (Figure 4.5)\textsuperscript{15}.

4.5.5. IRON FRAGMENTS

Apart from nails, very few iron articles were located in the two early buildings. The only recognisable articles are a few fragments of what appear to be barrel hoops.

4.5.6. OTHER ARTIFACTS

Other artifacts, or rather articles exploited by the European colonists include bone, shell, shale and sandstone.

Bone fragments are mostly too small for definite identification, but may be the remains of food. Shell fragments include oyster, and may again represent food items, or possibly their use in the production of shell lime. The occurrence of only a limited amount of shale on the site may be fortuitous, but the sandstone blocks may have been used in building materials.

4.6. MORE RECENT ARTIFACTS

A wide range and large quantity of artifacts were recovered from recent features and topsoil. A general date range from the mid-nineteenth century onwards is apparent. The material has not been studied in detail, but may contain other artifacts belonging to the period of the two early structures (for example, blue and white earthenware).
Figure 4.5. Glass or beaker, showing holes for repair.
The recent artifacts make the later development of the site highly visible in the archaeological context, but bring the society and ways of life only into very poor focus.

NOTES

1. Only in a few cases could the artifacts from post-holes be identified with certainty as having been deposited in either post-packing or post-pipe. In most instances the artifacts were recovered from the post-holes prior to the recognition of the post-pipe at a greater depth. Even considering at length the processes whereby posts decay, the artifacts do not reveal any recognisable contamination from later layers. It has therefore been concluded that the artifacts represent those deposited during or shortly after the occupation of the buildings.


7. I would like to thank Judy Birmingham who first brought this possibility to my notice.


11. Report commissioned by Gateway Plaza Pty. Ltd. forthcoming, copies to be presented to the Department of Environment and Planning, N.S.W. in satisfaction of the conditions of an excavation permit.


13. I am indebted to Mr. Hepburn Myrtle who kindly undertook to inspect the porcelain.

5.1. INTERPRETATION AND DISCUSSION

Historical documentation and the structural and artifactual remains from the excavated site combine to give a more detailed picture of the early settlement of Parramatta. Historical evidence by itself gives us a biased picture obtained from the journals of high ranking individuals or the despatches from the colonial to the home government. It is at most an official picture either meant for publication, or as a means to an end. To give an example, the illustration, entitled "A View of the Governor's House at Rose Hill in the Township of Parramatta", published by David Collins in 1798 (Figure 5.1) appears to be a partial copy and alteration of another drawing\(^1\). The artist responsible for the latter illustration is unknown, and it is only datable by comparison with Collins. (Figure 5.2)\(^2\). Note however the similarity between the two, namely the stocks and other structures on the north (right hand) side of George Street. Whereas the undated example portrays the perspective realistically, the illustration in Collins is clearly false. The stocks on the right are hardly larger than the small buildings on the left. The altered perspective of this picture makes George Street appear to be a grand avenue, thus uncovering the possible motive behind the change. The fact is however that this historical document may not provide a reliable indication of the appearance or layout of Parramatta in 1790\(^3\). Contrary to historical documentation, archaeological evidence provides information on the layout of buildings and the details of what took place in actuality. It reflects what people did rather than what they say they did.
Figure 5.1. "A View of the Governor's House at Rose Hill, in the Township of Parramatta" published in David Collins, 1798, An Account of the English Colony in New South Wales.
5.2 HISTORICAL EVIDENCE FOR THE EARLY SETTLEMENT OF PARRAMATTA

The historical outline of the development of the agricultural settlement at Rose Hill from 1788, and then the establishment and growth of the township of Parramatta from 1790 formed the subject of a previous report. Only the main features of this development will be repeated here.

The first settlement at Rose Hill was founded in early November 1788. It coincided with the failure of the first harvest and the despatch of the "Sirius" to the Cape of Good Hope for more seed-grain and flour. The intention was to clear sufficient land in advance of this ship's return, so that the grain could be immediately sown. The early settlement at Rose Hill was almost a desperate attempt to save the penal colony from starvation, and necessitated the clearance of the best agricultural land then known. Luckily the "Sirius" returned in May 1789, allowing the wheat to be sown in the best months of June and July.

Watkin Tench gives one of the most informative reports on the progress of agriculture at the small settlement at Rose Hill in November 1790. Within this description he states that:

"The view from the top of the wheat field takes in, except a narrow slip, the whole of the cleared land at Rose Hill. From not having before seen an opening of such extent for the last three years [since his departure from England], this struck us as grand and capacious. The beautiful diversity of the ground (gentle hill and dale) would certainly be reckoned
Figure 5.2. "View of Governor's House, Rose Hill", by an anonymous artist, but dated to the 1790s by comparison with the version of it in Collins (Figure 5.1) (ML. ZDG.SSV1B/3).
pretty in any country. Continued our walk and crossed the old field, which is intended to form part of the main street of the projected town."\(^5\)

With the arrival of the second fleet in June 1790, Governor Phillip decided to establish a township at Parramatta. However the development of the town may have been delayed until the harvest in November or December.

To continue with Tench's description:

"The main street of the new town is already begun. It is to be a mile long, and of such breadth as will make Pall-Mall and Portland Place "hide their diminished heads". It contains at present 32 houses completed, of 24 feet by 12 each, on the ground floor only, built of wattles plaistered with clay, and thatched. Each house is divided into two rooms, in one of which is a fire place and a brick chimney. These houses are designed for men only; and ten is the number of inhabitants allotted to each; but some of them now contain 12 or 14, for want of better accommodation. More are building; in a cross street stand nine houses for unmarried women: and exclusive of all these are several huts where convict families of good character are allowed to reside. Of public buildings, besides the old wooden barrack and store, there is a house of lath and plaister, 44 feet long by 16 wide, for the governor, on the ground floor only, with excellent out-houses and appurtenances attached to it. A new brick store-house, covered with tiles, 100 feet long by 24 wide, is nearly completed and a house for
the store-keeper. The first stone of a barrack, 100 feet long by 24 wide, to which are intended to be added wings for the officers, was laid today. The situation of the barrack is judicious, being close to the store-house, and within a hundred and fifty yards of the wharf, where all boats from Sydney unload. To what I have already enumerated, must be added an excellent barn, a granary, an inclosed yard to rear stock in, a commodious blacksmith's shop, and a most wretched hospital, totally destitute of every convenience.7

The grand design for the township has been described in a previous report. Governor Phillip had intended both Sydney, Parramatta and Toongabbie to have spacious and regular plans. Parramatta, the second to be laid out, was the only one to survive in any readily recognisable form until the present day.

