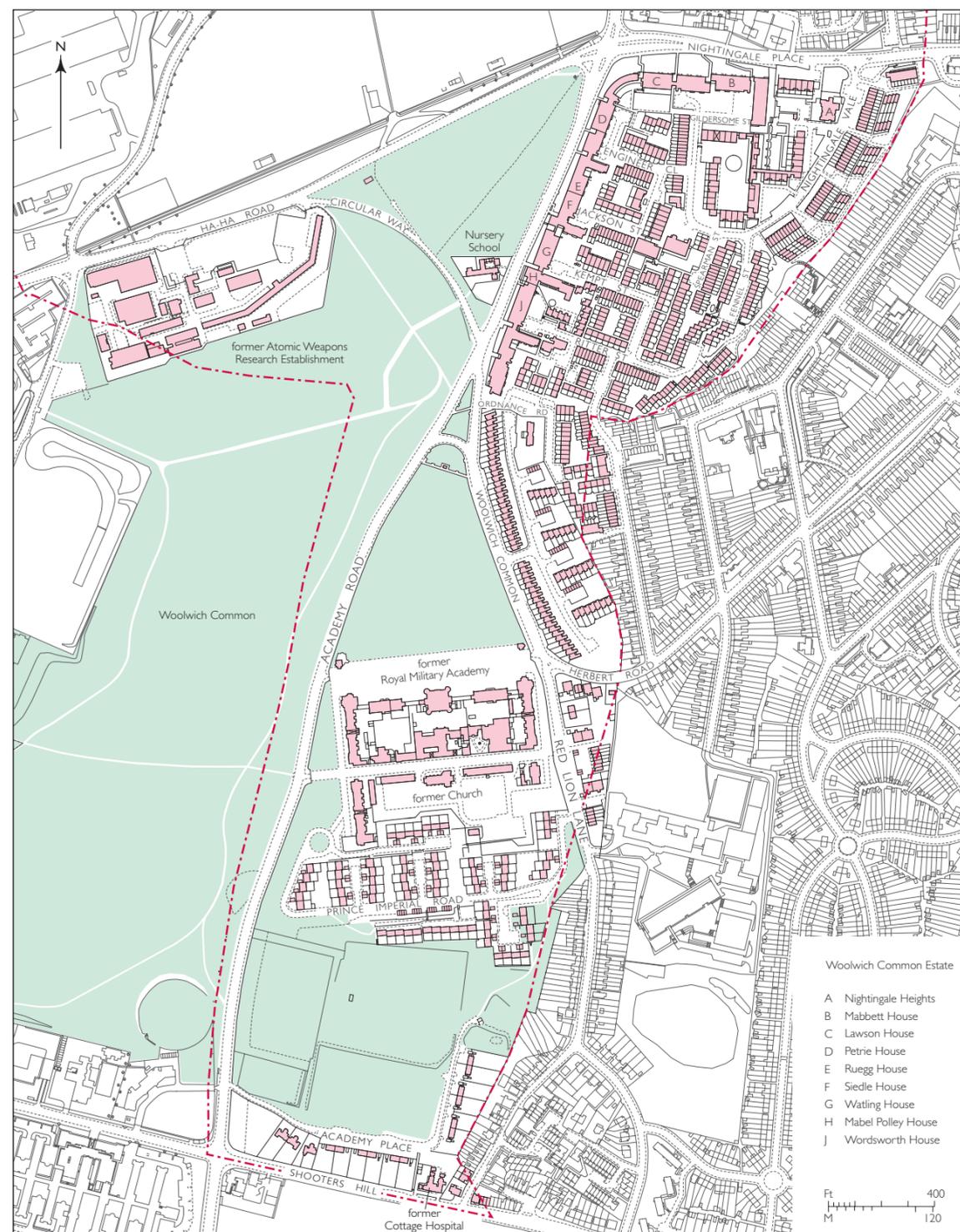


Woolwich Common and Royal Military Academy Areas



436. Woolwich Common and Royal Military Academy areas, 2007

The southern parts of Woolwich, the narrowing point of the isosceles triangle that shapes the parish, stretch across Woolwich Common (Ill. 436). This open ground has a distinct character, apart from the rest of the parish, bleak but, thanks to its framing buildings, stately – part blasted heath, part great park (Ill. 437). The southernmost parish boundary is formed by Shooters Hill, a section of Watling Street, the ancient road between London and Dover. From here the common, which extends westwards without break into Charlton, slopes gently down as far north as Ha-Ha Road. The dominant architectural presence is the former Royal Military Academy on what was a south-eastern section of the common. This was Woolwich's third major Board of Ordnance buildings complex, an establishment for the training of officers that was grandly rehoused here at the beginning of the nineteenth century in a move up from the Warren. By this time there were already a few houses strung along the common's east side. These multiplied in number through the later nineteenth century to fill the area back to Nightingale Vale, where a brook formed the eastern parish boundary. In the 1970s this built-up area was redeveloped as the Woolwich Common Estate. Elsewhere the parish boundaries, which have varied slightly over time, seem curiously determined. To the south-east zigzagging lines avoid following an early road, Red Lion Lane, which is then crossed to extend a small toe along Shooters Hill. To the west an indistinct dog-leg across the common approximates to the line of a lost watercourse that ran into the ponds in Repository Woods and separated Woolwich from Charlton.

Woolwich Common and its acquisition by the Board of Ordnance

Until the nineteenth century and through ancient custom Woolwich Common was used, as its name implies, by local inhabitants for herbage (pasture for grazing animals), turbarry (turf-cutting for fuel) and estovers (the collection of wood and furze for building or fuel), especially by the poor of Woolwich, to whom furze (gorse) was reserved. It may have been heath, or waste, because it was agriculturally poor. Ownership of these roughly eighty acres rested with the Crown, which had long held the manor of Eltham, to which land in Woolwich was loosely deemed an appurtenance (see pages 4–6). From 1663 the Crown's tenant of the Eltham manor was Sir John Shaw, who had bankrolled the royalist cause during the Commonwealth. Once granted the manor, Shaw built himself a stylish mansion,

Eltham Lodge, and gained a baronetcy. Unlike most of the rest of Woolwich, the common, save its northernmost part, and lands to its east were never part of what became the Bowater estate in the 1690s (Ill. 3). The Woolwich Vestry vigorously defended customary rights on the common against enclosure when around 1760 two houses were built on the common on the west side of the road linking Woolwich and Shooters Hill. It succeeded in stopping another Sir John Shaw (the 4th baronet) from granting any more building leases.¹

Routes along the sides of the common, from Charlton and bifurcating towards Shooters Hill along the latter-day lines of Academy Road and Red Lion Lane (named after the Red Lion public house on Shooters Hill in Plumstead parish), would have seen some increase in traffic after the Board of Ordnance improved Cholic Lane in 1765–6. The Board was using the common for testing ordnance by the 1720s and for artillery practice by 1773. In that year it acquired property, which included the northernmost section of the common, for the building of the Royal Artillery Barracks. This was enclosed as Barrack Field in the late 1770s behind a roadside ha-ha (see page 342). Control of the common was beginning to slip away from the Vestry.²

The common itself continued to be used for artillery practice and experiments – live ordnance made holes in the ground and endangered cows. Use for military reviews and manoeuvres may have begun in 1788 with a parade said to have been ordered by George III. By late 1801 the Board of Ordnance had decided to take full control of the common. John Pitt, the Earl of Chatham, had been appointed Master-General, and major wartime expansions of the Board's presence in Woolwich were anticipated. The fifth Sir John Shaw, whose estate was due to revert to the Crown in 1810, gave the Board a lease of all the land. Simultaneously, Bowater lands to the north-west were acquired, permitting Barrack Field to be enlarged westwards in 1802 (see pages 342–3). Parishioners objected to what were seen as encroachments, but in early 1803 Joseph Meads Madkins, Bowater's attorney and a vestryman, tried to persuade the parish to sell the Board its rights to herbage and turbarry for £600. No agreement was reached. At the same time, and against a backdrop of invasion fears that led the Duke of York to recommend the building of fortifications on Shooters Hill, the Crown's freehold of the common was vested in the Board by Act of Parliament; Charlton Common was also acquired. In what amounted to enclosure, the rights of Woolwich parishioners to herbage and turbarry were denied, as was access for the extraction of gravel for roads. Under the terms of the Board's



437. Woolwich Common and the Royal Military Academy from the south in 2011

Acts, Commissioners (Board officers, most of whom were locally resident – Vaughan Lloyd, Thomas Blomefield, George Hayter, John Geast and James Murray Hadden) were appointed and a jury of local inhabitants empanelled in 1804 to settle compensation claims. After much deliberation they awarded the parish of Woolwich £3,000 in compensation for all its rights to the eighty-acre common, though only gravel extraction was explicitly mentioned. At the same time, they granted £8,770 for the pasture rights of the 102-acre Charlton Common to its former freeholders, Lady Jane Wilson and Sir Thomas Maryon Wilson. Thus was the ground laid for more than a century of acrimonious dispute whereby the military asserted complete ownership of Woolwich Common, while the inhabitants of Woolwich claimed rights of access based in custom. By 1808, when Pitt affirmed the importance of acquiring Woolwich lands in relation to the desirability of fortifying London, the Royal Military Academy had been built on the common, Barrack Field extended to the south-east, cottages cleared and gravel pits levelled, leaving open ground more or less as it has remained. The Board, finally, purchased the common from the Crown in 1812.³

Eighteenth-century houses along the common

The only buildings in the area before 1800 lay as a sparse fringe on the common's eastern flank (Ill. 7), an isolated settlement that was identified apart from the rest of the parish in ratebooks as simply 'on the Common'. Further south and in Plumstead parish, comparably scattered but more substantial roadside buildings stood on Shooters Hill.

By the 1730s there were about twenty modest dwellings along the common, all but three of low rateable value and probably no more than single-storey timber cottages built on land that was waste. Landholders in the vicinity included the Clothworkers' Company, which in 1677 had acquired via Mary Hobby, the widow and executor of John Hobby who left the company a charitable bequest, a triangular field south of Ditchwater Lane (later Nightingale Place) around what would become Nightingale Vale (Ill. 3). Through the eighteenth century the Hardin(g) family tenanted this from a farmstead on the east side of Red Lion Lane in Plumstead. Samuel Hardin's use of clay beds in that area for brickmaking followed on from similar local use by the Lidgbird family, who had long held property further east in Plumstead.⁴



438. View across Woolwich Common from the west, drawing of c.1792 by John Charnock. From the Royal Artillery Barracks and shipwrights' windmill (left) to Severndroog Castle (far right), with Charles Hutton's Cube House looming large towards the right

The place was remote; in 1763 seven of the thirty-some cottages 'on the Common' were empty and some clearance may have ensued. But the attractions of undulating terrain and the proximity of a major road with improved links to Woolwich began to draw attention. In 1767 speculators, including 'several eminent surveyors', envisaged a town on Shooters Hill laid out as an 'elegant Circus' with radiating streets around a basin of water with an island for a coffee-house and assembly room.⁵ This idea, with its hilltop lake, went nowhere. But in 1774, once the Royal Artillery Barracks had been projected for a site facing the common and after the death of Benjamin James, the principal landlord of the cottages, building plots on the common's east side just south of the junction with Ditchwater Lane were sold off. John Groves, the Board's master bricklayer who was building the barracks, acquired these, and by 1780 a large house near the corner and an adjacent terrace of five lesser but still good-sized houses (later Rochester Place or 4–8 Woolwich Common) had been built, possibly using plans for field officers' houses that William Latimer had prepared in 1778 (see page 145). The wider area's picturesque possibilities were exploited when Severndroog Castle was built on the Eltham side of Shooters Hill in 1784, and villa-like houses went up on the north side of Ditchwater Lane, as the locale did become a desirable residence for military officers (see pages 414–15). Perhaps, though, it was not all that desirable. In the late 1780s what became the Barrack Tavern was added at the south end of the earlier terrace, and the larger corner house was acquired to be a factory for the Polygraphic Society, which printed copies of oil paintings under the supervision of Isaac Jehner. This building was destroyed by fire in 1793. A nearby and short-lived chapel may have been for Methodist worship (Ill. 438).⁶

