

## THE HIGHER BARRACKS, HOWELL ROAD, EXETER, DEVON, ENGLAND

By RICHARD PARKER<sup>1</sup>

*Higher Barracks at Exeter were established in the late 18th century as part of a national scheme to improve military accommodation in response to the threat of an invasion during the French Revolutionary Wars. A site on the outskirts of the city was chosen and surrounded by a perimeter wall, within which an impressive group of buildings was constructed. These included a Regimental Headquarters building, barrack ranges and ancillary structures such as a hospital, canteen, workshops, barns, veterinary stables and a riding school. Following a further invasion scare in 1803 the barracks were enlarged and remained in use as a military installation throughout the 19th and 20th centuries. Unlike many comparable buildings Higher Barracks had survived almost complete until their disuse in 1997. This report describes this important group of buildings and presents the evidence for their function and development recovered during archaeological work during their recent redevelopment for housing.*

### INTRODUCTION

In his general survey of British barracks James Douet remarks that ‘remarkably few detailed studies of individual barracks have been published’ (Douet 1998, xvii). This is a pity, since barracks were large and important complexes serving a wide range of specific functions in addition to that of providing accommodation for the troops. During their military use barrack buildings were frequently altered and adapted in response to the changing needs of their occupants, resulting in multi-phase structures of great complexity. Close study of barrack buildings can reveal much about the relationship between the British Government and its soldiers and civilians, as well as changing attitudes to public order, public health, education and morality.

This report provides a detailed analysis of the buildings of Higher Barracks in Exeter (centred at SX 9213 9346). The Barracks have recently been developed for housing by Barratt Bristol and renamed ‘Horseguards’. Prior to this redevelopment the barracks was regarded as one of the most complete survivals of a late 18th-century Cavalry Barracks in England (*ibid.*, 79). Many 18th-, 19th- and 20th-century military buildings survived within the compound. Six of the major buildings were individually Listed Grade II and the archaeological interest of the whole group was reflected in the overall Grade II listing of the site. Although many buildings have since been demolished, all the major buildings and several of the minor ones still remain among the modern buildings of the housing estate. This report summarizes the results of building surveys and archaeological watching briefs undertaken by Exeter Archaeology during the redevelopment and conversion of the buildings.

### PREVIOUS ARCHAEOLOGICAL RECORDING

In 1997-8 an archaeological and historical assessment of the site and a geophysical survey were carried out by Exeter Archaeology (EA) in order to assess the archaeological impact of the proposed housing development on the historic buildings and the potential for below ground remains. The results of this assessment and survey are contained within EA Assessment Report No. 98.09.

Further recording was undertaken in February 1999 in advance of the demolition of nine mid 20th-century timber huts. These huts occupied the former parade ground and were probably erected at a time of intensification of military activity at the barracks either before or during the Second World War. A brief description of each individual hut is given in EA report No. 99.08, and is summarized below in this report.

### THE PROJECT

The archaeological work which forms the subject of this report was undertaken from April 1999 to November 2003 as a condition of planning permission for the construction of new residential blocks and the conversion or demolition of some of the historic barrack buildings during the redevelopment of the site as housing. The recording and watching brief were carried out in accordance with Guidance Notes on Archaeological and Historic Building Recording supplied by the Exeter City Archaeology Officer in January 1999.

A full photographic record of the site and measured plans of many of the smaller buildings were prepared prior to the commencement of the redevelopment. These plans and drawings, together with survey drawings of the larger buildings provided by the architect, were used as a basis for recording features revealed during the

---

<sup>1</sup> Exeter Archaeology

development. Limited hand-measured drawn recording was also undertaken in those areas of the buildings which were perceived to be of particular interest.

During the conversion of the buildings and the construction of the new residential blocks the ground works were monitored and observed by EA staff. Records of the trenches were made utilising the site plans provided by the developer, and observations were recorded on watching brief record sheets. The site archive will in due course be transferred to the Royal Albert Memorial Museum, Exeter, for permanent curation.

## SUMMARY HISTORY OF THE BARRACKS

### *The French Revolutionary Wars, 1790-1802*

Higher Barracks (formerly Town Barracks) were constructed by the British Government in response to fears of an invasion following the French Revolution of 1789. A large standing army had previously been considered politically unacceptable in peace time, due to the perceived threat to constitutional and civil liberties posed by an army under the direct control of a potentially despotic monarchy or government (Douet 1998, 14). The new threat from France lay not only in the size of their army but also in the potency of Revolutionary ideas which, it was believed, were spreading through the civilian population. Measures were therefore taken at both a national and local level to mobilise the population. Large numbers of men were recruited to the regular army and navy, and many companies of volunteers were founded under the command of local dignitaries (Jenkins 1806, 223).

Such an army as did exist in Britain had traditionally been billeted on civilians, particularly publicans. This may have resulted in problems with discipline in addition to exposing the troops to potentially disaffected elements in the community. In order to provide secure accommodation for the troops and their equipment, and to isolate the men from contact with dissidents, over 200 new barracks were constructed throughout Britain in the late 18th and early 19th centuries. By 1809 21 new barracks had been established in Devon (Fig. 1), including ten in Plymouth, two in Exeter, one at Princetown and others at large towns throughout the county, particularly along the south coast (Breihan 1990, 133, 142-3).

The barracks at Exeter were constructed by the building contractors James Fentiman and Son on a site chosen by Colonel Oliver DeLancey, the Barracks Master General (Breihan 1990, 147). The site consisted of two fields at Hills Court in St David's parish which had a frontage of some 100m to Howell Road and extended up the hillside for approximately 300m (Fig. 2, A). The buildings were designed as a cavalry barracks and military depot, with stores, workshops and accommodation for both horses and men. Development of the site apparently commenced in 1794 (Breihan, 1990, 144), though the contemporary local historian Alexander Jenkins specifies 1792 (Jenkins 1806, 222-3). The site was first enclosed by a brick wall strengthened by projecting pilaster buttresses, and the buildings were subsequently erected against this wall. Much of the wall still remains and its sloping courses, reflecting the contours of the ground, can still be recognised in the rear of many of the original barrack buildings (Fig. 3).

The buildings in the upper part of the site (Fig. 5) were arranged around a large rectangular parade ground, with the Headquarters Building occupying the most prominent site. This was a symmetrical brick building bearing the Royal coat of arms in a central triangular pediment (Fig. 41). The Headquarters Building was flanked on either side by identical barrack blocks extending at right angles and forming the east and west sides of a quadrangle. These blocks contained stabling on the ground floor and troop accommodation on the first floor, in which the soldiers both ate and slept. The third storey contained stores and workshops within the roof space. Each block was provided with kitchens for the preparation of food purchased at the Suttling House (or canteen) located in the lower part of the site.

To the rear of the site was the Riding School, and at the southern ends of the two barrack blocks, granaries, animal feed stores and latrines were arranged symmetrically on either side of the compound. Large water tanks containing up to 20,000 gallons of water were located under the southern side of the quadrangle (which was to remain open until the late 20th century). The lower part of the site (Fig. 6) contained the Hospital, Farrier's Workshop and Veterinary Stables, the Guard House and the Suttling House, all located around the perimeter of the compound. There was also an Ammunition Magazine standing at a distance from the other buildings on the eastern side. Altogether the buildings provided accommodation for 15 officers, 180 men and 202 horses, with 21 officers' horses and 80 troop horses stabled in each wing (Breihan 1990, 142; PRO MPH 338, plan of 1869).

Entries in the marriage registers of St David's parish show that the 25th Regiment of Light Dragoons was stationed at the barracks in 1795 and 1796. The regiment was active not only in preparations for the threatened French invasion, but also in local law-enforcement. Jenkins records that the regiment, under the command of Major Shadwell, policed executions and put down local unrest, sometimes with such 'brutal severity' that the city at times 'exhibited a melancholy idea of military government' (Jenkins 1806, 225).

The 25th Regiment of Light Dragoons was followed between 1796 and 1798 by the Sussex Fencibles, the Sussex Light Dragoons and the 3rd (Prince of Wales's) Dragoon Guards. There appears to have been a rapid

turnover at the barracks; during the entire period of the hostilities, from 1795 to 1815 no fewer than 10 regiments were stationed at the barracks for periods long enough for members to form relationships with local women and marry at the parish church (research by A. G. Collings, EA Archives).

War with France ended with the declaration of the Peace of Amiens in 1802, which was celebrated with great rejoicing in Exeter. The 6th Regiment of Dragoons and their military band marched from the barracks to the Cathedral for an official day of thanksgiving (Jenkins 1806, 232). Unfortunately this peace was only of short duration and war was again declared in 1803.

#### *The Napoleonic Wars, 1803-15*

During this period French aggression on the continent and the renewed threat of invasion once again resulted in the country being put upon a war footing. Additional troops were recruited and many of the regiments and volunteer companies, which had only recently been disbanded, were reformed. Military activity in Exeter was greatly increased; the Castle (Fig. 2, **D**) was garrisoned with artillery and an ammunition depot was established near St Anne's Chapel at the junction of the present Old Tiverton Road and St James' Road (Fig. 2, **C**). Preparations were made for the enlargement of the Cavalry Barracks by the addition of new buildings and also for the establishment of an Artillery Barracks in the city on land in St Leonard's and Heavitree parishes, adjoining the Topsham Road (Fig. 2, **E**). The contract for the construction of both new barracks was awarded to the Exeter builder Robert Cornish on 23 September 1803 (House of Commons Sessional Papers 1803-4 Vol. VII, 141, 296). Cornish appears to have completed the extension to the Cavalry Barracks before beginning the Artillery Barracks in 1804. The Artillery barracks were still under construction in 1806 (Jenkins 1806, 231-36) and substantial parts survive today as 'Wyvern Barracks' (Fig. 8).

The new buildings at the Cavalry Barracks were constructed to the west of the existing compound on an adjoining field. Much of the earlier wall between the two sites may have been removed at around this time, but its course can still be clearly seen and fragments remain built into the rear of the surviving barrack buildings. The fully developed site is shown on Hayman's map (Fig. 2, **B**). The new site had a gateway onto Howell Road opening onto a central avenue running the length of the site. A large structure identified as the Barrack Master's House stood at the head of the avenue. This is shown with a central section and projecting wings. Six new barrack blocks were also provided in two rows extending down the hill. The additional buildings were timber-framed and possibly only a single storey in height, but together with some limited alteration of the earlier buildings, they increased the capacity of the Cavalry Barracks to 32 officers, 384 men and 412 horses (Breihan 1990, 146).

#### *The early 19th century*

Victory was declared in 1815 and reduction of barracks provision across the country followed. Some barracks were retained for less intensive peacetime use; other sites were disposed of and their buildings either reused by new owners or simply demolished for their materials (Breihan 1990, 155). At Exeter both the Cavalry Barracks and the Artillery Barracks remained in military use. The area of ground enclosed in 1803 was retained, but the timber buildings erected by Cornish were found to be badly decayed and were demolished (*ibid.*, 154). An undated early 19th-century map (c.1820) of the lands of John Gould Esq. depicts the site of the 1803 barracks after the demolition but before subsequent developments on the site. Only one structure remained; a rectangular building at the end of the avenue. This may have been the Barrack Master's House shorn of its wings (DRO 59/7/3/10). In 1827 the Royal Engineers' Office at the barracks advertised the disposal of 'the materials of part of the late residence of the Barrack Master' (EFP, 12.4.1827 4e). This may represent the further reduction of the Barrack Master's House to a single storey structure, which survived until its demolition in 1999 for the present housing development. By 1840, when John Wood's map of Exeter was produced, four small buildings were shown on the western extension (Fig. 4). One was an infection ward connected with the Hospital; another, standing to the south west of the former Barrack Master's House, is marked on later maps as the R.E. Office (OS 1876 1:500 map, sheet 80.6.2. Fig. 5).

During the early 19th century the barrack buildings were rarely fully occupied. A survey in 1822 indicates that during the previous 12 months only 5 officers, 31 men and 34 horses had been living there (House of Commons Sessional Papers 1822 Vol. XIX, 217). During the cholera epidemic of 1831-2 the Mayor of the City, William Kennaway, wrote to the Commander of the Forces to request that the Cavalry Barracks might be utilised as a hospital, as they 'are and have for some time past been unoccupied by troops'. The request was refused on the grounds of inconvenience (Shapter 1849, 131). A second and more desperate plea, for the use of the hospital block only, was refused in July 1832 (*ibid.*, 136-7). By the time of the 1851 census only five families were identified as resident at the barracks (WCSL 1851 census).

### *The later 19th century*

By the mid 19th century many barracks across the country were regarded as overcrowded and insanitary, and the authorities were increasingly aware of their responsibility for the moral as well as the physical well being of the soldiers (Douet 1998, 128). The Barracks Accommodation Report was published in 1855 and from 1857 onwards a Royal Commission was appointed by Lord Palmerston to investigate existing barracks and recommend improvements. A 'New Commission for Improving Barracks and Hospitals' was set up and eventually became the Standing Army Sanitary Commission. The Commission particularly condemned barracks where the men lived above their horses, as being pervaded with unpleasant odours. Corridors dividing back-to-back rooms were also condemned as restricting light and the flow of air. The reformers advocated the cross-ventilation of barrack rooms, mess rooms which were separate from the soldiers' sleeping rooms, the provision of married soldiers' quarters, gymnasia and also a better alternative to the franchised canteen, which was often so expensive that the soldiers preferred to frequent disreputable local beerhouses (*ibid.*, 128, 139-40).

Although Higher Barracks may in fact have been under- rather than over-crowded, many alterations and additions to the buildings seem to have been made as a result of these reforms. The layout of the barracks and many of the room functions at this period are fortunately recorded on a series of plans now held at the Public Record Office (PRO MPH 338). These were originally surveyed in 1866 but survive in versions corrected in 1869 and 1886. A return made to Parliament in 1867 indicates that there was accommodation for 13 officers, 155 men and 202 horses (House of Commons Sessional Papers 1867 Vol. XXXXI 389).

In 1861 the Royal Engineers' Office invited tenders for erecting a pensioners' establishment at the lower end of the site, in part of the area enclosed in 1803 (EFP 10.7.1861 8b). In the early 1870s land to the north-west of this was utilised for the construction of a two-storey block of flats, with galleried access to the rooms in the upper storey. This building provided accommodation for 29 married soldiers and their families (Fig. 6).

On a Sunday afternoon in November 1868 a serious fire destroyed the East Block within the old compound. This disaster caused a temporary reduction in the overall accommodation to 13 officers, 82 NCOs and privates, and 101 horses (EFP 25.11.1868 5e; PRO MPH 338, plan of 1869). The rebuilding of the East Block soon afterwards was carried out to the same dimensions as the demolished building, but did not include stabling. The interior was occupied entirely as soldiers' quarters and there was galleried access to the first floor.

In the early hours of a Sunday in December 1879 another fire destroyed the late 18th-century Headquarters Building at the head of the parade ground (EFP 31.12.1879 7b). The building was reconstructed in 1881 in an attractive Queen Anne Revival style, surmounted by a clock tower and with service areas to the rear. After this fire some alterations appear to have been carried out to the West Block to prevent or limit the danger of fire; the roof space, which seems hitherto to have been a single undivided space, was subdivided with brick walls, the chimneys were reconfigured and new external staircases were provided at either end of the building.

By the late 19th century territorially-based regiments had been established and the Higher Barracks had become the depot of the Devonshire Regiment. The West Block had been converted into armouries by the removal of the horse stalls and the insertion of iron columns to replace the original timber posts (PRO MPH 338, Plan of 1886). In 1886 there was provision for only six horses, and accommodation for 10 officers, 240 NCOs and privates and 29 married soldiers' families in the married quarters.

### *The 20th century*

During the late 19th and early 20th centuries few major alterations were carried out at the barracks and, although the military use of the site continued, the barracks sometimes served as the venue for Sunday promenades, when the public would walk on the parade ground to the sound of the military band (Harvey 1984, 8). Popular events such as the judging of the annual Cart Horse Parade were also held at the barracks during this period. The First World War of 1914-18 saw an increase of military activity and, sadly, the permanent cessation of such public entertainments (Hoskins 1960, 121-2).

During the First World War the field to the north of the site was acquired as an additional training area. A complex network of practice trenches were excavated in the field, some traces of which could still be identified in November 2002 (Fig. 7, top). New buildings were also added within the barracks compound; a drill shed was constructed to the south of the Forage Store and a rifle range was built against the east perimeter wall. The former Straw Store to the south of the East Block had been converted into a gymnasium (OS 1:2500 map Sheet 80.6, 1905) but in 1938 this building was demolished and a Dining Room was constructed on the site. This was to be the last building of any real architectural quality to be developed at the barracks; subsequent developments were of more utilitarian character.

During the Second World War many more buildings were added, most of which were temporary buildings such as the timber huts on the eastern side of the parade ground. An undated plan now held by the Wessex Reserve Forces and Cadets Association, entitled 'Town Barracks, Exeter. Skeleton Record Plan' shows the layout of the buildings and the uses of many of the rooms in the period following the Second World War.

In the post-war period Higher Barracks became a Combined Manning and Record Office, under the Ministry of Defence. The interiors of the barrack blocks were severely altered at this time. Later, plans of some of the buildings were made to show the teleprocessing, VDU and power supply layouts. These drawings, of the Hospital, West Block and East Block are dated 1977, but may well have been based upon 19th-century plans (DoE Area Works Office, drawings dated 1977).

Some new construction was carried out in the 1960s or 1970s when a large temporary office block was installed towards the west of the site. This led to the demolition of the Royal Engineers' Office and several other buildings. At about the same time a further large modern building was constructed between the south ends of the East and West Blocks, finally enclosing the quadrangle.

Further demolition occurred in the 1990s, when part of the site enclosed in 1803 was released to Exeter City Council and the married soldiers' quarters were demolished for redevelopment as 'King Stephen Close'. In 1997 military occupation of the barracks site finally ceased. The complex was subsequently acquired by Barratt Bristol and has been redeveloped as housing. Fig. 7 shows the site as it was at the time of recording in 1998-9.

## DESCRIPTIONS OF THE BUILDINGS IN THE 1794 COMPOUND

In the following sections the individual buildings are identified by their MoD numbers (Fig. 7). Although the demolition or drastic alteration of the structures during the recent redevelopment may be noted, this report is intended primarily as a record of the historic buildings in the context of their military use. The surviving buildings are thus described as they were prior to their recent conversion and no attempt is made to describe in detail the present condition or appearance of the buildings.

### BOUNDARY WALL AND GATES

The original barrack compound established in 1792-4 was surrounded by a brick boundary wall enclosing the whole area and punctuated, as described above, by flat pilaster buttresses at regular intervals. Although much rebuilt, the eastern and southern walls of the complex survived in their entirety at the time of the recording, and have been retained as the boundary wall of the new housing development. The western wall of the barracks compound had been almost entirely removed by the 1870s, but the northern wall, with the Sergeant Major's quarters and the Fire Engine House built against it, survived until the Second World War, when it was partially demolished during to allow for the construction of a row of Nissen huts. These are shown on the 'Skeleton Record Plan' and on RAF aerial reconnaissance photographs taken in 1945 (RAF Sortie No. UK 865 Part V (30/09/45) sheet 6450). Other sections of the boundary wall survived built into the rear walls of the remaining barrack buildings and will be noted below.

There was originally only one entrance to the barracks compound, in the southern wall immediately adjoining the Guard House. The gateway was flanked by two convex curving walls terminated by tall brick piers with white stone astragal mouldings beneath flat stone caps. Between these piers a short length of walling and a lower brick pier on either side defined a gateway with an iron overthrow and lamp (Fig. 9). The gateway was widened in the mid 20th century by the removal of the western pier and the reconstruction of the eastern pier to the east of its original position, possibly to ease access for motor vehicles. Only one of the original piers survived at the time of the recording; this has recently been demolished and the curving wall to the right of the gate rebuilt in a new position.

### GUARD HOUSE (Building 1: Fig. 10)

This single-storey red brick building stands just within the main gates of the compound at the southern end of the site, and has been converted to two bungalows. The Guard House was rectangular in plan, covered by a low-pitched, hipped, slate roof which extended to form a wide verandah surrounding the building on two sides (Fig. 11). The eaves were supported by white-painted wooden posts with diagonal braces springing from impost blocks near their summits. The original Guard House constructed in the 1790s survived as the central part of the building. This was later extended both to east and west, possibly in order to increase the accommodation following the expansion of the barracks in 1803. The vertical breaks between the 1790s core and the later fabric were visible in the brickwork immediately to the east of both entrances. Within the building the high plinth at the base of the wall could be traced running along two of the internal walls, which must therefore have at one time formed the exterior walls of the building.

#### *Guard room*

The main part of the original building was the large guard room in the eastern part of the building, which was entered by a doorway in the eastern part of the north wall. This room was lit by a large tripartite window under

a flat-arch of brick, and had unmoulded square glazing bars and horizontally sliding sashes. This may have been the original window, though the flat-arched lintel above seems to have been rebuilt. The guard room was formerly heated by a stove in its north-western corner; a door for cleaning the flue was still visible. There were small ventilator openings in the upper parts of the three former external walls, and traces of blocked windows in the southern and eastern walls of the room. A doorway had been cut through the west wall to give access to the western part of the building and a further doorway, cut through the east wall, opened upon the extension on that side. There were traces of four fixtures on the south wall of the room. These may have been rifle racks; unfortunately they had been removed and their purpose is uncertain. A post box bearing the initials of Edward VII was inserted early in the 20th century into the wall adjoining the main door.

### *Cells and yard*

The western part of the original building contained two smaller rooms; a cell to the north, and a partially roofed rectangular yard to the south. The cell, marked as 'Det<sup>n</sup> Rm 4' on the 'Skeleton Record Plan', was formerly entered by a door in the west part of the north wall. This had been blocked in brick and its flat-arched lintel pointed with false horizontal coursing to give the impression of continuous brickwork. The doorway was superseded by a new doorway to the west, beyond the corner of the original building, which communicated with a corridor running alongside the original west wall of the Guard House. From this corridor doorways opened into the original cell, into two additional cells in the western extension and also, through an earlier doorway in the original west wall of the building, to the yard. The doorway from the corridor to the original cell was made by cutting through the wall below a high-level window; the upper part of the opening had well made jambs, whereas the bricks in the lower part of each jamb showed evidence of truncation.

The cell was lit by an inserted window in the north wall adjoining the blocked doorway. This window had stone jambs and a square-headed opening under a massive stone lintel and retained its metal casement. This was strongly made to prevent escape, but pivoted inwards at the top to allow ventilation. In the south wall of the cell a further high-level cell window remained. This had an arched head with a similar casement. The window received light from the yard to the south, which was only partially roofed and may have functioned as a latrine. Adjoining the yard was a small rectangular projection to the west which may have been a water closet.

The two cells, or Detention Rooms 2 and 3, in the western extension were also lit by two windows each. The square-headed windows in the north wall and west wall appeared to be the earliest, but each cell also had a second window with an arched head. These windows were inserted into the west and south walls and, like the arched window serving the earlier cell, are presumably of 19th-century date. These windows retained their original bars, casements and glazing, despite being blocked. The windows may have been inserted to improve the ventilation and lighting of the cells.

Several ventilation grilles were observed in the walls between the cells and over the doorways. The ventilation slits over the doorways were made particularly secure with very strong, flat metal plates. A further, and most peculiar, feature of the cells was a series of small rectangular ducts located close to the cell doors. These ducts rose within the walls between each cell to connect into a larger brick duct running horizontally over the ceiling to meet the chimney serving the guard room. These ducts are almost certainly an additional ventilation system utilising the draught from the guard room chimney to refresh the air in the cells. In the probable water closet was a blocked flue high in the wall surmounted by a small chimney. This was a later addition and appeared to relate to a heating system; the room may at some time have been converted into a boiler house.

### *Eastern room*

The eastern extension to the Guard House contained a single rectangular room, lit by three high-level barred windows. These appeared to be of different periods. The window in the northern wall had a monumental stone frame similar to the windows at the western end of the building. It had diagonally set square bars to the interior. In the eastern wall near the north-eastern corner was a similar but much later window with round bars, and to the north of this, at a lower level, a smaller and older window also with round bars. This latter window seemed to be primary to the extension. The disposition of these windows suggests that the room was at one time partitioned into cells, though no evidence of partitions remained. By the time of the production of the 'Skeleton Record Plan' in the mid 20th century it is shown as 'Detention Room 1'.

At the south-eastern corner of the room a blocked doorway gave onto a small, triangular space contrived behind the curving walls of the entrance gate. This appears to have been a water closet corresponding with that in the western cell area. A door had been broken through its north wall and at the time of recording it was in use as a meter house. A further rectangular structure against the west wall of the guard house was added in the 20th century and is labelled as a 'Transf(ormer)? House' on the 'Skeleton Record Plan'.

### *Other furnishings*

The interiors of the rooms had been stripped of fixtures and fittings. Evidence for fittings survived in several rooms in the form of wall scars in the paintwork or chases in the brickwork: two vertical grooves could be seen in the plinth of the former east wall of the original Guard House which bore no relation to the presumed former subdivision of the room and may have been intended to accommodate the upright supports of a large piece of furniture such as a shelving unit or equipment rack. Elsewhere, metal fixings were identified in several rooms which might be the remains of rifle racks. A fixed metal cabinet also survived in one of the cells, but its function is uncertain. The cells retained heavy, panelled cell doors with massive bolts and hinges. These doors were probably installed when the building was extended, and may date from 1803.

### *Roof*

The original 18th-century roof structure of the Guard House survived, but had been extended to the east and west following the addition of the early 19th-century extensions. The roof was supported by king-post trusses with substantial tie-beams resting on the wall tops. The feet of the principal rafters were seated in the tie beam and rose to tenon into the sides of the king posts at the apex. Diagonal braces rose from the base of the king posts to support the principal rafters at their centres, and the tie beams were suspended from the base of the king posts by means of massive iron straps. The common rafters were supported on a single pair of purlins and a ridge tree. The trusses were also separated at their bases by longitudinal beams concealed within the structure of the ceilings, and flush with the ceiling joists.

The ceiling joists were integral with the roof structure; they tenoned into the tie beams at the base of each truss, and were clearly assembled after the trusses were in position. The tenon at one end of each joist was seated in a mortice in one side of the tie beam. In the tie beam of the adjoining truss were long horizontal slots or chases through which the opposing tenon was swung sideways until the joist was in the correct position. It was then secured with nails. The joists sometimes shared a chase, two joists being swung in from opposite directions so that when in position they were separated by the width of the chase. This method of assembly was noted in many of the barrack buildings.

The original form of the roof was best preserved in the area of the eastern extension. Here it was evident that the roof had not been altered when the building was enlarged, but simply extended by continuing the slope of the hip downwards to form a lean-to. The eaves plate of the original roof survived, and retained sockets for the wooden posts and diagonal braces of the verandah. The verandah had thus continued around the east and west sides prior to the erection of the extensions and must have been a feature of the primary building. At the corners of the original building, the pattern and alignment of the joists was varied to provide support for the verandah. Diagonal timbers were inserted to tie together the eaves plates on the long and short sides of the building, and short dragon beams tied into these timbers were inserted to prevent outward movement of the hip rafters.

The western part of the roof had been extended over and beyond the western extension by dismantling the entire western bay of the earlier roof and inserting a new truss, more or less on the line of the original western eaves plate. The roof was then continued over this additional bay and into a new hip over a new verandah beyond. The junction between the older and newer parts of the verandah could still be discerned on careful inspection. The ceilings in this area (over the additional cells) had diagonal dragon beams radiating from the centre. Although a similar system of assembling the ceiling joists was used, a continuous rather than an intermittent chase was cut in the west face of the tie beam of the additional truss to receive the tenons at the end of the joists.

Later alterations to the roof of the Guard House were minimal. In the 19th century the roof over the yard was removed and a partly-glazed, open area was created. This was probably undertaken to ventilate the latrine and to provide better lighting for the cells. Better light to the guard room was also provided by the construction of a large, central skylight cut through the ceiling and roof.

### WORKSHOPS (Building 2: Fig. 10)

The workshops were housed in a single-storey brick structure with hipped slate roofs, occupying the south-western corner of the compound (Fig. 12). This building was originally constructed in the 1790s against the original boundary wall of the Barracks, and served as a Farriers' Workshop (or Smithy) and Shoeing Shed, with other workshops adjoining. The original layout of the buildings appears to have been little altered by 1876 when they were depicted on the OS 1:500 map of that date (Sheet 80.6.7), which fortunately shows elements of their plan (Fig. 6). By the middle of the 19th century the northern parts of the building were in use as the Royal Engineers' Stores and as a Funeral Carriage Shed, and later still were converted into Recruits Inspection Room and a Plumbers' Workshop (EA report No. 98.09 Fig. 6). By the time of the survey the buildings had been

neglected and were in poor condition, but, despite some early 20th century alteration, they retained many interesting features. The buildings have been demolished and rebuilt in 'replica'.

#### *Farriers' Workshop*

The Farriers' Workshop (Fig. 12, left) lay at the southern end of the range of buildings, under the same roof as the Shoeing Shed. This small building was lit by three two-light casement windows in its east wall, and was entered by a doorway from the Shoeing Shed. The interior was divided into three rooms, the largest of which clearly formed the main work area. This room had no ceiling and was open to the roof. Its walls were of painted brick and its floor of concrete, with the exception of a wide causeway of wooden blocks connecting the entrance doorway with a small room to the south. The wooden blocks in the floor were each 100mm square, laid with the end grain uppermost to provide a hard-wearing surface.

The room at the south end of the building was well lit by one of the casement windows, and contained shelves and a row of coat hangers. This room was ceiled with plaster, but its floor was of concrete and its walls of painted brick. Adjoining this room was a small cupboard which was also ceiled and had a floor of identical wooden blocks.

Over the roof of this cupboard was a metal tank with a pipe rising diagonally through the roof, possibly an air vent (Fig. 13). Adjoining the wall of the cupboard, within the main room, was a low brick structure approximately 0.85m tall. Its lower part contained a possible firebox with a large metal door, and two smaller doors above this which may have served to regulate the draught. A further small door in the east wall of the building betrayed the presence of a flue within the wall. The upper part of the brick structure contained a tank with a hinged metal lid. This tank had an outlet tap and inlet pipes and may have been supplied by the high-level tank above. Unfortunately the pipework had been removed and the course of the piping could not be established.

It is possible that the tank was simply used as a trough for cooling or tempering forged metal; however the presence of the presumed firebox beneath it suggests that the contents of the tank could be heated. If the forge was regularly used for making cutting weapons or for the repair of edged tools, as is not unlikely, this tank may have been used as a tempering bath containing refined tallow or whale oil. These substances were used rather than water for tempering blades because they allowed the metal to cool more slowly, providing a more delicate temper (Bealer 1976, 62-3). The tallow would have to be heated to keep it in a molten state, and the provision of a lid may have ensured it was kept free of dirt or other impurities.

The forge itself had unfortunately been removed. It seems to have immediately adjoined the presumed tempering vat, as an area of brick blocking in the wall above, pierced by a hole for a stove pipe, may represent the position of the hood and chimney. Nothing else is known of the forge. Traces of a brick base remained against the west wall of the room which might represent a support for the bellows, though it is possible that this was a later feature. The wall area behind this was smoothly rendered, and it is possible that the original forge had been replaced with a patent forge standing in this position, with a metal chimney running up through the blocking of the former hood. The anvil had also been removed, but a work bench remained against the east wall of the room.

Wiring had been brought through the front wall of the building from a small brick shed added against the wall near the doorway. This shed appeared to be of 20th-century date, and may have contained a generator to power machinery. It seems also to have contained a water supply, the pipework for which extended from this shed around three sides of the room to terminate roughly at the position of the forge.

#### *Shoeing Shed*

The Shoeing Shed was originally an open-fronted rectangular area, walled on three sides only and sharing a roof with the Farriers' Workshop. The back wall of this building was the original barrack wall, with pilaster buttresses and a deep French drain at its base to prevent damp penetration. The side walls were shared with the adjoining buildings and the front was originally open, with only a single pier or post supporting the roof. The door to the Farrier's Workshop lay in its southern wall, and the doorway to the Royal Engineers Stores in the northern wall. The entire floor area may originally have been cobbled with rectangular setts; some of this cobbling remained outside the doorways to the two adjoining rooms. This part of the building presumably provided a covered space into which horses might easily be brought for shoeing, with convenient access to the forge and stores on either side.

In the early 20th century the front of the Shoeing Shed was enclosed with a new brick wall containing two heavily-barred sash windows under slightly arched heads. Short passages or entries were created to permit access to the doorways of the Farriers' Workshop and the Royal Engineers' Stores, producing a 'T'-shaped room within the former Shoeing Shed. The roof was ceiled with plaster and a planked floor was laid, but the walls remained unplastered and were painted white. The room was heated by a stove, for which only the base and the stove pipe remained.



### *Roof*

The roof of the Farriers' Workshop and the Shoeing Shed was hipped at both ends. At the time of demolition the roof above the Shoeing Shed was ceiled, but this was clearly a later modification as the roof timbers above the ceiling were whitewashed and must formerly have been exposed. Within the Farriers' Workshop the roof structure remained open (Fig. 14, and Fig. 10, section).

The roof was a simple king-post roof like that of the Guard House, but more old-fashioned in design. The king posts had no straps at their bases; the carpenters had not perceived these posts as suspension members, but as supports off the tie beams for the rafters and ridge, a feature of early roofs of this type. There were four trusses supporting a single pair of purlins and a plank ridge. Over the common rafters the roof was fully boarded and the slates, which were modern, were fixed with nails.

### *Royal Engineers' Stores & Funeral Carriage Shed*

This room and the adjoining Funeral Carriage Shed (Fig. 12, right) formed part of a continuous range with the Farriers' Workshop and Shoeing Shed, but were contained under an independent roof supported by tie-beam trusses identical with those of the Farriers' Workshop. The rear wall was formed by the original buttressed boundary wall, with sloping coursing following the contours of the hillside. Two small rectangular windows had been cut through this wall, and their jambs were made good in cement. The window to the Royal Engineers' Stores was heavily barred, but that to the adjoining shed was louvred. The front wall of the building was constructed of blood-red locally-made bricks laid in Flemish bond, pierced by two heavily barred sash windows which appeared to be 20th-century replacements. Both these windows and the doorway to the Funeral Carriage Shed had flat-arched heads constructed of rubbed bricks. Two small iron ventilator grilles had been cut through the wall in the 19th century.