Another feature of the township was the size of the allotments and thus the wide dispersal of the houses. Governor Phillip was at pains to explain this. Garden allotments had been provided to all classes of the penal establishment, officers, garrison and convicts, since the commencement of the penal colony in 1788. Such gardens were intended for vegetable production, as these articles were not provided by the stores. The allotments at Parramatta, measuring 100 by 200 feet (30.4 by 60.9 metres) were substantially larger than usual, Governor Philip stating that the purpose for this was as a "spur to industry" as the convicts could work the land in their own time and thus profit by their ingenuity. One other reason for the size of the allotments may also have been to accommodate the grandiose plan for the town.
The layout of the township at Parramatta certainly accorded with the world view that was held by Europeans at this time. It was reflected by the order imposed by Georgian architecture which was based upon classical principles. Whereas in Europe such a town plan would have been accompanied by equally grandiose buildings, in New South Wales the main streets were flanked by small huts intended for convicts and the whole town was set in a clearing in the wilderness measuring little more than 200 acres in 1790, that is less than 1 square mile. The contrast is dramatic and emphasises some of the themes identified by the archaeological evidence, the social distinction between free individuals and convicts, the dependence on convict and generally unskilled labour, the scarcity of resources and materials derived from overseas, the imposition of European technology and tradition on an alien and sometimes hostile environment, and the first adaptions to the new conditions.

5.3. THE IDENTIFICATION OF THE EXCAVATED STRUCTURES

It is the agreement between the historical and archaeological evidence which allows building 1 to be identified as one of the huts built for convicts in the early 1790s. The historical evidence, described in a previous report and also above, is summarised below:9

1. The dimensions of the huts were reported to be 24 by 12 feet, divided into 2 rooms, with wattle and daub walls, thatched roof, and a brick chimney at one end.
2. The huts were 100 feet apart, or rather placed centrally at the front of allotments measuring 100 by 200 feet.

3. George Street measured 205 feet wide, and the distance between Bridge Street (now Pitt Street) (118 feet wide) and Church Street (143 feet wide) measured 1400 feet, and was divided into 14 equally sized allotments.

The archaeological evidence for building 1 closely coincided in both size and position with the historical evidence. It confirms the calculations made from the historical documents concerning the size of the allotments and their regular layout. The evidence shows that at least on this part of George Street the allotments were not unduly displaced from their geometric layout by natural features such as creeks and gullies. Furthermore the placement of the huts central to the frontage of the allotment is demonstrated in this case. The slight discrepancy between the presumed and actual position can be explained by the nominal changes in the alignment of George and Church Streets since their initial layout (Figure 2.1).

Although building 1 can be identified by historical documentation, building 2 is not mentioned. Illustrative material such as Collins' view of Parramatta (Figure 5.1) hint at the presence of outbuildings but these are only of small size. The archaeological remains for building 2, which is of equal if not of greater size than building 1, therefore provides evidence that was previously unsuspected.
5.4. THE SEQUENCE OF EARLY BUILDINGS

It is assumed that, because building 1 lies beside the main street in the township and close to the site of Government House, it may have been one of the earliest of its type to have been completed, probably in 1790. The archaeological evidence in this case cannot assist this hypothesis, the artifacts only indicating a structure that was probably built between c.1790 and c.1820.

However the location of building 1 on the original "building line", coupled with the historical evidence, strongly suggests that of the two structures excavated building 1 was the first.

The remaining issues concerning the sequence of building relate to the date for the rebuilding or repair of building 1 and for the construction of building 2. There is only one historical reference to the huts designed for convicts after their initial construction. It states that,

"The government huts at Parramatta, which had been built by Governor Phillip for the immediate reception of convicts on their arrival, having been long neglected and disused and fallen into ruin, were completely repaired and made fit for the use for which they were designed. Many had fallen down".

It would be very easy, but not necessarily logical, to assume that the re-cut post-holes in building 1, phase 2 equate with the general repair of the government huts at Parramatta, which is dated between 1796 and 1800. If the allotment had been leased from
government then the rebuild could easily date to the currency of that lease and bear no relationship to the above historical reference.

Under any circumstances the structure of building 1 implied by both archaeological and historical evidence is likely to have required repair after a few seasons if its collapse was to be avoided. The date for the repairs is therefore very likely to have occurred in the 1790s. Of course it is assumed that all the re-cut post-holes imply a single stage reconstruction, but this need not be the case.

The possible interpretations of building 2 have already been discussed in Section 3.5. It was clearly erected while building 1 was still standing. Although there is no definite evidence for it, this second building may have been constructed only a few years after building 1. Both building 1, phase 2 and building 2 share a similar artifactual assemblage, whereas artifacts are almost completely absent from building 1, phase 1. Admittedly one might not expect a large quantity of artifacts from post-holes, and the sample is very small, but it is possible to suggest that building 1, phase 2 and building 2 were erected at the same time, or at least within a few years of each other.

Finally historical evidence would suggest that neither building 1 or 2 survived beyond 1828, since they are not shown on a map of Parramatta of that date, which otherwise appears to delineate all buildings accurately11. Indeed it is quite likely that they did not survive long after 1815, since the allotment on which they stood would have been resurveyed with the delineation of O'Connell Street in that year12.
As stated above the archaeological evidence cannot offer any more precise dates, but does not discount the historical documentation. It may therefore be concluded that building 1 was erected in 1790, and rebuilt by 1800, building 2 was erected by 1800, and both buildings had collapsed or were demolished by between 1815 and 1825.