By this time there was an even larger house at the south end of settlement facing the common. This had been built by Charles Hutton (1737–1823), the son of a Newcastle colliery worker. As a child, Hutton had injured his arm in a street-fight and so been sent to school instead of down the mine. A gifted mathematician, he became a schoolmaster and in 1773, through competitive examination, was

appointed Second Master and Professor of Mathematics at the Royal Military Academy, becoming eminent in his field. For the sake of his health he moved from confined quarters in the Warren to Shooters Hill in 1786. On his daily walks to and from the Warren he spotted some land for sale, ten acres with a house of the 1770s and a long frontage to Woolwich Common (south of where Ritter Street now runs as far as the Herbert Road junction). Income from his mathematical publications gave him the means to buy this property and to set about its development. There was good clay, so he saw to the making of bricks and tiles and a house for himself. Then, around 1792, a large stuccoed villa with giant-order Ionic pilasters and north and south bow windows was built at the south end of the plot. The architect of what came to be called Cube House (it had sides of 36ft/11m) is not known, but given the building's form and the landowner's character, it could have been Hutton himself or his son, George Henry Hutton, an artillery officer and an antiquarian with architectural predilections. Neither, it seems, ever lived in it. Instead, Maj.-Gen. Forbes Macbean, elderly and, as a Fellow of the Royal Society, no doubt well known to Hutton, was resident from 1793 (when he was appointed Colonel-Commandant of the Royal Artillery's Invalid Battalion) until his death in 1800. Meanwhile, in the mid-1790s Hutton continued to exploit his land for profit via speculative development. He started to build two big semi-detached pairs of houses (later 63–66 Woolwich Common) and, further north, a row of six more semi-detached pairs (see below). By 1799 he had 'reared a village', but, 'disgusted with the business by the villainy of the workmen',⁷ left it unfinished. He moved away from the common and Woolwich in 1807 when his health induced him to resign from the Academy.⁸

Royal Military Academy

The still quiet and rural purlieu of Woolwich Common changed dramatically in 1803 when the south-eastern



439. Royal Military Academy, 1803–6, from the north in 1821 in an aquatint by R. W. Lucas and George Hawkins. Also showing the Field Officers' Quarters (later 52–57 Woolwich Common) of c. 1814 (left)

field was chosen for the relocation of the Royal Military Academy. Founded in 1720, relaunched in 1741 and made 'Royal' in 1764, the Academy in the Warren educated future officers of the Board of Ordnance's 'scientific' corps, the artillery and the engineers, for their increasingly technical roles. The history of the Academy's accommodation in the Warren is covered in Chapter 3. The Academy's trainees, at first a disparate group aged from ten to thirty, were brought together as a company of gentlemen cadets to learn gunnery, fortification, mathematics and a little French, the last a privilege for which their pay was reduced. To start with, the cadets lived in lodgings in town, but they quickly gained a reputation for riotousness. Quarters or barracks were built in 1751–2 on the Warren's south side and the cadets were subjected to a more rigorously military lifestyle.⁹

Shortcomings in the educational standards of incoming cadets caused the Academy to split in two in the mid-1760s. In the Lower Academy cadets passed through courses in reading, writing, mathematics, drawing, Latin and French. If successful in examinations, they transferred to the Upper Academy where the military subjects were taught, along with the gentlemanly skills of dancing and fencing. As standards improved, numbers increased, leading to overcrowding in the barracks, to which the cadets were confined during their free time. The barracks housed up to eight cadets in each room, with poor sanitation and in what was thought an unhealthy situation exposed to harsh winds across malarial marshes. There were frequent illnesses and detrimentally lengthy absences. Further, proximity to the town was a distraction, as were the people who passed in and out of the Warren, from which the cadets could not escape. The possibility of moving the Academy to Wricklemarsh, Sir Gregory Page's house on Blackheath, was considered in Parliament in 1783, but the pressures of wartime expenditure forestalled this.¹⁰

The possibility of building anew was also raised in 1783, with the 'Idea of placing the Cadets upon the Hill' in a new building designed by James Wyatt, appointed Architect of the Ordnance the previous year.¹¹ Given the reluctance to spend on the cheaper option of Wricklemarsh, it is no surprise that this option was also not pursued. However, the thought recurred, and in 1791 Wyatt prepared three designs for a new Academy. The nature of this unexecuted scheme is not known.¹²

By the turn of the century the problems of the Warren site had become insurmountable. There was growing wartime pressure for more officers, rising numbers of East India Company cadets were also being trained at the Academy, and in 1801 British and Irish military establishments merged obliging the Academy to accommodate even more cadets, as many as 180 by 1803. There was now no conveniently located mansion for sale and, with money flowing more freely under Pitt and large tracts of Woolwich land being acquired, a decision to build was taken. In April 1803 Capt. George Hayter, CRE, was directed with Pitt's approval to clear the ground that Lt. Gen. Robert Morse had 'decided upon for erecting a New Academy etc'.¹³ Morse, the Board's first Inspector-General of Fortifications, had been promoted away from Woolwich, and this decision was probably taken with his close associate, Col. William Twiss, Commanding Royal Engineer of the Southern District and the Academy's Lieutenant-Governor (its senior officer), who lived in the Warren. Next in the Academy's hierarchy under Twiss were Isaac Landmann, Professor of Fortification (also housed in the Warren), and Charles Hutton, Professor of Mathematics.

The chosen site was not 'upon the Hill' but at the foot of Shooters Hill, on the south-east part of the newly enclosed common, across a road from Hutton's land. Wyatt provided new designs in May and June 1803 and building work began that summer, with the foundations aligned



440. Royal Military Academy from the north-east in 2005

parallel to and facing the Royal Artillery Barracks. Hayter oversaw construction by the Royal Military Artificers, the locally based direct-labour force of some 400 artisans and labourers, with Charles Weaver as his Chief Clerk of Works and Thomas Weaver as Principal Overseer. Stock bricks were probably supplied from local fields by Samuel Hardin, possibly also from pits in the field directly in front of the buildings. From June 1804 Wyatt was assisted by his nephew, Lewis Wyatt. It was the latter who in late 1805, when the buildings were being fitted out, saw that painting work for which the artificers were thought not competent was contracted to a Mr Hutchinson. Francis Bernasconi, a Wyatt favourite and the leading purveyor of Gothic stucco work (engaged at this time at Windsor Castle), was contracted to supply 'composition', probably using James Parker's patent Roman cement. A ha-ha enclosed the establishment's sides and a front lawn. Tripartite Gothic iron gates and railings with openwork piers, made in 1809 by Thomas & Rudge, were placed to centre front where an approach road crossed the ha-ha.¹⁴

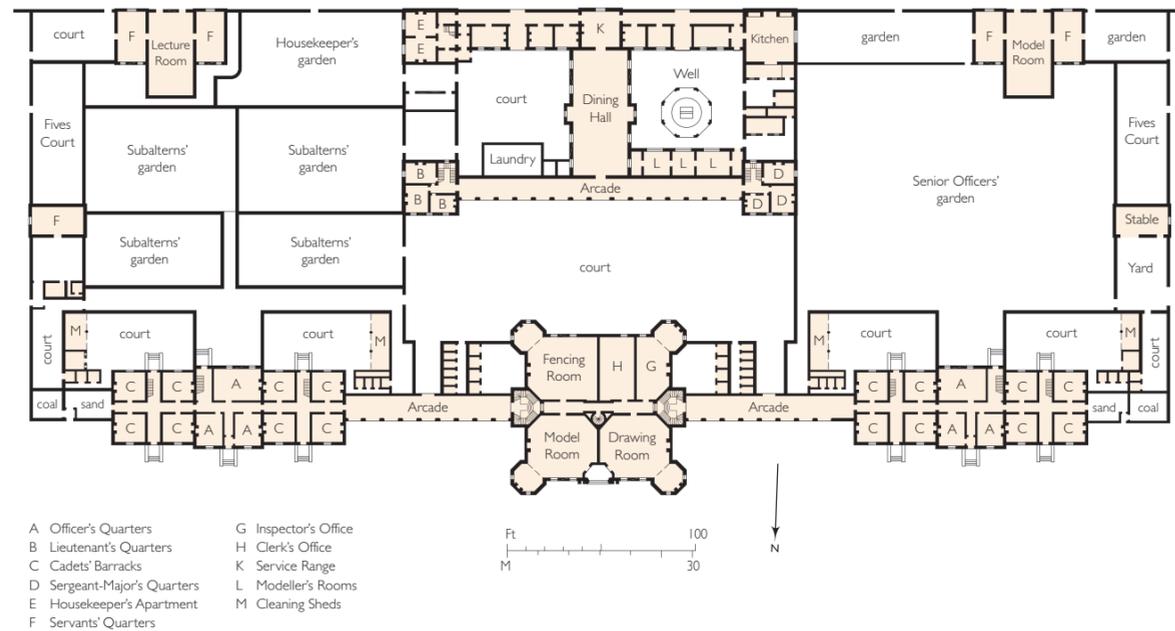
The Academy's four eldest classes (128 cadets) and resident officers (probably seventeen in number) moved to the common in August 1806. The sixty youngest cadets, another two classes, stayed at what had become the Royal Arsenal; another sixty were sent to the Royal Military College at Marlow. This separation of the older and

younger cadets was intentional, not a matter of inadequate provision.¹⁵

Architecture of the Academy

The Royal Military Academy had limited precedents. Ange-Jacques Gabriel's *École Militaire* in Paris of 1751–3, an academy for training 500 young men, was a long classical range, with opposed colonnades behind its main block. This layout was not taken up in comparable establishments in England. For large schools there was, rather, a preference for long staccato façades, linked blocks with a central focus; this derived from neo-Palladian country-house design, as later followed and adapted by Wyatt among others. Most pertinent and recent was the Royal Military Asylum at Chelsea, built for the army in 1801–3 to designs by John Sanders as a central block with short arcade links to dormitory wings. Wyatt had himself adopted a similar, though longer and more coolly Greek Doric scheme for the Royal Military College at Sandhurst, which he had designed in 1801, though it was not built until 1808–12, and then under Sanders.

What was novel at the Academy in Woolwich was the use of a Tudor-Gothic style, even though that style did have long association with places of learning (Ils 439, 440). The barracks on the other side of the common were



entirely classical, but Wyatt's choice of Gothic seems to reflect both institutional links and the *genius loci*. The central and largest block is most strikingly characterized by its large octagonal ogee-topped corner towers, an echo of the White Tower at the Tower of London, the Board of Ordnance's headquarters at the time, as well, possibly, as a recollection of the hexagonal Tudor look-out tower next to the original Academy building (Ill. 129), which Hutton and Landmann would have recalled and which Wyatt saw before it came down in 1786. Passing thought may also have been given to the Royal Observatory on the hill at Greenwich a few miles away, another turreted building dedicated to applied science. Precedents aside, an embattled Tudor-Gothic profile would have seemed particularly suitable for the Academy's picturesque rural setting against the wooded backdrop of Shooters Hill, which was itself graced by Severndroog Castle, a triangular tower with hexagonal turrets. Wyatt applied Gothic motifs sparsely to the orderly stock-brick front to create an austere yet light façade that has great scenographic impact – as Baron Charles Dupin noted: 'Built on the slope of a hill, and in rear of an extensive esplanade, it presents one of the most beautiful points of view which the environs of London, and the banks of the Thames, can offer.'¹⁶

The massiveness of the central block's corner towers generates the impression of a Tudor gatehouse, an effect reinforced by the shallow central entrance arch, to which

441 and 442. Royal Military Academy, ground plan in 1815 (above), with west staircase in centre block in 2006 (below)



443. Royal Military Academy, a cadets' barrack room in a lithograph of 1851

a road originally led. Wyatt was also able to draw on very different precedents in his own oeuvre – his unbuilt design for a Gothic cottage at Little Frogmore for Queen Charlotte was a smaller version of the central tower, with polygonal corner turrets and a layout with octagonal rooms. The window tracery recalls that he used at Windsor Castle. The larger window surrounds are of dressed stone, but the more plastic work of the arcades and the smaller turrets is of Roman-cement render. Bernasconi stuccoed the arcade interiors. Mouldings for the ribbed vaults were probably supplied by Wyatt from medieval prototypes such as Hereford Cathedral.¹⁷ A simple retaining wall enclosed the courtyards on the other three sides as if a curtain wall. With the ha-ha on the fourth side, the Academy was defended from intruders, and the wider world from the cadets.