The rooms within the building were originally open to the roof and had whitewashed brick walls and roof timbers. The Royal Engineers' Store had been refurbished in the late 19th or early 20th century and most of the surviving fixtures dated from this period. At this time a ceiling was inserted below the level of the tie beams and a new parquet floor was laid over a concrete sub-floor. A chimney in the north wall was inserted at the same time as the ceiling (the chimney stack above ceiling level was unpainted). The chimney served a stove, the base of which could be observed in the floor. The stove pipe and a door for sweeping and maintaining the flue remained. A wide, low, bench or table was erected on the east side of the room, with shelves on the two end walls. There were no other furnishings of interest, apart from a series of iron rings embedded in the west wall in three groups, at 0.35m and 1.6m above floor level. The function of these rings is not known.

The funeral carriage shed was entered through 20th-century double doors hung in the original opening, and was basically an empty rectangular room with a parquet floor. In its south wall was a blocked doorway formerly communicating with the Royal Engineers' Stores. A chimney had been inserted in the south wall, possibly when the room was converted into the Plumber's Workshop in the late 19th century. The ceiling in this room had been inserted after the chimney was constructed; both the stack and the earlier masonry were whitewashed to roof level. The base of the stove only remained.

### VETERINARY STABLES (Buildings 3 & 4: Fig. 10)

This building was erected in the 1790s and consisted of a long, narrow, single-storey range of buildings arranged in three blocks stepping uphill with the sloping ground (Fig. 15). Each block was roofed by a low-pitched, hipped slate roof. The front and side walls of the building were of locally made red brick laid in Flemish bond; however the rear wall of the building was the original barracks boundary wall, and was of poorer-quality brick.

The building is depicted on the 1876 OS 1:500 map of the area (Fig. 6), which may show the buildings prior to any alteration. The lower two blocks were apparently divided by brick walls into enclosed compartments, box stables or loose boxes which may have been intended for the isolation of sick or injured animals during treatment. The upper section was the Infirmary Stables and is shown as a single large room with a row of seven posts or columns running along its length. The span of the roof timbers is not large and it is uncertain why these columns were required; they may have been for tethering animals, though this area does not appear to have been divided into stalls. At the northern extremity of the building a separate room was provided, in which a chimney is shown. This room was the Veterinary Surgeon's office or store. Attached to the north wall of the building was a small room that doubtless contained a water closet. The whole building had been much altered, and the better preserved parts lay at its southern end. This building has also been demolished and new housing has been constructed on the site.

### *Southern block*

The southern block (Fig. 15, left) retained its original brick frontage, though all the door and window openings had been modernised. There was a deep projecting brick plinth at the base of the wall, and a pair of projecting courses forming a cornice immediately beneath the eaves. The front elevation had originally contained three wide doorways to the three stables within this section of the building. The two northern doorways had been narrowed and provided with new jambs and modern doors, while the southernmost doorway had been partially blocked in 19th-century brick, and converted into a window. This blocking was carried out to a high standard, replicating the projecting plinth and matching the colour and coursing of the brick as closely as possible. It is probable that this was undertaken during a major refurbishment of the building in the 19th century. The inserted window was a horizontally pivoting casement with glazing bars and a flat concrete lintel. There appears to have been no provision for brick arches over these openings, and it is probable that the concrete lintels replaced primary timber lintels which had become rotten.

The interior had been altered by the removal of the dividing walls to create a single large room. No divisions are shown on the 1905 OS 1:2500 map of the city, which suggests that the loose boxes had already been removed by that time. Following the removal of the dividing walls the building was subdivided into conventional horse stalls (Fig. 16 ) These could be traced as scars in the floor and through sockets in the west wall of the building. Traces of four stalls were visible, though there were originally five. The fifth stall had been destroyed by the insertion of a modern brick wall which partitioned off the end of the room to form a boiler room. The insertion of this wall had also resulted in the removal of the furniture from the fourth stall. Three of the stalls retained their mangers and water troughs, and all four had tethering rings and chains. All the furnishings, including the remains of the stall work (which consisted of small sections of grilles below the mangers) were of iron. Each stall was lit and ventilated by a high-level window cut through the rear wall of the building. These windows had four-paned casements and massive stone sills.

The floor contained an integral drain which ran along in front of each stall and then passed out through the south-eastern corner of the building. The floor was textured to resemble stone setts and set in the floor near the doorway was a brass manufacturer's plaque, with embossed letters reading 'Wilkes Metallic Flooring Co. Ltd. Devonshires Q: E.C.'. All these finishes must have been added after the walls dividing the loose boxes had been removed, probably in the late 19th century.

The walls and the roof timbers were whitewashed. The roof was well preserved, of the king-post type previously described, with diagonal ties and dragon beams at the corners to prevent the spread of the hip-rafters.

### *Central block*

The central block was originally identical with the southern block, and was also at one time divided by solid walls to form three loose boxes. The original doorways to two of these loose boxes remained in the east wall of the building, but to the north of this the wall had been entirely rebuilt in modern brick and the third doorway had been destroyed. Both the doorways had concrete lintels (probably replacing timber originals), four-paned over-lights and double-leaved doors. The rear wall of the building had been pierced by two large horizontal windows with 20th-century metal frames. There may have had earlier windows in this wall, but no trace of such openings were visible as the back wall of the building had been rendered.

The walls dividing the loose boxes appear to have survived until the early 20th century, since they are shown on the 1905 OS 1:2500 map. Following the demolition of these walls a fireplace was constructed in the south-western angle of the room to allow the whole area to be heated by a stove. The large, pale-pink bricks utilised in the fireplace and chimney may be of early 20th century date.

The south wall retained stained and varnished tongue-and-grooved timber cladding, which may be a survival of the 19th-century treatment of the interior. The other walls were simply of whitewashed brick. The roof was ceiled with hardboard nailed to the ceiling joists, though these joists appeared to be later insertions. The roof timbers were not whitewashed, as in the other buildings, and therefore an earlier ceiling may have been provided which has not survived. The floor of this room was entirely of modern concrete, stepping down southwards with the external ground level. No other fixtures or fittings remained; the room was filled with wooden racking and had recently been used as a store.

### *Northern Block*

The northern part of the Veterinary Stables had been altered almost beyond recognition, to the extent that it resembled a modern building (Fig. 15, right). The shell and roof of the original structure in fact survived almost completely, though masked by later render, metal-framed picture windows and a concrete porch supported upon brick piers. The roof was hipped at both ends, stepping slightly to the east at the northern end of the building.

The original building consisted of a long, narrow room divided into two unequal 'aisles' by the columns or posts shown on the 1876 map (Fig. 6). This room could still be identified as the main volume of the building,

though it had been divided into three smaller rooms and a central lobby, with a narrow corridor running along the interior of the west wall. The interior had been extensively refurbished and no earlier features remained. No trace of the columns or posts could be identified; all the windows, doors flooring, skirting boards and other internal features appeared to date from between 1950 and 1970.

Beyond the north wall of the larger room the smaller, heated room at the north end of the building retained its projecting chimney breast, but had been subjected to the same decorative treatment as the rooms to the south and no original features remained. The putative water closet outside the north wall had been entirely removed. The roof was supported by king-post trusses of the type previously described.

The building had been extended to the east by the addition of further accommodation beyond its west wall. The nucleus of this was a small square room, heated by a fireplace in an angled stack. The room had a flat roof and appeared initially to be of modern date, but had been almost completely disguised by later alterations. The room was probably added early in the 20th century. It was certainly in existence by 1945, when the site was photographed from the air during reconnaissance photography following the cessation of hostilities (RAF Sortie No. UK 865 Part V (30/09/45) sheet 6450).

To the west of this building further accommodation had been added since 1945 in a parallel range of similar form to the main block. The new building was separated from the main range by a narrow courtyard, but connected with it by a glazed link corridor to the north of the earlier rear extension. The building contained two large rooms, a small kitchen with a walk-in pantry, and lavatories for both sexes. The interiors of the rooms were without any distinctive features. This building was also covered by a hipped, slate roof, but was entirely constructed of late 20th-century materials. It was probably erected between 1950 and 1970. There can be little doubt that the construction of this building and the subdivision and re-fenestration of the northern part of the original Veterinary Stables were undertaken at the same time. Prior to its disuse and demolition this building had been occupied as the Territorial, Auxiliary and Volunteer Reserve Association Offices.

#### HOSPITAL (Building 5: Fig. 17)

The Hospital was a large, Grade II Listed Building lying on the west side of the barrack compound, 3m from the northern boundary wall. It has been spared demolition for conversion to social housing. The building was initially constructed in the 1790s, but was later considerably extended to both south and west by additional wings. These extended beyond the line of the former barrack wall into the area enclosed in 1803, and included an 'L'-shaped, single-storey building at the north-west corner of the main range, a large projecting wing at the centre of the north elevation and a square tower at the south-west corner. The north-west wing provided kitchens and a mortuary and has now been demolished. The main building and the other extensions have changed little in appearance externally, despite extensive internal refurbishment.

#### *East elevation*

The Hospital was a two-storey brick building covered with a slate roof hipped at both ends. The main façade faced east towards the parade ground and was devoid of any kind of ornamentation. This façade was nine bays wide, punctuated by regularly-spaced sash windows (Fig.18). A clear vertical break could be observed two bays from the southern end of the building, which revealed that the building was originally only seven bays long, but had been extended to the south by two bays in a sympathetic style. A probable context for this would be the increase in accommodation required following the expansion of the barracks in 1803. A number of iron ties had been inserted to prevent the walls from bowing outwards.

The ground-floor windows in this elevation were all modern replacements, but the windows at first-floor level were mostly hornless sashes, possibly of 18th or 19th-century date. Two pairs of sashes at the northern end of the first floor had been replaced in the 20th century. The joinery was in all cases severely plain; the glazing bars were either entirely unmoulded or chamfered, and even the horns of the later sashes were straight-cut rather than shaped. The differences in date of these windows were therefore extremely difficult to ascertain. The main entrance to the building consisted of a central doorway approached by a flight of steps. This doorway had a plain plank door surmounted by a tripartite fanlight.

#### *North elevation*

The north elevation of the building originally had no windows or doors. Part of this elevation was obscured by a flight of external stairs with an iron handrail, rising to a platform serving an inserted doorway at first-floor level. These stairs are not shown on the 1876 map, but may have been added soon after that date, perhaps as a fire escape. The stairs ran over the top of an earlier brick porch which linked the Hospital with the north-west wing. Adjoining the porch was a small 'L'-shaped store (Room 7). This seems to be shown on the 1876 map as roofless, and may have formerly contained a latrine.

### *West elevation*

The west elevation of the Hospital was originally as austere as its east elevation, but this has been partly obscured by the addition of a large rectangular extension masking the central two bays (see below). To the north of this, the four first-floor sash windows corresponded with those on the opposite side of the building, but those on the ground floor were irregular, due to position of the internal partitions. On the first floor two 18th- or 19th-century sashes had survived and one on the ground floor to the north. At the north end of the building a small window had been cut in to light a water closet. Near the central extension a doorway had replaced one of the ground-floor windows, the jambs and flat-arched head of which could clearly be traced in the brickwork.

To the south of the projecting extension three bays of the rear elevation were visible. Only two of the first-floor windows were 18th- or 19th-century hornless sashes, the others were 20th-century replacements. The break between the primary and secondary parts of the building could be traced two bays from the end of the building, though obscured by a modern down pipe. The corner of the building had been cut away to accommodate a link corridor to the tower-like building standing to the south west of the main structure.

### *South elevation*

The south elevation of the original hospital was entirely demolished when the building was extended, probably in 1803. The south elevation of the extension had itself been rebuilt in a second phase of remodelling early in the 19th century (Fig. 19). This was constructed in dark, reddish-brown bricks which are quite distinct from the blood-red brick utilised in the original building and in the extensions to the east and west façades. The elevation had been given an architectural treatment which differed markedly from the severity of the other elevations, perhaps because of the prominence of this elevation when viewed from vantage points across the Longbrook valley such as the public walks on Northernhay.

The elevation was divided into three bays, with regularly spaced window openings on the ground and first floors and an exceptionally high plinth as a result of the fall of the ground to the south. The central part of the whole elevation was brought forwards and offset from the corners, subtly emphasising the quoins. The projection was crowned with a low, triangular pediment, constructed entirely of brick with a cornice formed by raised brick bands and projecting headers forming dentils. At the centre of the pediment was a circular oculus containing wooden ventilation louvres. The resulting composition must have been handsome; later alterations had, regrettably, severely compromised this elevation.

The windows in the eastern part of this elevation had been blocked in brick. It was obvious from the colour of the brickwork on the exterior that the blocking of the first-floor window was an alteration, but the brick blocking in the ground-floor window was of much higher quality and was similar in character to the masonry of the walls. Nevertheless the context for blocking these windows must have been the insertion of a chimney stack at the south-eastern corner of the building, in the angle between the south and east walls. This chimney stack overlapped the window openings and was not bonded with the east wall internally, which argues that it was an alteration and that both windows had originally been open. It is uncertain when the stack was inserted; it is likely to have served a room in the south-eastern corner of the building which had already been removed by the time of the survey for the OS 1:500 map of 1876, when the whole southern end of the building is depicted as a single large ward. Although the chimney does not appear on the map it may have been omitted in error, since the window is shown as blocked. It is therefore assumed that the chimney was added in a third phase of alteration to the building, perhaps around 1850. The stack had been demolished above the roofline.

By 1876 a tower had been added close to the south-west corner of the Hospital. This had a major effect on the south elevation, since the entire south-western corner of the building had to be demolished to create corridors on both floors communicating with the tower.

### *Entrance passage*

The central door in the east elevation opened upon a narrow entrance passage running the depth of the building and opening through a rear doorway into the rear extension. The passage had been divided by a modern partition to create a small lobby immediately within the doorway. Primary doorways opened on the north and south sides into the adjoining rooms. The southern doorway had been blocked in the 20th century. The passage was dominated by a 19th-century iron staircase rising in two flights against the south wall to a landing corresponding with the passage below. The stair had iron stick balusters and a continuous handrail with a scrolled end, but no ornamental detail. The treads and risers were also of cast-iron, though this had been concealed by modern carpeting and the balustrade had been covered in hardboard. Beyond the staircase two further doorways in the north and south walls opened upon the adjoining rooms and a third doorway into the extension. The southern doorway was inserted in the 19th century, after 1876. The doors were modern. The skirting boards were of 19th-century date, consisting of bold, quarter-round mouldings in hardwood. A high dado rail was recessed into the plasterwork.

The south wall of the passage and the landing above contained a massive brick chimney stack projecting into the southern rooms. The northern walls of the passage and landing, by contrast, proved to be partitions of timber studwork infilled with later concrete blocks. The timber studs were well-squared, with diagonal bracing, and tenoned into the head and sill beams with double tenons secured with pegs. At first-floor level the studs and sill beams were marked with Roman numerals (Fig. 20). The sill beams of the partitions rested on the floor joists and supported the ceiling joists, but the position of the partitions was independent of the bay systems of the first floor and roof structures. The first-floor partition was slightly too low and the ceiling joists were supported off it on a series of shallow wooden wedges. This may show that the partition was erected after the roof structure was in place, but before the ceilings had been plastered.

Although the original infilling and timber laths had been replaced with concrete blocks and expanded metal lath it is likely that these partitions were contemporary with the building. The presence of a primary doorway at first-floor level in the east part of the landing, and no corresponding doorway to the west suggests that the layout of the staircase is also unchanged, though the present stair is likely to be a later 19th-century replacement.

#### *Northern rooms*

The northern part of the ground floor of the Hospital was divided into two large rooms by a further brick partition wall containing a massive chimney stack and associated alcoves. These two rooms had themselves been divided by partitions to form four smaller rooms, but the partitions had all been removed and new girders had been inserted to support the ceilings. Fortunately the evidence of the chimney breasts and alcoves, and the plan of the building given on the 1876 OS map, allow a reconstruction of the original layout of this area.

The room immediately north of the entrance passage (Room 5) was originally divided into a small room or vestibule approached by the doorway immediately inside the main entrance and a larger, heated room towards the rear of the building. The larger room was lit by two windows, one of which was converted into a doorway in the late 19th century and had a four-paned over light. The north wall of this room contained a broad chimney breast featuring a blocked fireplace, and an arched alcove adjoining to the east, which had been broken through to form a doorway to the adjoining room. Parts of the west wall and the north wall were clad with a 19th-century vertically-boarded dado. The room had a plain skirting board with a gap for the fireplace and chimneypiece. The 'vestibule' within the eastern part of this room had a quarter-round skirting board, and a small doorway with a plain architrave into the northernmost room. The chamfering of the dividing wall may suggest that there was formerly a small corner fireplace here.

The large room to the north (Room 6) was also formerly divided by a wall. This had been removed prior to the survey, but appears on plans of the building dating from 1977 (DoE Area Works Office Drawing No. A/189/77). These rooms were more or less equal in size. The western room featured an exceptionally large fireplace with a blocked alcove alongside it, the flue of which tended eastwards so that the bulk of the stack was reduced on the floor above. The large opening of the fireplace had been reduced to a small opening in the 20th century and later blocked. In the north-west corner was a doorway communicating with the north-west wing.

The eastern room featured a small corner fireplace in its north-west corner, which had been removed with the dividing wall after 1977. The room was lit by two windows in the east wall and had quarter-round skirting boards. The doorway cut through from Room 5 had been fitted with a plain four-panelled door, opening on a small triangular vestibule from which both the eastern and western parts of the present Room 6 could be reached. During the demolition of the chimney stack it became apparent that the alcove had formerly had an arched head, and that this alcove itself replaced an earlier chimney stack backing against the alcove and staggered in relation to the adjoining stack to the west. A complex arrangement of trimmers forming void areas in the ceiling showed the position of the chimney shafts and also provision for hearths at first-floor level.

On the first floor the layout of the northern part of the building had been severely altered and the chimney stacks truncated to increase the available space. The room immediately to the north of the main landing had been divided into two rooms: Room 14 to the west and Room 12 to the east. These rooms were separated by a 19th-century studwork partition. Room 14 was little more than a cupboard or store. It was formerly ventilated by a timber duct in the ceiling. Room 12 had been subdivided by a late 20th-century partition and opened out into the northernmost part of the building by the removal of an earlier partition shown on the 1977 plans. This room was formerly heated by a small fireplace in the south side of the chimney stack and also had a ventilation duct in the ceiling. The original functions of the rooms are unknown.

To the north of the chimney stack the first floor was again divided by a late 19th-century studwork partition. The western part (Room 13) formed a bathroom and lavatory whereas the eastern part had been incorporated into Room 12. The latter space retained the remains of a tongue-and-grooved panelled dado against its east wall and part of the studwork partition. The adjoining bathroom had been extensively refurbished in the late 1950s or 60s, with flush-panelled doors and door furniture typical of the period, but retained a late 19th-century cupboard or dresser with three shelves supported by curved brackets. To the north

was a separate cubicle for a water closet, lit by the narrow window already noticed on the exterior. Until the late 19th century, the rooms to the north of the chimney stack appear to have been a single large room, which may have served as one of the wards. This was heated by a large fireplace, since truncated. In the ceiling, obscured by modern hardboard panelling were three regularly-spaced ventilators linked to a complex of timber ducts hidden above the ceilings.

#### *Southern rooms*

The southern part of the Hospital had been most severely altered and all the original internal partitions had been removed. The ground floor room (Room 1) was entered from the entrance passage both by a primary doorway immediately within the main entrance (later blocked) and an inserted doorway dating from the later 19th century at the west end of the passage. These doorways flanked a massive projecting chimney stack containing a very large, blocked fireplace opening centrally upon the room. The room was therefore intended as a single volume and may have represented one of the main wards.

The southern room encompassed both the southern part of the primary building and the southern extension added in *c.*1803. No primary partitions survived; however the brick foundations of the original end wall, and of internal walls within the southern extension, survived beneath the floor (Fig. 17). The southern extension had contained a large room to the west, heated by a chimney in its north wall. To the east were a smaller room, heated by a corner fireplace, and an adjoining closet. The timber floor of the larger room was supported by a sleeper wall and there was provision for a hearth. There was no corresponding hearth relating to the corner fireplace in the smaller room; this may be assumed to have been an insertion. A large baulk of brick masonry survived in the south-western corner of the room on a conflicting alignment and entirely unrelated to the corner chimney. This might represent the base of a stove preceding the fireplace; if so the stove pipe must have passed through the window above, which might explain the visible disparity in the blocking of the ground- and first-floor windows.

The divisions between these rooms and between the primary building and the extension had been removed by 1876. Following the removal of these walls an iron column had been inserted. The column had a moulded base and capital and bore an axial beam supporting the joists, terminating with an ornamental moulding.

The removal of the ceilings revealed that the first floor had been strengthened by the addition of 'herringbone' strutting, probably when the internal walls were removed. By the late 19th century this ward was described as 'Ward 1' (EA 1998, Fig. 7). The room was fitted out with bold quarter-round skirting boards but no other features of interest survived. In the late 20th century the southern part of the room had been enclosed on the line of the iron column with a flimsy partition forming a separate room (Room 2).

The first floor of the southern half of the Hospital had also been united into a single large ward (Room 11), entered through a flush-panelled door from the landing. Both the large chimney stack in the north wall and the inserted stack in the south-eastern corner of the room were present, suggesting that the layout of this part of the building had mirrored the arrangement of the ground floor. The room would have been divided into a large room or ward with smaller rooms to the south within the early 19th-century extension. These divisions were removed by the late 19th century when the present rounded skirting boards were inserted. The floorboards proved to be of tropical hardwood, possibly of mahogany, laid in very narrow boards of extremely high quality. The ceiling was obscured by boarded panelling which may date from the mid 20th century.

#### *Roof*

The roof structure of the Hospital was supported upon seven king-post trusses whose tie beams were visible below the ceilings. The joists of the older part of the building were aligned at right angles to these, except in the end bays, where they were aligned with the ties and divided into groups of four panels by trimmers running from north to south. The ceiling structure in the southern extension replicated this pattern of trimmers and panels of joists, staggering the trimmers in each bay. The reason for this is unclear; it is possible that this arrangement was intended to avoid weakening the ties with too many sockets in close proximity to one another. The joists were seated in chases in the tie beams and trimmers, as described above.

The king posts in the trusses of the older part of the building were slender posts with expanded heads and feet to receive the principal rafters and the diagonal braces (Fig. 21). Close to centre of the building and in the primary trusses at either end the kingposts were turned through 90°. This seems to have been to allow for the large central chimney and for the hip rafters terminating the original roof. At the south end the hip had been removed and two more trusses added to continue the roof structure. The carpentry of these trusses was cruder than in the northern part; the king posts were simply wide vertical posts into the sides of which the ends of the principal rafters and the diagonal braces were notched. All the trusses had substantial iron straps suspending the tie beams from the feet of the king posts. There was a single level of purlins, supporting the common rafters on each side, and a plank ridge. Some of the purlins in the area of the extension were linked with the trimmers supporting the ceilings by diagonal braces. Above the rafters the boarded roof covering showed interruptions

representing the position of the former chimney stacks. These openings had been infilled with clean, modern boarding. Most of the chimneys appear to have survived until the late 20th century and only one, within the southern part of the building, had been removed earlier when the large wards were created on the ground and first floors.

Within the roof space, immediately overlying the ceiling of the northern part of the building, were timber ventilation ducts radiating from the northernmost chimney and ending at square vents in the ceilings (Fig. 21). These must have relied on the draught created by the chimney to ventilate the rooms. Also in the roof space, supported in part upon the large chimney adjoining the staircase, was a series of massive water tanks. The earliest of these was a large, shallow, slate tank, apparently with a very large capacity, which occupied most of the area immediately over the staircase. Adjoining this and cutting into the roof timbers was a taller steel tank, also with a very large capacity, which was lay partly within the roof of the western extension. This latter tank may have replaced the slate tank which appeared to have been disused for a considerable time. The shallow depth of the earliest tank and its position more or less at eaves level may suggest that it was designed to store rainwater collected from the gutters surrounding the roof.

#### *North-west wing*

This single-storey building was a surprisingly complex structure and has now been completely demolished. The north-west wing was 'L'-shaped in plan, the two parts being divided by a short length of the original barrack boundary wall (Fig.17). This was recognisable by its sloping courses following the contours of the hillside. The earliest part of the building was the eastern section, which was an addition to the rear of the Hospital infilling the gap between the main building and the boundary wall. This small brick building was covered with a slate roof, hipped at both ends. The scar of the boundary wall was clearly visible at its north-western corner and it must therefore have been erected prior to the demolition of this part of the wall. Although this structure is not shown on Wood's map of 1840 the character of the brickwork suggests that it may have been erected at around that time. The room is shown as a 'Cook room' on the plans of 1869.

The eastern part of the building was originally separate from the western part and contained a short passage and a single large room. The room was lit by two 19th-century sash windows and had a flat plaster ceiling concealing a king-post roof. The room was heated by a small fireplace in the west wall; however the grate did not survive and the chimney had been demolished above the roofline. The passage had walls of painted brick and was lit by a small late 19th-century sash window in the south wall. Adjoining this was a modern doorway opening into the area at the rear of the Hospital. This doorway had been cut in prior to 1977 and had a flat concrete lintel; it replaced an earlier doorway shown on the 1876 OS 1:500 map. The doorway from the eastern to the western parts of the building was cut through an earlier wall and retained an interesting door with moulded panels and an integral hatch and shelf. This is likely to have been of early 20th-century date.

The western part of the north-west wing was also a complex building and stood outside the early barracks compound within the area acquired in 1803. A building appears to have occupied this position from as early as 1840; however no fabric of such an early date survived. The western part of the building contained two rooms and had been subjected to several phases of rebuilding. Examination of the south wall showed that the roof had been raised by approximately 0.40m, and five courses of late 19th-century brick had been added over the earlier walling when the existing roof was constructed. The north wall of the building had been entirely rebuilt when the roof was raised and it is likely that the building acquired its present character at that time. This wall was constructed of large, 19th-century pink bricks. The horned sash windows were also of this period. The southern wall preserved earlier brickwork and contained evidence of a wide doorway opening into the western room, surmounted by a low, segmental arch which had either been introduced or renewed when the roof was raised. To the east the adjoining room was entered by a narrow doorway with a lower arch of similar character and date. Both doorways had been inserted prior to 1876 and had been blocked completely by 1977.

The western room was entered through the wide archway in the southern wall and is marked as a mortuary on the plans of 1869. The adjoining room was described in 1869 as the 'Foul Linen Store'. This room clearly showed the blocked archway in its southern wall, and retained a series of modern shelves fixed to its east wall. There was some evidence of a window alongside the main window in the north wall, which appeared to have been introduced in the early 20th century and blocked soon afterwards. It presumably lit a small closet or cupboard within the room.

Both rooms in the western part of the building were covered by a single roof structure which was partly obscured by boarded cladding. The roof was of three bays defined by two tie-beam trusses. These trusses were relatively crude in their carpentry, the timbers retaining a rough appearance which suggested they had not been planed smooth after sawing. One had queen posts in addition to a central king post; however it is likely that these were later additions.

### *Western extension*

The western extension to the Hospital was a substantial two-storey addition at the centre of the rear elevation. This extension had fully developed in its present form by 1876, and protruded beyond the line of the original barrack boundary wall. The masonry showed many different phases. The earlier brickwork was limited to the lower two thirds of the northern elevation and specifically its eastern part, whereas the upper parts of the north elevation and the western and southern elevations were constructed of pink bricks with a more shiny texture. The extension may therefore have begun as a smaller and lower rear extension, which, by 1876, had been extended both upwards and to the south and west.

The north elevation contained two arched doorways immediately adjacent to one another on its lower floor. One of these doorways had been blocked; the other remained in use and opened into a boiler house. The aperture for the stove pipe above the doorway and a number of iron clamps for a steel chimney could be observed rising up the north elevation. To the east of the doorways was a small, narrow window lighting the boiler house. This relates to the second phase of the extension. On the first floor was another small opening containing a casement window which was set low in relation to the other windows, showing that the floor levels within the extension were lower than those of the main building. This window relates to the earliest phase of the extension. Above this level the raised roofline of the extension could be discerned.

The west elevation of the extension was all constructed of the shinier brick and formed part of the second phase of extension. There was a doorway at ground-floor level with a semicircular arched head, which was blocked in late 20th-century brick. A large steel chimney pierced the blocking, no doubt replacing the chimney on the north elevation. To the south of the doorway a large patch in masonry represents the position of a shed which is shown on the 1945 Aerial Reconnaissance Photographs (RAF Sortie No. UK 865 Part V (30/09/45) sheet 6450), but which has since been demolished. At first-floor level was a large hornless sash window; this had a slightly arched head apparently constructed from shaped bricks of a dark-red colour matching the earlier brick in the Hospital itself. These bricks may have been reclaimed when the building was enlarged. A number of iron ties had also been inserted to prevent the walls from bowing.

The south elevation of the extension was entirely of the paler, shinier brick and must have been constructed when the extension was enlarged prior to 1876. This elevation was severely plain, with two large window openings containing horned sashes. Both windows have flat-arched heads which appear to have been made from reused bricks, augmented with later bricks matching those of the later parts of the extension.

The ground floor had a small heated room in its southern part (Room 4) with a floor supported by sleeper walls and provision for a hearth. The fireplace was in the west wall, contained within a pronounced chimney breast flanked by a pair of 19th-century cupboards. The room may have been an office or private room for the hospital staff. It was entered from the main southern ward through a doorway which may have been converted from an earlier window. To the north of this was a small lobby, originally with a doorway to the exterior. To the west the boiler room occupied two former rooms; one with an entrance in the north and another in the west wall. The wall dividing the rooms was not removed until after 1977, probably to allow the insertion of a new boiler. The original function of these rooms is uncertain. They may represent either stores or latrines.

The first-floor rooms within the extension were very similar in layout and may have served similar functions. The small room in the southern part of the extension was connected with the main ward on the first floor by a hatch and was approached by a short staircase from the main landing. This room was heated, though the fireplace had been blocked in the 20th century. The adjoining room was unheated and, despite its large window, is most likely to have functioned as a store.

### *Tower*

This curious building stood beyond the south-western corner of the Hospital and was linked to it by a short length of corridor, two storeys high (Fig. 19). The south-western corner of the main range had been removed to allow this link. It is not known why the building did not simply stand against the main range. The structure had developed in its present form by 1876, though it showed signs of early 20th-century rebuilding.

The tower was a two-storey building with a basement. It was roughly square in plan, with a gabled roof with a ridge running north-south. There was a high plinth containing a low doorway in the south face, above which was a rendered plat band marking the level of the ground floor. This plinth had later been extended into a concrete platform in front of the south elevation of the hospital, giving access to doorways into the main south ward and into the linking corridor between the hospital and the tower. At ground-floor level were a pair of tall, narrow windows looking south, above which an identical pair of windows lit the first floor. The roof had been rebuilt in the 20th century; however the treatment of the eaves of the linking corridor (which featured a brick cornice with dentils) suggests that the original roof had matched the decorative treatment of the south elevation of the main range.

The west elevation of the tower had been severely altered. This elevation had originally had groups of three tall windows on each floor. Two windows on each storey had been blocked in the 20th century when the



roof was renewed. The corridor was lit by a single window on each storey, though a doorway had been broken through to the platform on the ground floor. All of the windows had concrete lintels which may have been inserted when the roof was renewed. The western and northern sides of the tower were without openings.

The interior of the tower contained lavatories on both the ground and the first floors. Although the fixtures all dated from the mid 20th century it is likely that the building was originally constructed as a latrine tower. The basement storey might have contained tanks or cesspits and the isolation of the building may reflect concerns about hygiene. The tower probably represents one of the improvements resulting from the sanitary reforms of the mid 19th century.

#### DRILL SHED/MT GARAGES/FORAGE STORE (Building 6; Fig. 23)

##### *South part*

This part of the building was a large, rectangular modern structure (Fig. 22). It has now been demolished and replaced by modern housing.

Although this building was aligned with its rear wall against the original barrack boundary wall and abutted the Forage Store to the north, no early fabric remained. The building appears to have been developed as a Drill Shed during the First World War, but had been rebuilt on several subsequent occasions and served as a 'RASC (Royal Army Services Corps) Store' at the time the 'Skeleton Record Plan' was made. Traces of blocked doorways in the rear wall and evidence of rebuilding in the southern gable represented all that survived of the early 20th century structure. The east wall and the steel trusses of the roof were later 20th-century additions. The site was occupied in 1876 by a walled, roofless compound and by a row of latrines. No trace of these remained.

##### *North part*

The Forage Store was almost certainly one of the original 1790s barrack buildings. It was formerly balanced on the opposite side of the parade ground by an similar structure serving as a straw store, which was demolished in the early 20th century. The building served as an 'RASC Unserviceable Store' at the time of the 'Skeleton Record Plan' and has recently been converted into two houses.

The Forage Store (Figs 23, 24) was a rectangular structure standing against the barracks boundary wall. It was covered by a shallow-pitched slate roof, hipped at either end, and had three masonry walls and a timber wall which may represent later infilling of an open front. The barracks boundary wall formed the lower part of the western elevation and could be recognised by the regular buttresses. No visible break was observed in the upper and lower parts of the masonry and it is assumed that the building was constructed soon after, if not continuously with, the wall. The scar of the boundary wall was visible at the north-western corner of the building. Four windows had been cut into the western elevation of this building. These had lintels rendered over with cement or concrete, but were interesting iron-framed windows with horizontally pivoting casements, possibly dating from the late 19th century. Similar windows, lighting both storeys, had been cut into the north wall.

The eastern elevation of the building was entirely timber-framed and infilled with horizontal boarding to approximately first-floor level. Above this, boarding was applied diagonally to the upper part of the elevation, probably for decorative effect. At the centre of the elevation was a wide opening or recess, vertically boarded, containing a pair of large double doors hung on massive strap hinges. The timber infilling and cladding may have been added in the 19th century, following the conversion of the building to a new use; some form of enclosure of the frontage had already taken place by 1876. To the north of the large doors a smaller doorway opened upon a modern office lit by a metal-framed window. These openings had been cut through the timber cladding of the south elevation in the late 20th century.

Inside the building the front elevation was supported on four massive timber posts rising to the wall plate below the roof. These posts were braced with diagonal braces rising to the wall plates and separated by short, horizontal timbers. This construction closely resembled the construction of the verandah of the Guard House, and was almost certainly a primary feature of the building. This would seem to confirm that the building was originally a three-sided structure with an open front towards the parade ground.

The interior of the building had an inserted floor structure supported upon a central 'I'-shaped girder running the width of the building. The ends of the joists were supported from this girder by long timber beams or trimmers inserted into the recessed sides of the 'I' and resting on the bottom flange of the girder. The girder itself was supported at the centre of the building and on the frontage by vertical girders with concrete bases. The north and south walls of the building contained curved corbels projecting from the walls which supported timber trimmers bearing the opposite ends of the joists. The joists appeared to have been reused and had been reinforced with later 'herringbone' strutting.