5.5. CONVICT HOUSING

The best available description of the huts built for the accommodation of convicts is the one given by Tench and quoted above. It indicates the overall dimensions of each hut, as well as referring to wattle and daub walls, the division into 2 rooms, a brick chimney at one end, and a thatched roof. The archaeological evidence adds further detail to this description. For example, the post-holes indicate that it was a post-built structure rather than an equally feasible construction technique having corner posts and sill-beams, infilled with wattle and daub. The post construction may have left the slender saplings of the wattles exposed or even dug into the soil resulting in rapid decay. Sill-beam construction implies either slab or framed wall panels, the latter being a more sophisticated building technique used in many medieval and later buildings in England. The fact that it was probably not used here is an indication of the primitive or backward nature of early construction in New South Wales. For this type of building...

The archaeological evidence confirms the use of only one of the building techniques described by Tench, namely the wattle and daub walling, which accounts for the quantity of grey clay in the post-holes of
building 1, phases 1 and 2. The archaeological evidence cannot assist in this case in the veracity of Tench's statement regarding thatched roofing or the brick chimney. As discussed earlier no actual brick footings of a chimney were located in building 1, although the remains imply a feature at the east end of the hut. Unfortunately the western wall had been destroyed. In fact no recognisable remains of a fireplace were found in either building, although it is highly likely that at least one was originally constructed. It may be concluded that a chimney of brick or other material was present, but that its footings were insubstantial, and have been destroyed by later disturbance.

The post-holes discussed within the walls of building 1 may be evidence for an internal partition or other fittings. The evidence is however inconclusive and reliance must again be placed in comparative historical evidence. On many illustrations of this type of building including Collins' view of Parramatta, there is a centrally placed doorway and two flanking windows. The internal partition, if it existed, would have been set to one side of this doorway forming two rooms of unequal size. The archaeological evidence would seem to suggest that such a partition might not have existed in this case or may not be visible archaeologically. One could conclude also that Tench's statement that they were divided into 2 rooms is merely a supposition based on the 2 windows flanking a central doorway or is based on eye-witnessing the construction of other huts where a partition did exist.

Tench refers to each hut accommodating ten convicts, but that in November 1790 some housed between 12 and
14 for want of other buildings. It is difficult to assess how ten or more convicts were housed in such a small space, or to establish the sleeping arrangements. Various possibilities exist including hammocks or bunks. The absence of a greater number of internal posts might be taken as evidence against the former, as also the unlikely situation whereby additional lateral strain was placed on the flimsy wooden framework of the hut. It has been suggested that a number of large wooden platforms may have been incorporated in the structure, similar to the arrangements in a mobile box for convict accommodation on road-gangs (Figure 5.3)¹³. Alternatively free-standing beds could have been available, but more likely the floor itself. As with building 2 there is no evidence of flooring, and it must be concluded that the floor if any was of crude design, stamped earth, clay, or split timber laid directly on the ground¹⁴.

In conclusion the convict huts were crudely made buildings using simple and readily available building materials. Thatch may have been used because no other materials were available. It is clear that clay tiles were reserved at an early stage for the more important public buildings, including store-houses, the contents of which received heightened value because of the uncertainty of supply from Britain. In later years thatch, and wattle and daub were replaced by more successful materials, shingles and bark sheets for roofing, and weatherboards or slabs for walling. However at this early period, the housing for the convicts indicates the transplanting of simple traditional building techniques into an alien environment with little or no adaptation. The building materials reflect the local abundance of timber and other materials, and do not make use of
Figure 5.3. Sketch of sleeping arrangements on upper shelf of mobile box. The mobile box measured 7.25 feet wide by 14 feet long. (Figure 90 in J.S. Kerr, 1984, Design for convicts).
imported items already in short supply.

5.6. THE SCARCITY OF ARTIFACTS IN BUILDING 1, PHASE 1

The almost complete absence of artifacts which may be recognised as belonging to building 1, phase 1 requires some explanation. One must first consider the sample bias of the archaeological evidence, and "depositional theory" before making any interpretation.

Pre-depositional factors: the question which the archaeologist wishes to answer relates to the extent of personal or government property in the possession of the convicts in building 1, phase 1. Actual scarcity of materials or their recycling may account for their absence from the archaeological record. These factors will be further discussed below.

Depositional factors: the majority of the archaeological features which belong to phase 1 of building 1 are post-holes. One may accept that little refuse would have been discarded in these features. Artifacts are far more likely to have been deposited in "rubbish pits", and since only one pit has been provisionally assigned to phase 1, the scarcity of artifacts may not be unexpected. Furthermore any institutionalised form of rubbish disposal off-site would act severely against the appearance of artifacts on site. For example at Port Arthur in Tasmania the prison authorities arranged for refuse to be dumped at sea. While this option was not easily available at Parramatta, the example does indicate the possibility of institutionalised rubbish disposal.

Post-depositional factors: there are many processes
which affect the archaeological evidence after its deposition in the earth. All organic materials such as wood, leather, etc. are likely to decay. Furthermore in this case the topsoil has been thoroughly disturbed since the occupation of the building. This process will have removed all trace of archaeological features, the depth of which was less than 200 to 300 millimetres below original topsoil.

Apart from these processes the excavation itself may have contributed towards the bias in the evidence. Only a thorough excavation of one whole allotment, 100 by 200 feet (30 by 60 metres approximately) would determine whether or not rubbish was consistently discarded within site, but would not assist in any hypothesis concerning off-site deposition. In other words the extent and time available for excavation may not have allowed the evidence to be excavated or recognised. Indeed it is possible that artifacts recovered from the disturbed topsoil have not been recognised as belonging to the period of convict occupation of the site, the earthenware being one example that was recognised only at a late stage in the excavation.

The archaeologist is confronted by similar factors on every site. It is not feasible to continue excavation on an unlimited basis, for at some point costs must outweigh the rate at which useful evidence is returned. In other words there is a cut-off point that must be recognised. This excavation was in the opinion of the author taken successfully to that point.

The above factors limit the precision of any interpretation of the archaeological evidence. None-
theless the absence of artifacts belonging to this period coincides with the known historical evidence for the scarcity of personal possessions among convicts, and the reliance on items issued by the stores which could predominantly be recycled. For example, the mess gear issued to convicts working on Goat Island in 1834 included knives, forks and spoons, and tin plates, pots and dishes. The recycling of these articles would have rendered their appearance in the archaeological record unusual.