The layout within was simple, logical and in many ways economical – a central block for large semi-octagonal classrooms, libraries and offices, symmetrically flanked by arcades to outer barrack blocks, with service buildings separated to the rear, leaving large amounts of space for exercise and fresh air in open courts and gardens (Ill. 441). The centre block was given an east-west spine corridor with, at either end, staircases of an imperial type, plain rectilinear versions of the variant used by William Chambers in the Navy Stair at Somerset House and by S. P. Cockerell at Admiralty House, providing paired lower outer flights to a landing from which single upper flights sail across the stairwells (Ill. 442). The barrack wings kept reversed that of the Royal Artillery Barracks, perhaps

for the sake of greater separation. Here the taller, three-storey, central sections housed officers, the outer two-storey blocks the cadets, four to a room in thirty-two rooms (Ill. 443).

Directly behind the centre block there was a large dining-hall at the centre of a subsidiary rectangular complex (Ills 444, 448, 453). This room was big enough to evoke a great or college hall, an impression reinforced by its pseudo-hammerbeam roof trusses (replaced with a flat ceiling in 1936 on account of dry rot).¹⁸ Three-storey embattled pavilions stood at the corners of the rectangle, those to the north, to accommodate officers, were linked by another covered arcade. The south-eastern contained more accommodation, and the south-western a kitchen; between there ran a range of service rooms into which there were two stone-faced Tudor-arched site entrances. Low walls and minor buildings connected the pavilions north and south to enclose two more courtyards, that to the west with a well in an octagonal building. Within the further east and west perimeters there were open fives or rackets courts. Along the south wall two outer pairs of smaller pavilions provided servants quarters flanking gateways, as if gatehouses.

Alteration and adaptation to 1850

The East India Company's cadets had departed to Addiscombe College in 1810 and after the Napoleonic Wars numbers at the Academy dropped sharply as the education of officers was generally slighted. Cadets had to wait longer for their commissions, so in 1819 the Duke



444. Royal Military Academy, dining-hall, c.1896

of Wellington established a practical class of around forty young men who had finished the Academy syllabus. This group was accommodated in the Arsenal and the junior cadets were moved to the common, housed separately to minimize bullying – new arrivals at the Academy, lastingly known among cadets as ‘The Shop’, were ‘neuxes’, later corrupted to ‘snooks’ then ‘snookers’, from which the name of the game is said to derive. As numbers fell to an all-time low of fifty-eight in 1826, the practical class moved to the common. But the housing of all the cadets on the common did not last, as demands on the military began again to increase. In 1839 the establishment was set at 100, a year later the practical class returned to the Arsenal and by 1846 the complement stood at 177.

Through these decades the Academy continued to harbour some teachers of outstanding reputation. Two mathematical protégés of Hutton’s, both attached to the Academy from its last years in the Warren into the 1840s,

were Olinthus Gregory, who accurately determined the velocity of sound in 1823, and Peter Barlow, the father of eminent engineers whose experimental work overlapped with that of Michael Faraday, himself a lecturer on chemistry at the Academy in the 1830s and 1840s. Henry Young Darracott Scott, the inventor of selenitic cement who went on to oversee the building of the Royal Albert Hall and other works in South Kensington, was an instructor from 1848. Such pre-eminence declined in later decades. Numerous cadets, of course, went on to acquire status, even glory, in later life, mainly in the army but also in other fields. Of particular local note was Charles George Gordon, born up the road in 1833 and from 1848 resident at the Academy, where the future model Christian hero gained a reputation for bullying.¹⁹

As at any large new institution, it had soon proved necessary to alter the facilities. In 1811 it was decided that a ‘chemical lecture room’ and an instrument and model



445. Royal Military Academy, from the north, c.1862, showing the newly built outer wings

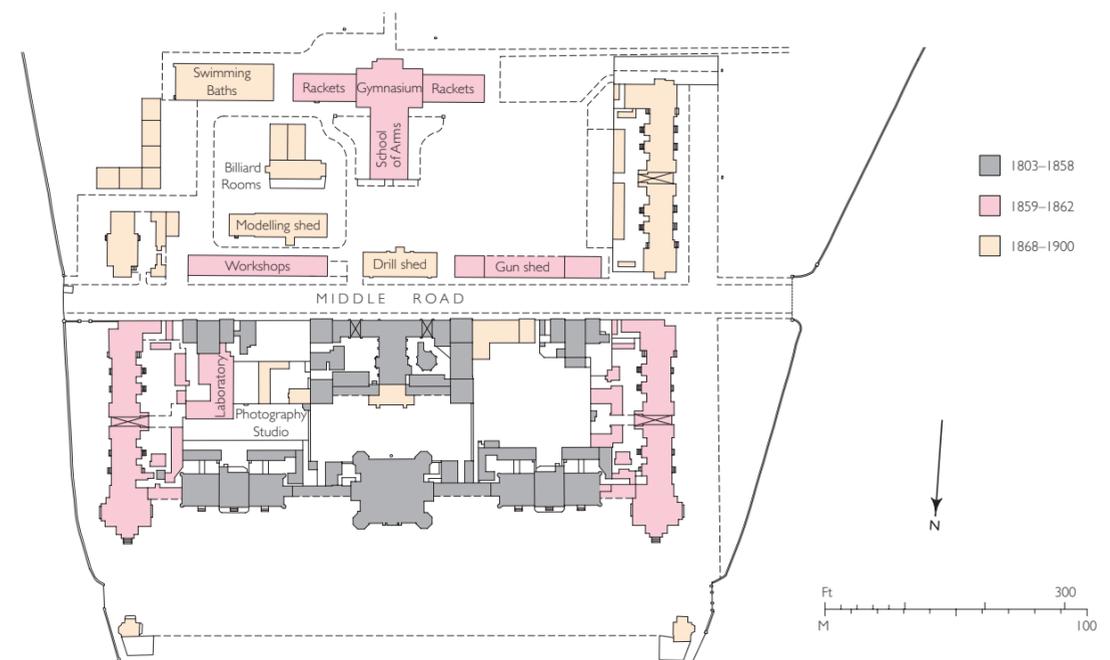
room were needed. It was suggested that these could be accommodated in round towers on either side of the main façade, but James Wyatt and then, shortly after his uncle’s death in September 1813, Lewis Wyatt objected that this would ‘injure the effect of the present Front’.²⁰ The rooms were instead accommodated, under the latter’s supervision, in the spaces behind the two south outer gateways in 1814–15 (Ills 441, 448). The lantern-lit model-room roof failed and in 1819 two cast-iron columns had to be inserted.²¹

Another aspect of the Academy that was found wanting was the heating in the main block. There was a single fire-place per room. These were large, with impressive Tudor-Gothic surrounds, but they could not have adequately heated the huge classrooms and libraries. When Charles Sylvester was asked in 1830 to raise the temperature in the first-floor classrooms to 62°F (17°C), the rooms were already heated by stoves, perhaps an original feature – the Wyatts installed stoves elsewhere, as at the Grand Store in the Arsenal. Sylvester’s centralized hot-air system, probably under-floor flues, failed to please, so he returned and tried to improve the situation by enclosing the entrance vestibule in the main façade. The failure of early hot-air heating systems was not unusual. They were almost universally superseded in later decades by pressurized hot-water heating; Burbidge & Healy of Fleet Street installed such a system at the Academy in 1851. This had a boiler

and furnace in a triangular space formed south of the main block’s east–west corridor, opposite the spiral stairs. Ventilators were fitted in ceilings.²² Time-keeping was perhaps another problem – a large clock was erected on the front-range central parapet in 1840. The internal walls of the dining-hall were embellished in 1846 with trophy armour and weaponry brought from the Tower of London. Capt. Frederick Marow Eardley-Wilmot, given command of the cadets in 1847 with instructions to break a culture of bullying and heavy drinking, added flags and raised funds for the insertion in 1848–9 of two painted-glass windows by William Bell Scott, Alice Boyd and David Scott. Another addition of the time was a lodge of 1847, placed on the east side of the main gate and the road across the ha-ha, its impact on the long view minimized by ivy that was allowed to cover it entirely (Ill. 445).²³

Enlargements of 1859–62

The status of cadets had begun to alter in 1831 with the introduction of fees. This change from a position as a junior but full member of the military to that of a pay-ing student meant that parents’ expectations for their sons’ standards of living gained weight, and it was suggested in 1847 that senior cadets should have their own rooms. In 1849 the cadets ceased to be a company so no longer featured on the muster roll. New involvement in



446. Royal Military Academy, ground plan showing enlargements to 1900

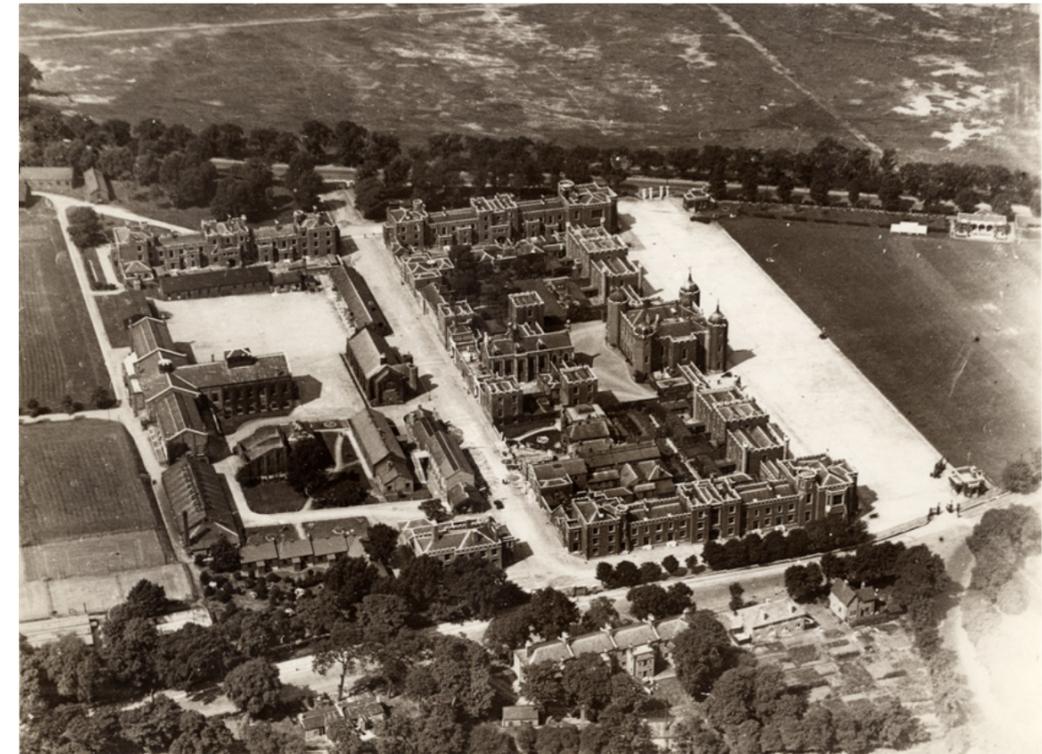


447. Royal Military Academy, west wing of 1859–62 from the south-west in 2006

large-scale warfare and, in particular, the spectacular failures of the Crimean War and the Indian Mutiny were powerful catalysts for a spirit of reappraisal in military training. In 1856, after the Crimean War and the abolition of the Board of Ordnance, there came a sanitary report and the appointment of a commission made up of Lt. Col. William Yolland, RE, Lt. Col. William James Smythe, RA, and William Charles Lake, an Oxford don and educational reformer, to consider the training of the army's scientific corps. This group not only examined the Academy but also visited its counterparts on the Continent. Its report of 1857 sought to change the cadets' training from a basic juvenile to a specialist education and gave rise to wide-ranging reforms. The minimum entrance age was raised to fifteen, the leaving age to seventeen, and an entrance exam was introduced. The commission also commented severely on the inadequate facilities that were deemed a cause of indiscipline. Recommendations included more accommodation and classrooms, to allow the Academy's entire complement to be lastingly housed together on the common, and more recreational facilities for the cadets. The War Office took that much on board and from 1859 to 1862 enlarged the Academy with east and west accommodation and classroom ranges, and, to the south across

what was henceforth known as Middle Road, with sports facilities (Ill. 446). Other desiderata, a chapel, a drill shed and a riding school, were deferred.²⁴