The existing first floor was clearly an early 20th-century insertion; however the presence of the corbels and the fenestration of the western and northern walls may imply that an earlier first floor had existed. The floor structure was probably renewed in an attempt to increase its load-bearing capacity. Apart from the joists, other elements of the earlier first floor have been incorporated within the new floor structure, including the trap door and the staircase in the northern part of the building. The staircase was an open-tread stair contained within a tongue-and-grooved boarded compartment. It had horizontal rails at first-floor level and square newels with pointed, domed tops. The trapdoor had two leaves opening upwards and large 19th-century strap hinges. It served a hoist suspended from the roof. The first floor was divided into aisles by shelving units. Some of these were of late 19th- or early 20th-century date, constructed of pine planks and incorporating ornate cast-metal brackets. Most also incorporated integral benches. In the north-eastern corner of both floors a modern office had been enclosed with stud partitions.

The roof of the Forage Store was a complex structure supported by two major king-post trusses with diagonal braces (Fig. 25). The hips were formed by half trusses with tie beams tenoning into the centre of the tie beams of the main trusses. Diagonal braces ran from the kingposts in three directions to support the principals. The ties were suspended from the kingposts by iron straps. There was a single level of purlins on each side of the roof and a plank ridge at the apex. The common rafters were original and were entirely boarded over beneath the slates.

#### WEST BLOCK (Building 7: Fig. 26)

The West Block was one of the three major buildings of the original barracks of 1794 and is the most important survivor of the complex; the contemporary Headquarters Building and the East Block having been destroyed by fire in the 19th century. At the time of recording the West Block was believed to represent the best surviving example of its type in the country (EA 1998, 5). The building has now been converted into housing.

The West Block stood on the west side of the parade ground, forming part of a formal group with the Headquarters Building and East Block. Despite its size and prominence, its architecture was unpretentious. It was constructed entirely of dark, red/brown brick laid in Flemish bond with a low chamfered plinth and white-painted timber windows under very slightly arched heads of red, rubbed brick.

The original character of the buildings was fortunately captured in the background of a photograph taken at the barracks in 1866 (WCSL P&D 6684; Fig. 27). This photograph seems to show the northern half of the West Block in an almost unaltered condition. The chimney stacks are all on the crown of the roof, the doorways to the stables are surmounted by timber ventilation grilles and all the windows appear to be horizontally-sliding sashes. Some of the larger oblong windows are of three unequally-sized lights, with the central sections fixed but the side lights sliding open.

The building was divided horizontally into separate areas for animals, men and storage (Fig. 28). The ground floor housed stables, the first floor accommodation, and in the attics were store rooms or workshops lit by dormer windows in the roof. Although there were ten vertical divisions, the building can be divided for ease of description into northern, central and southern sections separated by the staircases and service rooms. The room numbers assigned by the MoD have been adopted in the descriptions below; however these do not relate to the original layout of the building, which must be reconstructed by reference to the historic plans and by analysis of the original pattern of the fenestration. Information derived from the Public Record Office Plan MPPH 338, surveyed in 1866 and corrected in 1869 may be utilised to determine the functions of the rooms as they were before the fire of 1868, while the original plan of the ground floor is clearly shown on the OS 1:500 map of 1876. Many of the room functions had already changed by 1876 and these functions have been still further obscured by numerous late 20th-century alterations, some of which are recorded on survey drawings dating from 1977 (DoE Area Works Office. Drawing No. SWEX/E306/77)

The north end of the building contained higher-status accommodation than the south part. On the ground floor were a group of three officers' stables, each with room for eight horses (Rooms 1-3). The first floor above this was subdivided into accommodation for non-commissioned officers, including the Sergeant Major (Rooms 21-26). The northern section and the central section of the building were divided by a staircase and mess room which were expressed externally by narrower windows. The stair rose into the attic, which contained the Quartermaster's Stores.

The central section of the building comprised three large ground-floor rooms designed as troop stables and each capable of accommodating 16 horses (Rooms 5-7). Above these, three corresponding areas contained soldiers' quarters and, by 1868-9, a school room (Rooms 18-20). In the attic was the Saddler's Workshop. A further staircase and the soldiers' kitchen separated the central section from the southern section, which contained two large troop stables on the ground floor (Rooms 8-9) and accommodation for the soldiers and the shoemaker on the first and second floors respectively (Rooms 10-17).

The stables on the ground floor were originally independent of each other, whereas the first-floor rooms were linked by a long corridor running the entire length of the building. The stores and workshops in the roof space also appear to have been a single, uninterrupted space. This may account for the disastrous speed with which the East Block was destroyed by fire in 1868. Subsequent alterations may have been intended to reduce the risk of fire and to increase the chances of escape in the event of such a disaster.

#### *East elevation*

The east elevation presented a very long and plain façade to the parade ground, with irregular fenestration which betrayed considerable internal remodelling (Fig. 29, top). At the north end the three doorways of the Officers' stables could be recognised as a distinct group, alternating with small windows lighting the stables. The piers between the windows and the doorways featured iron tethering rings which were repeated along the length of the building. Many of the doorways also featured iron boot scrapers set in recesses in the plinth. The doorway to the central stable in the northern part had been narrowed in the 20th century and a modern door with a four-paned over light had been substituted. The northern stable retained double doors with fine ironwork and was lit by a 19th-century two-light casement window. The sills of the adjoining stable windows had been lowered in the 20th century and metal-framed windows had been installed.

On the first floor the original configuration of the windows had been obscured by drastic alterations. A small two-light casement window occupied the northern opening, above the doorway to the northern stable. Adjoining this was a long, four-light casement window, part of which was obscured from within by an internal wall and chimney stack cutting across the window embrasure. The window to the south of this was originally identical, but had been reduced in length and fitted with a pair of vertically sliding sashes divided by a timber mullion. This alteration was made in the early 20th century when lavatories were installed in one of the barrack rooms. The paired, narrow, windows of these facilities could be recognised to the south. The window to the south had also been replaced with an early 20th-century sash window. According to the 19th-century plans these apartments housed the Sergeant Major and other non-commissioned officers.

The northern section of the building was divided from the adjoining staircase and mess room by a brick fire wall of late 19th-century date, which could be seen rising above the roofline. The chimneys had been relocated away from their original position on the ridge, perhaps to reduce the complexity of the flue system and thus reduce the risk of chimney fires.

The rhythm of the fenestration became more regular and more widely spaced across the elevation of the first of the staircase blocks. In 1868 this section had contained the NCOs' mess and a troop stable store, but by 1876 it was functioning as a school. The Quartermaster's Stores in the attics were lit by a dormer window with a shallow, gabled roof which must have replaced the flat-roofed dormer shown in the photograph of 1866. On the ground floor the window of the store was heavily barred and fitted with modern metal-framed casements. The door head and one of the door jambs had been rebuilt and the doors fixed to open outwards, with a pair of hook stays in each jamb to prevent them from blowing shut. The two first-floor windows in the stair block were located directly over the ground floor openings and were simple two-light windows which had been replaced with 19th- or early 20th-century casements.

The central section of the West Block contained three stables on the ground floor with soldiers' accommodation above. The elevation of the central stable had been altered, but the elevations of the two flanking stables were well preserved. Each stable had a central doorway featuring 19th-century double doors surmounted by glazed ventilator lights and retaining good ironwork. Flanking each doorway were a pair of windows. These had been renewed in the 19th century; they were divided horizontally with bold, timber transoms into upper and lower lights. The casements had distinctive horizontal panes and were hinged at the transom so that the upper lights could tilt inwards to provide ventilation. On the first floor, above each stable, were two long rectangular windows like those lighting the NCOs' apartments, arranged symmetrically above the ground-floor doors and windows. Those to the north of the centre lit the schoolroom shown on the plans of 1869 and had triple sash windows divided by wooden mullions. The sashes had no horns and extremely refined mouldings to their window bars. These sashes were probably inserted in the 19th century.

The central stable had been much altered when a staircase was added in the late 19th century. A new doorway and window had been inserted on the ground floor and the original stable window had been reset slightly to the south, closer to the stable door. The stable door had been replaced with glazed double doors, which served as the model for the new front doors to each of the houses within the converted building.

The original elevation of the central stable at first-floor level consisted of a group of three regularly-spaced two-light windows. A narrow window had been inserted to the north of these to light a water closet off the landing of the new staircase. The window immediately to the south of this lit the landing and appeared to be undisturbed. This retained horizontally sliding sashes and was probably a survivor of the original fenestration. The two-light windows adjoining had early 20th-century frames, but the casements themselves appeared to be the original horizontally-sliding sashes cut down and rehung. The first-floor windows to the south of this were

four-light casement windows which also showed signs of the adaptation of earlier sashes and may have been reset in the early 20th century. A fire wall projected above the roofline and a dormer window lit the roof space over the staircase.

To the south of the central section another staircase and service room could be recognised by the slower rhythm and regular spacing of the fenestration. The windows and the door to the staircase had all been replaced, but above the doorway was a ventilator grille with substantial vertical bars and a pair of wooden internal shutters. This exactly matched the appearance of the grilles shown in the 1866 photograph (Fig. 27) and was almost certainly a survival of the original treatment. On either side of the doorway were hook stays to allow the doors to be fixed open. The window adjoining the door had itself been converted into a doorway for a period, but this had subsequently been blocked and the original appearance of the elevation restored. To the south of the staircase another fire wall protruded beyond the roofline to isolate the southern part of the building.

The southern part of the building was its best preserved section. The elevations of the stables on the ground floor had central doorways flanked by two-light windows. The doors had been replaced in the late 20th century and the windows in the 19th century with horizontally-pivoting casements opening inwards. The first-floor windows to the north consisted of a single two-light window and a wider window adjoining containing a tripartite sash window with narrow marginal sashes. This form of fenestration dates from the early 20th century, but appears to replicate the general appearance of the original sashes. The southern rooms had two small two-light windows, one of which had formerly a wide, rectangular window. This had been partially blocked in the late 19th century.

Despite the alterations the general appearance of the original building may be confidently reconstructed. It is apparent that the elevation was not designed as a formal, symmetrical façade, but as a supporting range to the headquarters building which formed the centrepiece of the site. There were many minor variations in the size and position of the windows, and no central element such as a pediment. This contrasts with the grander treatment of the flanking ranges at the Exeter Artillery barracks (Fig. 8), where each of the four ranges had pediments at their centres. The alternating doors and windows of the three officers' stables at the north end also disrupted the symmetry. The façade was not entirely irregular however; the groups of stables in the southern section of the barrack block each had both a narrow and a wide window on the first floor, the position of which was mirrored exactly in the officers' rooms at the opposite end of the building. The two staircase blocks also reflected each other. The reason for the variation in the window sizes is unknown, especially as some conflicted with the internal walls immediately behind them. It is clear from the repetition of these elements at both ends of the building that the rank of the occupants was not reflected by these features.

#### *North elevation*

The north elevation of the West Block was decorated with four blind windows and partly obscured by an external staircase. This had granite steps and an iron handrail and rose to a timber porch sheltering a doorway opening into the long first-floor corridor. Beneath the staircase was a small store with a hatchway and a doorway at the rear. The stairs were added in the 19th century, after 1876, and were probably intended as a fire escape as well as an alternative access to the first floor rooms. The stairs may have been built in response to concerns about the safety of the remaining 18th-century buildings following the rapid destruction by fire of the Headquarters Building in 1879.

#### *West elevation*

The west elevation of this range of the barracks originally corresponded closely to the east elevation. The brickwork was of lower quality and the arches over the windows were more crudely constructed; however the forms and positions of the windows and doorways were repeated essentially as on the east elevation.

At the north end one of the doorways of the three officers' stables had been blocked and replaced with a small window lighting a lavatory. Above this on the first floor one of the long oblong windows lighting the NCOs' rooms survived intact, with the spine wall behind it chamfering away to a point where it met the mullion, allowing the southernmost part of the window to light an adjacent room. The window adjoining this was originally identical, but had been reduced in size in the 19th century with a new window inserted alongside it. The original brick voussours of the wider window opening were still visible. All the windows in this part of the building had been fitted with 19th- or early 20th-century sashes or casements. The window of the NCOs' mess showed the only major variation from the pattern established on the east elevation. This was a wide window containing an early 20th-century double sash. Careful examination of the brick jambs and arch revealed no rebuilding and it seems that the NCOs' mess and Soldiers' kitchen were both originally lit by wide windows.

A brick chimney serving a stove within the adjacent stable had been inserted into the wall to the south of the mess room prior to 1891 (OS 2nd ed 1:500 map); this was eventually superseded by a massive steel chimney clamped to the outer wall, which protruded through a partially blocked ground-floor window. The first-floor windows of the Schoolroom above had been rebuilt in the early 20th century as a single small window with an

adjacent doorway opening into mid air, resembling a loading door. There was no provision for a crane serving this doorway and it is most likely that this doorway opened upon an external staircase. The staircase no longer survives and has left no trace; however it may be depicted on the 1932 revision of the OS 1:2500 map. The stair may have been removed when the steel chimney was inserted. All the windows in this part of the building were late 19th- or early 20th-century replacements.

To the south of the central part of the building a further chimney stack had been added by 1891 to serve a stove on the ground floor. This may relate to the conversion of the former stables to storage or workshop use. Beyond this chimney the southern part of the elevation was well preserved, with most of the windows and doors retaining their original dimensions. The window of the Soldiers' Kitchen retained horizontally sliding sashes which, though altered, may have been the original 18th-century sashes. Massive brick buttresses had been added on either side of the doorways to the ground-floor stables at this end of the building and one of the doorways had been blocked in the late 20th century. Earlier iron ties here suggested that the buttresses may have been added to resolve long-term structural problems. South of this section was a further late 19th-century chimney. The ground- and first-floor windows of the southernmost stable had been altered and the large first-floor window had been reduced in size to accommodate the window of a lavatory cubicle.

The fenestration of the west elevation closely replicated that of the eastern elevation, including the long, horizontal windows which, as has been noticed above, actually conflicted with the primary internal walls. These windows had not been enlarged, neither was it apparent that the internal layout of the building had changed. Although it is possible that the desire to impose some kind of loose symmetry on the elevations may have led to the use of these windows so illogically on the elevation facing the parade ground, it is difficult to understand why they were also employed on the less prominent elevation facing the barracks boundary wall.

#### *South elevation*

The south elevation of the building was originally identical with the north elevation, with four blind windows complete with sills and flat-arched heads. These blind windows backed onto chimney stacks, the stumps of which could be seen rising above eaves level. Although the chimneys were in fact 19th-century additions which were not bonded with the walls, it was clear from the earlier brickwork that the windows had been built blind, as decorative panels relieving an otherwise blank wall.

A low, single-storey brick building stood against the south elevation, with a pitched roof hipped on three sides. This building had two doorways and a central window fitted with shutters. The building was constructed before 1876; its original function is unknown. At the time of the 'Skeleton Record Plan' it was in use as a 'Ration Store'. The lower part of the interior was partly tiled and along the north wall were fixed shelves. The blind windows of the south wall could be seen above these and there were drainage gullies with richly-patterned cast-iron grilles along the south side. The roof had been extended to the south beyond the front wall to form a small verandah supported on five cast iron columns. These had moulded capitals and stood on low stone plinths.

A granite staircase had been erected against the south wall of the West block to provide access to the corridor on the first floor via a small lobby or porch at the head of the stairs. This staircase was added after the completion of the single-storey building and intrudes upon it. This staircase may have been added in the 1880s to provide additional means of escape following the devastating fires at the barracks. The construction of the stair would have necessitated the reconstruction of the roof of the small building and perhaps also the addition of the verandah at the same time.

#### *Ground floor: northern rooms*

Room 1 lay at the extreme north end of the West Block and was originally one of the three officers' stables. The room had been subdivided, but originally ran the full depth of the range, with a doorway and window in its west wall corresponding with those in its east wall. No historic furnishings survived, but inspection of the ceiling revealed a beam running from east to west containing regularly-spaced sockets. One of these sockets was filled by a chamfered timber post, one of the original posts dividing the stalls and the sole survivor in the building. Three sockets were visible in the eastern part of the beam in addition to that occupied by the post. In the western part of the stable the sockets were obscured; however there had clearly been seven sockets in total, dividing the stable into eight stalls. The beam was chamfered between the sockets; this seems to have been the only concession to ornament. No mangers or other fixtures remained.

Rooms 2 and 3 had also been divided by modern brick walls, but each represented officers' stables of eight stalls. After stripping, the full length of the beams in the ceiling were exposed, each containing seven sockets. Room 3 had been subdivided in the late 20th-century to form three separate rooms and a lavatory cubicle. Unfortunately no trace of stall work or mangers remained in either room.

### *Northern staircase and NCOs' mess*

The corridor and staircase between Room 3 and the store room (Room 4) was not numbered; neither was the NCOs' mess to the west of the stair. Entering the corridor through the double doors from the parade ground the stairs rose to the north in a straight flight, with two winders at the base (Fig. 30, top). The steps were monolithic granite blocks with projecting moulded nosings, corbelled out from the wall of the stair compartment. The balustrade was a severely plain metal handrail supported by straight metal balusters. The door to the storeroom lay immediately on the left within the entrance, while the corridor continued westward alongside the staircase and opened into the former mess room through a doorway surmounted by an eight-paned over light. The door itself was missing. The door to the small cupboard beneath the staircase was a simple plank door hung on hand-made iron strap hinges with flared ends. The cupboard may have served as a fuel store.

The mess room had been subdivided by a modern partition to form a continuation of the corridor and an adjacent room, now lavatories. This partition was in place before the survey of the buildings in 1977. Following the stripping of the modern finishes and cladding it became apparent that the nearby partition dividing the store room from the mess room had been rebuilt to the west of its original position in the late 19th century. This was betrayed by a step in the wall of the corridor which showed the original limit of the room.

The original mess room had been lit by a large window in its west wall, now converted into two separate openings. On the south side of the room was a large fireplace in a projecting chimney-breast flanked by alcoves, one of which had been blocked. The fireplace itself had been blocked in the late 20th century. Opposite the fireplace, in the north wall of the room (now part of the corridor) were three tall, round-arched alcoves of brick. One of these had been converted into a cupboard in the 20th century by the addition of double doors hung in a frame surmounted by a small, plain pediment. None of the alcoves bore any signs of fitted shelving or cupboard doors and their original function is uncertain. The floor of the corridor was of concrete and that of the lavatories of red quarry tiles. The original treatment of these floors is unknown.

Room 4, the store room adjoining the staircase, had also been severely altered. This room had cladding of pierced fibreboard tiles which covered any earlier treatment of the walls. There was a projection in the south wall suggestive of a chimney breast, but no fireplace remained. The doorway to the passage was a half door with independent upper and lower sections, both of which contained letter boxes attached to the rear. A dumbwaiter had been installed in the south-west corner of the room at the same time, and it appeared that the west wall had been moved in order to align the dumbwaiter with the wall of the corridor above, where a hatch allowed access to the food or goods which it transported to the first floor.

Upon removal of the floor coverings a deep, brick-lined cellar, partially flooded, was discovered beneath the floor of this room. The purpose of this cellar is unknown; it may have been a water tank supplying the NCOs' mess. The presence of this cellar in this position may imply a corresponding cellar serving the Soldier's kitchen to the south, though no evidence of such a cellar was revealed during the building works.

### *Ground floor: central rooms*

Room 5 originated as one of the former troop stables and ran the entire width of the building. The east and west walls were of unplastered, painted brick, which may have been the original treatment. The floor was of modern concrete. The ceiling was crossed by two timber beams, which showed the remains of chamfers and sockets revealing that the room had originally been divided into sixteen timber horse stalls with a central passage between them approached by the doors in the eastern and western walls.

The original timber posts at the head of each stall had been removed in the 19th century and six iron columns had been substituted for each alternate post. These had simple moulded capitals and integral circular lugs at intervals down the shafts containing circular sockets as though some form of bar or rail had been threaded through to form barriers between each pair of columns. The sockets were aligned in all four directions, though the majority faced north and south. Some of the sockets appeared very high up on the shafts, just below ceiling level. It seems unlikely that these represent divisions between horse stalls, and their purpose is unclear. They might represent provision for some form of storage system or racking, and could perhaps be connected with the conversion of the former stables to armouries.

The room had been divided by lateral partitions into three separate rooms, and a further small area in its north-western corner had been divided off to form a boiler house. The eastern partition was clad with vertical tongue-and-grooved boarding, the boiler house was of brick and the adjoining partition was of horizontal, painted boarding containing two hatches or windows. These partitions probably dated from the earlier 20th century. The central area of the divided room was fitted out with a work bench and shelves for storage. It may have served as a workshop, though it had no direct natural light.

Room 6 also originated as a troop stable and lay at the exact centre of the block. This room was originally identical with Room 5, and would have accommodated up to sixteen horses. The room had since been divided into four separate spaces of which the western two were the better preserved. As in the previous room the original timber posts had been replaced with iron columns, fewer in number and more widely spaced than the

originals. The west doors retained 18th- or early 19th-century hasps, and in the south-western corner was a stove on a concrete base served by a late 19th-century chimney on the rear elevation. A doorway had been broken through the centre of the southern wall, to communicate with the adjoining stable. The room had unplastered, painted brick walls and a concrete floor. It was divided up by boarded partitions and a brick wall with projecting piers supporting the altered eastern part of the ceiling (see below). The room was fitted with massive well-constructed pine shelving units. These may be early 20th century; they were carefully labelled with successive systems of letters and numbers.

During the recent alterations the ceiling was stripped away and the structure of the first floor was exposed. This had joists running from north to south, notched over the supporting beams. The hearths at first-floor were supported by a trimmer introduced between the joists on either side of the fireplace and secured by pegged tusk tenons. Within this area a shallow brick tunnel vault was constructed, bearing against the face of the trimmer and supporting the hearth slab. Subsidiary joists were then introduced beneath the vault to give additional support and to receive the laths to which the plaster was applied.

The eastern half of Room 6 had been severely altered. The first phase of alteration probably dated from the 19th century and consisted of the insertion of a staircase rising to the first floor against the north wall of the former stable. This staircase was approached from a new doorway in the east wall of the building.

Further alterations were undertaken in the late 20th century, after the survey of 1977, when this part of the stable was converted into two separate rooms. The columns and supporting beams in the eastern part of the ceiling were removed and new steel girders were substituted. These girders bore upon a new brick wall across the former stable, with prominent brick pilasters or buttresses visible from the rear. The removal of the original timber beams revealed the notches in the undersides of the joists, which were left in position, bearing upon the new girders. The ceilings had originally been of lath and plaster, but had been replaced in the 20th century with panels secured with applied fillets. A glazed screen linked the two rooms, and a small lobby was constructed immediately within the main doorway from which doorways opened to the north and south. There was a small hatchway in the south wall of the southern room, opening upon a dumbwaiter in the adjoining stable.

Room 7 was formerly an identical stable, but had been drastically altered. The entire first floor had been removed and replaced with a new floor structure supported on steel girders, bearing upon concrete block piers on either side of the main doors in the east and west elevations. This alteration had been undertaken very late in the 20th century, without affecting some of the earlier partitions dividing the interior. The main doorway on the eastern side of the room retained a pair of 19th-century doors complete with contemporary ironwork. These doors opened into a large 'L'-shaped room divided from the rest of the former stable by a modern brick wall rising almost to the ceiling. In the north-eastern corner of the room were traces of a dumbwaiter serving both this and the adjoining room through a hatchway in the north wall. It was presumably installed for the transfer of documents from storage to the offices above during the occupation of the barracks by the Manning and Record Office.

The western part of the former stable had also been altered but, surprisingly, a small, late 19th- or early 20th-century office survived intact in its south-western corner. This was divided from the room by a partly-glazed screen to the east and a solid wall to the north. The ceiling of the office had been removed and the upper parts of the wall made good when the first floor structure was replaced in the 20th century. The office was entered by a four-panelled door, possibly of early 20th-century date. In its north wall was a small hatchway, and in its south wall a cast-iron fireplace and mantelpiece of late 19th- or early 20th-century type, fitted with a mid 20th-century gas fire. Adjoining the fireplace was a small cupboard built in to a recess in the wall.

#### *Southern staircase and kitchen*

The southern staircase and kitchen preserved its 18th-century layout. The staircase rose against the south wall, immediately within the door. It had granite steps rising to first-floor level and a plain iron handrail with a scrolled terminal. Beneath the stairs was a cupboard entered by a simple plank door. This retained an interesting latch mechanism, possibly the original, but the hinges were modern replacements. To the north of the entrance passage, alongside the stairs, was the former troop stable store. This had been converted into a lavatory and wash room in the 20th century and no original features remained. An arched recess forming a projection in the north wall provided support for the chimney stack on the floor above. This did not appear to be bonded into the north wall. The construction of the hearth above, revealed after the stripping of the ceiling, was similar to the original arrangement, but did not employ tusk tenons. There were also clear signs of disturbance to the floor boards. It is likely that the floor in this area was lifted in order to insert a new trimmer and brick vault to support a hearth on the first floor following alterations in the late 19th century.

The soldiers' kitchen itself remained almost unaltered, with the exception of a lobby defined by modern partitions in its south-eastern corner. Three arched recesses similar to those noticed in the NCOs' mess to the north were present in the south wall of this room. One of these arches, now within the lobby, had been broken through into the adjoining stable in the 20th century. No trace of a fireplace was encountered in the north wall,

as this had been completely blocked in the early 20th century. The size of the chimney breast suggests a very large fireplace. A row of small brackets providing support for the ceiling survived above the fireplace. The room retained horizontally-sliding sash windows in its western wall, which may be original.

#### *Ground floor: southern rooms*

Room 8 originated as a troop stable and, with the exception of a small modern office in the north-western corner, remained undivided. Doorways to the adjacent rooms had been made the south and north walls and the western entrance had been blocked in the 20th century. The ceiling beams were supported by six iron columns, replacing the original timber posts dividing the stalls which featured integral lugs and sockets as previously described (Fig. 31). The walls had remained unplastered, and the texture of the brickwork in the south and north walls showed possible evidence of the original horse stalls. The upper and lower parts of the wall, where the brickwork had presumably been exposed, was rough in texture, suggestive of successive episodes of damage and redecoration. At c.1.5m above floor level was a horizontal timber built into the wall, presumably to allow the fixing of timber fixtures such as a hay rack or stall work. Below this was a horizontal strip of apparently newer brick seven courses deep, laid in stretcher bond. Although this might simply replace an area of badly decayed brick, it is also suggestive of infilling or refacing of a recessed area within the wall. This may have accommodated the feeding and water troughs, and was presumably refaced when the stalls were removed in the 19th century.

Room 9 lay at the south end of the building and had also originated as a troop stable. Like the adjoining room this had only been partially subdivided. This room also had six iron columns and similar evidence of the stall work, though in this case the lower part of the walls had been plastered when the stalls were removed. Although trenches were dug against the north and south walls, and at the base of one of the columns, no trace of the original flooring was identified. One of the windows in the west wall had been slightly enlarged to light a small office adjoining an internal porch within the west door. When the ceiling was removed during the recent alterations it could be clearly established that the chimneys heating the first-floor rooms at the south end of the building were later insertions, as the construction of the hearths was different from that established elsewhere in the building.

#### *First-floor corridor*

Throughout the first floor, brick walls divided the building into ten sections corresponding with the layout of the stables and service rooms below. The corridor at the centre of the range divided each section into eastern and western rooms. Many subsequent alterations had obscured this pattern, but the basic layout of the building had survived intact at its northern and southern ends (Fig. 26).

The walls of the corridor were timber partitions, resting on short trimmers lying between the first-floor joists rather than on the joists themselves. This may have relieved some of the load on the floor structure by spreading the weight over two joists. The partitions were constructed of vertical studs and horizontal rails pegged together to form frames, and infilled with subsidiary studs and diagonal braces (Fig. 29, bottom). The subsidiary studs were tenoned, but neither pegged nor nailed into the horizontal rails. Nails were used only where the diagonal braces intersected these studs. The frames incorporated integral door-frames which provided for two similar openings side by side (Fig. 32). Despite provision for paired doorways there is no evidence that any were used as such; in each case one opening only was utilised and the other was simply covered over. This may suggest an element of prefabrication in the structure. The sill beams of the partition remained unbroken across the unused doorways. The studwork was covered on both sides with horizontal softwood boarding nailed to the studs. These boards were then painted. A cream colour scheme with a dark green dado remained, but this was only the latest painted scheme and may have dated from the early 20th century.

The corridor was originally lit by borrowed light from glazed fanlights over the doorways to the rooms, and also by windows at its north and south ends. These windows were later enlarged to form doorways which opened upon external staircases at each end of the building. These may have been added as fire escapes following the devastating fires of the late 19th century.

When the ceilings of the first floor rooms were removed the original method of construction was revealed. The main beams supporting the ceiling joists were the tie beams of the trusses, which ran from east to west across the building. Near the lower edge of the vertical faces of each of these tie beams were opposed sockets and long horizontal chases, which allowed the joists to be swung sideways into position and secured with nails after the roof trusses were already in place. The ceiling joists ran from north to south, with their lower surfaces flush with the soffits of the tie beams. The joists supporting the second floor lay above this and are described below.



*First floor: southern rooms*

The configuration of the first-floor rooms at the south end of the building had been changed by the insertion of extra partitions dividing the area into four small rooms (Rooms 10-13). There was also a short passage and a lavatory. The rooms had been greatly altered and most of their fixtures and fittings were mid 20th-century in appearance.

Room 10 lay at the extreme southern end of the building, to the west of the main corridor. This room was entered from a doorway in its north wall opening off a short passage from the main corridor. The room contained a 19th- or 20th-century safe built into a brick projection at its south-western corner. In the south wall was a projecting chimney breast which was cut into the brickwork of the south wall and was probably a 19th-century addition. No chimneypiece or grate survived.

Following the stripping of the north wall of this room the studwork of the partition defining the passage was revealed. This was later than the primary timberwork of the ceiling and also the adjacent partition with the main corridor, although a row of redundant sockets cut into the ceiling joists showed that there had been an earlier partition on this alignment. The studwork was sligher than the original 18th-century work and may have been of 19th-century date. It contained an integral doorway opening into the room and, as there was no provision for any doorway in the primary studwork of the east wall, it was clear that the room must have always been approached from the north through what later became Room 13. The studwork to the north of the passage was cleaner and newer than either of the partitions previously described. It must have been inserted in the early 20th century when a new opening was cut through the 18th-century studwork of the main corridor to create the passage to the lavatory.

Room 13, to the north of the passage, was entered from the corridor by a four-panelled door hung in one of the primary openings and surmounted with an over light. A chimney breast in the north wall contained a large fireplace, which must have been intended to heat the whole area of rooms 10 and 13 prior to the subdivision of the room. The original window opening was very wide, but it had been narrowed and converted into a vertically sliding sash window. One of the alcoves adjoining the fireplace had been broken through to form a doorway into the room to the north.

On the opposite side of the main corridor Room 11 was entered through a doorway crudely cut through the 18th-century studwork. Like the other inserted doorways, this door had no over light and was smaller than the primary openings. The boards covering the partition to the corridor ran uninterrupted behind the partition dividing this room from Room 12, showing that the two rooms had formerly been a single barrack room. There was no primary doorway from the corridor into Room 11 and no provision for a doorway in the partition dividing the rooms. The chimney in the south wall and the doorway cutting the partition to the corridor must have been added when the rooms were divided. The partition between the rooms was a 19th-century insertion consisting of relatively slight studwork, braced with diagonal braces and covered with lath and plaster. Only the western and upper parts of the 19th-century work remained; the partition had been partially removed in the early 20th century and later reinstated with exceptionally flimsy modern studwork.

Room 12 had also been heavily altered but, following stripping of the modern finishes, the boarded cladding of the partition to the corridor was revealed, almost perfectly preserved and painted green and cream. The original opening and boarded cladding to the doorway remained intact, though it had been reduced in size by the insertion of a smaller frame. There were no architraves or mouldings and the original door and over light had been removed. No furnishings had survived, but traces of two shelves supported by brackets remained on the west wall and further shelving had formerly occupied the alcoves adjoining the fireplace. The window nearest the fireplace had been narrowed and was originally a wide window of three or four lights. The provision of such large windows close to the fireplaces may have been intended to provide good lighting for activities such as the preparation of food or the maintenance and cleaning of equipment.

In the north wall of the room was a massive brick chimney stack with a fireplace which must have heated the whole area prior to its subdivision. The fireplace was originally large enough to accommodate a hob grate, but had been reduced in size and finally blocked completely. A small blackened opening above the original metal strap lintel suggested that, after the blocking of the fireplace, the open grate had been replaced with a free-standing stove linked to the chimney by a pipe.

The chimney stacks in Rooms 12 and 13 were integral with one of the brick walls dividing the building into sections. These walls were not originally conceived as fire walls; formerly they rose only as high as the second floor, above which the chimney shafts converged in an high pointed arch to support chimney stacks on the ridge line (Fig. 34). The primary brickwork of the dividing walls at first-floor level respected the line of the partitions defining the corridor, allowing the timber partitions to pass unbroken through the length of the building. This construction and the continuous roof space on the floor above would undoubtedly have contributed to the speed with which the fire of 1868 destroyed the East Block. In order to prevent a similar disaster here, the space below each arch had been built up with a solid brick wall in the late 19th century and the corridor was interrupted on the line of these walls by doorways. The door from the southernmost section of the

building was a simple, four-panelled door set within a plain, unmoulded architrave. The two primary doorways to the eastern and western rooms had been improved at the same time with identical architraves overlying the original unadorned openings. It is likely that the entire building was extensively refurbished in the late 19th century, perhaps around 1880.

The rooms to the north had been severely altered in the 20th century, especially to the west of the corridor where the partitions had been removed to create a single large room (Room 14). The wall of the corridor had been rebuilt approximately half a metre further east, encroaching upon the corridor. The brick wall and chimney defining this section had also been removed so that the enlarged room extended over the Soldiers' kitchen. The fireplace in the south wall had been blocked and all the doors renewed with modern flush-panelled doors. The floor of the whole area had been replaced with a floor of tropical hardwood, probably mahogany, laid in exceptionally narrow planks. The room had a moulded picture rail and was entered behind a partly glazed screen with attractive, flat, moulded caps crowning the vertical posts.

On the opposite side of the corridor the original layout of the building was better preserved. This area was divided into three rooms, but had formerly contained two, both of which were entered by primary doorways from the corridor. The southernmost doorway retained the original four-paned over light above the doorway, though the door itself was a replacement. The room within had been converted into lavatories in the mid 20th century. Its window was an early 20th-century tripartite sash, part of which gave light to Room 15, adjoining.

Room 15 was identified as the 'Effects Store' and had been fitted out as a store room with timber shelving. It had no access from the corridor but was entered through a late 19th-century four-panelled door from Room 16. The partition between these rooms was older than that to the south, and may have been installed in the late 19th-century. No evidence of an original partition between the rooms remained. The skirting boards consisted of a simple quarter-round moulding and the architrave to the doorway was decorated with chamfering only.