5.7. THE REBUILDING OF THE CONVICT HUT, AND THE CONSTRUCTION OF BUILDING 2

The archaeological evidence, the dating, and the possible interpretations of building 1, phase 2 and building 2 have already been discussed. The recut post-holes in building 1, phase 2 were interpreted as a rebuilding of the convict hut either by government between 1796 and 1800, or by a lessee of the allotment. Only a provisional interpretation of the structure implied by group 2 post-holes and associated features was offered. However this building probably does represent an enlargement of the roofed space available to the occupants of this allotment.

At present the only available historical evidence for the lease of this allotment from Government is a map which has been provisionally dated to c.1811. This map indicates that a small number of allotments were occupied by individuals, the excavation site being leased by William Evans. From available historical documentation it has not been possible to establish which William Evans is indicated, but the possible contenders are listed below:
William Evans arrived in 1790 on the "Surprise". He had been sentenced to seven years transportation at the Old Bailey in December 1787. By 1814 he had obtained his freedom but was still a clerk to Mr. Crossley, and living in Sydney. In 1828 he was a servant to Mr. Thomas Kains in Sydney, and was aged 60. He was a protestant.

William Evans arrived in 1810 on the "Ann", and had been sentenced to transportation in Kent in August 1808. In 1814 he was still a convict on the stores, and was working at the Dockyard in Sydney.

Elizabeth McDougal or McDougall arrived in 1794 on the "Mary Ann" with a seven year sentence. By 1814 she was free, living in Sydney, and off the stores. She had married William Evans and had 5 children. (Judging by the number of children she had married no. 1, who was in New South Wales for an equally long period). In 1828 she was living at Botany. She was a protestant.

Elizabeth Hall had arrived in 1810 on the "Canada" under sentence of transportation. In 1814 she was still a convict, but off the stores, and living in Sydney. She had married William Evans (possibly no. 2) at Parramatta on 21 January 1811.

William Evans, native born, and free was living in Sydney and on the stores in 1814.

William Evans arrived in 1800 on the "Glatton".
under sentence of transportation for seven years. In 1814 he was still a convict, but was off the stores, and was living at Liverpool. By 1828 he had obtained his freedom, was aged 74 and was at Appin working for Patrick Callaghan. He was a carpenter by trade, and a protestant²⁴.

William Evans, private in the New South Wales Corps (named the 102nd Regiment in 1809) from at least 1796 to 1810. He was on detachment at Parramatta from at least June 1806 to December 1807. He became eligible for a higher rate of pay after 14 years service in 1810. He is not recorded as having left New South Wales with the 102nd Regiment in 1810, indeed he is not mentioned in the monthly pay lists or muster rolls after its departure²⁵.

He had obtained 25 acres by grant on the Hawkesbury River on 5 September 1796²⁶. He was married to Mary Ann Evans, and had at least one son, named John, born probably in 1813²⁷.

William Evans arrived in 1809 on the "Indispensable", a female convict ship, as a surgeon. He was appointed colonial assistant surgeon at Newcastle in 1811, and was in charge of the hospital there. In 1813 and in 1822 on his retirement, he received grants in the Hunter Valley. He had been employed by the Home and not the Colonial Government²⁸.

William Evans was born in 1780, had married Mary Ann Evans, who gave birth to a son, William, in 1812, and a daughter, Sarah, in 1814²⁹.
Of the above six William Evans the most likely contenders for an allotment at Parramatta would be free persons, with a strong association with Parramatta, and possibly having land holdings elsewhere. Only two qualify on this basis, namely numbers 7 and 8. The latter is known to have been in Newcastle from 1813 onwards, but this does not significantly alter the possibility that he had obtained an allotment in Parramatta.

One cannot rule out the possibility that a former convict may have obtained a lease in Parramatta, but none of the contenders appears to have had strong associations with the town and also have been free by 1814, the date of the muster.

Thus it is highly likely that the William Evans who leased an allotment at Parramatta by c.1811 was a free person, either a private in the New South Wales Corps or a surgeon. This historical evidence should not be taken to indicate that there were no other earlier leases. However if there were, then it is more likely that free persons rather than emancipated or bonded persons were involved. The historical evidence is strengthened by the archaeological data described below.

5.8. FURTHER INTERPRETATION OF THE ARCHAEOLOGICAL EVIDENCE FOR BUILDING 1, PHASE 2 AND BUILDING 2

Possible reconstructions of building 2 have already been discussed in Section 3.5. The difficulties experienced in the interpretation of the evidence severely restrict the social, economic, or technological hypotheses that may be developed. For example the somewhat irregular pattern of the post-
holes in building 2 may imply a structure that is as simple as, or cruder than the convict hut. Alternatively the shallow trenches and post-holes regularly spaced within them may indicate the presence of sleeper- or sill-beams and imply timber framed walls, altogether a more sophisticated construction. Furthermore the presence of nails may indicate weatherboard walls or a shingled roof on either structure.

This archaeological site is a typical example of the application by J. Deetz of the terms "visibility" and "focus" to house sites. Although the archaeological remains clearly demonstrate the presence of a structure, it is very difficult to interpret that evidence with any degree of certainty. In other words the structure is highly "visible" in the archaeological record, but it is not in "focus".

Without comparative material derived from similar archaeological sites with better "focus" it is thus very difficult to make any statement regarding the development and adaptation of building technology in the early penal colony beyond that already concluded for building 1. However the artifacts recovered from the site offer some information on this issue. For example the presence of nails and window glass suggest that these articles, while still scarce, were increasing in supply and availability. Alternatively it may suggest that the occupants of the allotment had greater access to these resources, and may therefore have been of higher social standing than convicts.

The archaeological evidence supports the historical documentation for the higher social status of the later occupants of this allotment. The relevance of
construction techniques and building materials to this question has been mentioned above. Other aspects of the evidence include increased living area and also domestic and other articles.