Maj. (Sir) William Francis Drummond Jervis, RE, the Assistant Inspector-General of Fortifications (and a future governor of New Zealand), prepared designs for the new east and west wings. Several versions survive, all broadly similar, each wing providing two large north-end classrooms, forty-six single cadets' rooms with indoor bathrooms and wcs, and south-end officers' quarters. Wyatt's crenellated Tudor-Gothic style was perpetuated, but in red brick with stone dressings (Ills 440, 447, 453). The Royal Engineers' own building force had departed Woolwich, so George Myers was brought in. Even so, Col. John Walpole, CRE, supervised the construction works. Walpole objected to the choice of red brick and briefly halted works in early 1860, but to no avail. Six months later Col. Charles G. Ford succeeded and oversaw completion. The senior cadets of the practical class returned to the main Academy in 1863. The winding up of the East India Company also meant that the last of its Addiscombe cadets were sent to Woolwich from 1861. The enlarged Academy was immediately and again overcrowded.²⁵



448. Royal Military Academy, from the east, c.1925

Jervis's designs grew out of and respected Wyatt's large enclosed quadrilateral. Replicas of Wyatt's open arcades link to the northern classroom blocks, which echo the levels of the centre block. In replacing the east and west perimeter walls Jervis accentuated the site's enclosure by increasing the mass of its boundaries. Punctuation by squat pavilions at the centres and ends of the new ranges extended the rhythm of the main façade. Yet the new wings with their red brick, thrusting bay windows and lateral asymmetry are unmistakably Victorian. Inside the classroom blocks there are more big fireplaces and broad staircases.

Redevelopment for the better-equipped institution was completed in the early 1860s with a new laboratory block on the east side and three buildings further south, most significantly a T-plan block that comprised a gymnasium with enclosed rackets courts and a school of arms (Ills 10/11, 10/13). Along the Middle Road and in front of a gun park there stood a workshop block to the east and a range of gun sheds to the west (demolished in 2007). On the site's east and west perimeters heavy cast-iron railings were erected.²⁶

Practice batteries were a final aspect of this phase of rebuilding, sited further south, just beyond the present

line of Prince Imperial Road. Four earthwork batteries for practical instruction in aspects of military engineering and artillery were intended for the Academy site in 1845 and, assuming they were built, were probably displaced by the sports buildings of the early 1860s. A more permanent facility was erected around 1860 along a pre-existing scarp, its practice nature immediately apparent as the gun embrasures faced north towards the Academy and Woolwich. It comprised an open scarp and brick-parapetted battery with six emplacements to the west of twin embattled and vaulted casemates. Further east there was an earthwork barbette (an unembrasured battery) with four platforms and a central revetment, probably for training in the use of mortars. A ramped roadway provided a link to the new gun park. Beyond there was a circular iron-lined reservoir of 1856 for supply of the Arsenal. In front of this a further detached two-gun barbette, perhaps for the demonstration of fieldwork batteries, had been constructed by 1881. This was replaced in 1890 by a comparably short-lived arrow-shaped bastion, a siege battery and stockade works, away to the west. Artillery drill declined at the Academy and by 1900 a sports pavilion stood immediately in front of the 1860 barbette. The main battery continued in use, but had been remodelled by 1912. Its scarp had probably come



449. Royal Military Academy, centre block from the north-west after the fire of 1 February 1873

to be used as a terrace for watching rugby and football on pitches laid out to the north. The casemates saw use as practice gas chambers during the Second World War, but clearance thereafter has left no more than the earthwork scarp as a visible remnant of the battery.²⁷

Fire in 1873 and later nineteenth-century expansion

On 1 February 1873 fire gutted the Academy's central block (Ill. 449). This housed the library and offices, so many of the institution's records were lost. The cause was never exactly determined, but the main suspect was the heating system's flue at the centre of the building; it was impossible to clean properly and was found to have a can-non ball lodged in it. Once alight, the books, desks and chairs made ideal tinder and the towers acted as chimneys. Separation, and the attendance of thirteen fire engines, meant that other buildings were spared. Reconstruction work began almost immediately under the guidance of Lt. James T. Johnston, RE, with William Higgs as contractor, and iron girders supplied by Westwood and Baillie of Poplar. The work, completed in 1874, was broadly conservative in nature, though the central spiral staircase was not replaced. The library was lined with fine tall Tudor-Gothic book cupboards that survive (Ill. 450). Other walls and ceilings were plastered with Scott's patent selenitic mortar, with first-floor windows by William Bell Scott. Gillett & Bland of Croydon supplied a new clock, its mechanism placed in the north-east turret. During the hiatus of the rebuilding iron huts were erected on the gun park as temporary classrooms. These were subsequently adapted for the long desired drill shed and a modelling shed in which sand was used to demonstrate fortifications and tactics.²⁸



450. Royal Military Academy, library in the centre block's north-east ground-floor room as refitted in 1873-4. From the north-west, c.1892

Sir John Miller Adye, RA, the Academy's Governor, catalysed further expansion in 1877-8 when another accommodation range, almost a replica of Jervois's buildings, was built on the west side, south of the Middle Road (Ill. 446). An overflow dining-hall was added on that road's north side and arrangements for access to the site changed. The central lodge, its approach road and the ha-ha were cleared and filled, opening up a cricket field in front of the Academy, and red-brick lodges were built alongside new east and west gates; the Gothic ironwork of 1809 was moved to the east, where it survives.²⁹

Once again each cadet might have had his own room, but the size of the establishment increased further, the complement rising to 280 in 1888. Not only did some cadets still have to share rooms in the north range, but it was also necessary to use the drill shed for further overflow from the dining-halls. The main dining-hall was extended north by two bays in 1890-1, pushing through the arcade into the courtyard, and in 1892 came a small south-east accommodation wing, first planned in 1885. Originally intended to provide fifty-nine cadets' rooms and two classrooms, this was scaled back because of costs to be just a third the size of the other outer wings, with only twenty rooms. East of the gymnasium, swimming-baths went up in 1889-93.³⁰

Sport and recreation at the Academy

Through the nineteenth century the Royal Military Academy was often innovative in its provision of purpose-built sporting facilities, driven by the need to keep the cadets fit, engaged and out of trouble. The two open-air fives or rackets courts that were part of the original layout were early instances of designed provision for a game that had come from prisons and taverns. As early as 1815

the cadets were first given somewhere to learn to swim, an open swimming-bath, perhaps not much more than a pond, away to the west on Charlton Common. An enclosed open-air gymnasium, among the earliest in Britain, was set up in 1824 beyond the east fives court. This may have owed its origins to experiences of India, from where other early initiatives with gymnastics drew inspiration. In contrast, cricket did not arrive at the Academy until 1848, probably because of the inconveniences of available ground. The grassy forecourt was too small for a cricket field, surrounded by a ha-ha and bisected by a road. The Academy's athletics meeting the following year, however, was one of the first such events in the country.³¹

The notion that an absence of recreational facilities undermined discipline, promulgated in the report of 1857, gained credibility during the construction works that arose from the report, when cadets, then deprived of the earlier gymnasium and rackets courts, mutinied, pushing artillery into the ha-ha and vandalizing buildings. To redirect energies, team sports were organized and extracurricular activities encouraged. It was also acknowledged that some long-standing restrictions could be relaxed; cadets were now permitted to smoke and solitary-confinement rooms (known, inevitably, as the Black Hole) ceased to be used in 1862. The gymnasium built in that year was a well equipped and modern facility, based on consultations with Archibald MacLaren, who had devised a system of physical training for the army in 1860-1 and overseen the building of a gymnasium at Aldershot that derived from his own in Oxford. Equipment included climbing ropes, vaulting horses and horizontal bars, and the adjoining school of arms, principally for fencing, also housed a hundred pairs of dumb-bells. The new rackets courts to east and west were roofed spaces, and underneath the school of arms there were two 'American' bowling alleys (converted to a shooting range in 1889) and a smoking room.³²

These facilities were regularly supplemented in subsequent decades as attitudes to both the army and education altered. The voice of the old school did sometimes make itself known, as when a former cadet asserted that sprinting across the courtyard and plunging through a thin layer of ice did good, but the facilities and comforts of the Academy steadily increased, improving both morale and discipline. Photography arrived as a recreational activity in 1865 via use of an ad hoc dark room; in 1870 a studio was built. After a long campaign of pressure the first billiard room was built in 1868, near the east rackets court. A second was provided in 1871 and then a third before a fives court was added to the south in the 1890s.³³

A Board of Visitors, established in 1869 to inspect the Academy once a year, pressed for more sports facilities, and was particularly determined that the cricket field should be improved. This lay behind the relandscaping of the northern grounds in 1877. Henceforth cadets could use the field not just for cricket but also for the new game of lawn tennis. The cricket field was further enhanced in 1896 when a pavilion was built on its west side. The design of this attracted the attention of the Duke of Cambridge,

concerned that it should not spoil the picturesque appearance of the Academy. It was given a Tudor-arcaded front (Ill. 448).³⁴

Football was also popular, but there was no on-site provision until 1889, after the Royal Artillery refused to allow the Academy use of Barrack Field for the all-important Sandhurst match, due to past unruliness. The ground between the gymnasium and the practice battery was drained for rugby and soccer pitches. In 1908 the War Office gave the Academy the open but waterlogged grounds further south (Jacob's Corner, see below), and after drainage works further rugby and football pitches, a running track, miniature rifle range and assault course were laid out in 1911-12.³⁵

Provision for the cadets' social lives was also transformed during these decades. Already in 1879 the Governor had publicly to defend the Academy from accusations of undue luxury. Visitors were encouraged to come to dances and theatricals in the gymnasium, and a tin-shed canteen was provided in 1885 for cadets to entertain guests. A more genteel tea room replaced this on the north side of Middle Road in 1901, with a photographic and art studio added a year later, all continuing the site's Tudor-Gothic idiom on a domestic scale and behind a small front garden for a charming ensemble (Ills 448, 451, 453). The Royal Engineer responsible for this may have been either Col. Arthur Henry Bagnold or Maj.-Gen. N. H. Hemming.³⁶