Room 16 was created in the late 19th century. It had doorways in its northern, southern and western walls, all of which contained four-panelled doors with unmoulded stiles and rails. The architraves were double chamfered and the skirting board was a quarter-round moulding as in the adjacent room. The doorway to the corridor proved to be within an original opening, but its lintel had been raised slightly higher than the original and the fanlight above had been removed. Immediately outside the doorway a further 19th-century door crossed the corridor on the line of the brick cross wall dividing the southern part of the building from the southern staircase block. This cross wall did not originally contain chimneys; however a projecting flue had been added to the north wall of the room, presumably to serve a stove. This appeared to be a late 19th-century addition.

#### *Southern staircase block*

The original plan of this area had been altered; however the original timber partitions survived on both sides of the corridor. There was originally a single room to the west of the corridor, heated by a fireplace in its northern wall. To the east the staircase rose from the ground floor, and was lit or ventilated at the head of the stairs by a large rectangular well or duct rising through the roof space. The blocked opening remained, although the light well above it had been removed.

The timber partition on the west side of the corridor showed traces of successive phases of alteration to improve the lighting. Directly opposite the head of the stairs an internal window had been cut at a high level in the wall in the mid 19th century. This presumably aimed to provide borrowed light at the head of the stairs, or to allow light from the possible skylight in the ceiling to penetrate the adjacent room. This window was not a primary feature, for it truncated the earlier studwork of the partition.

The room to the west of the passage was later subdivided to form two smaller rooms. The original doorway, reduced in size, was retained as the entrance to the new, northern, room and a new doorway was made to the southern room. This doorway was cut through the lower part of the internal window, which was then blocked with new studwork and reused boarding. These boards had stains of diagonal and vertical studwork on their rear faces, which demonstrated that they had been reclaimed from another part of the corridor when the boarded coverings of the partitions were still exposed. The southern wall of the southern room was later demolished and the room amalgamated with Room 14. The windows of both rooms were renewed, the boarded coverings of the partitions were covered with modern cladding and the doorways were reduced in size and fitted with modern doors. The northern room was converted into a lavatory.

On the eastern side of the passage the layout of the rooms had survived unaltered. The staircase from the ground floor was of stone with a metal handrail and balustrade but, above first-floor level, the stairs were of timber with a timber balustrade. This was supported by columnar newels and had stick balusters and a moulded handrail. The stairs had been enclosed in the 19th century with boarded partitions, fortunately leaving the handrail intact. To the north of the staircase Room 17 was heated by a fireplace in its north wall. There was no doorway from the corridor to this room, it was approached from Room 16 by a small vestibule east of the staircase, lit by a pegged, unmoulded window frame with later, chamfered casements. The panelled dado of

tongue-and-grooved boarding appeared to be a late 19th-century improvement and the original horizontal boarded cladding survived beneath the modern finishes.

*First floor: central rooms*

Room 18 occupied the entire first-floor area of this section of the building. The room had a 20th-century suspended ceiling and modern cladding but it was clear that the original interiors had already been altered in the 19th century. The original layout was probably of two heated barrack rooms divided by the corridor. The partitions defining the corridor had been removed and, at the same time, the level of the ceilings was raised, exposing the lower parts of the trusses below ceiling level. The original height of the ceilings was shown by the survival of redundant sockets for joists in the tie beams, obscured by cladding applied to the lower parts of the trusses. Although it might be argued that these sockets could have been cut, but not utilised, in a prefabricated standard truss, the chimneys in the south wall corbelled out at the same height, which seemed to confirm that there had been ceilings at this level.

The 19th-century ceiling lay around a metre above the original level and was originally covered with lath and plaster. This had been removed in the 20th-century and a new fibreboard cladding substituted. The raised ceiling was supported on beams which bore upon granite corbels built into the fire walls infilling the former open arches between the chimney stacks, and therefore seems likely to date from the last quarter of the 19th century. Above the ceiling a large, square timber duct rose to the apex of the roof. This might be the remains of a ventilator. Evidence of a stove pipe cut into the sides suggests this, though no vent remained externally.

The corbelling out of the chimneys in the south wall suggests that there were no fireplaces in this wall. Of the two fireplaces in the north wall only the north-western was revealed during the alterations. This proved to have been enlarged in the 19th century to house a large hob grate or range. In the very late 19th or early 20th century the opening was reduced in size to form an arched opening supported by a iron strap. The opening was later reduced still further, with an arched opening of brick voussoirs suitable for a small domestic grate.

The southern doorway was contrived within the truncated end of the corridor. A pair of double doors were then fitted within the opening. The doorway was surmounted by a rectangular over light with margin lights set in a plain, undecorated architrave. The corresponding doorway in the northern wall had been removed in the late 20th century. The windows in the west wall had been entirely replaced in the 20th century, however those in the east wall retained massive pegged, unmoulded frames with earlier casements (or former sashes) cut down to fit.

The entire room had been decorated with a decorative scheme consisting of cream walls above a dark-green dado. This was possibly of early 20th-century date, and replaced an earlier scheme with a red dado which in turn overlay a late 19th-century stencilled scheme consisting of a border of stylised flowers and leaves. Only short sections of this border were exposed. In the north-eastern corner of the room a pair of metal rails fixed to the wall revealed that the room had been served by the dumbwaiter from Room 7 below. A hatchway from the dumbwaiter opened into the adjoining room to the north. The room was probably created in the later 19th century to provide a leisure facility such as a dining room, or possibly even a prayer room. A reading room, recreation room and a coffee bar had been accommodated in the East Block prior to the fire of 1868 (PRO MPH 338, plan of 1869), and it may be that this part of the West Block was cleared and redecorated to replace these facilities following the fire.

Room 19 had been opened out to form part of the same open plan area as Room 18. The entire western part was thus a single large space, with no evidence of the original internal divisions. The southern of the three windows in the west wall had a pegged, mullioned frame without chamfers. Later chamfered casements had been cut down to fit. The northern and central windows had been renewed in the 20th century.

In the south wall was a blocked fireplace which was not exposed at the time of the refurbishment. No corresponding fireplace existed in the north wall, and therefore this area may be reconstructed with only a single room to the west of the corridor. The opening adjoining the fireplace in the north wall preserved evidence of the original width of the corridor, suggesting that it had passed unbroken through all these rooms. Two phases of 20th-century blocking had been inserted to narrow the opening, and a 19th-century door had been rehung within the new doorway. The original ceiling timbers survived throughout, though the 18th- and 19th-century lath-and-plaster coverings had been replaced by hardboard.

To the east of the site of the former corridor the partition defining the eastern rooms preserved its original boarded cladding, though pierced by a large, shallow arched opening to the former eastern room. This arch was infilled with a modern glazed screen and formed a private office. The eastern room retained some traces of its 19th-century decoration in the form of a tongue-and-grooved dado. This respected the arched opening, which was defined with a wooden bead-moulding. The arch may thus have been of late 19th-century date. The fireplace in the south wall had been enlarged, under an original brick arch supported with a strap. The opening contained three phases of brick infilling, with the final opening of a size suitable for a small domestic grate. To the west of the chimney breast was a doorway communicating with Room 18. This had been blocked in the

early 20th century and converted into a hatchway to the dumbwaiter in the adjoining room. A four-panelled door opened from the room upon a landing and staircase to the north. Following stripping it was clear that this wall was secondary, and that the doorway had been cut through it, severing one of its diagonal braces. The partition may have been added when the adjoining staircase was created in the late 19th century.

The landing and staircase north of this room communicated with the ground floor and the parade ground only. The stair had a square newel with a pointed, domed top and a broad handrail supported by substantial stick balusters. To the west, above the foot of the stairs was a small lavatory. This was entered by a four-panelled door and lit by a small early 20th-century window in the east wall. The west wall of the lavatory was constructed of concrete blocks and must be of 20th-century date. It is possible that this wall was inserted following the removal of an additional flight of stairs rising to the saddlers' workshop within the roof space. A staircase must have been provided here, as the alteration of the ceiling levels in Rooms 18 and 20 in the late 19th century would have made access to the saddlers' shop from the staircases at either end of the building almost impossible. A staircase in this position is shown on the 'Skeleton Record Plan'; it was probably removed in the late 20th century when the central part of the upper storey was abandoned.

Room 20 is the room identified on 19th-century plans of the barracks as a 'schoolroom' and may already have been opened out into a single large room by 1869. The presence of two fireplaces in its south wall shows that the original layout must have been of two rooms separated by the corridor, and some evidence of the division into individual rooms remained. Historic wallpapers were discovered in the alcoves flanking the eastern fireplace in the south wall. The earliest pattern, overlying white painted plaster, was a red/pink paper of curving stems forming a grid of reticulated ogee lozenges, each containing a floral spray. At the level of the ceiling the remains of a border survived. Overlying this and much of the remaining wall area was a green/grey paper with a repeating floral pattern diagonally offset in each row. Both papers were designed in imitation of damask wall hangings. The lowest part of the walls were left unplastered; these areas seem to have accommodated either fitted cupboards in each alcove, or a dado rail. The date of the wallpapers is uncertain. Neither appeared to the west of the former corridor, or on the north wall of the room. These papers may be interpreted as 19th-century improvements to an individual room which was later incorporated into the schoolroom.

The ceiling of Room 20 had been raised in the same manner as Room 18 and a later suspended ceiling had been erected beneath. At the centre of the ceiling was a square aperture communicating with a vertical shaft with plastered wooden sides. This feature may have been intended either as a light well or a ventilator. None of the fireplaces were fully revealed, though the western fireplace had only been blocked in the late 20th century. The entrance to the northern staircase block lay in the centre of the north wall through a pair of double doors of c.1880 with chamfered stiles and rails, surmounted by a plain, rectangular over light. These doors were set in a frame formed from reused timbers which were plainly derived from part of one of the corridor partitions; sockets for the vertical studs and diagonal braces infilling the partitions were visible in the side of the frame.

#### *Northern staircase block*

The corridor through the northern staircase block was defined on both sides by primary partitions, which retained their original boarding beneath later cladding. The staircase was identical with that in the southern staircase block, with a stone flight to the ground floor and a smaller timber flight to the attics (Fig. 35). The upper part of the stairs had been boxed in, but the original balustrade survived complete, with columnar newels, stick balusters and turned pendants.

In the late 19th century a glazed screen was inserted across the corridor at the head of the stairs, and both the eastern and the western walls were clad with a dado of vertical tongue-and-grooved boarding and a bold, quarter-round skirting. There was a glazed light in the west wall, with ovolo-moulded glazing bars, which provided borrowed light from Room 22. No provision for a skylight was visible in the ceiling.

To the east of the corridor Room 21 was an 'L'-shaped room which incorporated the area behind the staircase. This room was fitted with a dado of late 19th- or early 20th-century tongue-and-grooved boarding which did not continue into the area behind the stair. It is likely that there was originally a partition here to form a small lobby behind the staircase, similar to that which survives in the southern staircase block.

In the south wall of the room was a blocked fireplace and, adjoining this, an enclosed area of vertical boarding. This formed a narrow vertical cupboard or shaft within which a pulley mechanism was revealed, still in position close to the ceiling. (Fig. 36). This was presumably a small lift or dumbwaiter communicating with the ground floor. The main axle was supported off a flat-bed frame by elegant hooped brackets of cast-iron and there were curving spokes to the main wheel, characteristic of 19th-century machinery. A smaller subsidiary wheel was mounted behind the main wheel on the same axle and, at a lower level a further small wheel in alignment with this was mounted on a second axle below. There were flanges on the rims of the wheels suitable for housing ropes. Timber guide rails remained on the north side of the shaft, with grooves which appear to have accommodated 'parting beads' similar to those in an 18th- or 19th-century sash window. The lift, or a

counterweight for the lift, presumably slid up and down these rails like a sash. The lift was suspended from ropes running over the smaller wheels and was raised and lowered by means of a rope looping around both the larger wheel and a corresponding wheel at the bottom of the shaft. It appears to have been operated from the corridor, since dirt staining representing heavy use was visible on the timber cladding at this side of the shaft.

To the west of the corridor was a large room which had retained its original shape intact. This room was lit by two windows in the west wall and supplied borrowed light to the corridor via the glazed light in its east wall. The doorway was primary and retained an original four-paned over light, though the door was later. The room had been refurbished in the late 19th or early 20th century with tongue-and-grooved panelling to the dado, a picture rail and a built in display cabinet fitted with shelves in the north-western angle of the room. The fireplace lay in the south wall and had a segmental arched head supported by a strap. The opening of the fireplace had been narrowed, producing a tall opening suitable for a small hob grate. This had later been reduced, and then finally blocked in the late 20th century. The walls were covered with hardboard, replacing lath and plaster for which clear evidence remained on the studwork.

#### *First floor: northern rooms*

The northern part of the first floor was approached through a glazed pine door which may have been installed in the 1880s. This area contained higher-status accommodation than the southern parts of the building and was originally divided into six equally-sized rooms separated by the corridor.

The original arrangement of fenestration in these northern rooms was highly unusual. The long, horizontal windows in both the eastern and western elevations of the building did not respect the divisions between the first-floor rooms, but extended beyond the limit of each room so that a single light at the end of each window projected into the thickness of the walls dividing the rooms. These walls were then chamfered back to the width of a mullion, so that approximately three quarters of each window lit one room and the remaining quarter lit the adjoining room beyond (Fig. 37). Although only one example of such a window remained unaltered, at least four of the rooms showed evidence of such windows. As the layout of the officer's stables on the ground floor determined the position of the dividing walls between the rooms, it is clear that the walls were integral with the building and that this bizarre treatment of the windows must have been a primary feature.

These angled windows in the corners of the rooms initially suggested 'squints' overlooking areas of particular importance within the barrack compound. Two of the windows on the east side were indeed angled towards the Headquarters Building to the north east; however the two on the west side of the building were angled to the north west and would have had no apparent focus. Before the extension of the barracks in 1803 they would simply have looked out over the boundary wall to the fields beyond. It is probable that these windows had a specific purpose, but if so this remains unknown.

In the late 19th century the rooms closest to the staircase were converted into small apartments by breaking doorways through to the adjacent rooms. This may have provided separate bedroom and sitting rooms, possibly for officers displaced from the Headquarters Building following the fire of 1879. The rooms were altered again in the early 20th century when a short section of the corridor was removed, lavatories were inserted within the former eastern room and the western room was enlarged. An early 20th-century timber screen to the lavatories was provided, with four-panelled doors, partial glazing and an adjacent closet. The fenestration of the eastern room had been greatly altered, but evidence of a primary fireplace and a 'squint' window facing north-east was uncovered during stripping.

The western room had been refitted in the late 19th century, at the time of its conversion to an apartment. The former 'squint' window in the north-west corner had been blocked and a new sash window inserted further to the south. The adjoining window was also replaced with a sash at this time. In the early 20th century the east wall of the room was rebuilt further east and partly on a diagonal alignment. A new doorway to the remaining northern section of the corridor was then made, reusing an earlier door frame with a rectangular over light divided into four panes. The fireplace in this room was blocked in the 20th century.

Room 24 to the north retained its original shape and size and the only surviving example of one of the 'squint' windows, looking out to the north west. The room was entered by a 19th-century doorway within the original opening, surmounted by a four-panelled over light. The original partition with the corridor remained, though the boarding on its internal face had been replaced with later lath and plaster. The chimney breast in the north wall contained a blocked fireplace, flanked by late 19th-century cupboards. A small hatch with a sliding door opening into the adjacent room may also date from this period.

Room 27, on the opposite side of the corridor, had similar furnishings. This was entered through a primary doorway in its west wall and also by a late 19th-century doorway to the south. The 'squint' window in its east wall had been blocked up and elaborate cupboards had been inserted in the alcoves with shelves and high-level cupboards supported by ornamental cast-iron brackets. The fireplace retained a mantelpiece with shaped timber brackets, but the opening was not exposed.

The northern rooms, Rooms 25 and 26 had been much altered; their fireplaces had been blocked and their walls covered with modern cladding. The partitions to the corridor were found to retain original boarding on both sides. Marks on the boards showed the position of fixtures such as coat and hat rails, or perhaps shelving. Following the stripping these areas gave a strong impression of the character of the original interiors.

#### *Second-floor rooms*

The workshops on the second floor were originally approached only by the two staircases in the southern and northern staircase blocks. Prior to the introduction of fire walls and the raised ceilings of Rooms 18 and 20, the entire second floor may have been one continuous space on one level, bridged by the pointed arches formed by the flues of the chimneys curving together to support stacks on the crown of the roof. It is uncertain whether the second-floor store rooms and workshops were divided by timber partitions; though this seems likely.

The second floor workshops were not 'rooms', but rather railed platforms overlying the ceiling joists of the rooms below. Although the ceiling joists below ran from north to south, with their lower surfaces flush with the soffits of the tie beams, the joists supporting the second floor ran parallel with the tie beams. These joists were supported on strong subsidiary beams running from north to south, let into the upper surfaces of the tie beams. The tops of the second-floor joists were thus flush with the tops of the tie beams, and the floor boards were laid over this. The flooring did not extend the full width of the building, neither did it extend into the hipped areas at either end of the roof where the headroom was too low. These areas remained unfloored, with only a single layer of ceiling joists, and were protected by timber balustrades.

The high ceilings of Rooms 18 and 20 have been shown to be 19th-century alterations, and would have restricted access to the central part of the roof. A third staircase must have been added in the centre of the building after this, but has since been partially removed, leaving only its lower flight. Following the removal of the stair the central space was reached by means of crawling boards over the ceilings from small hatchways in the fire walls.

#### *Second floor: southern rooms*

The extreme south end of the building, within the hipped end of the roof, was not floored. The southernmost arch formed by the chimney flues had been entirely removed and replaced by a solid brick wall. The area to the south of this, formerly part of the Shoemakers' workshop, had been abandoned. The workshop had extended as far as the king post supporting the south end of the ridge. Areas of flooring survived and traces of the timber balustrades remained among the raking struts and braces supporting this end of the roof.

To the north, the area over Rooms 14-17 and the southern staircase block had been severely altered. The staircase to the workshop survived intact, but the arching brick chimney flues adjoining the stairs had been removed. The disturbance caused by this alteration was clearly visible in the roof timbers. This area had been laid out as a theatre in the mid 20th century, with a proscenium arch at the north end painted to resemble a pantiled cottage. The timber compartment protecting the staircase had been removed, but in the body of the theatre the original timber balustrades defining the floored areas remained, hidden behind hardboard cladding.

#### *Second floor: central rooms*

The central rooms had also been significantly altered, by raising the ceilings of Rooms 18 and 20 to a level at least a metre higher than the originals. The headroom within this area was insufficient to allow flooring and access was restricted to a hatch way in one of the fire walls and crawling boards. The timber shaft of a ventilator rose through the ceiling in the centre of this area. This had been pierced on its south side to allow a stove-pipe to vent into the area. Part of the pipe remained loose within the roof space.

Beyond the hatchway the floors of the former Saddlers' workshop remained at their original levels. This workshop must formerly have extended both to north and south; it was no longer accessible without great difficulty and had been abandoned entirely in the late 20th century. The rafters showed evidence of a large rectangular opening cresting the ridge of the roof. This was presumably a skylight designed to improve the lighting in the workshops. It was a primary feature, but had been blocked with modern rafters in the 20th century. No evidence of other primary fixtures and fittings remained.

The attic had been fitted up with crudely-constructed storage shelves made from boarded cladding recovered from demolished sections of the first-floor corridor. These formed compartments and a deep shelf for the storage of bulky goods. A series of nails driven into the edge of the shelf allowed for the suspension of hanging objects, though nothing remained to indicate precisely what was stored here. The room appears to have been abandoned prior to the second world war, since it had been defaced by graffiti in the 1940s. The legends 'P.O.W. KOETJMINDE CAMP 669 20.6.1945.' and 'POW KOETJEMINDE 669' had been painted in two places in this area. The date '1970' had been added beneath the former inscription.

To the north the roof space continued over the raised ceiling of Room 20 and space was once again extremely confined. Evidence that it had formerly served as a usable space survived in the form of blocked skylights infilled with later rafters and boarding. The area was dominated by the casing of the ventilator shaft or light well serving Room 20. Access into the adjoining area to the north was by a small ladder through a gap between the top of the brick fire wall and the underside of the flues.

#### *Second floor: northern rooms*

The northern workshop, or Quartermaster's stores, was the best-preserved part of the roof space. The staircase from the first floor was enclosed by a compartment defined by boarded partitions and a timber grille rising to the roof. This probably represented a security device to prevent theft or misuse of the stores. The stairs were lit by a dormer window on the east side of the roof and there was formerly a corresponding dormer in the west side of the roof, which had been blocked in the 20th century. Traces of the roofline and opening of this window remained. The balustrade defining the unfloored areas had been removed and the flooring extended further out into the eaves to maximise the space available.

The northernmost part of the roof over the officers' quarters was divided from the area previously described by a brick fire wall, and had been completely abandoned since the late 19th century. Although damaged, the timber balustrades defining the floored areas survived here almost complete, only one section on the east side having been removed (Fig. 38). The floored area extended as far as the king post supporting the north end of the ridge, but beyond this the roof space was open and unfloored. There were kick boards along the lower parts of each balustrade to prevent small objects rolling off into the unfloored areas, and rows of timber pegs for hanging up clothing or equipment along the square-set plates supporting the common rafters. Surprisingly, there were no skylights. Perhaps, as this area served as stores rather than workshops, good lighting was not necessary.

#### *Roofs*

The roof structure of the West Block was supported on nineteen large trusses, each resting on a tie beam crossing the width of the building, concealed within the ceilings of the first-floor rooms. The tie beams supported the ends of the ceiling joists and also supported the subsidiary beams on which the second floor joists rested.

The trusses at the extreme north and south ends of the building were king-post trusses with tall, slender king posts having expanded heads and feet. These posts were secured to the tie beams by substantial metal straps. The principal rafters were tenoned and pegged into the heads of the king posts, and were also braced with diagonal braces from their feet (Fig.30, bottom) to prevent deflection of the rafters. Further braces radiated from the feet of the king posts to support the hip rafters and the hip trusses supporting the end bays of the roof. The timber balustrades of the workshops were contrived around these timbers and formed integral parts of the trusses.

The seventeen trusses covering the remainder of the building were designed to allow uninterrupted space for the workshops on the second floor and were of different form (Fig. 30, top). The tie beams were identical, but instead of a king post there were two queen posts on either side of each truss, with expanded heads and feet and iron straps as before. The principal rafters rose from the ends of the tie beams to tenon into the heads of the queen posts on either side. Diagonal braces ran from the feet of the queen posts to support the principal rafters, and in some cases this area was infilled by the balustrades around the workshop areas. The principal rafters did not continue to the apex of the roof; instead, a horizontal tie ran across the roof above head height to connect the heads of the queen posts. Horizontal, square-set plates resting on the tie and tucked against the heads of the queen posts linked the trusses down the length of the roof, and were clasped between the principal and common rafters in the two end trusses. The square set plates acted as purlins in the upper part of the roof, but there were lower purlins, diagonally set in the plane of the roof, slightly trenched into the upper surfaces of the principal rafters.

Only the common rafters extended to the apex of the roof. These were supported along their length on the lower purlins and upon the square-set plates described above. There was a small plank ridge at the apex. The lesser timbers in the upper parts of the roof no doubt gained support from the arched chimney stacks, which must also have assisted in preventing racking. The entire roof was boarded over the common rafters and slated over this. Openings in the roof for skylights were achieved by horizontal trimmers interrupting the common rafters. None of these skylights had survived the 20th-century re-slating of the roofs.

#### WASH HOUSE AND CLEANING HOUSE (Building 16: Fig. 26)

The wash house and the cleaning house lay to the west of the West Block, against the boundary wall of the barracks. The rear wall of these buildings was the original 1790s boundary wall, which could easily be

identified by the brick buttresses projecting at regular intervals. This group of outbuildings has now been demolished.

The northern building or Wash House appeared to contain the earliest fabric (Fig. 39). This small building was constructed of red-brown bricks laid in Flemish bond. These were similar to those used in the barrack boundary wall, but were not properly bonded or coursed with the wall, suggesting that it was a later addition. The east elevation of the building was constructed of better quality bricks with a rich blood-red colour. The mortar bonding the front and side walls of the building was identical and a low, chamfered plinth ran uninterrupted around it.

The original building seems to have been a small rectangular structure measuring 7m by 4 m and only one storey high. The jambs and the threshold of the original doorway survived in the south wall. The lintel had been renewed in the 20th century and a modern gate had been substituted for a door. In the east wall were a pair of rectangular windows with flat-arched heads of rubbed brick. These had been blocked in the 20th century, one incorporating a louvred panel. Near ground level, but above the plinth, were a group of three ventilators. Two windows had also been cut in the west wall of the building through the earlier barrack wall. These were large openings which would have presented a security risk prior to the establishment of the barracks extension in 1803 and must therefore have post-dated the extension. The jambs employed the same richly-coloured bricks as the front elevation and may provide dating evidence for the construction of the building, which may be assumed to date from around 1803.

In the 19th century, before 1876, the building was extended northwards for a further 5m. This extension was simply butted against the earlier building and the barrack wall behind. A large opening was made in the north wall of the earlier structure to link the two buildings. The extension had a doorway in its east wall with a rubbed brick flat-arched head. A pair of ventilators flanked the doorway on either side just below eaves level. On the north elevation was a window with a similar head with a central mullion and timber casements. The roof was renewed with a shallow-pitched slate roof, hipped at both ends, covering both parts of the building. The eaves were fitted with ogee-section cast-iron rainwater gutters which, from a distance resembled a moulded timber cornice, and had scrolled angle-irons at the hips.

The interior of the building had been gutted in the 20th century and no original features remained. Most of the windows were blocked and the opening between the southern and northern parts of the building had been built up to the roof in brick. A suspended ceiling remained in the northern part but the southern part was open to the roof. No evidence of a stove survived; neither was there any trace of a water supply to the building. If the building functioned as a wash house it may have been supplied by underground pipes from the central reservoir.

The cleaning house lay a short distance to the south and was a more modest structure, measuring 10m by 3m and covered by a lean-to roof (Fig. 40). The building was erected before 1876 since it appears on the OS maps of that date. The interior had been divided into two compartments by a later wall at the southern end to form a lavatory, with a cistern (most unusually) accommodated in a gabled projection on the roof. The lavatory was entered by a doorway in the east wall and lit by windows in the south and west walls, both of which had been blocked in the late 20th century. The roof was reinforced by horizontal iron ties. The adjoining room was entered by doors at each end of its east wall and lit by a three-light casement window in the centre of the elevation. The interior had been gutted and converted into a plant room. There were scars in the paintwork in the interior of the west wall representing traces of fixtures or fittings; however the significance of these marks could not be determined.

No evidence of the original use of these buildings remained; however it seems certain that the buildings were designed to house sanitary facilities. Although the Wash House might have been constructed as early as 1803, its northern extension and the adjacent cleaning house are most likely to have been added in response to the sanitary reforms of the mid 19th century. On the 'Skeleton Record Plan' of the barracks the Wash House is shown as an 'Electricity Shed' and a 'Carpenters' Shop' while the Cleaning House is shown as a 'Wood Store'.

#### HEADQUARTERS BUILDING (Building 44: Fig.43)

The Headquarters Building had the most formal architectural treatment of any building on the site, reflecting its higher status. The present building replaced an 18th-century building which was destroyed in the fire of 1879. Fortunately the earlier structure was photographed prior to the fire, and the image was reproduced in the *Devon and Exeter Gazette* on 10.1.1930 (WCSL: Military History Cuttings File).

The original building was a severely plain brick block of two storeys covered by a hipped slate roof (Fig. 41). The main façade was eleven bays wide and of considerable architectural subtlety. The close spacing of the windows at the centre of the building and wider spacing towards each extremity divided the façade visually into a *risalito* and wings without any actual projection of the centre. The central part was further emphasised by an oversized pediment defined by plain stone bands and copings like those of the Magazine (see below). This pediment, together with the piers of masonry between the windows suggested a hexastyle portico without



employing any actual columns or pilasters. The pediment housed the Royal coat of arms and supporters in Coade stone. After the fire the central part of this coat of arms was recovered and re-erected on the new building (Fig. 42). The only other decorations were a pair of Ionic columns flanking the main doorway, which was crowned with an iron bracket and lamp. A headquarters building of the same period, with similar detail, survives at the former Artillery Barracks on Topsham Road.

The layout of the ground floor of the destroyed building was fortunately recorded by the surveyors of the OS 1:500 map of 1876 (Fig. 5) and bears close similarities with the plans of officers' ranges constructed at the barracks in Norwich and Hulme in the 1790s (discussed below). The building (Fig. 80) was rectangular, with two projecting rear wings. The central main entrance opened upon a passage running the depth of the building and opening upon a walled rear yard and garden. The passage was intersected by a long corridor extending into the eastern and western extremities of the building. At each end were small rooms tucked into the corners, which may have housed lavatories. Short passages to the north of the corridor communicated with the rear wings. The western third of the building contained a large room, which may well have been the Officers' mess, and an adjoining room which may have served as an ante room or servants' quarters. The rear wing beyond this contained a large room and smaller ancillary rooms or stores, which must represent the mess kitchen, sculleries and pantries. In the eastern parts of the building were seven, square, heated rooms of more or less identical size, which might be officers' rooms and accommodation for the Quartermaster. One of the rooms closest to the mess room had a small projection in the corner of the wing and might represent a servants' room with an adjoining plate closet. In the eastern rear wing were rooms which may represent the Quartermaster's kitchen, sculleries and pantries. An external staircase on the eastern elevation is also shown.

The replacement headquarters building was designed in the 'Queen Anne' style, a style popularised in the late 19th century by architects such as Webb, Nesfield and Shaw and which was based on the informal use of classical motifs. Plans and elevations for the building survive, dating from the late 19th century, which clearly show the original uses of the rooms (PRO works 43/46'). Unfortunately the plans are badly damaged. Fragments of a signature remain, which may possibly be deciphered as 'Ra(?v)enhil', 'for J.G. (?..)', '27th January 1(?)'. Nearby the plans are signed in pencil 'Hubbard & (?co), mai(..?dd). It is possible that these are the signatures of the architect and the building contractor.

The building was constructed in 1881-2 of bright red-orange brick laid in Flemish bond. The elaborate mouldings and classical detail were wrought in moulded and rubbed brick with some use of terracotta panels and finials. The interior housed the mess rooms, officers' quarters, Quartermaster's apartments, mess kitchens and associated servants' rooms and was originally divided into separate sections. The building therefore had multiple entrances; the doorways in the south elevation opening upon the mess rooms and officer's quarters, while the Quartermaster's apartments were approached by a separate doorway in the east elevation.

The building has recently been converted into apartments, which has involved extensive replanning of the interior. Alteration of the exterior has been minimal and the southern, eastern and western facades remain almost exactly as they were prior to redevelopment.

### *South elevation*

The south elevation was the principal façade, facing down the parade ground between the two earlier barrack blocks (Fig. 44, top left). The elevation was divided into three sections; a central part and two flanking pavilions breaking forward from the plane of the central block and with higher rooflines. Above the roof at the centre of the building rose a cupola containing a clock, with a tapering lead base and an ogee dome surmounted by a weather vane. There were formerly tall chimneys with decorated brick shafts and caps, but these were demolished in the mid- to late 20th century.

The central section of the building was of six bays, comprising four bays of windows at the centre flanked by porches containing the entrances. The four windows on the upper storey at the centre of the building were framed by pilasters supported on corbels to form aedicules projecting from the wall surface, each one of which rose above the line of the eaves and was crowned by a small pediment. The two porches on either side projected almost flush with the side pavilions and had arched entrances flanked by Tuscan pilasters, each supporting an entablature and pediment crowned by a terracotta ball finial. The pediments lay against an attic storey formed by the parapets of the porch (Fig. 45). The pediments were infilled with later brickwork of a slightly different colour and may have formerly enclosed decorative panels (though no such decoration is shown on the elevation drawings). The porches had floors of encaustic tiles and double doors featuring glazed panels of coloured and painted glass under arched fanlights bearing the monogram 'VR'. Above the porches the internal hallways containing the staircases were expressed by small paired windows without pediments. The central stair, which was intended for servants, was not expressed in this elevation.

The two side pavilions were each of four bays, but this was expressed in the form of two projecting bays on each pavilion, each containing a pair of windows and crowned by pediments rising above the eaves line. The windows on the ground floor had arched heads of rubbed brick and there were flat arches to the first-floor

windows. Below the windows were raised brick aprons. The whole façade was united by a plinth at ground level, a raised plat-band at first-floor level and string courses at the level of the window sills. Between the projecting bays were small aedicules surmounted by pediments. These contained modern paintings showing the emblem of the Devonshire Regiment. The original coat of arms from the previous building had been reset at first-floor level on the southern pavilion (Fig. 42).

#### *East elevation*

The east elevation was the main façade of the Quartermaster's apartments and was treated like a main elevation (Fig. 44, top right). This façade was asymmetrical, the southern part being occupied by a chimney breast and the northern part by pairs of tall windows lighting the rear rooms. The chimney breast had been truncated at the eaves in the 20th century, but formerly served to balance the façade. At the centre of the elevation the doorway to the Quartermaster's apartments was flanked by pilasters which curved inwards to support a rectangular panel containing a number of small circular terracotta motifs. Above the pediment a projecting bay with a central, first-floor window rose above the roofline and was crowned by a further pediment.

#### *West elevation*

The west elevation of the building was of lesser importance, being the side elevation of the Mess kitchens and service rooms (Fig. 44, bottom right). This elevation was also asymmetrical, reflecting differing floor levels in the higher and lower status parts of the building. The southern part of the elevation was dominated by a large chimney stack, again truncated at the roof line. This was flanked on either side by tall ground-floor windows serving the Mess room. The first floor level was expressed by a plat band and string course at the same level as those on the southern elevation, but this continued only over about three-quarters of the elevation. There was a single first-floor window to the north of the chimney stack.

Beyond this point the façade was recessed slightly and the internal floor levels were lowered so that three storeys could be accommodated, the top storey being partly within the roof space. These rooms housed the 'Mess Man's Quarters' and were less elaborate, with string courses at the level of the window sills and sash windows with arched heads lighting the ground and first floors. The top storey was lit by a small dormer window springing from eaves level, covered by a shallow hipped roof.

At the rear of the building the kitchens and scullery projected in the form of a single-storey north-west wing. This had tall, square-headed sash windows and a low pitched roof gabled on the north. This roof originally had an exceptionally tall chimney and also a ventilator, but both had been demolished when the building was re roofed in the 20th century.