The cramped accommodation forced upon between 10 and 14 convicts was later extended possibly by occupants of the allotment who demanded more sheltered living or storage space. Although shared living quarters were not uncommon at this period among the lower classes, the process whereby individual requirements for privacy were incorporated into house design had long commenced and was beginning to filter down through the social classes. Any increase in sheltered accommodation therefore suggests better economic conditions, or higher social status, in cases where it can be demonstrated that such space was not required for storage or other purposes.

While many of the aspects of "depositional theory" discussed in relation to building 1 are also relevant to the rebuild of building 1 and also in building 2, the artifacts reveal certain dramatic changes. The assemblage of artifacts recovered from the pit or depression on the north side of building 2 (at 2536 on the survey grid) is an important example. As already mentioned, it contained several pieces of imported Chinese porcelain, a glass beaker, a fine example of locally produced earthenware, a tobacco pipe also made of earthenware and several other artifacts. The Chinese porcelain represents a valuable article that was traded over vast distances. Its cost prohibited its disposal among the lower classes or less wealthy groups of people. The clear glass beaker may also be a similar article of value. Both one porcelain piece and the glass were repaired.
after breakage, though not in a highly professional fashion. Clearly these articles were of great value to the person or persons who possessed them. The value may be perceived not only in terms of actual cost, but also in the difficulty of replacement, or personal value as heirlooms. Other items implying individual use or ownership include probably two unglazed white earthenware mugs or cups with handles and a tobacco pipe of unusual style and possibly local manufacture.

The presence of all these artifacts in a single pit, and the ability of the archaeologist to form three nearly complete artifacts from the shards recovered in spite of the fact that the first 200 to 300 millimetres of the pit is missing is important. It suggests that they were either discarded immediately after breakage or alternatively secreted on purpose in a complete condition, only subsequently being broken by pressure from the weight of the earth above or by disturbance of topsoil.

Some of the possible interpretations of this evidence are outlined below:

1. The articles may have been stolen, and therefore do not necessarily represent the possessions of an individual or individuals with access to more costly articles.

2. The articles represent the possessions of an individual or individuals with access to more costly articles.

3. The repair of two articles within the assemblage imply that at least these were highly valued by
their possessor(s) for whatever reason(s).

4. The articles were finally discarded after breakage.

5. The articles were hidden or hoarded with a view to later recovery. This situation may be compared with the archaeological evidence derived from Hyde Park Barracks in Sydney, where valued items were hidden under floorboards by convicts or others under institutional control. Of course there are many other reasons why valued articles may be hidden by free individuals, for example to prevent theft.

The archaeological evidence derived from construction techniques and materials, the increase in roofed space, and other artifacts is not conclusive evidence for the occupation of this allotment by individuals of higher social standing than the convicts who were in earlier occupation. The evidence is circumstantial but does accord with the historical evidence.

The archaeological data not only provides evidence for the construction techniques used, and the social standing of the occupants of the allotment, but may also provide some information on the means of livelihood. For example, building 2 may be a byre, stable or store for agricultural produce. If so the location of such primary production in the township demonstrates an early stage of town development, before primary production is pushed away from population centres by urban development.
NOTES


3. I am grateful to Paul Johnson, senior lecturer, Graduate School of the Built Environment, U.N.S.W., for bringing the hybrid character of Collins' illustration to my attention.

4. See Section 1, note 2.


6. I am grateful to Paul Johnson, senior lecturer, U.N.S.W., for bringing my attention to the date of the harvest with respect to the development of the township.

7. Watkin Tench, 1793, p.78.

8. See Section 1, note 2.

9. See section 1, note 2.

10. David Collins, 1798 (1975), vol. 2, p.222. David Collins is referring to a return published by the colonial government which Governor Hunter sent to Under-Secretary King on 25 September 1800 (HRA, Vol. 2, p.560). The return is worded with slight differences from Collins' version:

"Return of public buildings erected in New South Wales since October 1796, exclusive of many others completely repaired or enlarged.

Repaired the government huts at Parramatta and Toongabbie, originally built by Governor Phillip for the reception of convicts on their arrival, but which had been some years neglected, and were now in a state of ruin. Many indeed had fallen down".

11. E. Higginbotham, 1985a, Figure 2.3, Section 1, note 1 of this report.

12. E. Higginbotham, 1985b, p.17. See Section 1, note 2 of this report.
13. I am grateful to J.S. Kerr for this information, and an illustration of possible arrangements is found in his book, Design for Convicts, 1984, Figure 90, p. 63.

14. In a letter from Caley to Banks, a description is given of houses in Windsor, similar to those erected in Parramatta (HRNSW, vol. 5, p. 294).

"The walls are wattled and plastered with clay, the roof thatched, the floor frequently nothing more than the bare ground. They generally consist of two rooms".

15. Depositional theory was developed by a number of archaeologists in the late 1960s and early 1970s including Nicholas David and M.B. Schiffer.


17. J.S. Kerr, 1985 Goat Island, Maritime Services Board of N.S.W., p. 6.

18. See Section 1, note 1, and Figure 2.2 in that report.

19. 1811 and 1814 musters (AONSW), and 1828 census (E594).

20. 1811 and 1814 musters (AONSW).

21. 1814 muster (AONSW) and 1828 census (M530).

22. 1814 muster (AONSW).

23. 1814 muster (AONSW).

24. 1814 muster (AONSW) and 1828 census (E636).

25. PRO. piece 9904, 9905.


27. P. Robinson, 1985 The hatch and brood of time, p. 123, also 1828 census (E571).


29. 1828 Census (E594-597).
30. There are 3 other William Evans listed in the 1828 Census who could be contenders for the allotment, but insufficient information is given to make any informed judgement.

6.1. THE SCIENTIFIC VALUE OF THE ARCHAEOLOGICAL EXCAVATION

The two earlier reports on the site at Parramatta were both concerned with establishing the potential scientific value of surviving archaeological remains of buildings associated with the early township. It was not only demonstrated that archaeological excavation might reveal a large body of detailed information which the generalised and scant historical documentation could not provide, but it was also recognised that only a small number of early house sites for the accommodation of convicts and others could ever be located with sufficient accuracy to allow for archaeological excavation. Furthermore of these known sites only a small proportion were likely to have survived later disturbance.