These facilities, so different from their makeshift predecessors, illustrate changing attitudes to the cadets. Once referred to as 'almost an officer and not quite a gentleman', a cadet was now all but inevitably a product of the public-school system and unquestionably a young gentleman. Among the high-ranking personages enrolled at the Academy were, in the late 1860s, Victoria's third son Prince Arthur, Duke of Connaught, who did not live on site, and, in the 1870s, the exiled Louis Napoleon (1856-79), the only child of Napoleon III and pretender, as Prince Imperial, to the throne of France, who did. After the shock of the imprudent Louis's death in South Africa while with the British Army, a statue in his memory was erected at the



451. Royal Military Academy, tea room and photographic establishment, 1901-2. From the south, c.1903



452. Church of St Michael and All Angels (the Royal Military Academy's chapel), 1902–4. From the south-west in 2008

north apex of the Academy site in 1883. Prince Victor of Hohenlohe-Langenburg (Count Gleichen) designed what comprised a bronze figure on a tall red-granite pedestal with four bronze open-winged eagles. It was moved to Sandhurst in 1955. A statue of Victoria by Henry Price, another bronze figure on a granite plinth, was put up next to the Academy's centre block in 1904. This too was moved to Sandhurst, in 1947.³⁷

Twentieth century

At the turn of the twentieth century the Academy once again found itself stretched. Another report, this time by the Akers-Douglas Committee, was, like its predecessors, largely happy with the educational standards but not with the facilities. The demands of the Boer War were such that in 1900 some of the 306 cadets were housed in iron huts east of the swimming baths (Ill. 446). The sharing of rooms continued for nearly half the cadets, a state of affairs the committee found unacceptable: 'The practice of making two, three or four Cadets sleep in one small room is on all grounds objectionable, and is the more inexcusable in view of the large sums paid annually by parents for the maintenance of their sons.'³⁸ New building was strenuously recommended, even if only more huts, but funds were not forthcoming and pressure eased at the end of the war in 1902.³⁹

Since the 1850s there had been a desire to provide the site with a chapel. Money had been set aside and plans prepared on two occasions, a contract even put out to tender in 1871. But other provision took priority and the cadets used the garrison church. Sufficient subscription funds were at last secured, and the Academy's chapel was built in 1902–4 on the site of the old drill shed (Ills 448, 452, 453) and dedicated as the Church of St Michael and All Angels. Maj.-Gen. N. H. Hemming, RE, deployed red-brick Perpendicular Gothic to fit in with the surroundings. A cruciform plan was intended, but want of money meant that the southern transept was not built until 1926. Inside there is an oak pseudo-hammer-beam roof. Furniture, decoration and an organ were all funded by charitable

subscription and fitting out was gradual through to the end of the 1920s. The most impressive fitting was the First World War memorial west window of 1920 by Christopher Whall and his daughter Veronica depicting soldiers in historical uniforms paying homage to the Virgin and Child. An earlier west window, moved to the east, commemorated the fallen of the Boer War. The Academy's chapel became the main garrison church after the Second World War. It closed in 2003. Thereafter memorials, furnishings and the decorative windows were taken to the Royal Artillery's headquarters at Larkhill, Wiltshire, and Sandhurst.⁴⁰

In the 1920s Ethel Charles, the first female member of the Royal Institute of British Architects, kept house for her brother, the Academy's Governor. She proposed panelling the library lobby, apparently without success. The only significant addition in this period was a pair of laboratories for electrical training and experiments, built in 1925. However, the Academy could no longer provide the range of scientific training officers now required. Educational emphasis had changed in 1922 to concentrate on providing a general grounding in science and mathematics; more specialist knowledge was henceforth to be acquired elsewhere, at Larkhill, Chatham or Cambridge. The Academy also suffered from the post-war retrenchment that affected the entire military, though the additional demands of the Royal Corps of Signals, formed in 1920, kept the establishment at about 240 until 1929. All the while the army sought to reduce its costs. As training at the Academy became less specialized, the possibility of amalgamation with the Royal Military College at Sandhurst was raised. This was not a new idea and had in fact been approved by Parliament in the 1860s, but resistance within the army had kept the institutions separate. The idea was again rejected in 1923, 1926 and 1933, but a committee re-examining the possibility in 1938 accepted it as both feasible and desirable, and amalgamation was scheduled to take place in 1940. The outbreak of war brought closure of the Royal Military Academy in Woolwich forward to 1 October 1939.⁴¹

During the Second World War the Academy buildings housed the Coast Defence, an Anti-Aircraft Wing



453. Former Royal Military Academy from the south in 2011. Showing Prince Imperial Road (foreground) and Durkan Estates housing (centre)

of the Royal Artillery Depot, a hostel for officers of the Admiralty, War Office and Air Ministry, and a technical course for senior military officers. The Royal Artillery used the sports grounds and the front parade was a drill ground for the Women's Royal Army Corps. The Royal Artillery Institution's library and collections, salvaged from bomb damage, were moved to the central block in 1941 where they stayed until 1999, the Institution itself also taking up residence for most of that period. Much of the rest of the complex was used only intermittently. Many and various military departments were accommodated, but large sections stayed empty for long periods. The gymnasium complex was demolished in 1963 to make way for married officers' houses (see below). The main building was listed in 1973, the lodges in 1998 and the chapel in 2003.⁴²

Conversion

In the mid-1990s Defence Estates highlighted the incompatibility of a shrinking military presence in Woolwich with the growing cost of maintaining historic buildings. The Academy was prepared for sale, interiors stripped to stabilize problems with damp and rot that were par-

ticularly bad in the west wing of 1877–8 and the model room of 1814–15. Following lengthy consultation with Greenwich Council and English Heritage the Academy was declared surplus to requirements in 2002. Danny



454. 1–5 Red Lion Lane, 2008–10. From the east in 2012

Durkan (Durkan Estates) purchased the twenty-one acre site in 2006 and prepared a scheme to provide 328 dwellings through conversion of the existing buildings north of the Middle Road and the erection of new housing to the south, with John McAslan + Partners as architects. Work started with the southern section, for which there was housing money. In 2008–10 Durkan built three large blocks of flats, stock-brick and black-timber clad, each with an internal courtyard (Ill. 453) – Colebrook House to the south-east, Ellington House to the north-east, and Kitchener House to the west. Middle Road was renamed Ashmore Road. Along with flats sold on the open market these provided sheltered housing for the elderly and, to comply with social-housing requirements, 150 shared ownership and fixed-rent properties, managed by the London and Quadrant Housing Trust. Facing Red Lion Lane there is a short terrace of five cross-wall timber-faced houses (Ill. 454). The west wing of 1877–8 was also converted to flats as part of this phase. Shops projected for the Middle Road were abandoned.⁴³

The northern complex was scheduled to have been refurbished by 2010, but these works were deferred. The project was financed through Irish banks and funding thereby passed into the hands of the Republic of Ireland's National Asset Management Agency, formed in 2009 in response to financial crisis. The listed buildings remain empty in 2012, yet to be converted. Plans have intended a mixture of dwellings ranging from studios to five-bedroom houses, with small additions inside the courtyards, low enough as not to be visible from the common. The dining-hall and chapel were destined to be used for community purposes, the latter as studios and classrooms.

Woolwich Common and eastern environs

NINETEENTH-CENTURY DEVELOPMENT EAST OF THE COMMON

Private settlement on the east side of Woolwich Common was significantly affected by the enlarged military presence. The impact was perhaps immediate and direct. It was said that George III, taken to view early building work for the Royal Military Academy, demanded the clearance of Charles Hutton's adjacent and unfinished 'village'.⁴⁴ The Crown did purchase Hutton's land in two parcels in 1804–5. Some of what stood on it was taken down, and a few other houses on the west or common side of the road were cleared. But much survived; Cube House was converted for a cadets' hospital, and the two substantial southern semi-detached pairs of houses (63–66 Woolwich Common) were completed (originally with pedimental fronts) to accommodate officers of the Academy, including Isaac Landmann and Olinthus Gregory (Ill. 455). In 1806 Capt. Hayter projected redevelopment elsewhere to house field officers, possibly using plans that James Wyatt had prepared in 1802. Pitt asked for 'simpler' plans in 1808 and

there was a hiatus. What followed around 1814, presumably via Hayter's successor, Lt. Col. Robert Pilkington, CRE, was not simple, rather just as grand. On the north side of a path (later Ordnance Road) that led to gravel pits, three similar pairs (later 52–57 Woolwich Common) with pedimental fronts and linked entrance bays probably reused Hutton's foundations, if not carcasses (Ills 439, 459). Following Hutton's lead, all these Field Officers' Quarters were stuccoed in what had emerged as, in effect, an early suburban park estate that mixed, if somewhat accidentally, free-standing villas with semi-detached and terraced houses. Parts stood into the 1970s.⁴⁵

Cube House was enlarged and reconverted as a house for the Lieutenant-Governor of the Academy in 1828–9 (the cadets' hospital moving to the pair of houses that became 65–66 Woolwich Common). It was then replaced in 1875–7 by an even larger residence for Sir John Miller Adye in Tudor Revival brick with shaped gables.⁴⁶

The Board of Ordnance had acquired more land yet further north in 1810 for the sake of an even greater cordon sanitaire. There were already some houses facing the common here, but the idea of clearance was again abandoned and heterogeneous infill was allowed to occur. A large plot just south of Jackson's Lane (later Street) was given up on a long building lease in 1831 and Robert Jolly began to build a terrace of seven big houses for W. J. Mitchell to a specification from Lt. Col. Sir John Thomas Jones, CRE (Ill. 458). Jolly had completed the two northernmost houses by 1833 when Mitchell fell bankrupt. The first occupants of the corner house (later No. 29) were Maj.-Gen. Henry William Gordon, RA, and his wife, Elizabeth, who was the daughter of Samuel Enderby, the eminent Greenwich-based whale-oil merchant. Here their fourth son, Charles George Gordon, was born in January 1833. Col. Sir John May, an Inspector in the Arsenal's Royal Carriage Department, took the house next door. Jones's successor, Lt. Col. George J. Harding, CRE, set about planning the completion for the Board of what was designated Kempt Terrace, after Sir John Kempt, Master-General from 1830 to 1834. Concerns about finding builders led to relaxation of the specification, but to no avail, and the Board sold off this and other lands in the wider area in 1833–4. A major purchaser was Sir John Webb, Director-General of the Ordnance Medical Department, who in 1845 employed George Hall Graham to build Chatham House (later 58 Woolwich Common), a large villa that the War Office reacquired in 1855. Through Webb, Kempt Terrace was completed in somewhat more Italianate stuccoed vein around 1850, keeping up the lower-storey bows. At this point smaller low-class housing began to creep back onto the scene, to the rear of the Field Officers' Quarters in the shape of about forty cottages on Ordnance Place (later Road) (Ill. 459). Another beneficiary of the Board's sales was Rebecca Fenwick, the widow of Capt. Howard Fenwick, RHA, who also owned the houses to the south of Kempt Terrace.⁴⁷

There had been other spin-offs from the military presence. To the north the Barrack Tavern prospered. John



455. 65–66 Woolwich Common, begun mid-1790s for Dr Charles Hutton, completed c.1807 for the Board of Ordnance. From the west in 1972. *Demolished*