#### *North elevation*

The north elevation (Fig. 44, bottom left) was broadly symmetrical despite the irregularity of the mess man's quarters and the north-west wing, which projected further north than the corresponding parts to the east. The fenestration and architectural detail were carefully organised to express both the function and the status of the different rooms.

The central section of the building contained the servants' rooms and was distinguished by a cornice of diagonally-projecting headers below the eaves. At the centre the servants' staircase was lit by a large window with a segmental arched head and a mullioned and transomed frame. On the ground floor was a door divided into two sections with a central mullion and surmounted by a segmental arch. These openings were set in a recessed panel at the centre of the façade rising through two storeys. The doorway formerly opened upon a yard at the rear of the building defined by a high wall, which was unfortunately demolished in the late 20th century.

On either side of the central staircase pairs of tall sash windows with flat-arched window heads lit the servants' rooms on the ground and first floors. The main staircases to east and west of these were expressed by wide tripartite windows below the eaves, and by short projecting wings below these with very shallow mono-pitched roofs. These wings contained lavatories accessible from the half landings of the stairs and from the yard on the ground floor. The western of these projections extended further north at ground-floor level to incorporate an additional lavatory and urinal entered from the yard, probably for the servants.

The eastern projection had been extended by a two-storey addition in the early 20th century. This was carefully designed to repeat the detail of the main building, the string courses and plat bands being continued around the new build. The extension is marked on the 'Skeleton Record Plan' as 'bath' and was presumably added to improve the sanitary arrangements. It was entered from the yard by a wide, arched doorway in the west wall of the extension.

The eastern pavilion had a plain cornice below eaves level. The Quartermaster's kitchen on the ground floor was lit by a pair of tall sash windows, one of which had been partially obscured by a late 19th-century extension accommodating a scullery. Adjoining this was a small window lighting a lavatory. The officers'

rooms on the first floor were lit by a pair of sash windows. The string course and plat band from the eastern elevation were carried across both this pavilion and the central part of the building.

The western pavilion was three storeys high and partially obscured by the projecting north-west wing containing the mess kitchen and scullery. There were a pair of tall, barred sash windows on the ground floor lighting a large pantry serving the Mess room. The Mess Man's Quarters on the first and second floor were lit by smaller sash windows, and by dormers rising above the eaves line. The string course and plat band were not continued across this elevation, though a plain cornice was employed.

The north-west wing containing the kitchen and scullery was lit by a tall sash window in the north wall. The string course and plinth from the west elevation, and a simple cornice beneath the eaves were carried around this elevation. The pitched roof of the north-west wing was continued on the east down to a lower eaves level, covering a kitchen passage and larder as well as the eastern part of the scullery. A walled kitchen yard lay to the east of the north-west wing. This area contained several outbuildings, including a cloakroom and lavatories. It was approached by doorways from the kitchen passage and the scullery as well as by an external gate communicating with the gardens to the rear of the building.

### *Ground floor*

The entrance porches in the south elevation opened upon small lobbies, both of which retained their glazed entrance doors with coloured and painted glass (Fig. 45). The ceilings were decorated with plasterwork cornices, and the floor was of concrete, possibly overlying encaustic or geometric tiles. The lobbies had glazed internal screens with alternating green and yellow glass panes in the margin and over lights. Unfortunately the glazing in the doors of both screens had been replaced with modern frosted glass. Beyond the screens both lobbies opened through wide segmental arches upon a corridor running from east to west through the eastern and central parts of the building. The corridor had a bold plaster cornice and a skirting of red tiles, suggesting that the floor, now covered in a concrete screed, was originally of similar tiles. Further evidence of these tiles was visible at the eastern end of the corridor. Two doorways opened off the south side of the corridor into the officers' rooms.

The three principal staircases opened off the northern side of this corridor. At the centre of the building an arched opening with a segmental head opened upon the central staircase. This arch was filled by a glazed screen with green and yellow coloured panels of frosted glass. The staircase hall beyond had doorways opening into servants' rooms on the east and west and it is clear from the 19th-century architects' plans that this staircase was reserved for the use of the servants. The staircase had massive rectangular concrete or stone treads cantilevered out of the walls, an ornate cast-iron newel and a continuous handrail supported by iron stick balusters (Fig. 47, top left). Under the stair a doorway opened into the yard. This staircase was not as finely finished as the officers' staircases, which lay at the eastern and western ends of the corridor, opposite the archways to the porches.

The officers' stairs were approached by segmental arches corresponding to those opening upon the lobbies. The western staircase appears to have been the most important. This led to a private suite of first-floor rooms reserved for an important official, possibly the Commanding Officer (unfortunately this part of the 19th-century architects' plans is illegible). The eastern staircase led to the Officers' quarters in the central and eastern parts of the building. Both staircases had open strings and were curved around narrow wells. The treads were solid blocks, cantilevered from the wall and chamfered underneath to form an elegant continuous soffit (Fig. 47, top right). The continuous timber handrails were supported by ornate cast-iron splat balusters and elaborate octagonal newels standing on bull-nose steps at the base of each stair. Unfortunately the balusters had been reinforced with crude metal straps. The base of the western stair had winders turning to the west, respecting the corridor, which offset to the north at the foot of the stairs and continued towards the kitchen corridor. Beneath both staircases were archways with ovolo-moulded jambs which opened upon the corridors leading to the lavatories in the projections at the rear of the building. These had floors of red quarry tiles, and moulded timber architraves to the original openings. The lavatories and bathrooms had been altered in the mid 20th century and the original fixtures had been replaced.

The officers' rooms in the central part of the building were large and well appointed, with high ceilings decorated with bold plaster cornices, and broad, moulded architraves to the doorways and windows. Rooms 3 and 4, to the south of the corridor, were a pair of interlocking 'L'-shaped rooms lit by large sash windows in the main elevation. The rooms had been knocked together in the late 20th century, but were originally separate accommodation for two officers. Both rooms were heated, but unfortunately the fireplaces had been blocked. The alcoves on each side of the chimney breasts in both rooms retained fitted dressers consisting of low level cupboards surmounted by two tiers of shelving supported by turned balusters in early 17th-century style. The cupboards had been painted white, but internally retained their original polished wood finish.

The servants' rooms (Rooms 10, 11) were approached from the servants' staircase through doorways with narrow moulded architraves. The doors were four-panelled doors with later hardboard cladding and bakelite

door handles. They had no cornices or other decoration apart from the architraves round the window, which were broad and delicately moulded. Room 11 retained fitted cupboards in the alcoves flanking the chimney breast, but these were without shelves or turned balusters. The fireplaces in both rooms had been removed. Each room is shown on the 19th-century plans as shared by two servants.

The eastern part of the building was originally separated from the central part by a solid wall and formed a separate residence for the Quartermaster. The wall had been broken through in the late 20th century and a doorway with a reused four-panelled door was added to link the two parts of the building. The section of corridor immediately beyond the linking door is shown as a 'spare room' on the 19th-century architects' plans. This area had no cornice and a wooden floor. It was lit by borrowed light through a glazed screen in its northern wall. The eastern wall of this room had been removed in the late 19th century and an arch substituted. Beyond this the corridor continued to the east and terminated at a glazed screen with green and yellow frosted panes. This defined a lobby within the entrance to the Quartermaster's apartments. A further section of corridor extended to the north and the rooms at the rear of the building. Both the lobby and the corridor had geometrical tiled floors and decorative plaster cornices.

The rooms to the south of the corridor had been altered in the late 19th century. There were originally two large rooms here, shown on the 19th-century plans as a bedroom and a sitting room, but these were subdivided in the late 19th century to form the present Rooms 5, 6 and 7 and also a staircase to the first floor. The alteration was carried out with respect for the original structure and the original cornices, architraves and other mouldings were replicated exactly in the new work. Rooms 5 and 6 were created from a former bedroom by the addition of a partition down the centre of the room. A new doorway was broken through the north wall of the room into the former 'spare room' which must have been incorporated into the corridor at this time. Room 5 is shown on the 'Skeleton Record Plan' as a dining room, and Room 6 as a servant's room. Both rooms had cornices and were lit by tall windows in the south wall surrounded by broad, moulded architraves. The lower parts of the windows were sashes, but there were leaded lights above these with yellow borders and roundels at the centre. The fireplace in Room 5 had been removed and no other fixtures remained.

To the east of Room 6 a staircase had been created within part of the former sitting room. A wide arch had been broken through the wall to the corridor and a dividing wall then inserted across the room, rising through two storeys. The staircase was a dog-leg stair rising to a half landing which cut across the middle of one of the windows in the south wall, clearly showing that it was an addition. The stair had an open string and a heavy square newel with a ball finial (Fig. 47, bottom left). The balusters were simple wooden stick balusters. A section of the balustrade ran across the window on the half landing, which retained its coloured glass panels; these had coloured centres with five roundels. They were more ornate than those of the former bedroom to the west as the room had formerly been of higher status.

Room 7 was entered through a doorway at the foot of the stairs with a four-panelled door set in a broad, moulded architrave. This may have been reset when the original sitting room was subdivided. The room retained its plaster cornice and coloured glass panels, but the fireplace had been removed in the late 20th century.

To the north of the corridor and entrance lobby, Room 8 is marked on the 19th-century plans as a bedroom. This was a large, 'L'-shaped room lit by tall windows in the east wall with leaded lights in the window heads of still simpler design. The architraves of the windows were elegantly moulded and there was a bold plaster cornice. The fireplace had unfortunately been removed. In the late 19th century a doorway was broken through the north wall of the room to open into a small extension. This had a floor of red and yellow tiles and may have been a washroom, though no fixtures survived.

Room 9 lay to the west of the northern part of the corridor and originally served as a kitchen. It was formerly entered by a doorway from the corridor but, during the late 19th-century alterations to the building, the door was moved to the south wall of the room. The original doorway remained until the mid 20th century but was later blocked. The kitchen was lit by a tall sash window and formerly had a fireplace in the west wall. This had been blocked. At the top of the chimney breast were a number of projecting corbels which probably served to support the hearth in the room above. On the opposite side of the corridor a lavatory was provided, and in the late 19th century a scullery and pantry was added to the rear of the building.

The western end of the building contained the principal rooms, particularly the Mess room and the ante room adjoining it (Rooms 1 and 2 respectively). These rooms occupied the south-western corner of the building, and were designed as a suite of rooms connected by folding doors. The ante room (Room 2) lay to the west of the western lobby and was entered from the corridor near the foot of the western staircase. The door had unfortunately been covered with hardboard, though its moulded architrave remained. A second doorway in the north wall of the room communicated with the service corridor which ran towards the kitchens and service rooms in the northern part of the building. This doorway had been blocked in the late 20th century. The folding doors in the west wall of the room consisted of four hinged leaves each with three moulded panels. The doors could be withdrawn to form a wide, square-headed archway linking the two rooms. The door furniture was early

20th century and included a brass knob and finger plate. A modern suspended ceiling had been introduced, but above this the original ceilings retained very rich plaster cornices. The panels of coloured and painted glass in the upper lights of the windows had been removed and plain glass substituted, though these lights were also obscured by the suspended ceiling. The fireplace had been removed and diminutive modern skirting boards added at the base of the walls, disguising the original grandeur of the room.

The Mess room (Room 1) was the largest room in the building and was also formerly the best appointed. Unfortunately, as with the ante room, modern alterations had robbed it of much of its original detail. Fortunately the plasterwork and stained-glass panels survived above the modern suspended ceiling and the original deep, moulded skirting boards remained in place. The doorway in the east wall communicating with the service corridor retained its original door. This was of unusual type, with four small, square panels in its lower section and two larger glazed panels above. It is likely that the more important rooms elsewhere in the building had similar detail. The door had a brass finger plate decorated with a roundel or flat boss. A modern opening in the north wall and a doorway beside this to the 'Mess Waiter's Room', had recently been blocked.

To the north of the high-status rooms the service areas of the building began. These were approached by an 'L'-shaped service corridor starting at the foot of the western staircase and extending half the length of the north-western wing. The northern part of the passage was screened off by a glazed screen and door and was clearly reserved for the servants. On the west side of the passage was a square room shown on the 19th-century architects' plans as the 'Mess Waiter's Room'. This was lit by a sash window in the west wall and had doors in its east and south walls, both of which had unmoulded architraves. The fireplace had been blocked. In the north-western corner of the room was a large built in wall safe resembling a walk-in wardrobe. This was clearly designed to store the regimental plate, and had a massive metal door and shelves inside supported by ornate cast-iron brackets. No manufacturer's name was visible.

To the east of the service passage was a room shown on the 19th-century plans as a 'Pantry'. This had a four-panelled door and was lit by two barred windows in the north wall. There was a glazed screen in the upper part of the south wall providing borrowed light from this room to part of the service passage. The room was heated by a fireplace in the east wall flanked by cupboards (which do not survive). It is unlikely that food was stored here, the room probably functioned as a sitting room for the principal servant, in the same way as a 'butlers' pantry' in a stately home.

On the west side of the passage, adjoining the Mess Waiter's Room was a service stair to the 'Mess Man's Quarters' on the first floor. This stair was a generous open well stair with a closed string, stick balusters and chunky chamfered newel posts. These were topped by ball finials and terminated below with moulded pendants (Fig. 47, bottom right). Beneath the staircase, concealed by a panelled timber partition, a further staircase descended to a beer cellar and wine cellar. Beyond the foot of the stairs the corridor continued into the single-storey north-west wing. The first room on the west had a concrete floor and painted brick walls, and retained early 20th-century shelving and cupboards along its north wall, replacing an earlier dresser.

At the north end of the service passage doorways opened into a larder, tiled from floor to ceiling with white ceramic tiles, and the kitchen, which lay to the west of the passage. This was a bare room with painted brick walls and a floor of red quarry tiles set diagonally. The room had a massive fireplace in its north wall, which had been completely blocked in brick. A square concrete area in the floor may represent the site of a large range or stove. A built in dresser on the opposite wall had also been removed.

The scullery at the northern end of the range was originally entered by a doorway in the north wall of the kitchen, adjoining the chimney breast. This had been blocked in the 20th century so that the room was only accessible from the yard. As a result of this the scullery had not been stripped of its furnishings. The interior had brick walls painted with a dark green dado and cream walls above. Heavy slate shelves survived attached to the north wall and a large Belfast sink remained beneath the window. A cupboard in the north western corner was probably a late 19th- or early 20th-century addition as it does not appear on the 19th-century architect's plans.

### *First floor*

The first floor contained accommodation for officers and their servants in its central and eastern parts and more important rooms in the west part. The rooms were approached from a long corridor running the length of the central and eastern wings, which opened upon the three staircases through segmental archways. The corridor had a fine, moulded plaster cornice and a recessed half-round moulding forming a dado. The arch to the servants' staircase at the centre of the range was closed by a glazed screen.

The 19th-century plans show that a full length corridor was not part of the original arrangement; the western rooms had originally formed an entirely separate apartment divided from the rest of the building by a solid wall. The corridor had been extended in the late 20th century by breaking through this wall and absorbing a small store into the corridor. This alteration was particularly evident in the floor; that of the original corridor was of geometric tiles but within the area of the former store was a modern floor. The original doorway to the

store had been retained within the corridor, just west of the entrance to the servants' stair. The different floor levels in the central range and the flanking pavilions were resolved by short flights of steps at each end of the corridor. The eastern steps were primary and passed into the eastern part of the building under a segmental arch. The western steps were modern and were cut through the west wall of the former store.

To the south of the corridor, opposite the eastern and western staircases, small lobbies branched off into the areas above the entrances. These areas were lit by pairs of windows and had geometric tiled floors and barrel-vaulted ceilings. The vaults disguised the fact that the chimney flues from the adjacent rooms arched over the lobbies to join the chimney stacks at the junction of the central and flanking ranges. Both lobbies had been partitioned off in the late 20th century to form small separate rooms.

In the central part of the building Rooms 17 and 18 were set aside for officers. As on the ground floor the dividing partition between the rooms was staggered, producing two 'L'-shaped rooms. The alcoves thus produced may have been intended for beds, desks or wash stands. The rooms retained their original plaster cornices, doors, skirting boards and architraves, though the chimneypieces had been removed. Room 18 had a pair of exceptionally well preserved cupboards flanking the chimney breast in the east wall. The shelves above the cupboards were supported by turned balusters and the original polished wood finish had survived (Fig. 57). The cupboards and shelves in room 17 had been removed in the 20th century and a doorway broken through the wall to link the two rooms.

To the north of the corridor were a pair of servants' rooms flanking the servants' staircase (Rooms 24, 25). Each room accommodated two servants. The rooms were entered by primary four-panelled doors from the landing within the glazed screen and had tall sash windows and fireplaces with slate surrounds (of which only traces remained). The chimney breasts were flanked by cupboards and shelving of simpler design than those for the officers, the shelves being supported by cast-iron brackets rather than balusters. There was no cornice in either room, but the original skirting boards remained, with bold quarter-round, mouldings at the base similar to those observed in the Hospital.

In the eastern part of the building the 19th-century plans show that all the first-floor rooms were assigned to officers. These rooms were approached by five steps and a short length of corridor from the landing at the head of the eastern staircase. The eastern end of the corridor had been enclosed to form a small separate room (Room 21). This had a geometric tiled floor and white wall tiles below a recessed dado rail. The windows were of frosted glass; it must have served as a washroom or lavatory.

Room 19 was a well-preserved example of officers' accommodation. This was lit by a pair of tall windows with moulded architraves and panels beneath. The door had four moulded panels, but the door-furniture had been replaced. The fireplace in the west wall was flanked by a pair of well-preserved cabinets with superimposed shelves supported by turned balusters. The chimneypiece had been removed and the fireplace blocked. The plaster cornice was unusual; in the south-west corner of the room it cut at an angle across the corner, leaving a small triangular area of ceiling of uncertain function. It is most likely that this treatment of the cornice was necessitated by the construction of the hipped roof above, which had short dragon beams tenoning into diagonal braces across each corner. These projected below ceiling level and this arrangement of the cornice was necessary to disguise them.

Rooms 19 and 20 had originally been of equal size; however in the late 19th century an additional staircase (described above) was made within Room 20, reducing the room to only half its original size. The staircase cut through the former officer's room at the south-eastern corner of the building (Room 20). The original cornice of this room had been preserved and replicated along the new wall dividing the room from the staircase. Room 20 retained its original door, architrave and cornice, but the original skirting boards had been removed and there were no cupboards. A suspended ceiling had been inserted below the original.

Room 22 lay to the north of the wash room. This was heated by a chimney in the north wall of the building and lit from the east by a pair of tall windows. No cupboards remained in this room and the original skirting boards had been removed. The cornice remained, but was concealed by a modern suspended ceiling. A modern doorway had been cut through the west wall to open into Room 23

Room 23 was also an officers' room and had similar fixtures to those previously described, including a full set of well preserved fitted cupboards and shelves. The original cornice survived and the skirting boards, four-panelled door and architraves were also intact.

The western part of the building was set aside as an apartment for an important official, probably the Commanding Officer. The accommodation consisted of a suite of rooms marked on the 19th-century plans as a sitting room, bedroom, kitchen and servants' room. These were entered from a doorway off the landing at the head of the western staircase. This led to a short, 'L'-shaped corridor running for a short distance westwards and then turning to the north. The end of the corridor was lit by a primary skylight in the ceiling. The rooms had been altered, but were formerly well appointed.

Room 14 was formerly the bedroom. This had a high ceiling, with a moulded plaster cornice adapted at the south-western corner to allow for the construction of the hipped roof above. The room was lit by a pair of tall

windows in the south wall with broad architraves and panelling beneath the window sills obscured by later iron radiators. In the north-western corner was an angled fireplace with a handsome white marble chimney piece. The pilasters on either side of the former opening had shaped brackets with foliate ornament supporting the mantelshelf. Close examination of the chimney piece suggested that it had been reset. Part of the right-hand bracket was missing and the mantel shelf had been cracked and repaired. This damage was not modern, and appeared to have occurred prior to the installation of the chimney piece. It is possible that the chimney piece was recovered from the ruins of the previous building and reset here for sentimental reasons.

Room 15 was formerly the 'sitting room' and was a large square room with a fireplace in the east wall. The cornice was exceptionally bold and architectural, with a diagonal anomaly in the south-east corner. The fireplace and any fitted cupboards had been removed, but the room retained a picture rail and good quality moulded architraves and skirting boards. The original doors to the sitting room and the bedroom had been retained, the former with glazed panels inserted into its upper section. The room had been subdivided in the early 20th century to create a short corridor leading from the entrance passage to the bedroom.

Room 26 lay to the east of the northern part of the corridor and is marked as a 'Servant's Room' on the 19th-century plans. This room had neither heating nor direct light and ventilation; it was lit by a skylight in the ceiling opening onto the roof space above. Room 27, the former kitchen, had a blocked corner fireplace in its south-western corner and a plain four panelled door to the corridor in a simple, moulded architrave. A modern suspended ceiling had been inserted below the original ceiling and a modern door had been cut to form a link the room with the former bedroom.

In the north-western part of the building the Mess Man's quarters formed a further independent suite of lodgings. These consisted of paired rooms on both the first and second floors, separated by the staircase which continued unbroken to the top floor. On the first-floor landing, to the north of the staircase, was a small lobby lit by a sash window and retaining an original fitted shelf. Within this lobby was a lavatory cubicle entered by an original four-panelled door. The lavatory within was late 19th- or early 20th century, with a high-level cistern supported by cast-iron brackets. An embossed plaque announced the lavatory as 'The Belvedere'.

The Mess Man's living room is shown on the 19th-century architect's plans to the west of the staircase. This room was entered by an original four-panelled door in a moulded architrave. The window in the west wall also had a moulded architrave and there were fitted cupboards flanking the chimney breast in the north wall. Unfortunately the chimneypiece had been removed. On the opposite side of the staircase the bedroom had been converted into a kitchen, but retained its four-panelled door and moulded architraves, though the chimneypiece and skirting boards had all been removed. An original built-in cupboard survived to the right of the chimney breast and corbelling above this supported the hearth in the room above.

The stairs continued to the uppermost floor and terminated at a landing with a slightly more elaborate newel post featuring a turned knop. The bathroom was divided from the landing by a screen of tongue-and-grooved boarding with an obscure-glazed window and a plank door. The original door furniture remained. Two four-panelled doors on either side of the landing opened upon two further bedrooms, partly within the roof space. Both rooms were formerly heated, but their fireplaces had been blocked in the 20th century.

### *Cellars*

The cellar was approached from within the building by a doorway beneath the service staircase leading to the Mess Man's quarters and was formerly also served by an external trapdoor outside the window of the Mess Waiter's Room, though this had long been covered over. Although it had been converted into a boiler house the cellar retained some of its original wine bins. None of the fabric appears any older than the present building and it is unlikely that any of the older structure was retained during rebuilding in the 1880s.

### *Roofs*

The roofs of the 19th-century Headquarters building were supported by trusses similar to those of the those of the 18th-century West Block. The roof over the central section of the building was supported by truncated queen-post trusses, each consisting of a massive tie beam in which the feet of two queen posts were seated and secured with iron straps. The posts rose to support a collar beam at about two-thirds the height of the roof. At the heads of these posts triangular brackets were fixed to the inner face of each post in order to form 'jowls'. The principal rafters rose on either side to terminate at the ends of the collar beam, but did not continue to the apex. Diagonal braces ran from the feet of the queen posts to support these rafters. There were two levels of diagonally-set purlins supporting the common rafters and a plank ridge at the apex (Fig. 48). These trusses were very widely spaced and the roof structure was reinforced at intervals by diagonal props or braces.

At the two end of the building the roof space widened and the ridge rose higher than at the centre. Despite the wider span no attempt had been made to provide proper trusses to support these parts of the roof. The purlins and rafters were simply supported by diagonal props and braces which apparently bore upon internal masonry walls dividing the first floor rooms. The layout of the ceiling joists was also curiously illogical. The

clock tower at the centre of the range building consisted of a timber tower with a shaft formed from closely-spaced vertical studs interrupted by 'X'-shaped braces. The clock had unfortunately been replaced with an electric mechanism.

#### RIDING SCHOOL (Building 18: Fig. 49)

The Riding School occupies the north eastern corner of the site and is one of the most attractive and important buildings to survive from the 1790s building campaign. This building has recently been converted into garages and many modern accretions have been removed.

The original building was a simple rectangular structure covering an area of 13.5 x 32.5m. and providing an uninterrupted covered area for training horses and men in wet weather. There were no internal columns, which necessitated a roof structure of some ingenuity. The walls were constructed of red-brown bricks laid in Flemish bond, and overlay the original barrack boundary wall on the northern and eastern sides. Traces of the projecting buttresses supporting this wall were visible on the exterior, but did not project within the riding school. The building is marked as a gymnasium on the OS 1: 2500 map of 1932; however at the time of recording the interior had been in use for the storage of archives. The floor surface was of modern concrete and was not disturbed; the original surface may simply have been of earth or sand. At the south end a series of temporary offices had been constructed and on the exterior a late 20th-century range provided toilets. Part of this range appeared to be an earlier 20th-century boiler house approached by a short flight of steps. The main façades of the building faced south and west, and were given an ornamental treatment denied to many of the other buildings on the site.

#### *West elevation*

The west façade survived almost unaltered prior to the recent conversion of the buildings (Fig. 50). This consisted of six brick piers supporting five wide arches in which were brick panels slightly recessed from the wall surface. A white-painted band or string-course ran the width of the façade at the level of the springing of the arches, forming impost blocks for the main arches and for the recessed arches over the windows. The windows were of cast iron, with large panes and radiating window bars in the arched heads. These were probably 20th-century replacements of the originals. The roof finished simply at the eaves, with no cornice or parapet. A doorway had been driven through one of the piers in the 20th century to give access to an adjoining garden.

#### *South elevation*

The south elevation was dominated by a single wide arch and had detail similar to that previously described. The upper part of the window was a 19th-century survival, divided by two vertical mullions and terminating at impost level to form a 'thermal window'. The lights were divided into many small panes and there was a stone sill. There may well have been tall doors below this window; however these do not survive due to 20th-century alterations. It is uncertain to what degree this form of window replicates the original 18th-century windows which must have had similar small panes.

#### *East and north elevations*

The east and north walls were rendered externally. The east wall had three simple semi-circular windows, all of which were heavily barred. Only the central window survived from the 19th century, the others had been altered. In the north wall was a final semi-circular window, also a modern replacement. This window was flanked by a pair of smaller rectangular windows inserted in the early 20th century.

#### *Roofs*

The outstanding feature of the building was its roof structure (Fig. 51). This had been concealed by a suspended ceiling, which was removed in the recent works. The roof was supported on eight open trusses, each consisting of a pair of principal rafters linked by a high-level collar beam. Between the collar beam and the apex was a king post with diagonal braces but with no strap to the collar beam. The principal rafters continued downwards to wall plates resting on the top of the walls and long, straight braces rose from these wall plates to meet the centre of the collar beam. The junction of the timbers was reinforced by an iron strap linking the underside of both braces. The braces were linked to the principal rafters and to the collar beam by short, angled struts which aimed to prevent the deflection of the lower parts of each truss as a result of the great span of the roof.

The construction of the roof trusses thus resembled a king-post roof with massively extended triangular legs bracing the centre. The hipped roofs at either end of the building were supported by half trusses of identical form with extra diagonal braces rising to support the centres of the hip rafters at the angles of the roof. There



were two levels of purlins on each side of the roof, staggered in each bay in order to avoid weakening the principal rafters. Some of the joints appeared to be pegged; however the roof was painted, which obscured much detail, and it was also at too high a level for details of jointing to be clearly discerned. The interior of the roof was clad with modern boarding and the exterior with 20th century artificial slate. In a few places the original common rafters were visible and preserved the original boarding over the common rafters. The boards were also painted and it is clear that the entire roof structure was intended to be displayed.

EAST BLOCK (Building 17: Fig.52)

This building occupies the site of one of the 18th-century barrack ranges and forms a group with the West Block and the Headquarters Building. It has been more thoroughly refurbished than the West Block; nevertheless many 19th-century features remained at the time of the survey. The building has now been converted into housing.

The original East Block was destroyed by the fire of 1868 and no part of it now remains. The fire occurred before the OS 1st Edition maps were surveyed and the layout of the destroyed range is uncertain; however it may be assumed to have more or less exactly mirrored the West Block. Newspaper accounts of the fire describe nine pointed arches supporting the roofs, which gave the building in its destruction 'the appearance of an ancient ruined abbey' (WT 24.11.1868, 3d. See Appendix). Pointed arches formed by converging chimney shafts survive within the West Block and there can therefore be little doubt that the two buildings had similar plans.

The East Block was rebuilt after the fire as a long two-storey red brick range with similar dimensions to the earlier building but with an entirely different plan and appearance (Fig. 53). The accommodation was arranged on two storeys, with a gallery providing access to the first floor and forming a verandah in front of the ground-floor rooms. Although it was designed solely as accommodation and not as stabling or armouries, the treatment of the ground floor was quite distinct and of a far less domestic character than that of the first floor.

The ground floor is shown on the 1876 map as divided into eight square rooms (Fig. 52). There was a spine wall running along the central axis of the building, but this was pierced by a wide, arched openings so that the rooms were 'cross-lit' and ventilated by windows in both sides, in accordance with the sanitary reforms of the mid 19th century (Douet 1998, 140). The eight rooms were independent of each other and were approached through arched openings in the west wall corresponding in size to those within the spine wall. At each end of the building were a pair of smaller, narrow rooms, two of which were entered from the verandah and two through doorways in the end walls of the building. The rooms in the southern part of the building had been drastically altered in the early 20th century and the original layout had been lost. The plans of 1869 describe the small rooms at either end of the range as ablutions rooms and sergeants' rooms. The soldiers' quarters lay between them within the central section of the building (PRO MPH 338, plan of 1869).

The first floor was reached by external stairs at both ends of the building, communicating with a covered gallery above the verandah. This floor had six large, square rooms at the centre of the building, all independently approached from the gallery and 'cross-lit' and ventilated from both sides. At each end of the building was a group of four smaller rooms. The outermost rooms were approached directly from the gallery and are identified in the plans of 1869 as an ablutions room and a cookhouse (at the north and south ends respectively). The remaining three rooms at each end of the building were approached by an internal corridor and are identified as sergeants' rooms (PRO MPH 338, plan of 1869). As on the ground floor the southern end of the building had been altered in the 20th century and the original layout was lost.

#### *West elevation*

The west elevation of the East Block (Fig. 53, top) faced the parade ground and was divided into two storeys of unequal heights. The lower storey was at least twice the height of the upper storey, and featured eight wide openings to the barrack rooms, with 'basket' arches resembling those of contemporary casemates. Each arch was divided by two vertical mullions to provide a narrow central doorway. This was surrounded by a glazed screen rising into the head of the arch over the doorway in the form of a 'thermal window'. Although the original chamfered frames and glazing of the upper parts survived, the lower sections of all the glazed screens had been replaced with metal-framed windows in the 20th century.

Originally there were narrower, round-headed arches at each end of the building with similar screens (on a smaller scale) opening into the ablutions rooms. The northern arch remained intact, complete with its original glazing, but the southern arch had been replaced in the early 20th century with a pair of sash windows. A small window opening with a pivoting frame survived adjoining the northern arch, and presumably lit a lavatory cubicle. The corresponding window at the south end of the building had been destroyed.

The upper storey of the west elevation was much less prominent as it was largely masked by the gallery. This part of the elevation had doorways positioned centrally over the heads of the arches of the ground floor windows, each flanked by a pair of sash windows. This arrangement was employed for each of the six large

rooms in the centre of the range. At either end of the building were two more widely-spaced sashes, with a pair of doorways between them. The outermost doorways to north and south opened directly from the gallery into the ablutions room and the cookhouse respectively. The adjoining doorways opened into corridors leading to the sergeants' quarters. All but one of the original 19th-century sashes survived, perhaps as a result of the protection afforded by the overhanging roof of the gallery.

The gallery was supported by very tall and slender cast-iron 'Tuscan' columns with moulded capitals and bases, linked by steel girders running from column to column across the frontage. Further and much shorter columns rose above these to support the roof over the gallery, the central part of which was glazed to allow light into the main rooms on the first floor. The balustrade of the gallery had wrought-iron panels each with a central spiked circle and four radiating diagonal bars. The panels were grouped in pairs under a plain handrail and reinforced with cast-iron Tuscan columnar newels surmounted by ball finials. The roof was hipped at both ends and, excepting the roof of the gallery on this elevation, had barely any projection at the eaves. All the chimneys, which are visible along the ridge of the roof in the 1940s aerial views, had been demolished.

#### *South elevation*

The south elevation of the range (Fig. 54, top) was partly obscured by buildings relating to the Dining Room, which was added on the site of the Straw Store and latrines in 1938. The external staircase to the gallery rose over a brick base containing several small rooms. The western of these rooms was entered by a doorway from the verandah and lit by a large sash window in the south wall with a stone sill and a shallow arched head of brick. This appeared to be a primary feature, though the sashes had been replaced. The doorway adjoining this window had clearly been altered; its segmental brick head could be seen to extend some distance to either side of the existing opening and the jambs had been repaired or renewed in a darker red brick, showing that the doorway was once wider. The room within had a small window with a flat arched head, the blocked remains of which could clearly be discerned to the east of the doorway. Both these rooms almost certainly housed lavatories.

Beyond the foot of the staircase a single tall window remained lighting the ground-floor room, which may originally have been a sergeant's room but was later assimilated into the cookhouse. Adjoining this was a link corridor to the 1930s Dining Room which almost certainly obscured evidence of an earlier doorway to the sergeant's room. Above the window were a number of patches of newer brick which appeared to represent blocked openings, possibly connected with ventilation for the cookhouse.

At first floor level the original elevation of the south end of the building survived unaltered. The suite of rooms at the south end was lit by three tall sash windows, each with a flat-arched head and a stone sill. The sashes were modern replacements. A chimney is shown above the central window, presumably served by serpentine flues within the wall; this was demolished in the late 20th century.

#### *North elevation*

The north elevation of the East Block was once identical with the south elevation, but had been altered (Fig. 54, bottom). The doorway to the rooms beneath the stairs had been blocked and a window substituted, possibly reusing the stone sill from elsewhere. The remains of the segmental arch over the adjoining window revealed that the opening was formerly wider. The brick blocking the opening was dark red like that of the replacement jambs of the doorway at the other end of the building; it may well be that both alterations are contemporary. A small window to the west of the doorway also showed signs of alteration, and may have replaced a larger opening in the same position. To the east was a small window with a pivoting casement lighting a lavatory cubicle.

At the foot of the staircase to the gallery were a pair of openings; a tall window and a doorway adjoining, both with flat-arched heads. Traces of alteration to the western jamb of the doorway and the high level of its lintel may suggest that this opening was originally a window; however, as there was no other apparent means of access to the room, this is highly unlikely.