However scientific value rests not only in the ability of the archaeological site to reveal a quantity of evidence. Anne Bickford and Sharon Sullivan have pointed out that "judging them on this basis, that is, their capacity to supply data, is not a sufficiently scientific process, and can lead to mindless data collection, while not necessarily increasing real knowledge". Rather scientific value should be viewed in terms of the potential of archaeological sites to provide evidence relevant to the development of current research questions.

"The mature assessment of the research potential (scientific significance) of sites, together with the formulation of worthwhile research programs, may enable historical archaeology in Australia to progress beyond the antiquarian approach which has dominated so many projects in the past."
While the research questions posed before the excavation were simplistic but not necessarily site-specific, the contribution of the excavated archaeological evidence to current research questions in both history and historical archaeology cannot be questioned. The site is able to contribute to such themes as the social distinction between free individuals and convicts, the early dependence on convict and mostly unskilled labour, the scarcity of resources and materials derived from overseas, and in general the imposition and adaptation of European technology and tradition on an alien and sometimes hostile environment.

The archaeological and historical evidence combine to demonstrate that both convicts and free persons were accommodated in the same building. Some important changes to the structure were made probably by the latter category of person, commencing a process of organic growth to the buildings as need arose. Such a process is characteristic of vernacular English buildings, and also became a strong component of Australian settlement in both vernacular and architecturally designed structures.

The accommodation of different social classes in a similar primitive style of building may have been a common occurrence in New South Wales and elsewhere in Australia until well after the 1850s. Such a phenomenon may have been caused by limited access to capital, the pioneering nature of settlement, or the insecurity of land title. To give an example, James Atkinson, the author of *An Account of the State of Agriculture and Grazing in New South Wales*, published in 1826, and a well known adviser on agricultural
matters, made the following statement in his book:

"Many persons on first taking possession of a grant of land, content themselves with the shelter afforded by a bark hut, while they put in their first crops, or carry on their first or most important operations; and many having once accustomed themselves to living in this way, will rest content with no better habitation for perhaps several years; until absolutely compelled by the advancing state of the population around them, to think of erecting a better. But although in cases where the Settler's capital is limited, and it is necessary to apply every shilling to the purchase of livestock and improvement of his land, living in a bark hut may be a necessary and praiseworthy line of conduct; yet those persons who have been accustomed to all the comforts and conveniences of a good house, and especially such as have families, might, by submitting to such privation, become disgusted with the hardships of their situation; and it is certainly a prudent step for every one, as early as possible, to construct himself a decent dwelling; taking care, however, always to bear in mind, that in such a building, grandeur and ornament must be kept out of sight; and that comfort and convenience are the only requisites to be studied."  

Atkinson gives instructions in a following passage on how to construct such a basic structure, illustrating a sketch plan and elevation (Figure 6.1). Were such a building transferred to the English landscape apart from one or two peculiarities in design it could be
recognised as similar to a medieval long house or as a building belonging to a small tenant or landholder. The fact that it was used in the Australian landscape by people of higher social status with capital indicates the adaptation to the environment that was necessary.

Without the further excavation of other examples of this type of building, coupled with historical research, it will not be possible to develop the themes addressed in this archaeological report. It is necessary to establish a pattern of development rather than an individual instance of it. Only in this way will it be possible to define more accurately the construction techniques used, and the changing social status of the occupants of such structures. From this basic site-specific evidence can be developed more powerful research themes relevant first to the growth of the township of Parramatta and in general to the settlement of Australia.

Research questions raised by the excavation and not fully answered include the local manufacture and use of earthenware pottery, and in general the development and adaptation of local manufacturing industry and technology. The excavation did not resolve with certainty the details of construction, especially of building 2. It is likely that timber framing, wattle and daub or brick nog walling was much more common than its surviving examples would suggest. Only further excavation on other sites and detailed historical research will rectify the bias inherent in the surviving structures from this period. Finally the excavation also raised questions on the nature of urbanisation in the Australian context, for example the grand design for the township, its early emphasis.
as a gaol for convicts, its gradual development as a
township by free citizens, and its economic role first
as an agricultural settlement, then as a centre for
services or for the production and marketing
of produce and manufactured goods.

NOTES

1. See Section 1 of this report, notes 1 and 2.

2. The processes whereby the cultural significance of the
site was established are made explicit by Anne
Bickford and Sharon Sullivan in their article,
entitled "Assessing the research significance of
historic sites", p.19-26 in S. Sullivan and S.
Bowdler, 1984, Site surveys and significance
assessment in Australian Archaeology.


4. M. Pearson, 1984, "Assessing the significance of
historical archaeological resources" in S. Sullivan
and S. Bowdler, 1984, p.27 (full reference in note 2
above).

5. James Atkinson, 1826, An Account of the State of
Agriculture and Grazing in New South Wales,
introduction by B.H. Fletcher, 1975, p.95.
7.1. RECOMMENDATIONS

The brief for the archaeological excavation, provided by the Department of Housing and Construction in April 1985, made provision for the following items not already included in this report:

1. Statement of significance.

2. The appropriate measures for the conservation of the archaeological remains and their possible effect on the development proposal.

3. The requirements of a watching brief.

All these provisions have been addressed in previous reports and correspondence to the Department of Housing and Construction, and will be summarised below.

7.2. STATEMENT OF SIGNIFICANCE

A full statement of significance was included in the previous report to the Department. There appears to be little need to update this statement, apart from indicating that the scientific value or potential of the site has been realised and must form part of an ongoing research framework for historical archaeology.

7.3. RECOMMENDATIONS FOR THE CONSERVATION OF THE ARCHAEOLOGICAL REMAINS

Recommendations for the conservation of the archaeological remains were partially addressed in a previous progress report to the Department of Housing and Construction.
The following matters should however be addressed:

1. The Commonwealth Government, through the Departments of Housing and Construction, and of Local Government and Administrative Services, are the owners of all the artifacts recovered from the site. As the owners, the Commonwealth Government is responsible for the curation and safekeeping of all the artifacts, which are considered to form an important and essential part of the cultural heritage of the site.