456. Belmont Place, 57–59 Nightingale Vale, c.1840. From the north in 1962. *Demolished*



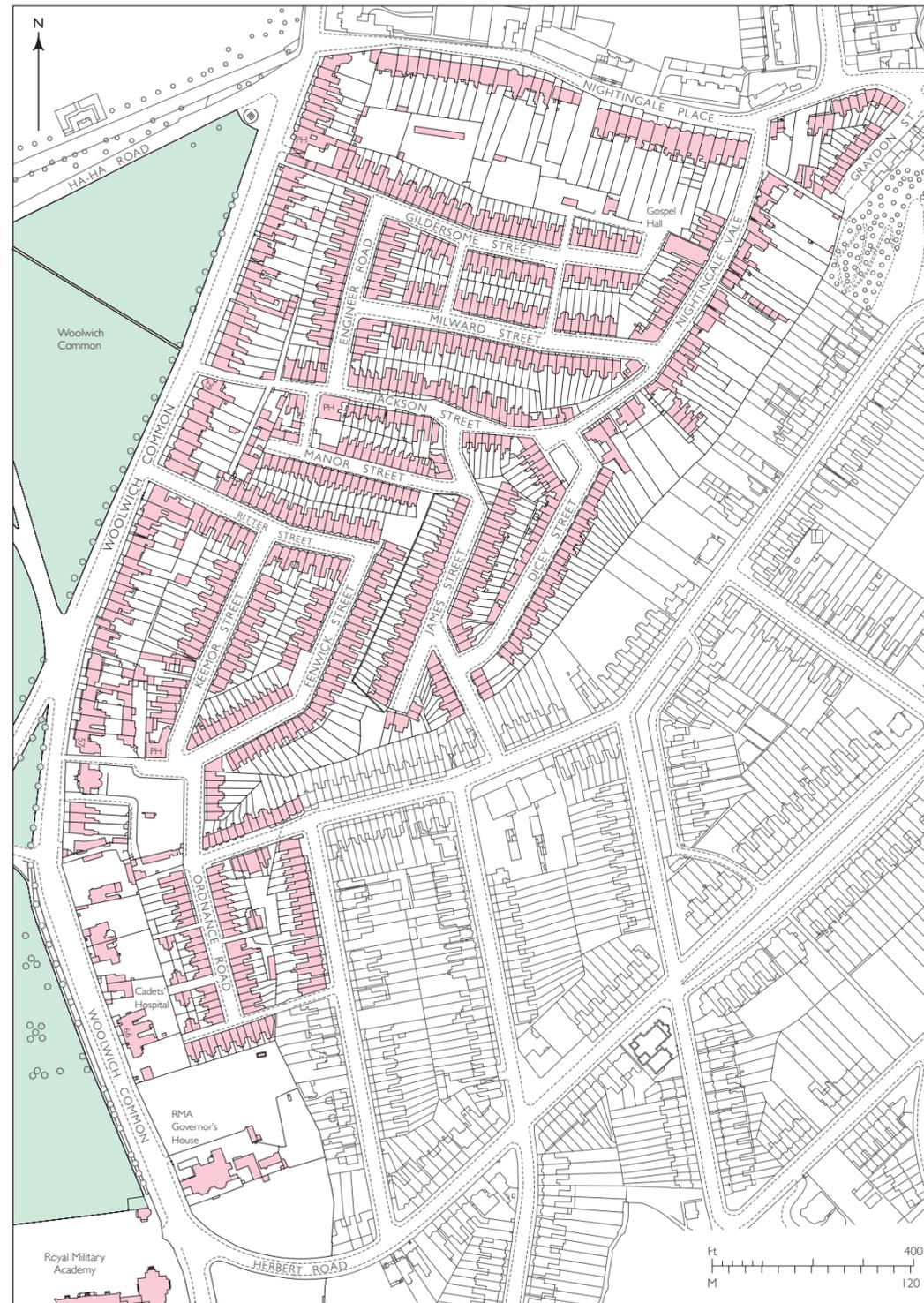
457. Queen's Terrace, 23–28 Woolwich Common, 1828–30. From the north-west in 1962. *Demolished*



458. Kempt Terrace, 29–35 Woolwich Common, 1831–2 and c.1850. From the north-west in 1962. *Demolished*

Fensham, its proprietor in the first decades of the century, acquired property to the south that passed to Charles Fensham, through whom the frontage was developed from 1828 by Joseph Hudson and Robert Jolly. Especially feverish activity around 1830 had set the scene for the Kempt Terrace speculation. From north to south there appeared Clarence Place (rebuilt after a fire in 1840), Adelaide Place and Queen's Terrace, the first and last both regular six-house rows, the second three disparate pairs (Ill. 457). These properties were only gradually occupied, and most of Clarence Place became one of several local preparatory military academies or crammers for the Royal Military Academy. Just south of Kempt Terrace, in a large house called Belle Vue, was Dr William Bridgman's gentlemen's boarding school, behind which a school room was built in 1845.⁴⁸

The Barrack Tavern was remodelled in 1875 and 1900 and its stables were converted to a motor garage in 1913. When it was demolished in 1975 it was the last remnant of early development along the common. The clearance of the houses along Woolwich Common from Clarence Place to Kempt Terrace had only come after a long and bitter conservation battle. Woolwich Borough Council's first scheme of 1963 for replacing the houses, rejecting proposals for retention of the façades from its Borough Engineer, Robert Gee, was thrown out by the London County Council, which had put a blue plaque on Gordon's house in 1959. The Ministry of Housing and Local Government was similarly opposed and in 1964 placed the Barrack Tavern, Clarence Place, Queen's Terrace and Kempt Terrace on the supplementary list of buildings of architectural or historic interest, noting that domestic



459. East of Woolwich Common, 1893–4

buildings of this kind were scarce in Woolwich. Gee drew up plans for conversion to flats, but the rest of the council (Greenwich from 1965) paid no heed. Local and national societies joined the opposition, but the Ministry conceded that the Grade III listing had no teeth, so the council gradually purchased the properties and reaffirmed that repair and conversion were not financially viable. After a public inquiry in 1967 the inspector found that demolition would be economically and architecturally wrong, but housing associations rejected opportunities to take on the deteriorating terraces as uneconomical. By 1971 the Ministry declined any longer to object and demolition proceeded in 1972.⁴⁹

The hinterland of the common terraces had remained largely open until the late nineteenth century. By the 1840s there was a small group of houses on Fensham property along Ditchwater Lane (Ill. 10). This was renamed Nightingale Place around 1850 when it gained Nightingale Terrace, ten good-sized houses. About the same time a long run of humble houses cropped up along the outer or east side of the sweep of Nightingale Vale, a place name in use by the early nineteenth century. This, which must have spoilt what had been described as ‘romantic seclusion’,⁵⁰ curved round Clothworkers’ Company property to Belmont Place, a fine pair of houses of around 1840 (Ill. 456); another comparably large pair was built just to the north-east around 1860. Nightingale Vale linked through to Jackson’s Lane where E. W. James had property and where in 1851–2 Lewis Davis, who owned a brewery in Plumstead, established the Manor Arms public house and his tenant, John Brown, built a couple of houses. Around James Street there was some more sparse development and a thatched villa. With its fields and orchards the area retained a semi-rural character.⁵¹

In 1863 H. H. Church and William Rickwood laid out some new streets on Fensham land west of the Clothworkers’ holding – Engineer Road and the western ends of Milward Street and Gildersome Street; William Gosling and Son were the architects and builders of some modest houses here. Around the same time even humbler rows were built south of Jackson Street on Manor Street (later Kempt Street), and, yet further south, Fenwick Street was begun where there was still a brick field that continued to supply the immediate area as and until the ground came to be covered with streets and houses (Ill. 459).

The doubling in size of the Arsenal’s workforce in the 1880s drove demand for housing; districts nearer the factories had already been built up. From 1881 Gildersome Street and Milward Street were extended onto the Clothworkers’ Company land via building agreements with William Woodford, a tax assessor and collector who lived on Nightingale Place. In 1882 Ritter Street was formed south of Kempt Terrace to meet an extension of Fenwick Street, and Keemor Street was inserted. By 1891 the frontages had been wholly built up by a number of developers, including the Standard Freehold Land Company and the Kent and Surrey Building Society (Ill. 460). After



460. 33–39 Fenwick Street, 1883–5. From the south-east in 1955. Demolished

a sale of land in 1874 A. S. Cochrane had extended James Street (later Spearman Street) in 1877 and given it an off-shoot called Delvan Street. Dicey Street (which became a music-hall joke before it was renamed Fennell Street in 1931) followed in 1882 as a link to Nightingale Vale. The main builder-developers here through the 1880s were Frederick Johnson, of Powis Street, and Robert Hull, of James Street. Finally, Graydon Street, a short dead end just inside the parish boundary off Nightingale Place, was built up in 1886. On all these streets the houses were small and of mediocre quality at best. George Aitchison, the District Surveyor, was dismayed to discover that household refuse was being used to make the foundations for houses in James Street in 1876. A wide variety of working people occupied the area, forming a population of around 3,500 in 1891. Labourers in the Arsenal were numerous, and others, including many laundresses, depended for work on the barracks and the Academy. Towards the south there were some agricultural labourers.⁵²

Amid these small houses there were a few buildings of other types. A small chapel, used by the Plymouth Brethren and generally called a gospel hall, was built on the west side of Nightingale Vale in 1873. Opposite, and near the street’s north end, two adjacent double-fronted late-Georgian houses that had been adapted for a military prep school by the 1840s became the Sisters of Notre Dame convent school in the mid-1880s. An incongruous stair turret was added in 1891 to designs by F. A. Walters, when Augusta Kopp, a German, was in charge. The school continued into the 1960s.⁵³ The Rev. John Cavis Brown of St John’s Church on Wellington Street took an interstitial plot north of the junction of Ritter Street and Fenwick Street in 1897 for a mission room to serve the newly populous district. Here the Church of St Anne was built in 1898–9, to designs by William and Charles Aubrey Bassett Smith, church specialists. It was a low and plain building,



461. Castlewood Day Hospital (originally Woolwich and Plumstead Cottage Hospital), Shooters Hill Road, 1889. From the south-east in 1992

aisles and nave under a single roof, with lancet windows, a small open belfry and paired side gables towards the east. It was demolished in the mid-1960s.⁵⁴

The presence of a brook behind Nightingale Vale and of thousands of soldiers near by encouraged the establishment of industrial laundries. Maria Lister opened the Belmont Laundry in 1881 in sheds behind Belmont Place. It extended into larger back buildings, and a receiving office or shop was established on Nightingale Place. The success of the business led the family around 1900 to establish the Standard Laundry, further north on Nightingale Vale. Here too rear workshops were added and, with more than forty employees, enlarged in 1912 and subsequently. Additional premises were taken for Lister Bros, which diversified into light engineering. These works carried on up to 1970.⁵⁵

The Woolwich, Plumstead and Charlton Nurses' Home was founded in 1899 at 22 Nightingale Place to house district nurses to tend the local poor. It was in one of a four-storey pair of houses of around 1880, the other half let to provide an income. It bore a large Doulton-tiled plaque that recorded the Home's origins in fund-raising to commemorate Victoria's Diamond Jubilee. The nurses remained in residence until 1965 when they moved to Shooters Hill.⁵⁶

Shooters Hill and Red Lion Lane

A few buildings just inside the southern boundary of the parish were part of the scattered settlement of Shooters Hill in Plumstead parish, set back from the Dover Road around Anglesea House and the Red Lion public house, and extending along Red Lion Lane to Wellesley House (previously The Maisonette). Inside Woolwich a triangle

of land at the junction of the two roads had, on its west side, Ordnance Terrace, four houses of 1846–7 replaced in the 1930s with 27 Shooters Hill, to the rear of which 148 Red Lion Lane is a recent addition, and, east of the junction, two double-fronted shophouses of the 1850s, once part of Ordnance Place, latterly 31 and 33 Shooters Hill; these survive in much altered form.⁵⁷