On the first floor the original arrangement of the windows had mirrored the southern elevation, with three large, regularly-spaced sash windows. The central window had been blocked and three small windows substituted when lavatory cubicles were installed in the late 20th century. The eastern window was a modern replacement but the original 19th-century sashes, without horns, remained in the western window. A chimney stack formerly stood over the central window, but this has been demolished.

#### *East elevation*

The east elevation of the East Block (Fig. 53) faced the barrack boundary wall across a narrow yard. Many of the windows on this façade had been altered in the 20th century and projecting features at both ground- and

first-floor level had been both added and removed, resulting in an irregular elevation with many signs of patching and repair.

At the north end of the building the small, northernmost room had no windows facing east because a chimney stack formerly stood at this corner. The stack was presumably removed with the other chimneys in the late 20th century. To the south the first of the large barrack rooms on the ground floor (Room 23) was lit by three tall sash windows with segmental heads. The sill of the central window was formerly much higher, but had been cut down to the same level as the others in the 19th century. It is not known why the height of the sills varied. On the first floor the two northern rooms representing the sergeants' quarters (Rooms 20, 21) were each lit by a smaller sash window with a flat-arched head. This pattern of windows was repeated, with minor variations, in the case of each barrack room along the length of the building.

To the south of the first-floor windows was a large rectangular patch of modern brick blocking extending from the eaves to the first-floor level, one of at least four such patches visible at regular intervals along the façade. A fifth patch was partially obscured by a 20th-century latrine tower. The patches seemed too large to represent blocked windows, and may have been associated with structures projecting from the wall at first-floor level. Five large projections are shown on the 1876 OS 1:500 map, delineated with dashed lines to show that they did not extend to ground level. No supporting columns are shown and it is uncertain how these structures were supported. They may have been cantilevered out from the wall and were presumably constructed from timber. These projections may have housed lavatories or washrooms; the three central projections each straddled the dividing wall between two barrack rooms and thus served two first-floor rooms at the same time. The northernmost and southernmost projections each appear to have served one barrack room only, probably because the sergeants occupying the extremities of the buildings had their own sanitary arrangements which were not shared by the men.

The adjoining barrack rooms on the ground and first floor (Rooms 26 and 18) were lit by a similar arrangement of windows. In this case, however, there were traces of vertical breaks below the short, central ground-floor window, which showed that there had been a doorway here. The window was fitted with a pivoting casement. In places the brick blocking of the apparent doorway was very nearly seamless and the building breaks were very difficult to distinguish; this may suggest that the doorway was blocked early in the life of the building, when bricks and mortar identical with that of the original fabric could still be obtained.

To the south of this, at ground-floor level, was a small single-storey lean-to structure which overlapped the dividing wall between Rooms 26 and 27 and served both rooms. Within was a small lobby, with a pair of doorways in its west wall opening into the barrack rooms. The lobby was lit by a window in the south wall but the north wall had been rebuilt to provide a doorway to the yard. East of the lobby was a small room, apparently a lavatory cubicle, which was lit by small, pivoting casement windows in the north and south walls. There seem originally to have been three of these lean-to structures on the rear elevation, two of which survived. These lean-tos were staggered in relation to the first-floor projections, so that the ground- and first-floor projections did not coincide with each other. If all these projections were indeed lavatory or washing facilities it is difficult to see why they were arranged in this manner and not combined to form two-storey 'latrine towers'.

The windows of the barrack rooms beyond this followed the pattern previously described, although there did not appear to have been a doorway beneath the central window lighting Room 27. Many of the windows were modern replacements, though pairs of 19th-century sashes survived in several openings. An area of blocking at first-floor level showed that Rooms 15 and 14 had been served by a projecting extension at first-floor level, now removed. Room 28 showed clear traces of a doorway below the central window, and also shared a small rear lean-to with Room 29 (Fig. 55). The original pegged, chamfered door frames to the extension survived in this case. To the south evidence of a first-floor projection serving Rooms 10-9 and 7-8 could be discerned at first-floor level. Beyond this point the façade was less regular. Room 30 on the ground floor was formerly lit by three tall windows, one of which had been blocked. A large two-storey latrine tower had been added in the 20th century, prior to the Second World War. This tower replaced one of the lean-to structures and utilised the original chamfered door-frames on the ground floor. The first floor doorways were of the same character even though there had not been a first-floor projection in this position. It seems likely that these latter door frames were either replicated or reused from another part of the building. The interior of the latrine tower retained many of its original fixtures and fittings, including substantial plank doors to the lavatory cubicles.

To the south of the latrine tower the elevation of Rooms 32 and 6, formerly of the usual pattern, had been altered in the 20th century. One of the ground-floor windows had been entirely blocked and the smaller, central window had been extended vertically to compensate for this. The first-floor windows retained their 19th-century sashes. Evidence of a first-floor projection was visible to the south of this, but a large brick chimney had been built against this in the late 20th century. The chimney served a single storey extension with a corrugated asbestos roof which is not shown on the aerial photographs of 1945 but appears on the mid 20th-

century 'Skeleton Record Plan'. This extension was designed as a boiler room and may have been added in the immediate post-war period.

To the south of the boiler room the southern rooms are lit by pairs of sash windows within primary openings at ground- and first-floor level. The sashes had all been renewed in the 20th century. A small window lighting a corridor had been inserted on the first floor in the late 19th century and, at the extreme southern end of the elevation, a doorway had been cut through the corner of the building to connect to a building or yard which appears to have been contemporary with the boiler room. This structure was demolished in the late 20th century and no trace of it now survives.

### *Ground floor*

The rooms within the East Block had been numbered by the MoD in an unusual manner, starting on the first floor at the south end, proceeding north, and then returning southwards through the ground floor. This description will start with the ground-floor rooms, but will retain the original MoD numbers for identification. The room numbers will therefore appear out of sequence in the following section.

At the north end of the ground floor the original plan survived largely intact. The two former ablutions rooms (without MoD numbers) at the north end of the building had been fitted up as lavatories and no original fixtures remained. Modern lavatories had also been fitted beneath the external staircase to the gallery, entered through a doorway cut through the northern wall of the building. The doorway appears to have been made in the early 20th century, when the original entrance through the south wall from the verandah was blocked.

The first large barrack room in the north part of the building had been divided into two rooms (Room 22 and Room 23) before the Survey of 1977 by the insertion of a modern screen (DoE Area Works Office Drawing No. SWEX/E305/77). The room had been a single space spanned by a wide segmental arch within the spine wall (Pl. 56). Although the jambs of the archway projected considerably into the room there is no evidence that the room was intended to be divided by a partition within the arch and, in any case, such partition would have impaired the ventilation. On the 1876 1:500 map one of the jambs of the archway is shown expanding into a square baulk of masonry; this may represent a chimney serving a stove or a fireplace. No such projection now exists. The room was lit from the west by the large arched opening to the verandah and to the east by the three segmental-headed windows in the east wall. There appear to have been no primary openings in the north and south walls. The present doorways in these walls were made in the 20th century. The ceiling was concealed by a low, suspended ceiling and no other features were visible.

Rooms 24, 25 and 26 are also subdivisions of a single large barrack room, made by the addition of insubstantial partitions in the late 20th century. The room was originally identical with that previously described, with an arched window to the west and an identical arch in the spine wall. In the rear wall, alongside the three windows, a chamfered door-fame opened into a shared lobby within one of the lean-to projections at the rear. This appears to have been the only link with the adjoining barrack room; both doorways in the south wall are of late 20th century date. The western part of the interior had a suspended ceiling, but the eastern part, beyond the arch, was open to its full original height and had been clad in the 20th century with unusually large fibre wall tiles. These might represent an attempt at sound proofing or fire-resistant cladding.

Room 27 remained undivided, with the exception of a small 20th-century internal porch and a glazed screen defining a small office in the south-eastern corner. The rear wall had a doorway to the shared lean-to extension and the walls and ceilings throughout were clad with asbestos tiles. A large chimney breast lay immediately to the east of the spine wall on the south side of the room. The other ground-floor rooms are either without comparable chimneys or else these occur in different positions. These features break the regularity of the plan, and it is possible that they are additions. Some, but not all, of these chimney breasts are shown on the 1876 map, which may suggest that some of the chimneys were added relatively early in the life of the building.

Rooms 28 and 29 were among the best preserved in the building. Both rooms featured small internal porches with four-panelled doors of early 20th-century type. The rooms had very bold quarter-round skirting boards and doorways with chamfered architraves opening onto a shared lean-to extension in the rear wall. Room 29 retained its original door with chamfered and stopped panels. Both rooms had modern suspended ceilings. Room 28 had a chimney breast in the north wall, to the west of the spine wall. Room 29 had a similar chimney breast in the south wall east of the spine wall. Both stacks are presumably 19th-century additions.

Room 30 had been subdivided with modern partitions. One of these partitions lay alongside the entrance porch, cutting across the arched entrance screen and the archway in the spine wall to form a subsidiary room. The partition had a small hatch opening into the main area and a massive steel duct venting through the east wall. In addition to the duct the room was ventilated by extractor fans within its window. There was unfortunately no evidence to show the function of the room. Room 30 had two chimney breasts, both in the north wall, lying on either side of the spine wall. One of these is shown on the 1876 map, the other is later but would still seem to have been in place before the end of the 19th century. The presence of two chimney breasts may suggest that the barrack room had been subdivided, though no trace of a screen or partition remains. The

eastern part of the room retained its quarter-round skirtings and had been subdivided to form a corridor connecting with the latrine tower at the rear. One of the rear windows had been blocked and the walls had been clad with tiles above a plain dado. The tiles may represent sound proof or fireproof cladding.

Rooms 31 and 32 were formerly a single barrack room but were divided by a partition within the arch. Both rooms retained their original skirtings. Two chimney breasts were visible in the south wall, though the eastern one had been truncated to allow for a modern door to the adjoining room on the south. This was the older of the two chimneys and appears on the 1876 map. It seems likely that the room had already been divided into two by the late 19th century. A doorway in the east wall opened into the latrine tower at the rear of the building.

At the southern end of the building the original layout of the rooms had been greatly altered, possibly in the context of improvements to the cookhouse, which seems to have been established here from the 1930s. Rooms 33 and 34 had originally been a single barrack room, identical with those previously described; however the rooms had been enlarged by the demolition of the south wall to incorporate the small southern rooms shown on the 1876 map, which were probably ablutions room. A cluster of small rooms had been constructed within the south end of Room 33 in the mid 20th century. These had walls clad with ceramic tiles and served as vegetable, meat and grocery stores connected with the cookhouse and Preparation Room shown on the Skeleton Record Plan. In the late 20th century a staircase was added, the archway linking Rooms 33 and 34 was blocked by a masonry wall and the boiler house was extended westwards into the northern part of Room 34.

### *First floor*

The first-floor rooms were originally reached only by the gallery; there was no other provision for a staircase within the interior of the building. The present staircase is not shown upon the mid 20th-century 'Skeleton Record Plan' but appears on the survey drawings of 1977. The staircase rises into the first floor room identified on the 1869 plans as a 'cookhouse'. The first-floor location and the small size of this facility is perhaps surprising, and it is possible that this cookhouse was in fact a kitchen reserved for the use of the soldiers, like the soldiers' kitchen in the West Block. Increasing the segregation of the different ranks was a priority for the barrack improvers of the mid 19th century (Douet 1998, 129); however if this room was reserved for the soldiers it is interesting that there seems to have been no alternative kitchen or mess in this building for the sergeants. They may have eaten elsewhere, perhaps in the NCOs' mess in the West Block. At the insertion of the staircase the cookhouse was entirely demolished; the existing partitions defining the staircase and Room 2 are of late 20th-century date. Room 2 was a narrow room representing the southern part of the cookhouse. It was lit by modern sashes in the south and west walls. A chimney in the south wall was removed after 1977.

Room 1 was formerly one of the sergeants' rooms. This room preserved a projecting chimney breast in the east wall, but the fireplace had been blocked. Rooms 1 and 2 had modern suspended ceilings, but above these the common rafters in the roof showed the marks of lath and plaster extending to the apex of the roof. The larger structural timbers, including the purlins and trusses (discussed below) were all painted and must have been exposed within the rooms. The southern plane of the roof was pierced by a rectangular opening, now blocked, which may have served either as a skylight or a ventilator for the cookhouse. No trace of decorative schemes such as wallpaper or stencilled paintwork was observed.

To the north of Rooms 1 and 2 was a corridor running from east to west. The western half of this corridor was part of the plan of the original building, providing access to the sergeants' rooms. In the late 19th-century the corridor was extended to the east by subdividing part of Room 1. The space was converted into a lavatory with a southern wall of tongue-and-grooved boarding. The southern wall of the remainder of the corridor was replaced when the staircase to the ground floor was inserted in the late 20th century. The only part of the original wall to survive was a brick pier terminating a short section of spine wall aligned on the ridge. This pier supported the southern extremity of the ridge and received the hip rafters from the southern corners of the building.

The spine wall divided the northern part of this section of the building into Rooms 3 and 4. Both of these rooms were former sergeants' rooms and were heated by corner fireplaces, which had been blocked in the late 20th century. The ceilings of these rooms were at collar level, partly within the roof, and brick corbelling was visible below the ceilings supporting the upper purlins. Above the ceilings was a large water tank serviced through a hatchway at a high level in the north wall of the lavatory. Room 4 retained a pair of 19th-century sashes, but the internal doors had all been replaced in the 20th century and no other historic features remained. Room 3 had been divided by a partition to form a short corridor running alongside the spine wall to a doorway broken through into the adjoining barrack room. This corridor appears to have been inserted in the 20th century.

Room 6 was the first of the large barrack rooms on this floor. At the time of the recording the room was undivided, with the exception of a small area in the south-eastern corner defined by a modern partition. No trace of primary partitions dividing the room were present in the ceiling, and it seems likely that the room was originally open, accommodating a large number of men. In the centre of the west wall was a door to the gallery,

later blocked; this doorway was formerly the only entrance to the room. In the south-east corner a small doorway formerly led to a projecting structure at the rear of the building, but this had been blocked and the projection removed by 1977. The room was surrounded by a chamfered rail at a high level which may have been for hanging clothes or equipment; however it is uncertain if this was an original feature or an addition made in the later 20th century. Projections in the centre of both the south and the north walls may represent chimney breasts, though no trace of either fireplaces or apertures for stove pipes were exposed during the alterations. In the ceiling the timber and iron structures of the roof (discussed below) were exposed below collar level and the apex of the room was concealed by a flat ceiling at collar level.

In the 20th century, prior to the Second World War, a doorway was opened in the north-eastern corner of the room to give access to the new two-storey latrine tower added at the rear of the building. The chamfered door-frame of this opening replicates the original detail of the building, and might have been reused from elsewhere. By this time the room had been divided into four separate rooms approached by a corridor from a doorway onto the gallery. The corridor was flanked by a pair of small rooms, and there were two rooms in the east part.. This pattern was repeated almost exactly in the three adjoining barrack rooms to the north, with the exception that the eastern parts of these rooms were not subdivided. The partitions are shown on the 'Skeleton Record Plan', but the date of their insertion is unknown and they had been entirely removed before 1977. As the partitions would have interfered with the cross-lighting and ventilation of the rooms it is unlikely that they were original. It seems clear that the rooms had all been altered to essentially the same pattern in the late 19th or early 20th century, and that the rooms must have had the same function at this period.

In the late 20th century, before 1977, Room 6 was remodelled; the partitions were removed, the door from the gallery was blocked and a doorway was made through the eastern part of the north wall so that Room 6 could be approached only from a corridor within Room 7. These alterations were presumably made in the context of the conversion of the building to offices in the post-war period.

Room 7 was originally identical with Room 6, with the exception that the doorway to the rear projection lay in the north-eastern corner, and had been removed to the south-eastern corner after the construction of the latrine tower. As described above, the room was formerly divided into three separate rooms, but the partitions had been removed by 1977 and an 'L'-shaped corridor had been created running around the south and west sides of the room. the corridor linked a doorway broken through the north wall at the north-western corner with a doorway in the north wall of Room 6, and must have been designed to allow communication between Rooms 6 and 10 without disturbing Room 7. These partitions must relate to the office use of the building. Rooms 8 and 9 were small rooms which had been added in the north-eastern and south-eastern corners of Rooms 7 and 10 respectively. Both rooms were present by 1977 but they had been entirely removed by the time of the recording.

Room 10 was formerly subdivided in the same manner as Room 6 and 7, but these partitions had also been removed. A short mid 20th-century glazed screen with frosted glass panels sheltered the doorway in the south wall. The other partitions were of late 20th-century date. The doorway from the gallery had been blocked and a modern sash window substituted. Two doorways had been broken through the north wall of the room, in the east and west corners. These doorways had simple four-panelled doors of early 20th-century type but must have been added in the post-war period as they are not shown on the 'Skeleton Record Plan'.

Rooms 11, 12, 13, and 14 were all late 20th-century rooms created by the subdivision of the 19th-century barrack room to the north of Room 10. The partitions defining these rooms replaced earlier partitions laid out in the same manner as those formerly in Rooms 6, 7 and 10, but these had been removed and no evidence for the date of their insertion remained. A doorway had been broken through the north wall in the north west corner of the room, and a doorway in the northern part of the east wall, formerly communicating with one of the projecting structures on the rear of the building, had been blocked. The chimney breast in the north wall had been removed. Part of the chamfered rail surrounding the room remained, but no other early features had survived the modern alterations.

With the exception of a small modern internal porch, Room 15 was unenclosed, and is shown as such on the 'Skeleton Record Plan'; however the plans of 1977 show that two smaller rooms had been created by that date in its north-west and south-east corners. These have been removed and any other surviving original features presumably vanished at the same time. In the south-eastern corner of the room a doorway to one of the rear projecting structures had been blocked and two modern doorways had been broken through the north wall.

Rooms 17 and 18 represent the last of the barrack rooms on this floor. These two rooms were divided by a partition running from east to west down the centre of the building. Both rooms were entered by a small internal porch within the entrance from the gallery. Room 17 was later divided into a further two rooms but was otherwise featureless. A small doorway had been broken through the west part of the north wall of Room 18 and, to the east, a wide archway had been broken through into Room 20. In the north-eastern corner of the room was a blocked doorway formerly communicating with one of the rear projections. Part of a chamfered rail remained in the west part of the room but all other historic features been removed.

The north end of the building was arranged as three sergeants' rooms and an ablutions room. These rooms were still entirely recognisable at the time of the recording and were among the best preserved rooms in the building. Room 19, one of the sergeants' rooms, faced onto the gallery and was heated by a fireplace in the south-east corner. Unfortunately the chimneypiece had been removed and the fireplace was blocked. The doorway retained its original chamfered architrave around the doorway from the corridor, though the door was a modern replacement. Room 20, which adjoined to the east, was the same size as Room 19 and also had a corner fireplace and a chamfered architrave to the door from the corridor. In this room, however, a recessed, channelled dado rail survived and the room also retained its original quarter-round skirting. The third sergeants room, Room 21, lay in the north-eastern corner of the building, and was lit by sash windows in both the north and east walls. The fireplace was in the east wall, but had been blocked. The room retained a channelled dado on its western wall and a chamfered architrave around the doorway to the corridor. All of these rooms had modern suspended ceilings, above which the original ceilings rose to the apex of the roof, as previously described.

The last room on this floor was the ablutions room in the north-western corner. This was still operating as a bath and shower room at the time of the recording, though all the fixtures were of 20th-century date. Part of the room had become a walk-in shower or wet room and another part was divided into lavatory cubicles. These alterations had resulted in changes to the fenestration, but two of the original sash windows remained intact. No other historic features remained.

### *Roofs*

The building was covered with a continuous roof structure, hipped at both ends. The greater part of the roof was not supported on conventional trusses, but on massive timber purlins supported by the brick walls dividing the barrack rooms. The north and south faces of these walls each incorporated four large brick corbels, which supported the upper and lower purlins on each side of the roof. Despite the large scantling of these timbers there was clearly a concern that they might bow, and therefore each timber was 'trussed' by the addition of metal tension rods below the main beam. Each purlin had two metal shoes or brackets positioned at equal intervals along its length (Fig. 57). From each of these shoes a large pointed spur extended downwards into the room, to receive a tension rod descending diagonally from the beam near the corbels. The rods were threaded through eyes at the end of each spur and ran parallel with the purlin between the spurs. The tension could be adjusted by a nut between the spurs. Each purlin was trussed in this manner. There were also two metal tie rods running across the building from east to west within each barrack room. These rods were independent of the trusses of the lower purlins, but were linked to the spurs of the upper purlins by vertical rods. These ties could also be adjusted at the centre. The common rafters were of relatively slight scantling and were supported on the backs of the purlins. Each common rafter couple rose to the apex and was effectively converted into a common rafter truss by a ceiling joist forming a 'collar beam' at a level just below that of the upper purlins. The common rafters and collars all bore the traces of lath and plaster showing that they had been ceiled, whereas the metalwork and the lower purlins were visible beneath the ceilings.

The construction of the roofs at the northern and southern ends of the building were slightly more complex, because there were no gable walls to receive the ends of the purlins. In the place of the walls the lower purlins were supported by massive queen-post trusses of timber (Fig. 58 ) These consisted of timber tie beams crossing the width of the building, supporting a pair of queen posts linked by a double horizontal collar or tie beam. The trusses were truncated above this by the hipped end plane of the roof. The lower purlins rested on short, truncated principal rafters rising from the ends of the main tie beams to meet the queen posts at their heads. From these, short diagonal braces ran to the feet of the queen posts. The lower purlins were extended to meet the hip rafters slightly beyond the line of these trusses, and affixed to them (rather clumsily) by bolts and metal shoes. The upper purlins received no support from the trusses but simply ran into the hip rafters, to which they were attached by similar metal shoes. The clumsy junction was especially evident in the case of the upper purlins due to the great disparity in the scantling of the timbers. As mentioned before these parts of the roof were open to the apex and the whole supporting structure was exposed beneath the original ceilings.

### PIONEER SHED AND BATHROOMS (Building 19a: Fig. 52)

These buildings shared the MoD number '19' with the Pension Office at the south-eastern corner of the 1803 barrack site. They have therefore been identified here as Building 19a. The buildings lay behind the East Block in a position more or less corresponding to that of Building 16 at the rear of the West Block. They have now been demolished. The buildings consisted of a long, low range lying against the eastern boundary wall of the barracks under a lean-to roof of corrugated asbestos (Fig. 59). The structure appeared to have developed in two phases. The 1876 OS 1:500 map of the area shows that only the southern part of the building was in position by that date. This is shown divided into two compartments and marked as a 'bath house'. It may have been

constructed in the early 19th century, but it seems to have been substantially rebuilt and repaired later in the 19th century, perhaps as a consequence of damage during the fire which destroyed the neighbouring East Block in 1868.

The southern part of the building was constructed from large red bricks laid in a creamy white mortar. The bonding appeared to consist of groups of two or three stretchers for every header, laid in alternating courses. Unfortunately the masonry showed evidence of so many repairs that it was difficult to determine the original brickwork bond. In the south wall was a small window with a slightly arched head and a horizontally pivoting upper casement opening inwards. Adjoining this was a brick protrusion which was constructed with cement mortar and was probably added in the 20th century in connection with sheds to the south, now demolished. These sheds are shown as urinals and lavatories on the 'Skeleton Record Plan'.

The west wall of the building was its principal elevation but the brickwork did not appear to be of significantly higher quality. This elevation contained a small casement window with a large stone sill and a slightly arched head. The doorway adjoining was of the same phase, though the door had been narrowed from its original width, the door head had been rebuilt and the opening fitted with an early 20th-century door. To the north of the doorway was a long window opening containing a horizontally sliding sash; this may have been of 19th-century date. Adjoining was a small window and a doorway serving the central part of the present building.

The interiors of the building were very plain, with walls of whitewashed and painted brick. The buttresses of the barrack boundary wall could be observed protruding from the wall face within the building. In the southern room was a massive raised plinth or base in the centre of the floor. Metal fixings in the surface of the showed that it may have formed the base of a large piece of machinery. Against the north wall of the room stood a timber work bench. The room is shown on the 'Skeleton Record Plan' as containing a group of seven showers.

The adjoining small room at the centre of the building was served by a tall chimney stack with a single flue. The stack was of 19th-century date but had been raised by several metres, no doubt to improve the draught, in pink brick characteristic of the early 20th century. Inside this room the stack continued to the ground and there was a circular opening in its front suitable for a stove pipe. A pipe with a much smaller bore, suitable for water, descended from the roof and had a curved end which had clearly been attached to an installation in the central room. The route taken by the pipe at roof level could not be ascertained; however it is possible that the installation in the central room was a water heater or boiler from which water was conveyed to the baths and showers in the adjoining rooms.

The northern part of the building was constructed in the early 20th century of bricks similar to those employed in the upper parts of the chimney. The boundary wall had been raised to a higher level at the rear of the buildings after they had reached their present extent. The extension to the building had a central doorway flanked by a pair of heavily barred sash windows. The north wall had a small ventilator at a high level, and a further ventilator in the form of a small louvred timber tower rose above the roof. The interior of this room was of whitewashed brick and had a concrete floor with a drain running along the base of its east wall. At the centre of the floor was a large concrete plinth, possibly connected with a piece of machinery. The 'Skeleton Record Plan' shows this room as divided into two cubicles, each labelled as 'NCOs' bath' This explains the presence of two ventilators. An adjacent shed to the north, now demolished, is labelled as a fuel store.

#### STORE (Building 20)

This 20th-century building has now been demolished. The store was a square brick building under a flat concrete roof which stood on the site of demolished late 18th- or early 19th-century latrines. The building was constructed of a pale orange brick and had concrete lintels over the openings. In the west elevation were a pair of tall double doorways opening upon the two rooms within. There were metal grilles near floor level and, high up to the south of the southern doorway, a louvred opening providing ventilation to the southern room. The interior was divided into two unequally sized rooms which were ventilated by large louvred openings in the north and south walls.

The walls were covered with ceramic tiling and had shelves. The annotation shown on the 'Skeleton Record Plan' for this building is unfortunately almost illegible, but it is possible that the smaller, northern room is marked 'bread' and the larger room to the south as 'meat store'. The building thus seems to have been as a ration store associated with the cookhouse and dining room added to the earlier East Block in 1938 (See below). If this is so it is uncertain why the building is not closer to and more easily accessible from the cookhouse.

#### DINING ROOM (Building 21: Fig. 60)



The Dining Room was a single-storey structure adjoining the southern end of the East Block, standing on the site of the 18th-century Straw Barn, which had previously functioned as a gymnasium (OS 1:2500 map, 1905). The Dining Room was added in 1938; it has now been demolished. Detailed plans of the new Dining Room survive, labelled 'CRE South Western District. Plan No. T/2144 No 1 of 5', which show the function of the various rooms. The cookhouse associated with this building had been converted from rooms in the East Block and is described above. The cookhouse and the Dining Room were linked by a short passage so that the Dining Room was almost an entirely detached building.

The Dining Room was constructed of pale red brick laid in stretcher bond. The main elevation to the parade ground was of seven bays, defined by pilaster buttresses rising from a chamfered plinth laid in Flemish bond and of darker red bricks. The window openings had flat-arched heads of richly-coloured brick and were fitted with metal-framed windows, painted white, having three lights divided by mullions and transoms. The lights were divided into many small panes by glazing bars. The central bay of the main elevation broke forward to form a projecting porch with chamfered corners, lit by two tall windows in its sides. The main doorway was approached by concrete steps and had a flat arched lintel with a projecting keystone, above which was a recessed panel containing a carved stone coat of arms. On either side were decorative corbels which probably related to a projecting ironwork bracket supporting a lamp. This had been removed and a modern lamp substituted. In the roof above the porch was a three-light dormer window with a flat roof.

The side elevations of the building rose into half-hipped gables. The sloping eaves were outlined with a brick soldier course, and there was a projecting cornice beneath the hip. In the south elevation were a group of three windows, the centre one taller than the rest, forming a symmetrical elevation. The north elevation had varied sizes of windows opening into the service rooms and was partly obscured by the link corridor. The rear or east elevation faced the barracks boundary wall but was well detailed, with identical buttresses and dressings to the windows. Each window was surmounted by a dormer window in the roof.

With the exception of the service rooms at the north end, the interior of the building was largely a single space. The roof was concealed by a suspended ceiling, but consisted of steel trusses resting upon elegant projecting corbels in the side walls. There was a moulded picture rail running around the room below the ceiling. The dormers opened into the roof to give additional light to the dining area. At the north end were three service rooms. The eastern room was designed as a servery and opened onto the dining area by a wide square-headed opening. The serving bench had been removed. The passage to the cookhouse ran from the north wall of this room. A doorway in the west wall of the servery opened upon a short passage, to the north of which was a narrow room identified on the CRE plan as a 'bread store'. This small room was lit by a narrow window and was lined from floor to ceiling with ceramic tiles. The adjacent room to the west was set aside for washing up and for the storage of crockery. This room was also open to the dining room by a wide rectangular opening. All its original fixtures and fittings had been removed.

#### COAL STORE (Building 23: Fig. 61, top)

The Coal Store lay to the south of the East Block and Dining Room and has now been demolished. It appears to be represented on Hayman's map of the city, made in 1805 (Fig. 2), though the map is perhaps insufficiently detailed for this to be certain. Wood's map of 1840 shows an open or unroofed structure on the site which must represent the present structure. The building was therefore of early 19th-century date at the latest and is most likely to have been constructed in the 1790s as one of the original barrack buildings.

The Coal Store consisted of a yard surrounded by thick brick walls, with an entrance on the south through a wide gateway flanked by massive brick piers (Fig. 62). The deep red bricks of the walls were laid in Flemish bond and the wall and the gate piers were surmounted by a plain stone coping. Over the gateway a short section of iron railings formed a spiked 'overthrow' to prevent climbing. The gates were modern and covered with corrugated iron, but were hung on the original iron pintles. The northern wall of the yard was immensely thick at the base and steeply battered allowing the coal to be heaped against it. The yard appears to have been paved with granite setts, although most of the original surface was obscured.

Within the yard were several small buildings and enclosures. At the north end of the yard were a pair of sheds with corrugated roofs and immediately within the gateway a small office building. The other structures were roofless and may simply have been enclosures for storage of fuel. None of these buildings are shown on 19th- or early 20th century maps of the barracks and it is likely that they were erected in the mid 20th century. All the buildings were present by the time of the 'Skeleton Record Plan'.

Adjoining the north wall of the yard was a small, single-storey structure which appears to have formed part of a larger block of buildings, since demolished. This was a narrow but unusually tall building of red brick, with a pitched roof of corrugated asbestos. The brickwork bond was 'English garden wall' and there were flat arched heads over the doorway and the adjoining small window in the west wall. The interior of the building was whitewashed and partly divided by a dwarf wall. There was a further small window in the east wall and the

seating for a stove below this. The stove pipe still remained projecting from the wall. In the south wall was evidence of a large opening overlooking the adjacent coal yard, and it is likely that the stove was supplied with fuel directly from the yard. The roof was boarded over the rafters and may well originally have been slated. Within the spacious roof void, supported on steel girders, was a large water tank.

Although the character of the brickwork suggested a 19th-century date for this building, no structures are shown in this position on the 1891 or 1905 OS maps. By the time of the 1932 revision of the OS 1:2500 map and the 'Skeleton record Plan' the building is shown as part of an ablutions block. The small building seems to have been used as a boiler house heating water for use in the showers. It is possible that the ablutions block was constructed during the First World War, to improve facilities at a time of increased activity at the barracks.

#### INDOOR RANGE (Building 25: Fig.61, centre)

This building lay to the south of the coal store, separated from the eastern boundary wall of the barracks by a narrow alley. The building is not shown on either the late 19th- or early 20th-century OS maps, but appears on the 1932 revision of the OS 1:2500 Map. The building may have been constructed as a training facility during the First World War. It has now been demolished.

The Indoor Range was a narrow structure 31m long and 8m wide, terraced into the hillside (Fig. 63). It was constructed of pale red brick laid in stretcher bond, the walls being only a single brick thick. The north wall alone was of two bricks thickness, presumably because this wall lay behind the targets. The building was divided into ten bays by pilaster buttresses at intervals of approximately 3m and there were further pilaster buttresses in the gable ends. The roof was pitched, covered with slate and lit by skylights at each end. Two tall timber ventilating louvres with saddle-back roofs crowned the ridge.

The interior of the building was approached through a single doorway in the west elevation of the southern bay and lit by a pair of two-light windows in the third bay from the south. The two western bays were divided from the main body of the building by a late 20th century partition to provide a safe firing area and a raised firing platform with a series of apertures of different sizes and levels. Beyond this the entire northern part of the building was open, with the target area against the north wall, supported away from the wall surface by a pair of projecting internal buttresses.

The roof of the building was supported on nine trusses; however these varied in design down the length of the building. The first three trusses at the north end were basically of 'A'-frame type with a high collar, but with additional timber diagonal braces running from the foot of each principal rafter to the centre of the collar. The collar and the apex were also linked by a king post. All these timbers were of the same scantling and there is no suggestion that any of them had been added. The six trusses to the south of this were also of 'A'-frame form, but these had iron tie rods forming both the additional braces from the feet of the trusses to the collar and the 'king post' at the centre. The reason for this difference in the treatment of the trusses is unclear; however it is possible that the use of timber rather than metal in the northern trusses was intended to reduce the risk of ricochets should a badly aimed bullet hit one of the roof trusses by accident. There were two levels of purlins on each side of the roof, supported on cleats resting on the upper surfaces of the principal rafters. The entire roof was covered under the slates with boards laid diagonally, a curiously decorative treatment for an utilitarian building (though this may also have helped to prevent racking). The interior and the roof timbers were whitewashed.

#### MAGAZINE (Building 26: Fig. 61, bottom left)

This was one of the primary buildings of the 1790s barrack complex, and is now in use as a garden shed. It was located against the eastern wall of the barracks, in a position as remote as possible from any other building in order to minimise danger from potential explosions.

The Magazine (Fig. 64) was a small rectangular structure of red brick, measuring 3.8 x 5m externally. It was constructed of dark red bricks laid in Flemish bond, with plain stone copings similar to those of the coal yard walls. At the gable ends of the Magazine the copings formed classical pediments. These sprang from square blocks at the corners of the building which managed to suggest both the capitals of non-existent pilasters and also sections of an entablature. The walls of the Magazine were 0.6m thick with ventilating slots in the south, east and north walls. The interior was vaulted with a brick barrel vault and entered by a doorway in the west elevation with a flat-arched head of orange gauged bricks. Unfortunately the doorway had been enlarged and a modern door inserted in the 20th century.