The appropriate repository for all the historical European artifacts within the State of New South Wales is the Museum of Applied Arts and Sciences, based in Ultimo. For the aboriginal artifacts the Australian Museum, Sydney, is the appropriate repository, as defined in the National Parks and Wildlife Act of New South Wales.

It is necessary for both museums to be approached with regard to the proper curation of the artifacts, bearing in mind the requirements of the departments concerned for a display of archaeological material in Parramatta and also that it is advisable for all the artifacts to be stored in one place (by one institution).

Provisional discussions with Doctor Ronald Lampert at the Australian Museum suggest that it may not be willing to accept the aboriginal artifacts, and this factor may help in keeping the collection together.

2. The archaeological excavation removed all recognised deposits of the early structures on the site. Only the outlines of the pits and post-holes
cut into the sandy subsoil remained after the completion of the excavation. While the area remains significant as part of the early township and as the actual site of a house the recording and excavation of the archaeological remains and their full publication removes many obstacles to the development of the site. Issues which may still require attention include publication of the excavation results, the display of archaeological material at Parramatta, and a watching brief.

3. Recommendations for a watching brief during bulk excavation were discussed in a letter to the Department of Housing and Construction on 11 March 1986, and were discussed separately with Leighton Contractors (27 November 1985).

NOTES

1. See Section 1, note 2 for reference to this report, and Section 4.2 of that report.

APPENDIX 1. SOILS

Roy Lawrie of the Department of Agriculture, N.S.W., who is based at the Parramatta Branch, kindly undertook to investigate the soil profile on the archaeological site.

The remaining topsoil was demonstrated by archaeological means to have been thoroughly disturbed (Section 3.2 of this report). The soil was recorded as a crumbly silty sand, of very dark greyish brown (Munsell 10YR, 3/2). Elsewhere the topsoil was recorded as dark reddish brown (5 YR, 3/2). In general the upper part of the topsoil profile was dark and contained frequent charcoal flecks. The lower part of the profile may have been slightly leached and was a lighter colour.

The topsoil overlay a silty sandy subsoil, brownish yellow in colour (10 YR, 6/6), and with depth the colour deepened to a yellowish red (5 YR, 5/8). The boundary between the topsoil and subsoil was disturbed by archaeological features or by human intervention (cultivation) (Section 3.2 of this report).

Roy Lawrie was able to relate the alluvial sand to the older terrace on the Hawkesbury-Nepean River System, and was able to put its age at approximately 30,000 years. Several other distinct soil types were located on site, namely a light grey crumbly silty sand (10 YR, 7/2) and a light grey sandy clay (10 YR, 7/2). Both the sand and the clay can be found on the site at a considerable depth (between 2.5 metres and underlying shale bedrock at 10.4 to 14.5 metres). The clay would also have been available more easily at exposures of the hill soil at the edge of the alluvial plain of the Parramatta River.

The original structure of the clay appears to have been totally changed, indicating redeposition, erosion and possibly
puddling. Chemical analysis of the clay was contemplated to ascertain whether human intervention was likely, for example if the clay was puddled, and mixed with straw or other binding material in the process of constructing the wattle and daub walls. Discussion with Roy Lawrie concluded that chemical analysis would probably not provide definite answers, and the results of any tests could be strongly influenced by other means (recent cultivation).

Finally the fill of many early post-pipes consisted of a characteristic soil type, namely a dark greyish brown silty sand, with crumbly structure, and generally loose or friable consistency (10 YR 4/2). It was suspected that this soil may represent the original topsoil which had fallen into the post-void once it had rotted. Such a light coloured topsoil might be expected at an early date, since the organic content of the soil may have increased more recently.

Judy Birmingham raised the question of topsoil having been removed prior to construction of buildings 1 and 2. She stated that this had been demonstrated at other sites, such as Mamre. In this case the hypothesis cannot be tested by soil analysis, since the topsoil now present has been thoroughly disturbed since the construction and decay of the two buildings. The following evidence however does not support the hypothesis:

1. had topsoil been removed prior to construction, then many more archaeological features might be expected to survive, including flooring and chimney footings.

2. the removal of topsoil in the area of the buildings would have caused them to flood in wet weather, being lower than the surrounding soil.
APPENDIX 2. THE SURVEY GRID

At an early stage in the excavation, at the completion of machine work to open up the trench, a survey grid was established across the site and pegged out at either 5 or 10 metre intervals. With the setting up also of a temporary site datum of which the absolute height was known, all artifacts and archaeological features could if necessary be located precisely in three dimensions.

The survey grid was used as follows:

1. A 2 figure reference identifies a 10 metre square (100 square metres) by the co-ordinates at its south-western corner.

2. A 4 figure reference identifies a 1 metre square (1 square metre) by the co-ordinates at its south-western corner.

3. A 6 figure reference identifies a 0.1 metre square (0.01 square metre) by the co-ordinates of its south-western corner.

4. An 8 figure reference identifies a 0.01 metre square (0.001 square metre) by the co-ordinates of its south-western corner.

The first number or numbers in the co-ordinates gives the eastings, the second number or numbers the northings. This system is identical to that used on C.M.A. maps, except that with the latter a four figure reference identifies 1 square kilometre. For example using the system on the excavation, the reference 2437 refers to a 1 metre square 24 metres east by 37 metres north.
APPENDIX 3. EXCAVATION RECORDS

The records of the archaeological excavation of George Street, Parramatta, include the following manuscripts and other items:

A. Recording sheets

1. Record of excavation procedure
2. Context catalogue
3. Context record
4. Context find record
5. Artifact catalogue
6. Recorded find and artifact record.

B. Other documents

1. Field plans
2. Levels book.

C. Photographic Record

1. B/W 35mm negatives and contact prints, including photo-mosaic of site.

These archaeological records will remain in the possession of the author until such time as a suitable archive is established in N.S.W. for the reception of site records. All excavation records may be consulted by arrangement.
APPENDIX 4. PRELIMINARY REPORT ON ABORIGINAL STONE ARTIFACTS

This report was presented in January 1986 and is reproduced here with minor alterations to Section 2.

Contents

1. Introduction.
2. Excavation of aboriginal artifacts.
3. Opportunity for further investigation.
4. Curation of aboriginal artifacts.
5. Recommendations.