The Woolwich and Plumstead Cottage Hospital (25 Shooters Hill) was built west of this group in 1889 on land leased from the War Office as a philanthropic initiative to benefit the poor and to mark Victoria's Golden Jubilee. William Woodford (see above) was the project's secretary, its architect was John Oliver Cook and building work was begun by H. Coombs and completed by A. White, both of Plumstead. The hospital is in a Queen Anne or red-brick domestic-revival style, with tile hanging and coved cornices on its taller central section (Ill. 461). A western ward block had a roof ventilator. To the rear there was a mortuary. The establishment soon came in for criticism, described in 1905 by the King's Fund as 'a hospital for whose existence there seems no reason'.⁵⁸ Its governors responded by pointing out the urgent need for a general hospital in Woolwich. The campaign that ensued resulted in the Woolwich and District War Memorial Hospital, built in 1923–7 on the south or Eltham side of Shooters Hill. The cottage hospital was adapted as a training school and home for nurses. After subsequent use as a carpenters' workshop, in 1962 Bexley Hospital extended and reopened the premises as Castlewood Day Hospital. Final health-service use in the 1990s was as the Signpost Castlewood Centre for the rehabilitation of teenage drug-users. Turnhold Properties acquired the disused hospital and, after a period of dereliction, the buildings were converted in 2011–12 for Family Mosaic, a housing association, with the Hill Partnership as developers and



462. Soldiers' huts (later Duke of York's Cottages), Woolwich Common, as projected in 1811. Anonymous watercolour view from the north-east

contractors. Forge Architects supplied designs, with details and subsequent work by Saunders Boston, architects. The result was Castlewood, a complex of five flats and six houses incorporating a new pale-brick terrace of two and a half storeys to the rear.⁵⁹

MILITARY AND OTHER USES OF WOOLWICH COMMON

After the Board of Ordnance's acquisitions of 1802–4 Woolwich Common was kept clear for military use, principally for artillery practice and as an exercising ground. To these ends the greater part of the ground was levelled under the supervision of Lt. Col. Robert Pilkington, CRE, and then sowed to grass in 1816. A veterinary establishment for the Board's horses was set up to the south-west on Charlton Common.⁶⁰

Duke of York's Cottages (demolished)

Clearance of the common was complicated by artillerymen and their families camped there. There were no designated married quarters in the Royal Artillery Barracks, and little space at all to squeeze in the dependents of around 1,000 married soldiers. By 1808 the camp had become a long row of mud huts, put up in the preceding few years by the soldiers themselves, with Comdt. Vaughan Lloyd's permission. These stood across Ha-Ha Road from the garrison's south-west guard house (1 Repository Road) and extended to the south in Charlton parish. It was soon deemed necessary to remove this obstruction to artillery exercises but, not wishing to cause great distress, Lloyd gained the Board's sanction for replacement of the huts,

as an exceptional case. In 1812 two rows were built under Pilkington's supervision, fifty pairs of back-to-back rooms in all, extending to the west along the south side of the road to Charlton, on the present-day site of the Queen Elizabeth Hospital (Ills 16, 462). These early purpose-built soldiers' married quarters were rudimentary single-room homes, 12ft by 16ft (4.9m by 3.7m), built for £20 each using cheap bricks and timber. Rents were expected in due course to cover the Board's expenditure. A decade later Baron Charles Dupin commented: 'It is thus that respect for manners, and the desire of softening the privations inseparable from military life, have urged the public authorities in England to the execution of a number of paternal measures, which can only be blamed as sometimes carried to too great an extent, but always undertaken with the most laudable motives'.⁶¹

A small infants' school was built just south-east of the cottages in 1843–4 with subscription funds from artillery officers and a contribution from the Board of Ordnance. In the early 1850s six double cottages were added between for non-commissioned officers with large families. The earlier homes, all maintained by the soldiers themselves, were already then recognized as wretchedly overcrowded and prone to disease. Yet they were not cleared until the late 1870s, after an outbreak of diphtheria and a press campaign for action to replace what had become known as 'the Duke of York's Cottages' but were perhaps more aptly described as 'kennels'.⁶²

Public access and other easements

At the south end of the common, much of the waterlogged open land between the Royal Military Academy and Shooters Hill was leased by 1841 and into the 1850s

to the Labourer's Friend Society, founded in 1830 after the Swing Riots. It was used for gardens, or allotments, for labourers to practice 'cottage husbandry'. The remote field came to be known as Jacob's Corner.⁶³

Also close to Shooters Hill, on the west side of what is now Academy Road (in Charlton parish), the Kent Water Works Company dug a three-acre circular reservoir in 1844 to supply Woolwich Dockyard in case of fire (Ill. 436). A head of water was pumped here by the company's steam engines in Deptford. The company's engineer for the work was Thomas Wicksteed, watched over by Lt. William Denison, RE, for the Admiralty and Col. George Hoste, CRE, for the Board. (There is an equivalent and contemporary reservoir in Greenwich Park, formed to protect Greenwich Hospital and Deptford naval dockyard.⁶⁴) In the 1870s, after the dockyard closed, the War Office adapted the reservoir to supply the rest of the military estate in Woolwich. It was now fed by artesian wells and supplemented with machinery to soften and purify the water. Only later was it covered. The Kent Water Works Company had formed another reservoir in 1872, on the south-west part of Jacob's Corner. This one was rectangular and covered, as required by law for a public supply.⁶⁵

These intrusions aside, the military maintained its control over the common, though with little physical enclosure. Concerns about encroachments led to the erection of cast-iron boundary markers, and there were chronic disputes about access to public footpaths, which sentries frequently blocked. Disagreements, when aired, appear generally to have been resolved in favour of the public. Horses that did not belong to the forces were at no time admitted. There were, however, regular military reviews and horse races that attracted royalty and thousands of spectators. Artillery training moved from the common to Shoeburyness in the 1850s and field-artillery riding to Larkhill in 1871. The training of horses continued, and on Charlton Common a hutted camp of cavalry barracks (later Shrapnel Barracks) and remount stables were added alongside what had become the Royal Horse Infirmary.⁶⁶

A scheme for a railway across the north end of the common, favoured by the Board of Ordnance, had been fought off in the 1840s (see pages 19–21). This part of the common came by the 1860s to be considered a 'People's Park' where thousands promenaded and played games on summer days. To provide for this populace, a drinking fountain was put up at the common's north-east corner in 1863 on land the War Office readily granted. After the formation of the Metropolitan Drinking Fountain Association in 1858, London was peppered with drinking fountains. This one, in the form of a grey-granite obelisk, was given by Anna Victoria Little in memory of her late husband, Maj. Robert John Little, barrack-master at the Marine Barracks and formerly a resident of Adelaide Place across the road. It was designed by a civil engineer, E. Gregory, and built by William Tongue, who, ironically, was responsible for enclosing part of Plumstead Common at this time. The obelisk survives, without its faucets, basins, twenty-one encircling cannon bollards or a trough

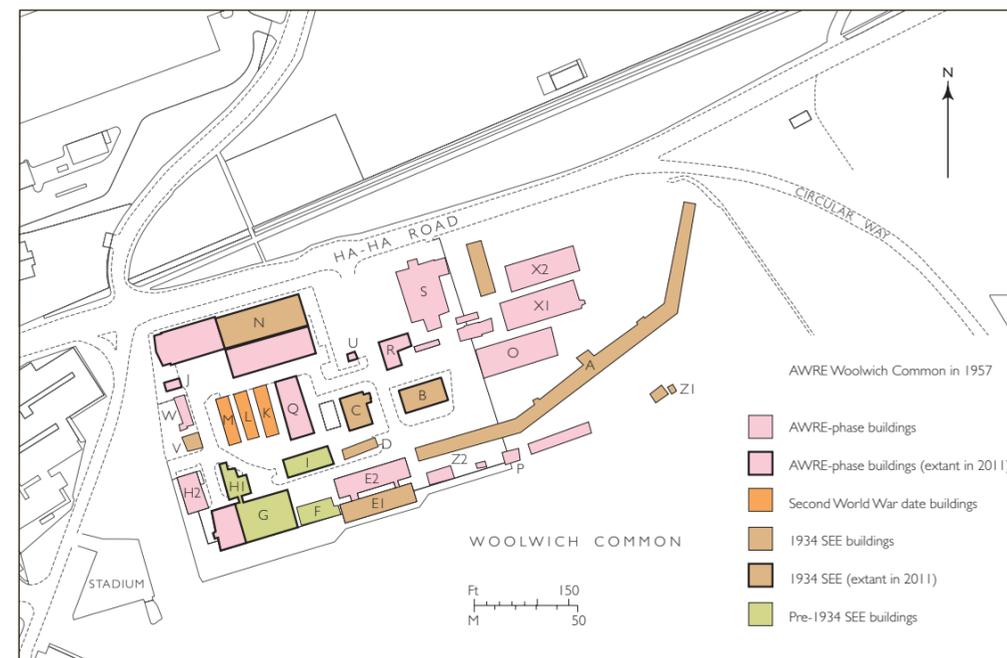
for dogs, but restored with new bollards by Greenwich Council in 2011.⁶⁷

Across London there was deep-rooted popular resistance to enclosures in this period. The Commons Preservation Society was founded in 1865, the Metropolitan Commons Act passed in 1866, and, military ownership notwithstanding, there was pressure for better public access to Woolwich Common. Plumstead's enclosures provoked riots in 1876 that led to gatherings of tens of thousands in Woolwich, wherein, bizarrely, the local journalist and historian W. T. Vincent helped burn his own effigy. But it was not until 1892 that a campaign led by the Rev. J. W. Horsley obliged the military to open more of the common and Barrack Field to public recreation; football and cricket were restricted to Jacob's Corner. The common at night was said to be the 'scene of much disorder', that is, prostitution.⁶⁸

Circular Road (later Way) had been formed by this time and Jacob's Corner was reclaimed for exclusive military use in 1908 (see above). This aroused opposition that succeeded in eliciting a warning from the Secretary of State for War, Richard Burdon (later Viscount) Haldane, that the land should be treated as a common. Despite this, the exigencies of the First World War led the common to be used first for troop encampments and then for further enclosures that included building works. A wireless station cropped up on the south side of Ha-Ha Road in 1916 (see below), and a stadium on the Charlton side around 1920. Barrack Field and the common's north-east section were fenced off in 1923 and, to the far south, where there was already a laundry for the Herbert Hospital, a nurses' home appeared in 1928. In that year local ginger groups formed the Woolwich Common Joint Committee, with Charles Grinling to the fore, with the aims of regaining some of the lost open space and preserving the common for public use through joint administration. But the War Office refused to co-operate, civil opposition was reduced to trying to stop further enclosures, and military police stopped children playing on the common.⁶⁹

The opposition and the police were both largely successful, save for the arrival of **Woolwich Common Nursery School**, erected in 1943 between Woolwich Common Road and Circular Way to provide child-care for women engaged in war work, principally at the Arsenal (Ill. 465). The nursery for sixty children and eighteen staff was erected quickly and cheaply under the supervision of W. H. Gimson, Borough Engineer. It comprises a T-plan array of huts, built with precast concrete posts, hollow-block walling, corrugated-asbestos roofs and a separate brick-built air-raid shelter. Remarkably, these buildings, much refurbished, continue in their original use.⁷⁰

Elsewhere on the common there were rather different wartime adaptations; a barrage-balloon mooring site was set up, as was a heavy anti-aircraft artillery battery that was enlarged from four to eight gun emplacements in 1944. All this had been levelled by 1955. Further, the south end of the common was used as a huge spoil heap. Military reviews had moved into the stadium as tattoos, though



463. Atomic Weapons Research Establishment, Woolwich Common, layout in 1957, showing development phases including former Signals Experimental Establishment (SEE) buildings: a senior staff, administration, production control, drawing office, planning, laboratories, Indian Electrical and Mechanical Engineers (IEME) staff; b surgery, contracts office, IEME drawing office; c goods, receipt and dispatch, inspection; d IEME office and storage; e1 raw material store; e2 electronic components store; f woodwork shop; g electronic assembly; h1–h2 sheet metal (heavy machines); i paint, shot blasting, degreasing; j oil and paint store; k inter-operation piece-part and completed detail storage; l pre-selection store; m general storage; n machine shop and tool room; o security assembly area, functional testing; p radar, echo-box testing site; q sheet-metal shop; r police lodge; s canteen; u transformer house; v boiler-house; w toilets; x1 mould shop; x2 IEME headquarters; z1 site maintenance workshop; z2 tool shed

Royal Artillery 'At Home' events continued on Barrack Field until the threat of terrorist attack stopped them in the 1970s.⁷¹

Signals and atomic-weapons research establishments (demolished)

The military development of what was latterly known simply as the Ha-Ha Road site, west of Circular Way, had its origins in 1914 with the formation of an Experimental Wireless Telegraphy Section of the Royal Engineers, working from a van parked on Woolwich Common. This became the Signals Experimental Establishment and was permanently housed here from 1916. Early work on inter-aircraft communications and field telephones moved after the war into sound location. In 1919–20 there were experiments tracking aircraft with a 20ft(6.1m)-diameter

concrete 'disc' above a sound-proof underground shelter. By the 1930s around 100 staff worked on 'internal and external communication of tanks; the special communications required by Artillery; Direction Finding and Intercept apparatus; secret wireless and cryptograph machines; apparatus to eliminate Morse; facsimile transmission; jam-proof wireless'.⁷² There was rebuilding in 1934, with workshops and stores concentrated on the west side of the enclosure, the largest a north-lit brick workshop beside the road. A long and canted office and laboratories range stretched eastwards (Ill. 463). During the Second World War a ring of semi-sunken air-raid shelters was formed on the site perimeter, just outside which there is a large zigzag trench, of contemporary or possibly earlier origin; some Orlit prefabricated huts were also erected. Despite bomb damage, work that included attempts to plot the launch sites and understand the electrical control systems of flying bombs continued up to 1945.