The building was originally surrounded on all sides by brick walls, defining a narrow ambulatory running around the four sides of the Magazine. The gateway opening into the ambulatory was offset to the south of the doorway of the Magazine itself. These surrounding walls may have been intended to contain the blast should the Magazine accidentally explode; however they were neither specially thick, heavily buttressed or embanked

with earth, as might be expected if they were designed as a blast shield. These walls may therefore have served simply a barrier to prevent sabotage or theft. Parts of the walls had been demolished in the 20th century but a section of the northern wall and the stone paving of the ambulatory remained. Traces of scarring at the north-west corner of the Magazine showed where the ambulatory had been partly infilled by a later structure of uncertain purpose. This structure is not shown on the 1891 OS 1:500 map but appears on the 1:2500 map of 1905.

During repairs to the roof of the building the roof timbers were exposed. Much of the roof had been renewed in the 20th century with softwood timbers secured with galvanised nails; however some timbers retained massive square-sectioned nails with faceted heads which may have been the original 18th-century work. The roof was boarded over the rafters and covered with asbestos slates laid in a diamond pattern.

#### RACQUET COURT (Building 27: Fig.61, bottom right)

The Racquet Court was a large brick structure which stood immediately adjoining the south side of the Magazine. It has been demolished and new housing erected on its site. The building is not depicted on Wood's Map of Exeter, made in 1840, but appears upon the OS 1:500 map of 1876 as a roofless structure defined by heavily buttressed walls and entirely open to the south. The building was presumably constructed in the mid 19th century, in response to the Barracks Accommodation Report of 1855, to provide a recreational facility for the soldiers (Douet 1998, 128). Although altered by conversion into a shed, this building survived intact until the recent development.

The Racquet Court was terraced deeply into the sloping hillside, with massively constructed north and west walls of red bricks laid in Flemish bond (Fig. 65). The north elevation was divided into three bays by massive pilaster buttresses and had a high chamfered plinth. There were six buttresses on the west elevation, dividing it into unequal bays. The east wall was built up against the eastern boundary wall of the barracks and had no buttresses. The north wall appears to have originally been between 4 and 5m high above the internal floor level, but the later roof rose above this to a high ridge and then sloped down towards the south, giving the building an asymmetrical profile. A second chamfered brick course at a high level might represent the original height of the walls, above which the buttresses and roof had been raised. Alternatively the walls may have been truncated to accommodate the existing roof. This was certainly the case at the southern end of the building.

The roof was supported on rectangular timber trusses consisting of pairs of horizontal beams linked by diagonal timber braces and vertical iron tension rods. These trusses supported five sets of 'rafters', over which were timbers supporting the corrugated roofing material. The roof structure appears to have been added in the mid 20th century to convert the building into a squash court. A low south wall was added with a metal-framed window and double doorways at the south-western corner of the building.

#### STORES (Building 28a: Fig. 66, top left)

The complex of buildings to the south of the Racquet Court included several small store rooms, a yard, offices and the former 'Suttling House' or canteen. The nucleus of these buildings was the Suttling House, at the south end of the complex, which was largely of 18th-century date though severely altered. These buildings all shared the MoD number '28'. To distinguish the later buildings they have been identified here as Building 28a. These buildings were store houses of late 19th- and early 20th-century date. They have been demolished and new housing erected on the site. The Suttling House, identified as Building 28b, has been divided into two bungalows and survives.

#### ?Store

The northernmost building of the complex was a large, single storey shed with a shallow-pitched roof and walls of dark red brick laid in Flemish bond. The roof was covered with roofing felt and the apex of the southern gable was entirely glazed (Fig. 67, top left). There was also a two-light casement window in the north wall, barred on the interior. The entrance was a doorway at the south end of the west wall, with a flat-arched head of rubbed orange brick. This entrance had clearly been cut in or enlarged, probably when the adjacent oil store was constructed. No trace of an earlier entrance was visible; however the south wall was in stretcher bond and may have been rebuilt, suggesting that an earlier entrance may have lain in this wall. The interior was of whitewashed brick and the roof structure was exposed and unpainted. The only fixtures to survive were some wooden shelves or racks, though these were not early features. The building does not appear on the OS 1891 1:500 map, but was in existence by 1905 when the area was surveyed for the OS 1:500 map. The original use of this building is uncertain. It may have been constructed as a store room and is marked as such on the mid 20th-century 'Skeleton Record Plan'. Unfortunately part of the annotation is illegible and the substance stored there remains unknown.

*Oil store, yard and office*

The adjoining store is marked as an 'Oil Store' on the 'Skeleton Record Plan' and formed a lean-to structure facing south towards a small yard to the north of the canteen. The yard was entered by double gates hung on brick piers with stone dressings and shallow pyramidal caps. The brickwork of the oil store was laid in English bond and was integral with the gate piers. The façade facing the yard had two doorways at either end, the eastern one of which was blocked. The interior was featureless apart from a sub-rectangular sunken area in the floor against the south wall, resembling a shallow bath. This was entered by a pair of steps on each side. Near the centre of this feature was a circular sump or drain. The building was constructed in the early 20th century, after 1905 and before 1932.

On the opposite side of the yard a small office had been constructed against the north gable wall of the 18th-century Suttling House. The roofline of the older building had been extended across the office, but the break in build between the two sections was clearly visible in the western elevation (Fig. 68). The north wall of the office was in English bond and identical in materials with the oil store, suggesting that the two buildings were contemporary. The northern gable rose above the roofline into a parapet with a coping of either concrete or Portland stone. The window in the eastern part of the north wall had a segmental arched head and was fitted with a horned sash window. The west elevation of the office was of better quality as it formed the principal façade. The entrance doorway and an adjacent window were both under widely-flared flat arches of rubbed brick and the brickwork was laid in Flemish bond, perhaps in an attempt to match the brickwork of the adjoining, earlier building to the south. The interior of the office was plastered, ceiled and heated by a fireplace in its south wall. Unfortunately the chimneypiece had been removed and, with the exception of some fixed shelving on the east wall, no other features of interest remained.

## SUTTLING HOUSE (Building 28b: Fig. 66, top right)

To the south of the office was the original main block of the 1790s Suttling House. This originated as a rectangular building, but was later extended by the addition of a projecting wing at the centre of its western façade. The layout of the chimneys in the east and north walls and the possible footings of a demolished stack in the cellar allow the original layout of the building to be tentatively recreated.

The northern wing of the Suttling House was divided into two heated rooms, both with chimneys at the centre of their northern walls. To the south the central room, now extended into the western wing, was larger than the northern rooms and was heated by a fireplace in its eastern wall. The southern wing of the building contained a large room, also with a chimney in the east wall, and there was a short passage between the central and the southern rooms which presumably marks the site of the original entrance.

The building may have contained a residence for the Suttler, which seems likely to have been at the south end of the building which adjoined a private garden. There must have been a bar and a tap room, perhaps in the northern part of the building, with storage in the cellars beneath. Although the building was only a single storey high when viewed from the parade ground, the land fell steeply to both south and east of the building and the cellar was in fact partially above ground, enabling it to be well ventilated by slits in its eastern wall.

The western wing added to the front of the Suttling House is not depicted on Wood's map of the 1840s but appears on the 1876 OS 1:500 map; it must therefore be of mid 19th-century date. The 1876 map seems to show wide entrances in both the north and south walls and two windows in the west wall. There was a single large central room running the full depth of the building. The northern and southern rooms of the Suttling House were also undivided at this period and some partitions within these wings may already have been removed, particularly from the north wing, where two former rooms had been united by the removal of one of the chimney stacks and a partition. By the time of the 'Skeleton Record Plan' in the mid 20th century the Suttling House had been converted into married soldiers quarters and a 'RASC store'.

*South, north and east elevations*

The earliest parts of the building could be recognised by the deep, blood red colour of the brickwork, laid in Flemish bond. The south elevation was rendered externally and could not be examined. The north elevation was obscured by the early 20th-century office and the east elevation incorporated the barrack boundary wall and overlooked a private garden outside the wall. It was clear following the stripping of the building that these walls were all part of the primary building.

*West elevation*

The main façade looked west, and its best preserved section lay to the north of the projecting wing (Fig. 68). This part of the elevation preserved two wide window openings with flared flat-arched heads of rich orange-coloured gauged bricks. The windows were metal framed and probably of 20th-century date. The original

windows may have been tripartite or horizontally sliding sashes, judging by the proportions of the openings. South of the windows a doorway had been cut into the wall in the late 19th century to provide access to the northern rooms.

The projecting wing on the west elevation of the Suttlng House was an extension to the central room achieved by removing the original western wall of the building and throwing out a projecting bay. Although essentially a simple structure this was a complex building showing many phases of alteration. The north and south walls were of 19th-century date; however the west wall was a 20th-century rebuild of bricks laid in stretcher bond, suggesting the use of cavity walls. A wide blocked doorway was clearly visible in the north wall.

To the south of the projecting wing the façade had been greatly altered. The original entrance may have lain immediately south of the later projecting wing, where the passage crossed the interior. This part of the façade had been partially obscured by later accretions and, by the early 20th century a small window was inserted in the west wall of the former passage. The details of the original windows, such as the flat-arched heads of gauged brick, had been carefully replicated during these alterations. The adjoining, larger window appeared to be an original opening, though it was fitted with an early 20th-century horned sash. This window was narrower than those in the northern part of the building and may have always been a sash window.

A large area of the elevation immediately to the south of these windows had been rebuilt in the 19th century. This rebuilding may be associated with the insertion of a doorway opening into the southern room of the building. The flat-arched head for this doorway replicated those of the original openings elsewhere in the building. Although it was later blocked a recess remained internally. To the south of this doorway a chimney stack and flue had been cut into the elevation. It is likely that the blocking of the doorway and the addition of the stack took place in the early 20th century in the context of improvements to the residential accommodation.

#### *Northern room*

The character of the interiors of the Suttlng House reflected the alterations of the early or mid 20th century. The northern room (the former RASC store) had plastered walls but an open roof, the plaster ceiling following the underside of the rafters to the apex. There was a fireplace in its north wall, but this had been blocked and the chimneypiece removed. To the west of the fireplace a doorway had been broken through the original north wall of the building into the office. The room had been divided into two sections in the later 20th century when a partition was constructed across the room. This in fact reinstated one of the original divisions within the building; the cellar below preserved a massive baulk of masonry representing the base of a demolished chimney stack which must have risen through the building at this point and was probably associated with a partition. A modern door led through the southern wall to the central room. This replaced an earlier, blocked doorway to the west which had been sealed up in the late 19th century, separating the two parts of the building. No other features of interest remained.

#### *Central room*

The original large central room had also been divided into two separate rooms by a timber-framed partition. This partition had quarter-round skirting boards and chamfered architraves to the doorways and was almost certainly of late 19th-century date since it does not appear on the 1876 OS 1:500 map (Fig. 6). The partition contained an internal window providing borrowed light to the eastern room. There was also a skylight within the roof to augment the lighting, though this may be a later addition. The original chimney in the eastern wall was retained to heat the new, smaller, eastern room, though the fireplace had been blocked and plastered over in the 20th century. All domestic fixtures had been removed by the time of recording and the function of the room is uncertain. It is shown as a kitchen on the mid 20th-century 'Skeleton Record Plan' and this may well have been its function since the 19th century. Within the kitchen a small lobby and store room were created in the 20th century, and the doorway to the room in the western extension was blocked.

#### *Southern rooms*

The southern rooms retained few original features; they are marked as bedrooms on the 'Skeleton Record Plan'. The former entrance passage between the southern and central wings is shown divided into two small store rooms and a central passage communicating with the kitchen. The eastern room is marked as a pantry, and the western room as '?scy'. This may be an abbreviation of 'scullery'.

The southern rooms beyond the passage were ceiled at the level of the tie beams, obscuring the roof structure. These ceilings were primary and may confirm that these rooms had originally functioned as accommodation, the plaster finishes in the inhabited rooms contrasting with the open roofs of the north part of the building. The dividing wall between the two rooms is probably of early 20th-century date. This was the period when a new chimney was cut into the west wall, which must surely relate to the creation of a separate

room in the southern part of the buildings. Both this chimney and the earlier chimney in the east wall formerly had small early 20th-century cast iron grates, now removed. The window in the south wall was an early 20th-century horned sash occupying an earlier opening.

#### *Western extension*

Only the north and south walls of the original western extension survived at the time of the recording. Both preserved evidence of the original doorways. The northern doorway shown on the 1876 map had been blocked in the late 19th century when a chimney stack was built against it following the subdivision of the central room. The blocking was clearly visible externally. The southern doorway remained, but now opened into an entrance passage added alongside the south wall of the extension in the early 20th century. The doorway was fitted with a timber screen incorporating a late 19th-century four-panelled door, probably reused from another location. The west wall of the extension had been entirely rebuilt with cavity walls whose inner and outer skins were linked by most unusual 'S'-shaped brick ties. The room was provided with a picture rail in the early 20th century. It is shown as a sitting room on the 'Skeleton Record Plan'. Above the modern suspended ceiling was a 19th-century ceiling and a beam supporting the original trusses of the Suttling House roof across the void where the 18th-century west wall had been removed.

The 20th-century entrance passage to the south of the extension had a partly-glazed front door and, in a projection further south again, a lavatory. The passage formerly communicated only with the wide opening in the south wall of the extension; the eastern part of this passage was a later modification extending the passage into the former 'scullery'.

#### *Cellars (Fig. 66, bottom right)*

The cellars beneath the Suttling House were reached by an external staircase covered by an iron grating in the pavement outside the southern rooms. The cellars consisted of a large rectangular room occupying almost the entire length of the Suttling House, the only internal division being the massive masonry base of a probable chimney stack which divided the north end of the cellar into a separate compartment.

The walls of the cellar were mainly of Heavitree breccia rubble rising to the height of the ground floor, except on the west and south sides, where the rubble masonry formed a tall plinth for eight courses of brick walling. It is likely that the natural ground levels within the Barrack compound had been altered when the building was constructed.

All the walling showed traces of whitewash, though this had largely perished due to damp penetration. In the south wall was a blocked cellar window formerly opening onto the garden to the south of the building, and on the east side four narrow slit windows survived at a high level in the wall, providing ventilation. Within the small northern cellar a blocked opening in the west wall seemed to represent a further cellar window.

The cellar was divided along its entire length by an arcade of short cast-iron columns with moulded caps and bases standing on high masonry plinths. The columns supported an axial beam, scarfed at intervals over the heads of the columns, which bore up the floor joists of the Suttling House above. The columns and the ceiling joists bore the marks of laths showing that the room was originally plastered, probably for reasons of hygiene. The columns defined a narrow aisle along the western side of the cellar, presumably to allow communication from one part of the building to the other, and a wide aisle in the eastern part which must have been designed for storage. The floor was of concrete sloping to a central drain.

Along the western wall of the cellar stone corbels projected at intervals, presumably to support a beam or trimmer bearing the ends of the floor joists. The beam had been removed and replaced by a steel girder supported on 20th-century brick piers built against the west wall. Many other modern piers of brick or concrete blocks had been added to support the floor.

Examination of the floor joists showed the positions of primary and secondary hearths on the floor above. The former had trimmers receiving the ends of the joists and supporting the hearth, secured to the joists on either side of the hearth by pegged tusk-tenoned joints. The earlier hearths have been supported by modern brick walls. Many of the joists bore carpenters' marks gouged into the faces of the timbers, though the significance of these could not be determined (Fig. 69).

At about the centre of the large southern cellar and on its eastern side, a primary opening in the floor was represented by a trimmer and a tall timber post. From the head of this post to the east wall of the building, one of the primary joists was cut away into a shallow segmental arch, the soffit of which bore traces of laths. On the east wall adjoining this, traces of a diagonal scar were visible, rising from a point level with the foot of the timber post to the floor level approximately 3 or 4 metres to the north (Fig. 70). This must represent the remains of a staircase from the ground floor to the cellar, descending from the central room of the Suttling House above. The arch was no doubt cut in the joist to improve headroom at the foot of the stair.

This stair appears to have been the only access to the cellar from within the building and it was surprising to find that it had been blocked and plastered over. It may have been blocked when the central room of the

Suttlings House was subdivided in the late 19th century, possibly within the context of the extension of the residential accommodation into the rest of the building. The cellars seem to have been abandoned in the 20th century and the cellar lights were subsequently blocked in brick. The lath and plaster was removed from the ceiling, exposing the joists, perhaps in an attempt to improve ventilation to the timbers and prevent decay. The floor had been propped by additional supports.

### *Roofs*

The original roof survived to the full length of the 18th-century building. This had five king-post trusses supported on tie beams, and diagonal braces from the base of the king post to the principal rafters. There were no straps at the base of the king posts. A single level of purlins was visible on each side of the roof and many of the common rafters were original. The trusses in the southern part of the roof had provision for ceiling joists in the tie beams, but the trusses in the northern part of the roof appear to have been exposed, with the ceiling rising to the apex. Blocked apertures at intervals at the apex of the roof presumably represented the sites of ventilating turrets, one of which was recovered intact from within the roof space (Fig. 71).

At the centre of the building the erection of the western wing necessitated the removal of a section of the west wall of the original building. The original roof trusses were supported on a timber beam inserted across this void to bear them and a new truss was created to support the roof of the extension. This truss was of similar form to the 18th-century trusses, but differed in that it had an iron strap linking the tie beam and the king post, showing that the post was perceived by this time as a tension rather than a compression member. The partition dividing the central and western rooms extended into the roof space and it was apparent the roof of the western room was originally open. The trusses were painted dark green and the common rafters bore traces of laths and plaster extending into the apex, showing that the rafters only had been ceiled. The existing ceiling was probably a 19th- or 20th-century addition.

### GAS METER HOUSE (Building 29: Fig. 66, bottom left)

The Gas Meter House adjoined the south wall of the barrack compound to the east of the main gateway, and has been retained within the recent housing development. This building was a simple rectangular structure of dark-red bricks laid in Flemish bond, surmounted by an unusually-shaped pitched slate roof. The eastern, southern and northern walls of the building were crowned with an horizontal cornice of two projecting courses of brick below the eaves, whereas the western wall rose into a gable. The roof was thus shaped like half a square pyramid, giving the building a lop-sided look as though it had been truncated. There was no evidence in the fabric, nor on any of the historic maps to show that this was the case. The maps show that the building was constructed after 1840 and before 1876. It is annotated as 'Gas Metre (sic.) House' on the 1876 OS 1:500 map and it is probable that this was its original function.

The entrance to the building was in its north wall and was closed by a pair of 20th-century double doors. The lintel over the doorway had been rebuilt and was covered with cement. In the east wall was a window with a stone sill and a rebuilt lintel. There were no other openings in the walls.

The interior of the Gas Meter House was absolutely bare; however the remains of a low wall and a projecting buttress were visible low down at the base of the south wall. This showed that the original south wall of the barrack compound had been reduced to floor level and the wall of the shed and the present boundary wall had been built over the earlier wall. In the floor, just within the doorway, was an enigmatic feature with a square opening surrounded by stone kerbs, one of which retained a pair of iron pintles for a hatch door opening upwards. The hatch had been blocked with bricks laid in soft earth. This hatch presumably protected a valve or stopcock connected to the gas supply. On the 'Skeleton Record Plan' the building is shown as a 'RASC Store'

To the west of the building was a mound of earth, also shown on the mid 20th-century plan. The function of this mound, the appearance of which suggests a buried shelter or reservoir, is uncertain. In the late 20th century the mound was cut by a flight of steps leading down to a gateway in the barrack wall at the level of Howell Road. It has now been levelled, the steps removed and a new pedestrian access created.

### TIMBER HUTS (Buildings 24, 32–39: Fig. 72)

These huts have been entirely demolished. Eight of the huts (Nos 32 to 39) were arranged on the western side of the road defining the eastern edge of the parade ground. The ninth hut (No. 24) was located on the opposite side of the road between the Coal Yard and the Indoor Range. All the buildings were arranged with their gables facing the road, no doubt as a result of the sloping site. The huts stood on low brick foundations and were approached by flights of steps with tubular handrails. The superstructure of each hut was of softwood studs clad externally with lapped, horizontal boarding. The roofs were covered with either roofing felt or corrugated iron. The interiors had boarded floors, vertical tongue-and-grooved boarding on the walls and hardboard cladding on

the underside of the roofs. Each hut was divided into five bays, defined by four large king-post trusses with diagonal braces. These trusses have the unusual feature of braces nailed to either side of the feet and apex, which may have served as a form of internal buttressing to prevent the distortion of the walls.

The interiors were lit by square, two-light windows, divided into two halves by a vertical mullion. One half of each window had an opening casement and the other a small ventilating light. There was a doorway with a two-light fanlight in the central bay of one elevation, and two further doorways in one of the end walls. One of these doors had usually been sealed, or both doorways amalgamated into double doors. The provision of two doorways may have been intended to increase the options for the subdivision of the building into smaller rooms. On either side of the doorways were two tall, narrow windows. The wide spacing and narrow form of these windows was repeated in the opposite end of the hut even if no doorways were provided. Above the doorways were rectangular, louvred ventilators, set off-centre within the gable. Hut No. 34 was the least altered example and may be taken as typical of the original form of the buildings. Hut No. 36 was shorter than the other huts and served as a latrine block. The end bays of this hut appear to have been erected on the opposite side of the road as a separate building, Hut 24. Hut No. 37 had been remodelled as a bar in the late 20th century.

These huts were part of a larger group of timber buildings visible in aerial photographs of the city taken in 1945 (RAF vertical air photograph Sept. 1945, sortie 865 No. 6449). Many of these had already been demolished by the time of the survey. The huts do not appear upon the OS 1:2500 map of 1932; they were probably erected shortly before the Second World War to provide temporary accommodation at a time of intensification of military activity at the barracks site. Although they may have been a standard type of timber hut, neither the model nor the manufacturer have yet been identified.

CANTEEN (Building 30: Fig. 73)

This building was probably constructed in the late 1960s or 1970s after the conversion of the 1930s Dining Room into Offices. It has now been demolished. The Canteen stood on the south side of the quadrangle formed by the East and West Blocks and the Headquarters Building. The building was only a single storey high and approximately square in plan, with a projecting porch at its south-western corner. Although a simple prefabricated timber-framed structure, the building was a carefully designed piece of modern architecture. It stood on a brick terrace facing south, surrounded by a low wall with a concrete coping. To the west the terrace was approached by a broad flight of steps in front of the porch. The long, low south façade was divided into carefully proportioned sections, the porch being distinguished by strips of tile hanging and the canteen area by a grid of panels forming four three light windows grouped in two pairs and separated by a narrower bay of two blind lights. The walls below and between the groups of windows were formed by dark blue coloured panels and the area over the windows and the porch doors by black panels. French windows allowed access to the terrace from the canteen. Similar details were employed on the other façades. The interior was not inspected.

#### DESCRIPTIONS OF THE BUILDINGS IN THE 1803 COMPOUND

The 1803 compound was originally laid out like the earlier barracks, with the Barrack Master's House at the head of a parade ground flanked by opposed groups of barrack blocks (Fig. 2). By the 1840s the temporary buildings of 1803 had been demolished and only the basic layout of the site survived. This consisted of a long central avenue which ran the length of the site and then divided into two branches around a central lawn. A short avenue ran across the top of the lawn in front of the former Barrack Master's House and neither the eastern nor the western avenues continued far beyond this. The regular layout of the site had been completely lost; the buildings erected during the 19th and 20th centuries were haphazardly sited and made no attempt to recover a formal layout.

Many of the 19th-century buildings on the site had already been demolished by the time of the archaeological recording. The Royal Engineers Office, which had stood opposite the western end of the short avenue at the top of the lawn since the early 19th century (Fig. 5) was probably demolished in the 1970s or 80s when the new Record Centre was erected. An Infection Ward which stood at the rear of the Forge Store was also demolished to allow for the erection of this building. At the south end of the site, opposite the Pension Office, was a laundry; however this was destroyed by enemy action and its site and outline only are shown on the 'Skeleton Record Plan'. The Married Soldiers' Quarters erected in the 1870s on the west side of the avenue were demolished in the 1990s to allow for the development of King Stephen Close. These alterations removed the last traces of the avenue and lawn. The remaining historic structures have now been cleared for the recent housing development.

PENSION OFFICE (Building 19b: Fig. 74, top left)



The Pension Office shared the MoD number 19 with the Pioneer Shed and Bathrooms to the east of the East Block. It has therefore been identified in this description by the number 19b. The building survived only in a truncated form at the time of the recording. It has now been demolished and a new building erected on its site.

The Pension Office was a single storey building erected at the south-eastern corner of the 1803 compound, lying parallel with the workshop range containing the Farriers' shop and the shoeing shed. The office was probably constructed in the early 1860s (see above), but it had been much altered and partially demolished in the 20th century. The original form of the building may be shown on the OS 1:500 map of 1876. This map shows a long range a single room deep, containing four rooms and a small internal porch. At the north and south ends of the building were porches or wings projecting to the east which seem to have been associated with open-sided or insubstantial structures covering part of the east wall of the building. Later in the 19th century the northern part of the building became the Armoury Sergeants' Quarters and the southern part an Infant school (EA 1998, Fig. 6). Only the northern part of the building remained at the time of recording.

#### *West elevation*

The west elevation of the Pension Office was its main façade and formerly overlooked a small garden alongside the central avenue of the 1803 barracks site (Fig. 75). The elevation was rendered and featured two irregular groups of tall rectangular sash windows with concrete sills. A doorway in the south part of the façade had been blocked and rendered over, and this part of the elevation had been painted black. The extreme southern end of the Pension Office had been demolished. Study of the RAF Aerial Reconnaissance photographs taken in 1945 (RAF Sortie No. UK 865 Part V (30/09/45) sheet 6450) reveals that this had already occurred by that date, possibly in the same air raid which destroyed the Laundry. The 1932 revision of the 1905 OS 1:2500 map shows that an extension had been built onto the north-western corner of the building. This was constructed of brick laid in stretcher bond, with a chimney in its western wall. In the south wall of the extension was a broad window opening with a flat-arched head.

#### *North elevation*

The north elevation of the building had also been subject to considerable alteration. This was the gable end of the original building and was constructed of red brick laid in Flemish bond. The gable was shallow-pitched, and at the apex was an oculus containing a ventilator. At the centre of the elevation was a sash window under a flat-arched head. The original entrance lay within a small projecting porch to the east of the building, which survived, though absorbed into a later and larger extension. The doorway had been partially blocked and a narrow window substituted. A new doorway had been cut through the wall to the west of the original doorway and covered by a small projecting porch with a lean-to roof. This porch had concrete lintels over the doorway and the window and was probably contemporary with the western extension. The masonry of the western extension could be easily distinguished from that of the original building by the colour of the bricks and the use of stretcher bond. The eastern extension used bricks made from darker clay and was in Flemish bond like the original building. This extension was clearly earlier than that to the west. It may have been enlarged to its present size when the building was truncated.

#### *East and south elevations*

The east elevation of the building was also rendered and had been painted black, concealing any changes or anomalies in the masonry. Only a short section of walling, representing a surviving fragment of the demolished south end of the building, remained visible. This had Flemish bond brickwork and contained a blocked doorway formerly communicating with the former southern room which was now roofless. To the north were a pair of tall sash windows without horns lighting the adjoining room, and beyond this a smaller window to the north. Much of the elevation north of this was obscured by the early 20th-century eastern extension, which seems to have been added to provide lavatories. The brickwork in the southern parts was laid in stretcher bond and this suggests that the extension was later enlarged to its present size.

The original south wall of the building had been demolished and the building shortened so that the present end wall was one of the former internal divisions. The wall preserved a projecting chimney breast flanked by alcoves but the fireplace had been blocked and no other features relating to the room survived.

#### *Interior*

The interior of the Pension Office was originally divided into four rooms, of which three survived the truncation of the building. The 'Skeleton Record Plan' records that in the middle of the 20th century the northern room served as a kitchen, the southern rooms as bedrooms and the north-western extension as a sitting room. The interiors had been refurbished in the early 20th century and were largely featureless. The ceilings rose up into the roof space and were canted at the sides with a flat ceiling at the centre. The two chimney breasts in the south

and central rooms retained small cast-iron fireplaces of early 20th-century date. The fireplace in the northern room was a tiled fireplace of a later period. No other features of interest were observed.

#### RECORD CENTRE (Building 8)

This very large modern building was demolished in 1998-9. It was a single-storey prefabricated structure which probably dated from the 1970s or 80s. The building replaced the early 19th-century Infection Ward and also a number of small buildings, probably timber sheds, which had been erected on the site in the early 20th-century.

#### OFFICES (Buildings 12 a & b)

These buildings were separate structures sharing a single MoD number (Fig. 76, left). The southernmost building (12a) was an early 20th-century timber hut. This was similar in appearance to the huts on the main parade ground, but differed in detail. The hut was erected after 1932 but before 1945 at the top of the former lawn at the centre of the 1803 barracks, facing the short avenue before the former Barrack Master's House. The site was adjacent to that of the demolished Royal Engineers' Office and it may be that the building was intended as an extension to the accommodation in that building.

The hut had an asphalt roof and timber-framed walls clad with horizontal weatherboarding over a brick plinth. The long elevation of the hut facing south had five bays, with mullioned and transomed casement windows. The short, gabled elevations were of two bays with simpler, mullioned windows. The same windows were utilised on the north elevation. The north elevation appears to have been the main façade, and had a long verandah running the full length of the façade, with square posts and a balustrade with a few balusters arranged decoratively at the centre and edges of each bay. The façade was originally divided into five bays, each with a doorway and adjacent window, showing that the interior was divided into five individual rooms. Later in the 20th century the doorways at the west end were blocked in matching horizontal boards and the verandah was interrupted by a corridor providing a link with the adjoining buildings. The interior had been reordered when the corridor was added and all the original internal partitions had been removed. A suspended ceiling was inserted beneath the original roof and the walls were clad with modern finishes.

Building 12b was a single-storey prefabricated timber building dating from the 1970s or 80s (Fig. 76, right). Its west elevation consisted of timber panels clad with vertical timber boards alternating with large windows lighting a corridor. Double and single doors at intervals along the length of the corridor may have provided fire escapes. The east elevation of this building used the same prefabricated units to create a regular façade of alternating panels and windows lighting a row of offices. The link corridor to the earlier hut was erected somewhat later, over the site of the former avenue, which was then abandoned and grassed over. This link is likely to have been added when the former Royal Engineers Office was demolished.

#### FOREMAN OF WORKS' QUARTERS (Building 14a: Fig. 74, bottom left)

This building formed part of a complex of minor buildings which operated in the 20th century as the Royal Engineers Offices, and shared the same MoD number '14'. The main building is identified here by the number 14a, and the other buildings in the group by the numbers 14b and 14c.

The former Foreman of Works' quarters consisted of a single storey structure over a deep basement, with a pyramidal slated roof (Fig. 77). The building occupied part of the site of the Barrack Master's House constructed in 1803 and, although the surviving building had been much rebuilt, it is probable that it represented a part of that building. Comparison of historic maps suggests that the central part of the Barrack Master's House had been retained but that both wings had been demolished. The date of the demolition was probably in the spring of 1827 when the materials of the demolished building were advertised for sale (EFP, 12.4.1827, 4e).

The external brickwork of the surviving structure appeared to be early 20th-century refacing. The extent of this refacing suggests either that the building was inadequately repaired after the truncation of the Barrack Master's House, or that it had been poorly constructed in the first place. It is possible that the brick walls might have replaced original timber-framing. This would strengthen the conjecture that the building was a survival of the barrack buildings of 1803. Unfortunately the building was demolished very rapidly in 1999 and it was not possible, for safety reasons, to observe the structure closely during demolition.

#### *External elevations*

The south elevation had been entirely refaced in pale-red bricks in the early 20th century, obscuring any earlier features. The eastern part of the façade had a pair of horned sash windows contemporary with the refacing of the walls, under segmental arched heads. To the west was a single sash window lying just west of the centre of

the façade, producing an asymmetrical elevation. West of the façade a section of stone walling extended westward on the same alignment as the south elevation and had been retained as a boundary wall. The early 20th-century refacing cut this wall, obscuring any evidence of a relationship; nonetheless it is likely that this wall was also part of the original Barrack Master's House.

The west elevation had been refaced at the same period, except for a small area of walling to the south at basement level. This consisted of mixed rubble, incorporating much Heavitree breccia, and almost certainly survived from the Barrack Master's House. The elevation contained a doorway and ventilator to the basement and, above this, two large sash windows lighting the principal rooms. These features were of 20th-century date and contemporary with the refacing of the building.

The north elevation of the building had also been refaced. There were two partially blocked openings to the basement storey and four sash windows lighting the main floor. Two of these sashes were earlier than the others and had no horns, these are probably 19th-century windows either reused or preserved *in situ* when the building was refaced. A boundary wall ran northwards from the north-eastern corner of the building, then turned diagonally to the north east until the corner of Building 15, at which point it turned again to the north. This wall was in place by 1876 but appears to be unrelated to the earlier Barrack Master's House; It may have been constructed in the mid 19th century.

The east elevation appeared not to have been refaced in the early 20th century. Unfortunately it had been rendered, and the fabric was no longer visible. There were no window openings, only a doorway slightly to the north of the centre. The façade was concealed by a corridor which had been erected against it in the early 20th century to provide a link with buildings 12a and b. This replaced a glazed building shown on the 1876 OS 1:500 map, which may have been a verandah, porch or conservatory approached from the south. The main entrance was under a gabled porch lit by a high glazed over light and by glazed panels in the roof

#### *Ground floor*

The main doorway opened upon a small lobby within the early 20th-century corridor. This had a half-round dado rail deeply recessed within the wall surface. The architraves to the doorways on either side were simply chamfered, but the main doorway to the building was delicately moulded and framed a large, glazed over light with a triangular head and chamfered glazing bars. The door was modern, within an architrave inserted into the earlier opening. On the 'Skeleton Record Plan' the room to the south of this lobby is marked 'records'.

Within the main building was a further small lobby and a corridor running from east to west through the centre of the building. Primary doorways opened to north and south and gave access to a lavatory in the north-eastern corner of the building and an office in the south-eastern corner. The latter room was divided from an adjacent room to the west by an early 20th-century partition and was heated by a fireplace in its north wall. The chimney breast could be recognised in the wall dividing the room from the corridor.

Further down the corridor two modern doors opened into a pair of rooms in the centre of the northern half of the building. These rooms were formerly a single room heated by a fireplace in the west wall and lit by a pair of sashes in the north wall. This room is marked 'typists' on the 'Skeleton Record Plan'. The room had been subdivided in the early 20th century and all earlier features had been removed.

At the end of the corridor two doorways with very fine moulded architraves opened into the rooms in the western part of the building. These had delicate mouldings stopped by a block at the base of each jamb, and may well have been of early 19th-century date. The south-western room was divided from the eastern rooms by an early 20th-century partition; replacing an earlier wall shown on the OS 1:500 map of 1876. It is uncertain why the earlier wall was removed. The room formerly had a fireplace in the north wall, this had been blocked.