Notes.
1. Introduction

The site of the proposed Commonwealth Government Office Block and Law Courts Building is located on the western portion of the city block bounded by George, O'Connell, Macquarie and Marsden Streets, Parramatta, New South Wales.

As a result of two reports examining the historical development of the site, the Department of Housing and Construction and Leighton Contractors Pty. Ltd. jointly commissioned E. Higginbotham to undertake an excavation to examine possible remains of early European settlement (1790s to 1830s)¹. An excavation permit was obtained from the Department of Environment and Planning, NSW, and the work undertaken during a six week period in July and August, 1985.

The exposure of aboriginal artifacts was first reported to the Commonwealth Department of Housing and Construction with the recommendation that the National Parks and Wildlife Service, New South Wales, was the State authority to which the exposure of such artifacts should be reported. Representatives of the Service visited the site during excavation, and were informed about the artifacts.

The Department of Housing and Construction formally reported the exposure of the artifacts to the Commonwealth's heritage authority, the Australian Heritage Commission, and following advice from the Commission, informed the National Parks and Wildlife Service, N.S.W.
2. Excavation of Aboriginal Artifacts

An area of 915 sq. metres was opened up by machine, stripping modern overburden (demolition rubble) and removing topsoil to near its interface with subsoil. An area of 590 sq. metres was intensively excavated for archaeological remains.

A total of 32 small stone artifacts of aboriginal manufacture were recovered, including only one possible elouera of greyish chert, 6 small silcrete cores, and 26 flakes and other small fragments, predominantly of silcrete, but including some chert. The assemblage belongs to a microlithic industry, and probably dates after 3000 B.C. The source of most of the artifacts appears to be the Cumberland Plain.

Ten of the artifacts were located in remnant topsoil, the remainder in features cut into subsoil dating from 1790 to the mid nineteenth century. The fill of all the features consisted of redeposited topsoil mixed with small quantities of subsoil sand.

Three factors demonstrated that the topsoil had been thoroughly disturbed since the commencement of European occupation. First a range of nineteenth and twentieth century artifacts were found throughout the topsoil profile, secondly a consistent series of spade-marks had left their impression in the subsoil sand, and finally no features dating to the 1790 period were located above the topsoil-subsoil interface. In other words the early European deposits had been truncated by the later disturbance or cultivation of the topsoil.

Since all of the aboriginal artifacts were found in topsoil, redeposited or otherwise, and not in subsoil sand, it can be concluded that any aboriginal site, of which the artifacts form a remnant, would have been
deposited on or within the topsoil. Subsequent cultivation or disturbance of the topsoil has removed all in situ remains apart from the redeposited artifacts.

Such aboriginal occupation may predate or be contemporary with European settlement. There is documentary evidence for sporadic and occasional contact and trading between the aborigines and early European settlers at Parramatta\(^3\). However in this instance the archaeological evidence is inconclusive. There is nothing that would positively indicate contemporary occupation, and the most likely interpretation is of an earlier site being disturbed by European settlement.

The fact that the majority of aboriginal artifacts (22 out of 32) were located in archaeological features requires some comment. The partial removal of topsoil by machine at the commencement of the excavation or prior disturbance of the topsoil may be factors that have removed a number of artifacts and prohibited their recovery. These factors may partially explain why aboriginal artifacts were more frequently recovered from archaeological features dating to 1790 or later. It would be difficult to hypothesise that the 32 artifacts recovered from the vicinity of the early European buildings indicate concentrated aboriginal occupation even accounting for the sample bias already mentioned. This number of aboriginal artifacts on alluvial river flats can hardly be considered above "background noise" or what would be expected given the long period of aboriginal presence on this continent.
3. Opportunity for Further Investigations

The site of the excavation near the corner of O'Connell and George Streets was chosen as detailed historical research and site inspection indicated that this area was the least disturbed. From these investigations it was found that the Macquarie Street frontage was heavily developed first by Vallacks Brewery (1850s) which was taken over by Meggitts in the early twentieth century and extended through to George Street. Also on the corner of O'Connell Street a petrol garage is likely to have destroyed archaeological remains. The George Street frontage appeared to be less developed, but still had another petrol garage on the O'Connell Street corner, replacing a hotel, and also the extension of Meggitts works.

Given that it was an urban site, the good condition of the remains of early European settlement on the chosen site is surprising. However the excavation demonstrated the presence of modern disturbance on all sides except between it and George Street where the topsoil profile remained. Again the topsoil here gave every indication of being subjected to the same processes as evident on the excavation.

It must be concluded that the best area for exposing aboriginal occupation is similar to that for early European settlement. This site has been thoroughly excavated and all archaeological evidence recovered. There is little likelihood of finding other remains of early European settlement in an undisturbed condition on the development site, and these conditions must also apply to aboriginal occupation.
4. Curation of Aboriginal Artifacts

Discussions have been held with Dr. Ronald Lampert of the Australian Museum concerning the curation of the artifacts. The options at present are as follows:

1. Storage at the Australian Museum.

2. Storage with remaining artifacts from the excavation by the Museum of Applied Arts and Sciences.

3. Display of artifacts at Parramatta in the proposed buildings when completed.

The Australian Museum has already indicated that it may be unwilling to receive the artifacts. Of the remaining options it is recommended that all the finds from the site should remain together, with the exception of a small quantity forming a display if appropriate.
5. Recommendations

The recommendations for the curation of the aboriginal artifacts have been discussed above.

As for further action on site during bulk excavation it is recommended that:

1. A watching brief for any further aboriginal artifacts be made part of the watching brief for items of historical archaeological importance.

2. Any exposure of aboriginal artifacts during the watching brief be immediately notified to the National Parks and Wildlife Service.

3. The consultant undertaking the watching brief employs a suitably qualified consultant in aboriginal archaeology when and if necessary.
Notes


2. Preliminary analysis of the artifacts was undertaken by Dr. Ronald Lampert at the Australian Museum. I would like to acknowledge his assistance with thanks, and to state that any errors regarding the artifacts in this report are my responsibility alone.


4. See note 1, second report.