In the north-western corner of the building was a further room lit by windows in the west and north walls. It was unclear whether or not this room was heated since there was no chimney breast projecting within the room; however there may have been a fireplace in the east wall in the rear of the chimney breast serving the adjacent room. A doorway from this room to the adjoining room had been blocked. Both the western rooms were marked as 'offices' on the 'Skeleton Record Plan'.

Throughout the building the ceilings and the roof structure were obscured by modern suspended ceilings. Unfortunately no fixtures survive to show the functions of the rooms, and it is uncertain to what extent they preserve the layout of the 1803 building. It is even unclear whether the original structure had one or two storeys. Given the extent of the alteration to the building it is unlikely that the roof was of early date. The building was latterly used as offices, but may formerly have served as a residence.

#### *Cellars*

The cellars were entered by a passage and stairs underneath the 20th-century corridor extension attached to the east elevation of the house. It was immediately clear upon entering the passage that this had formed part of the earlier building of 1803. The east side of the passage was a low but substantial wall just over a metre high, constructed of mixed rubble. Above this and offset from the plane of the wall rose eight courses of 20th-century

brickwork, which rested upon the top of this wall. This represented the brickwork of the extension on the east side of the house, and may have replaced earlier masonry relating to the conservatory or glazed structure which preceded it. The west side of the passage was constructed of rubble to ceiling height. At the south end of the passage was a large raised baulk of masonry just over 0.75m high with a flat surface approximately 1m below the present ceiling. The purpose of this structure was unknown.

In the west side of the passage was the entrance to the cellars. This doorway opened upon a small room with walls of mixed rubble stone and a flat ceiling supported upon modern brick piers. The piers supported both a timber beam and a steel girder which in turn bore the floor joists of the rooms above. A blocked window or other opening was visible in the south wall, showing that this room had formerly been lit by a basement light. A brick wall on the west side divided the cellars into eastern and western sections. The centre of the building was divided by a massive spine wall running from east to west across the building. This was also of mixed rubble, and showed that the basic division of the main floor into southern and northern rooms is likely to have been adopted from the 1803 building. The northern cellar had been converted into a boiler room. The west wall was a modern wall dividing off the western parts of the cellar, which were sealed up and could not be inspected. Part of the north wall was of brick, suggesting that there had been cellar lights in this elevation also. The other walls were entirely of rubble masonry.

#### ROYAL ENGINEERS' OFFICES (Buildings 14b-c)

Building 14b was a 20th-century timber hut lying close to the western boundary of the 1803 barracks site. The hut closely resembled those on the main parade ground area, but differed from the hut forming building 12a. It was most recently used as part of the Royal Engineers Office and has now been demolished.

The hut had an asphalt roof and timber-framed walls clad externally with horizontal weatherboarding. The long elevation was of four bays, with mullioned timber casement windows in the south elevation and four doorways and adjacent windows in the north elevation. The east and west walls both had single windows placed centrally beneath the gable. The north elevation of the hut was its main façade. This had no verandah or terrace, resulting in a considerable step up into each doorway; it must therefore be presumed that a timber platform had existed but was later removed. At the time of the 'Skeleton Record Plan' the interior of the building was divided into four individual offices. All but one of these partitions had been removed. The interior walls were clad with vertical timber boarding and a suspended ceiling had been inserted beneath the original roof. The hut seems to have been constructed shortly before the Second World War.

#### *Building 14c*

This was also a 20th-century timber hut, lying to the north east of the Foreman of Works' Quarters. The hut was erected between 1932 and 1945 and formed part of the Royal Engineers Office. It has now been demolished. The hut was only two bays long and roofed in corrugated iron. The principal façade was in the south gable end, with a central doorway surmounted with a small, gabled porch supported by diagonal brackets. The doorway was flanked by a pair of large windows with paired casements below a transom and a horizontal casement above. In the eastern and western elevations were pairs of long horizontal windows divided by glazing bars into many small panes.

The interior of the hut was divided into a lobby and two rooms, with a dado of vertical boarding. The upper parts of the walls were panelled with sheets of hardboard added at a later period. The roof was open and panelled with similar material.

Adjoining the hut was a lean-to shed with a corrugated iron roof. A building on this site had been erected by 1932 and may have dated from the First World War; however no fabric of this date appeared to survive.

#### ROYAL ENGINEERS' YARD (Building 15: Fig. 74, bottom right)

This was initially an open yard, but was later infilled with sheds and other buildings. The yard is first depicted on the 1876 map of the barracks (Fig. 5) but may have been in existence since at least the mid 19th century. The yard and the buildings within it have now been demolished.

The yard was inserted into the north-eastern corner of the 1803 compound, utilising some of the earlier walls of both compounds. The eastern wall retained regularly-spaced buttresses and was clearly part of the 1790s boundary wall. The northern section was of deep red, hand-made bricks with an offset at a height of about 1m above ground level. This may have formed part of the wall of the 1803 barracks. The west wall continued this pattern, with regular buttresses above the offset (Fig. 78). Although very similar in character, this section of wall does not appear on Wood's map of 1840 and may have added in the mid 19th century to define the yard. The south wall containing the gateway had been substantially rebuilt in the 20th century but retained some fabric of the same period.

The interior of the yard had been partially infilled by 1905 with an open-sided structure which ran along the south and east sides of the yard and incorporated a small enclosed area, possibly an office (OS 2nd edition 1:2500 map 1905). This structure is also shown on the 1932 revision of that map, but by 1945 it had been rebuilt and the interior of the yard had been almost entirely filled with sheds. The principal building lay along the east side of the yard. This was a large shed or office with a pitched roof of corrugated iron. The shed was lit by large metal-framed windows cut through the earlier fabric of the yard walls on the north and east. A doorway was cut through the south wall of the yard and a brick wall with pilaster buttresses was constructed to define the western side of the shed.

The interior was divided into three rooms and a passage by late 20th-century partitions incorporating early 20th-century four-panelled doors reused from another building. The walls were of painted brick and the roof was obscured by a suspended ceiling. A second shed lay on the west side of the yard. This was crudely constructed and had a corrugated iron mono-pitched roof.

## GROUNDWORKS

Archaeological monitoring and recording at the barracks was carried out between June 1999 & June 2000. During this time frequent site visits were made to observe the foundation trenches and other below-ground interventions as they were excavated by the contractors. All below-ground interventions were inspected and observations recorded on standard watching brief sheets. Colour slides and monochrome photographs were also taken when appropriate. All records of observations made during the construction works are stored with the site archive, EA 3636/3724.

Unfortunately, few archaeological deposits were revealed on the barracks site. This may in part be due to the relatively high level of natural deposits, which consisted of yellow/orange clay underlying some 0.3 to 0.5m of modern material. Many rubble-filled land drains were observed running across the site, some of which may pre-date the establishment of the barracks.

A brick culvert was observed, running from north west to south east, in one of the foundation trenches of block 'N' to the north of the Magazine. A further culvert, running approximately north-south was observed in the foundation trenches of block 'O' to the south west of the Magazine. These culverts are probably identical with those shown on the 'Skeleton Record Plan' and are likely to date from the late 18th or 19th century.

The foundations of part of the original perimeter wall of the barracks compound was observed in the western part of the site. This part of the wall dated from the 1790's and was demolished in the 19th century to unite the two barrack compounds.

Traces of sinuous, semi-circular practice trenches were observed in the field to the north of the barracks. This field was acquired by the Army during World War I, and the trenches were constructed to serve for assault training. They continued in use right up to the end of World War II, when the barracks were converted into a Record Centre. The trenches remained open long after falling into disuse and have only recently been infilled to create a childrens' playground for the new housing estate and the adjoining residential areas.

## DISCUSSION

Higher Barracks were established as part of a national campaign in the 1790s to improve military accommodation by the provision of permanent barracks. The threat of invasion had led to a massive increase in the numbers recruited to the professional army and the militia, and this had wholly overwhelmed the traditional system of billeting. In addition, the billeting system was now perceived as detrimental to the discipline and loyalty of the troops, especially within the larger towns. The response to these concerns was led by Colonel Oliver DeLancey, who as Deputy Adjutant General had arranged for the construction of permanent barracks at several large industrial towns in northern England in 1792 (Douet 1998, 62). After his appointment as Barrack Master General in 1793 DeLancey proposed the construction of a chain of cavalry barracks along the English coastline, concentrated with particular density on the vulnerable south and east coasts (*ibid.*, 69). Although DeLancey's proposals were not carried out in their entirety, many of his new barracks were constructed, and Higher Barracks represents one of the best preserved examples of a large regimental headquarters barracks of this period.

### *The 18th-and early 19th-century buildings*

The site chosen by DeLancey for the new barracks lay in open fields to the north of the city. It was not on a main road, but lay within easy reach of central and east Devon, via Howell Road and the roads over Stoke Hill. The County Gaol had been established on 'a healthy spot of ground' close by in 1790 (Jenkins 1806, 222), so the location was wholesome and may have been regarded as particularly suitable for large institutional

buildings. The proximity of the site to both the Gaol and the Castle could also have been a consideration, since these might be possible targets in times of unrest.

Comparison of the Exeter Cavalry Barracks with the surviving drawings of those constructed at Hulme, Manchester in 1792-3 (redrawn by Sue Goodman and illustrated in Douet 1998, Figs 54, 55), shows a very close correspondence in the layout of the buildings as well as in their plans and elevations (Fig. 79). This is particularly noticeable in the plans of the stable ranges which, at both Hulme and Exeter, included three groups of stables separated by staircases. The troop stables were each of 16 stalls and there were three smaller stables of eight stalls at one end of each barrack range for the officers' horses. The unusual long, first-floor windows located near the corners of some of the barrack rooms in the West Block at Exeter are also very similar to those shown in the plans and elevations of Hulme, and the section through the building is virtually identical. The headquarters buildings at both Hulme and Norwich are clearly related to that formerly existing at Exeter (Figs 79, 80). All three had a central cross passage, a longitudinal passage running the width of the building and two smaller cross passages on either side serving rooms in the projecting rear wings. There can be little doubt that the buildings were constructed on a standard plan.

The plans and elevations for the barracks at Hulme are known to have been provided by Col. DeLancey himself (*ibid.*, 63). Given the great similarity of the buildings it is likely that the design of the Exeter Barracks may also have been determined by DeLancey. This may explain some of the anomalous features, such as the long windows of some of the rooms in the first floor, which for some unknown reason do not actually fit the plan of the building; it may perhaps be conjectured that the building contractor was required to adhere to a set of 'standard' elevations which did not exactly match the layout of the building he was constructing.

The barracks were expanded in 1803 by the addition of a new enclosure and barracks on land to the west of the original compound. Unfortunately, nothing now remains of the buildings erected within this area. Only a short length of the boundary wall and a mutilated fragment of the former Barrack Master's House survived at the time of the recording and these have now been demolished. One of the small outbuildings in the original 1790s compound (the Wash House) and the extensions to the Hospital and the Guardhouse may also have dated from this period. The enlargement of the latter two buildings clearly reflects a considerable increase in the size of the garrison. This did not last long however; most early 19th-century accounts suggest that the barracks were rarely occupied, and that this remained the case during most of the 19th century.

#### *Later alterations*

Until its recent redevelopment for housing, Higher Barracks had been in continuous military occupation since its establishment. This continuity, together with the low level of occupation during the 19th century, preserved the site, so that even as late as 1932 the majority of the original 18th-century buildings had survived intact. Two of the buildings had necessarily been rebuilt in response to disastrous fires, but these new structures occupied the same sites and served similar functions as their 18th-century predecessors.

The complex had nevertheless continued to develop. The reforms suggested by the Barracks Accommodation Report and the Standing Army Sanitary Commission were reflected in the conversion and alteration of existing buildings and the addition of some entirely new structures. The reformers had recommended improved hygiene and ventilation as well as the provision of educational and recreational facilities at British barracks. Prior to the fire of 1868 a reading room, recreation room and coffee bar had been provided within the East Block and a schoolroom had been converted from former barrack rooms at the centre of the West Block (PRO MPH 338, plan of 1869). By 1876 the former NCOs' Mess in the northern part of the West Block had been converted into a school, Married Soldiers' Quarters had been provided within a new galleried block at the south end of the site and a Racquet Court had been constructed near the Magazine. The Suttling House had also been enlarged, but it is uncertain whether or not this reflected a change in the way the building functioned.

The new East Block, as rebuilt in 1869 after the fire, might be regarded as a model of an improved barracks. This building included cross-ventilated rooms with high ceilings on both storeys, and galleried access to the upper floor, removing the need for long internal corridors. Quartering men above horses was regarded as wholly unacceptable from 1864 (Douet 1998, 145) and this may have precipitated the removal of stabling from the East Block and the conversion, after 1876, of the former stables in the West Block into armouries. The ventilation systems in the Guardhouse, Hospital and the West Block may also have been added in response to these reforms.

Later in the century, or at least by 1905, the former Straw Store was converted to a gymnasium. This facility was later moved into the former Riding School, where it remained until after the Second World War. In 1938 an elegant new Dining Room was constructed on the site of the Straw Store. These changes must have wholly transformed life at the barracks for the ordinary soldier.

Although the new buildings for the soldiers were wholly distinct in plan and appearance from their 18th-century predecessors, it is interesting to compare the plans of the 18th-century Headquarters Building with that

of its replacement. The plan of the former building is known from the 1876 OS maps, although the functions of its rooms can unfortunately only be guessed at, or extrapolated (in mirror image) from the plan of the Headquarters building at Norwich, which was almost identical (Fig. 80). The large, officers' mess room lay in one half, with an ante room alongside and the kitchens beyond to the rear. The rest of the area was divided into officers' and servants' rooms with accommodation for the Quartermaster. Comparison with the replacement building of the 1880s (Fig. 43) reveals that, with the exception of the provision of separate entrances for the officers, Quartermaster and Commanding Officer, the plan of the building is still very similar. Although there was increasing segregation of the different ranks, the layout and scope of the accommodation has hardly changed. We may conclude that the lives of the officers, unlike those of the soldiers, had altered little between 1794 and 1881.

The almost pristine state of the Headquarters Building at the time of its conversion to housing suggests that the new building was well designed for its function, requiring little or no adaptation to fit it for modern residential (and eventually office) use. Later alterations to the East Block were also essentially superficial, apart from the enlargement of the cookhouse to serve the new Dining Room. The West Block had been more drastically altered, but still preserved to a large degree its original character and plan. The reuse of the minor buildings around the perimeter of the site as stores ensured their survival into the late 20th century, with only a few losses as a result of the intensification of activity during the Second World War. The almost complete preservation of so many of the minor buildings of a barracks, from its workshops to its leisure facilities, is remarkable.

### *The barracks and the city*

The relationship of the barracks with the wider community is also of interest. Traditionally, permanent barracks in England had been regarded with suspicion, as symbols of absolutism (Breihan 1990, 134-5). This prejudice was still strong in the late 18th century, but had begun to crumble in the face of the threat from France. As has been suggested, one of the aims of the establishment of permanent barracks was to isolate the troops from civilians and there is much evidence to suggest that, at Exeter, this was effective. The local historian Alexander Jenkins records that the use of the troops to enforce law sometimes led to scenes of extraordinary violence, and that the soldiers could on occasion behave towards the townsfolk with 'the greatest insolence' (Jenkins 1806, 225). A lack of sympathy between the City and Military authorities may also be revealed by the refusal to allow the barracks to be utilized as an emergency hospital during the cholera epidemic of the 1830s. During the disastrous fire of 1868 civilians attempting to assist in fighting the blaze were threatened with bayonets at the barracks gate and, before the soldiers were finally disarmed, one of the firefighters was wounded in the neck (see Appendix, below). This may have been an accident resulting from quite understandable panic or confusion, yet it seems to show that the troops had indeed become distant from the people. A sense of alienation between the barracks and the wider community persisted even after the conversion of the barracks to a Record Centre, as the author can personally attest, having lived during childhood in one of the adjoining streets. Whether being chased out of the barracks field by security guards, or deafened by the sudden and wholly unexpected descent of helicopters upon the parade ground, for local children the barracks, behind their high wall, undoubtedly exuded an air of menace and formed a large unknown space in our mental map of the city.

The relationship between the soldiers and civilians was not always so hostile. Records of marriages between the soldiers and local women reveal a different aspect of the military presence in the city, and the testimony of elderly local people, recorded in the 1970s, reveal happier memories of the barracks. These include accounts of the Cart Horse Parades and Sunday Promenades before the First World War, when the public were admitted within the walls to listen to concerts and guests might be invited to dinner in the officers' mess. In 1977 Mr H. Aggett recalled that the Church Parades, when the soldiers marched to the Cathedral and back again, 'lent some character to Exeter: All the soldiers going up and down'. On Sunday mornings the band of the Devonshire Regiment could be heard playing their regimental marching song 'Over the Fields and Turnips' from as far away as Lions Holt in St Sidwell's Parish (People Talking, 1977 vol. 7, 2-3). The soldiers were allowed out of barracks to attend local fairs and, occasionally, soldiers from the two rival Exeter barracks would meet and fight, using their belts and bandoliers as makeshift weapons (*ibid.* 1976, Vol. 5, 3).

Unlike the Artillery Barracks, where a row of handsome early 19th-century houses was constructed along the north side of the Topsham Road, Higher Barracks did not form a focus for further development in the area. It is possible that the proximity of the prison discouraged residential development. The fields adjoining the barracks were not in fact developed for housing until the late 19th and early 20th centuries. The Eagle Tavern in Howell Road is the only other building which appears to owe its existence directly to the barracks. This public house stands almost immediately opposite the barracks gate and is clearly an early 19th-century structure. Its footprint is shown on the manuscript map of the city produced in 1819 by the surveyor John Coldridge. Several unusual buildings are shown on the 1876 map, adjoining the tavern among an avenue of trees (Fig. 6). These include a row of small rectangular booths, perhaps for private dining, and two shallow, open-fronted structures

of uncertain purpose. These may have been for games such as skittles or archery, or perhaps they were bandstands. It seems likely that the 'Eagle' was established to compete with the Suttling House for the soldiers' custom. It may have provided a place for soldiers and civilians to meet, make friends, and overcome the barriers which had been created to divide them.



## APPENDIX:

References to the Higher Barracks from Exeter Newspapers  
Collated by A. G. Collings*Trewman's Exeter Flying Post* 10.1.1799 1d**SUTLING HOUSE**

THE SUTLING HOUSE, at the BARRACKS, at Exeter, to be LETT.

For Particulars, apply at the BARRACK OFFICE, Hill's Court, Exeter.  
December 1798.*Trewman's Exeter Flying Post* 12.4.1827 4e**BUILDING MATERIALS FOR SALE**

By Order of the Hon. Board of Ordnance

ON Monday the 16th April, 1827, will be SOLD by Auction, by J. FORCE, in 4 Lots, the Materials of part of the late residence of the Barrack Master, at the Cavalry Barracks, Exeter.

Particulars and permission to view the premises may be had on application to the Royal Engineer's Office, between the hours of 9 and 3.

The Sale to Commence at 12 o'clock precisely.

Royal Engineer's Office, Cavalry Barracks.

Exeter 11th April 1827

*Trewman's Exeter Flying Post* 6.1.1831 2b*Cavalry Barrack Canteen, Exeter*

OFFICE OF ORDNANCE, 31st DEC. 1830

NOTICE is hereby given That the Canteen in the above-mentioned Barrack is to be LET, upon the following conditions, from the present time, to the 29th September, 1833.

No Person but of unexceptionable character, or who will not undertake, bona fide, to reside in the Canteen, and conduct the business thereof in his own Person, will be approved; and two sureties will be required for the regular payment of the rent, and of all sums which may become due in respect of the said Canteen, and for the due performance of the several conditions and stipulations of the lease.

The Person whose proposal shall be accepted, and his sureties, must execute the indenture of lease and covenants relating thereto, the particulars whereof may be known by applying to this Office, or to the Barrack Master at the Barracks.

The names of two respectable Persons, with their christian names, professions, and places of abode, who will join the tenant in executing the indenture as his sureties, must be inserted in the proposals; and the tenant is to pay half the value for the stamps, and the Ordnance Department does not undertake to procure the tenant a licence.

Sealed Proposals addressed to the Secretary of the Board of Ordnance, London, with the words 'Tender for Canteen', written on the outside cover, will be received at this Office on or before Twelve o'Clock at Noon of Monday, the 24th of January next, after which hour any proposals received cannot be noticed.

By the Mutiny Act, Canteens are not liable to have Troops billeted on them.

All Persons making Tenders for Canteens are to take notice that they will be held to the strict performance of the covenants of their leases and full payment of their rents, without any remission or reduction further than the covenants of the lease itself set forth.

The form of the Tender to be as follows: I hereby offer for the Canteen in the Cavalry Barracks at Exeter, from the present time to the 29th of September 1833, the rent of ten pounds, per annum, for the House as a Dwelling, and the further rent of — per month, for every ten non-commissioned officers and private soldiers who may occupy the Barracks during that period, and propose Mr — of —, and Mr — of — as my sureties for the sums.

The rent of the Canteen as a Dwelling is to be proposed at the sum above stated, therefore the biddings will be upon what is offered for every ten men occupying the Barracks. This number will be ascertained from the Barrack Master's Monthly Returns, which are made up on the 1st day of every month, and no changes in the occupations of the Barrack which may take place in the progress of the month, either for or against the tenant, will be taken into account. No less number than ten will be charged against the tenant, nor will any odd number be calculated; thus if the Barracks should be occupied by 148 men on the first day of the month, only 140 will be calculated for that month. The bidders are also desired to introduce no fractional parts of a penny in their offers as they will not be noticed; nor will any Tenders be noticed except such as are strictly according to the above form.

*Trewman's Exeter Flying Post* 10.7.1861 8b**WAR DEPARTMENT CONTRACTS****TO BUILDERS AND CONTRACTORS**

TENDERS are required for erecting a PENSIONERS' ESTABLISHMENT, at the Cavalry Barracks, at Exeter.

Parties desirous of Tendering for this work may see the plans, specifications, and letter of tender at this office up to 17th inst.

The Tender to be addressed, under cover, to the Director-General of Contracts, War-office, Pall-Mall, London, SW.

The Secretary of State does not bind himself to accept the lowest or any tender.

Royal Engineer Office, Exeter, 1st July, 1861

## ACCOUNTS OF THE 1868 FIRE

*The Western Times* 24.11. 1868 3d

### GREAT FIRE AT EXETER BARRACKS

There was great excitement and alarm in Exeter on Sunday afternoon. Lurid flames shooting high into the air, from the barracks, caused many persons, notwithstanding the inclement weather, to make their way there. Arrived at the entrance, however, they were met by soldiers with fixed bayonets, who refused them admittance. It could be plainly seen that a fierce fire was raging within, and this made people the more eager to learn the extent of it. Many went to Northernhay, where they had a commanding view of the conflagration. Others went all round the barracks to try to effect an entrance, but high walls, with broken bottles on the top, shut them out, and the fire too from their view. Every available prominence was then taken possession of, and the sight that met their gaze was truly appalling. The whole of the left wing of the barracks was in one mass of flames from end to end, and the strong south-west wind was driving the flames along with great fury, threatening destruction far and near. Presently the roof for the whole length of the building fell in, exposing to view the massive pointed arches, which supported the roof – nine in number – and giving the building the appearance of an ancient ruined abbey. All the engines in the city had by this time arrived, and were actively at work. ‘Chingy’ Dymond was one of the foremost helpers, and was pushing an engine in, when a glistening bayonet was presented at him. ‘Hold on mate’, said Dymond ‘I am going in to work the engine’. Dymond says upon this he received a thrust in the neck with the bayonet, but it is probable that in his eagerness to get the engine into the barrack-yard, he forced himself upon the point of the bayonet and received a slight wound in the neck. He had a narrow escape. Upon this the soldiers were disarmed, and the civilians being now on an equality with them, many made the attempt and succeeded in forcing their way into the yard. By this time nothing but the bare walls of the left wing of the barracks were left. Still water was poured on the burning material, and ever and anon could be heard loud reports, which the soldiers said were ball cartridges left in the pouches. Louder and more frequent reports at the south end of the building caused some alarm, and the fire brigade were warned of the danger. Like true salamanders they could stand any amount of fire, but not being invulnerable to powder and shot they discretely retreated. By six o’clock the fire had burnt itself out. It commenced about half past two. The accommodation for about two hundred men and horses was destroyed, and damage to the extent of several thousand pounds done, a large quantity of stores being consumed, one chest of arms, the soldiers’ clothes, &c. The origin of the fire is unknown. It was seen to break out from a sky-light near the cooking house, and the supposition is that it originated in the chimney of the kitchen.

*Trewman’s Exeter Flying Post* 25.11.1868 5e

The Higher or Cavalry Barracks, in this city, was the scene of a fire on Sunday afternoon. Of late years the Barracks have seldom been tenanted, but at the present time three companies of the Third Buffs are therein located. The Barracks consist of a east and west wing, and the officers quarters occupy a separate space, ranging from east to west. The fire was discovered in the rooms over the cooking house in the centre of the east wing. The most active measures were at once taken to extinguish the fire; but, aided by a strong breeze, the flames could not be subdued till the east wing was completely destroyed. Such was the rapidity of the flames that a quantity of clothing and stores and ammunition were compelled to be abandoned. The West of England and other fire engines were speedily at the barracks; but the firemen were unable to stem the flames.

## ACCOUNT OF THE 1879 FIRE

*Trewman’s Exeter Flying Post* 31.12.1879 7b

### FIRE AT THE HIGHER BARRACKS

Between three and four o’clock on Sunday morning a fire broke out in one of the rooms occupied by Quartermaster Atkins at the Higher Barracks, and burned with such ferocity that in a very short time the whole block of buildings known as the officers quarters was completely gutted. The building is the one which bears the Royal Arms, and stands at the higher end of the Barrack yard, with its front towards the gate. The fire was first discovered by a little boy, son of Quartermaster Atkins, who was awakened by the noise which the fall of a ceiling caused, and he at once gave an alarm. Fortunately, about the same time, one of the sentries caught sight of the flames, and promptly communicated with the sergeant-major in charge of the guard. A bugler was then aroused and the alarm sounded, the result being that in a few minutes the whole of the men in barracks were ready for duty. Colonel Drewe, the officer in command of the depot, was also very quickly on the spot and at once took the direction of affairs. The safety of the inmates of the Quartermaster’s apartments was first attended to. The Quartermaster, who had been confined to his bed for some days with an attack of pleurisy, was removed in the bedding, it being impossible to dress him. His wife and the other members of his family had only time to slip on a garment or two and make a hurried exit before the whole of the interior was filled with flames. The other officers in the building were Captain A. Vaughan, Lieutenant Braithwaite, and Lieutenant Yorke. The fire burned with such fury that the Quartermaster’s family saved nothing but what they wore, and the other occupants of the block were also losers to a very considerable extent. Fortunately the mess plate and the plate belonging to the First Devon Militia were secured in time and removed to a place of safety. Meanwhile the barrack engine had been got out, and the men fixed their hose to the two new and powerful hydrants which have recently been provided as a safeguard against fire, but when all was in working order it was found that the water had been turned off. This caused further delay and before the water could be laid on, the flames had destroyed the roof and the fire raged with uncontrollable fury. During this time the barrack engine had been run down to the well, and with the supply of water thus obtained the men worked vigorously until the arrival of assistance from the Topsham Barracks and the city. The West of England engine was the first to arrive, and under the command of Captain Honey, was quickly got to work. The Sun engine, under the superintendence of Mr Knill, and an engine from the Norwich office were very little behind, and they were followed in a few minutes by the engine from the Topsham Barracks. Their united efforts were

however insufficient to check or control the fire, which only died down when the fuel was exhausted. By eight o'clock the fire was well under control, but the engines continued to work until after ten o'clock. Colonel Drewe stated that if there had been a good supply of water at the first he believes much of the destruction might have been averted, but he speaks very highly of the prompt and energetic services rendered by the city brigades. The few soldiers in barracks worked well under the instructions of Colonel Drewe and the officers of the depot. Captain Whinfield, of the Royal Engineers, and the officers of the Royal Horse Artillery were also present and did their utmost to keep the flames from spreading to the wings. General Smythe, who commands the district, arrived in the afternoon from Plymouth, and with Colonel Drewe inspected the ruins. The damage to the buildings is estimated at about £2,000; and the loss of the officers by destruction of their furniture, &c., is calculated at about £500. Quartermaster Atkins had only lately refurnished his quarters at considerable expense and he is wholly uninsured. Nothing is known as to the cause of the fire, but it is probable that it arose from the ignition of a beam which had been let into a chimney, as close to where the fire broke out there is now to be seen in the chimney-stack an aperture such as would be left by the burning out of a beam so built in.

#### ACKNOWLEDGEMENTS

This report was commissioned by Barratt Bristol and administered for Exeter Archaeology by P.J. Weddell, J. Allan, M. Watts and the late C. G. Henderson. The recording of the buildings was undertaken by R.W. Parker, G. Young, N. Goodwin, S. Blackmore and the late A. Sage. The groundworks were observed by M. Dyer, J. Bell, N. Goodwin R. Woodgate and the late A. Sage. The illustrations were prepared by T. Ives, J. Read and R.W. Parker and the documentary research by A.G. Collings. We are grateful for the assistance of the Barratt Bristol site staff, particularly C. Westall, S. Moore and J. Atkinson and also of J. Hall, the Senior Security Officer. Thanks are also due to A. Saunders and S. Pugh of Ford Gilpin Riley Architects and to Nationwide Surveys, on whose drawings many of the phased drawings in this report are based. We are particularly grateful to Ian Jubb for permission to reproduce two of his historic postcards, to the staff of the Westcountry Studies Library for the use of one of the photographs in their collection and to English Heritage for the use of illustrations by Sue Goodman from James Douet's superb study of British barracks. The work of John R. Breihan on 18th- and early 19th-century barracks in Devon is also gratefully acknowledged. Thanks are also due to A.R. Pye, Dr J. Cox, S.R. Blaylock, P. Boyce and D. Perrin for assistance, encouragement and advice.

#### SOURCES CONSULTED

##### Unpublished sources

###### *DRO Devon Record Office*

Undated early 19th-century map (c.1820) of the lands of John Gould Esq. (DRO 59/7/3/10).

###### *PRO Public Record Office, Kew*

Map Room MPH 338, 1869 plans of 1869 and 1886.

Works 43/46 'Exeter Brigade Depot. Officers' Quarters and Mess Establishment (Rebuilding)'.

###### *WCSL Westcountry Studies Library*

1851 Census.

Photograph of the Brixham Lifeboat at Higher Barracks in c. 1866 (P&D 6684).

Military History Cuttings File.

##### Printed sources

Bealer, A. W. 1976 *The Art of Blacksmithing* (New York).

Breihan, J. R. 1990 'Army Barracks in Devon during the French Revolutionary and Napoleonic Wars', *Rep. Trans. Devonshire Ass.* **122** 133-58.

D&EG Devon and Exeter Gazette 10.1.1930.

Douet, J. 1998 *British Barracks 1600-1914, Their Architecture and Role in Society* (Norwich).

EA Exeter Archaeology 1998 *An Archaeological Assessment of the Higher Barracks, Howell Road, Exeter*, Exeter Archaeol. Rep. **98.09**.

EFP Exeter Flying Post, 12.4.1827 4e.

– 10.7.1861 8b.

– 25.11.1868 5e.

– 31.12.1879 7b.

Harvey, H. 1984 *Discovering Exeter: Pennsylvania*, Exeter Civic Society, Discovering Exeter Series, **4** (Exeter).

Hoskins, W.G. 1960 *Two Thousand Years in Exeter* (Exeter).

House of Commons Sessional Papers.

1803-4 Vol. VII, 141, 296.  
 1822 Vol. XIX, 217.  
 1867 Vol. XXXXI 389.

Jenkins, A. 1806 *History and Description of the City of Exeter* (Exeter).

Parker, R.W. & Young, G. 1999 *Archaeological Recording of Nine WWII Huts at Higher Barracks, Exeter*  
 Exeter Archaeol. Rep. **99.08**.

*People Talking* (ed. J. Lloyd) 1976 & 7, The Fountain Community Association Occasional Series, Vols **5 & 7**.

Shapter, Dr. T. 1849 *The History of the Cholera in Exeter* (London).

WT Western Times, 24.11.1868, 3d.

### Maps consulted

Coldridge, J. 1819 MS 1:800 MS map of Exeter (DRO).

Hayman, J. 1805 *Exeter*. Map engraved by J. Roper under the direction of J. Britton for *The Beauties of England and Wales*.

OS Ordnance Survey Maps.

1:500 Sheets 80.6.2, 80.6.7, 80.6.8, surveyed in 1876.

1500 Sheets 80.6.2, 80.6.7, 80.6.8, 1891.

1:2500 Sheet 80.6, 1905.

1:2500 Sheet 80. 6, 1932.

Wood. J. 1840 *Plan of Exeter From Actual Survey*.

### Survey drawings

*DoE Area Works Office, Exeter*.

Survey drawings dated 1977.

‘Teleprocessing, VDU outlets and power supply layout, Higher Barracks, Exeter’. No. SWEX/E305/77,  
 East Wing. 15.12.77.

‘Teleprocessing, VDU outlets and power supply layout, Higher Barracks, Exeter’. No. SWEX/E306/77.  
 Headquarters Block and West Wing. 15.12.77.

Exeter, Higher Barracks, Plan as existing of Old Hospital Block. No. A/189/77. June 1977.

### *Ford Gilpin Riley Architects*

Survey drawings nos:

4:98:111 Plans of Headquarters Building.

4:98:112 Plans of Headquarters Building.

4:98:113 Elevations of Headquarters Building.

4:98:119 Plans of East Block.

4:98:120 Elevations of East Block.

### *Nationwide Surveys*

Survey drawings BAT 9701:

Plans of Hospital.

Plans of West Block.

### *Wessex Reserve Forces and Cadets Association*.

Undated drawing c.1945 entitled ‘Town Barracks, Exeter. Skeleton Record Plan’ DFW/109/35.

### Other sources

#### *Exeter Archaeology Archive*

RAF aerial reconnaissance photographs, 1945.

RAF Sortie No. 106G/UK 865 Part V (30/09/45) F/12 sheet 6450.

RAF Sortie No. 106G/UK 865 Part V (30/09/45) F/12 sheet 6449.

Research by A. G. Collings (St David’s Parish registers).

#### *Ian Jubb’s Exeter Collection*

Postcard c.1920 showing the main gate of Higher Barracks, Exeter.

Postcard c.1910 showing the western ranges of the Artillery Barracks. Topsham road, Exeter (now demolished).