464. Woolwich Common Estate, 1967–70 and 1975–80 for Greenwich Council. Under construction in 1978, view to south-west from Nightingale Heights

The Atomic Energy Authority took over the site in 1949 to form what became the Atomic Weapons Research Establishment (AWRE) Woolwich Common, 'to assist in the development and production of electronic, electro-mechanical and light mechanical assemblies associated with weapon design and home and overseas trials instrumentation'⁷³ for the British nuclear-weapons programme. Earlier work on the production of atomic bombs had taken place in the Arsenal's eastern parts, in its Research Department, but this light engineering of detonator and other components for overseas trials was based here in part because Woolwich had a workforce with electrical assembly skills, largely female and derived from Siemens. Redundancies at the Arsenal also helped the Ha-Ha Road establishment expand from 155 to 487 staff in the early 1950s. There was more new building in 1953–7 (Ills 463, 464). Marston sheds went up to the east, and the roadside workshop and stores were extended by Ministry of Works architects, who saw to embellishment with patterned projecting brick headers. Some earlier stores were replaced in 1960 by a long two-storey office range with an exposed precast reinforced-concrete frame and brick-panel walling designed under G. W. Dixon, chief architect for the Atomic Energy Authority's Southern Works Organisation.

The Woolwich AWRE closed in 1964, after ratification of the Partial Test Ban Treaty. There were several subsequent military uses of the site up to the 1990s when large prefabricated 'rover cabin' office blocks appeared and some eastern buildings came down.⁷⁴

Clearance of the rest of the complex, including its air-raid shelters, followed in 2011, to allow the formation of a ride-out area for the King's Troop Royal Horse Artillery to exercise. At the same time, adjoining parts of the common and Barrack Field on either side of Ha-Ha Road were enclosed for the staging of shooting and archery events during the 2012 Olympic and Paralympic games. Temporary structures for this included three PVC-clad indoor ranges with colour-spot vents, designed by Magma Architecture and erected by Sisk (Ill. 437).⁷⁵

LATE TWENTIETH-CENTURY HOUSING

Woolwich Common Estate

Most of the streets east of Woolwich Common were comprehensively redeveloped in 1967–79 to form Greenwich Council's Woolwich Common Estate. Parts of this area,

poorly built in the late nineteenth century, had fallen into desperate need of improvement. Nightingale Vale, Keemor Street and Jackson Street were identified as slum-clearance sites in 1935, and in 1951 Woolwich Borough Council's slum-clearance programme was extended to most of the properties behind Woolwich Common and Nightingale Place, projecting the displacement of more than 400 families. War had made a start, bombs accounting for dozens of houses between Gildersome Street and Kempt Street. Thirty-six prefabs took their place in the late 1940s, but the council's house-building commitments in other areas were such in the 1950s that rapid progress here was unlikely. Even so, a four-storey block of eleven bed-sit flats, Harvey House, was built in 1956 on a bombsite at the west end of Nightingale Place. The Ministry of Health concurred that the damaged area east of Nightingale Vale and north of Jackson Street was a priority, so in 1958 the council purchased the Clothworkers' Company estate. Clearances began in 1961.⁷⁶

There were ambitious thoughts about a forty-acre estate reaching further east into Plumstead, but these were hauled back and the council's first plans of 1963 for the Woolwich Common Redevelopment Area, prepared under Robert Gee, Borough Engineer, covered thirty-five acres in Woolwich parish, extending south to Ordnance Road to include property that the War Office had indicated it would relinquish. A mixed-development scheme proposed five twenty-two-storey towers amid five-storey blocks and two-storey cottages for about 3,500 people (so a density of 100ppa), two pubs in place of four, and a youth or community centre in lieu of the Church of St Anne. The LCC firmly rebuffed this, thinking tall towers next to the common unsuitable, and incidentally disparaged the idea of a nursery on top of a four-storey car park. But the stickiest objection was to the demolition of the early nineteenth-century terraces facing the common (see above). Woolwich Borough Council was used to plain sailing with its housing developments and kept a steadfast course, resubmitting the scheme in 1964 with an insistence that to preserve the 'worn-out properties situated on a main road frontage was completely illogical and would prejudice the proper redevelopment of the Woolwich Common Area'.⁷⁷ The exchanges grew rancorous as the council dug in its heels with growing obduracy. It declared in early 1965 that the Woolwich Common project had become its most urgent priority. Progress was necessary, not just because of housing demand, but also to keep the council's Direct Labour Organization busy. However, the LCC still disliked the towers and the common-side demolitions. Successor bodies, Greenwich Council and the GLC, reached a compromise whereby the latter approved the plans except those for the three common-side terraces. All but one of the towers were scattered to other locations (see Elliston House and Hastings House, pages 318 and 390). Meanwhile conditions in the old houses deteriorated.⁷⁸

Joyce Carroll, chairman of Greenwich Council's Housing Committee, drove the Woolwich Common project forward. Gee was still responsible for design,

now working alongside J. M. Moore, Chief Architect. A 'Master Plan' of 1966 envisaged around 1,270 dwellings and included district heating, room for a car for every family and large areas of communal open space. The layout broke up street patterns in favour of rectilinear grouped blocks, to segregate cars and pedestrians, with raised walkways and landscaped courtyards many of which would be made playgrounds. This was typical of the time, but a new departure in local terms, save for the precedent of Bowling Green Row, the last phase of the St Mary's Comprehensive Development Area project, then under way.

The first stage of the Woolwich Common Estate, carried through in 1967–70, was on nearly six acres on the west side of Nightingale Vale. Victor Hards was the job architect for the larger part of this, 140 dwellings, mainly maisonettes and sheltered housing, brick built by the council's DLO in eight medium-height (four- to seven-storey) blocks with concrete floors and flat roofs (Ills 464, 465, 466). High-level walkways linked to lift towers. Seven of the blocks were arrayed around two semi-open quadrangles; separate to the north was 130–147 Nightingale Place. Maisonettes were laid out on the 'crossover' principle, in three-storey sections, the middle or entrance-level floors of which were divided. Centrally imposed 'yard-stick' economies were forced onto the scheme to reduce costs by eighteen per cent. District heating and quality of finish were sacrificed – the blocks are plainer than those of Bowling Green Row.⁷⁹

To boost housing output Woolwich Borough Council had embraced industrialized or system building in 1964 (see pages 317–18). This was applied in the other main element of the first stage at Woolwich Common, a 229ft(75m)-tall, twenty-five-storey tower block of two-bedroom flats. To minimize its impact this single tower was sited as far from the common as possible, on the lowest part of the site near the corner of Nightingale Place and Nightingale Vale. Built as Nightingale Heights in 1967–70 (Ills 322, 437, 465), this was one of seven standard Bison Wall Frame system-built blocks that the council commissioned from J. M. Jones & Sons Ltd of Maidenhead, general contractors for Concrete Ltd, for sites across Woolwich and Plumstead. The abandonment of district heating, here in favour of under-floor electric heating, allowed an increase from eighty-nine flats to ninety-three but caused delay, as did strengthening work that had to be undertaken following the Ronan Point disaster.⁸⁰

There was a hiatus in the early 1970s, at first on account of the deferred demolition of the Woolwich Common terraces, later probably because of general economic conditions. The building of the next stages of the project only began in 1975. There had been a major redesign under Moore as the approaches of the late 1960s fell from favour. What was picked up instead was a version of perimeter planning and a return to terraces on streets. The north and west frontages to Nightingale Place and Woolwich Common were made a single continuous range of up to six storeys, behind which modest rows of two- and three-storey houses were laid out along reconstituted streets.

The northern parts down to Jackson Street, 355 dwellings, were complete by 1979, with William Howe as job architect and Costain as contractors; the council's now shrunken direct-labour force was fully engaged elsewhere (see page 116). The final stage followed on quickly and in the same vein in 1976–80, with 569 more dwellings south to Ordnance Road. For this John Manley was the job architect, with Costain again the contractors.⁸¹

The most striking feature of the Woolwich Common Estate is the irregular red-brick perimeter or curtain 'wall' along Nightingale Place and Woolwich Common (Ills 464, 465, 466), set back to allow Nightingale Place to be widened, and swept round to return along the site of the common-side terraces and 'to provide a backcloth to the Common with its undulating skyline'.⁸² The 'wall' also encompassed the rest of the estate, giving the area definition as an enclosed and private residential space, an approach that drew on precedents such as the Byker Wall in Newcastle. Apparently solid, the 'wall' is actually permeable, with access ways between its seven linked blocks, which vary in height from four to six storeys. There are set-backs for balconies, and staircase towers further accentuate the dynamic profile. The blocks were named Mabbett, Lawson, Petrie, Ruegg, Siedle, Watling and Wordsworth Houses, invoking mid-nineteenth-century local connections: Mrs Mabbett supervised cartridge-making girls at the Arsenal; James and Henry Lawson, born on Woolwich Common, were mainstays of the Royal Artillery Band; Flinders Petrie, the Egyptologist, was born on Maryon Road, Charlton; Richard Ruegg was a writer and editor of the *Kentish Independent* who lived on Nightingale Vale; Phillipine Siedle, the daughter of a German watch- and clockmaker on Wellington Street, gained local acclaim as a singer and actress; Watling Street is the Roman road that passes just to the south; and William Wordsworth is said to have stayed with Edward Quillinan on Nightingale Place. Between these last two blocks and extending back at right angles is Mabel Polley House, sheltered housing for the elderly, named after the Mayor of Woolwich in 1962–3.⁸³

Behind the 'wall' there are numerous short rows of plain red-, yellow- and brown-brick houses of one to three storeys, many with integral garages, almost all with pitched roofs, most facing directly onto rather mean roads that kept the names of their predecessors, others with echelon planning and more set back (Ill. 436). Each house has its own small yard or garden as well as access to inner pedestrianized paths and yards. At the centre, the community centre was grouped with a row of shops around a square. On the east side of Nightingale Vale there are more terraces, here again red brick with a jagged sweep of roof-lines, and another block of flats.

Problems associated with housing estates with relatively private communal areas quickly appeared at Woolwich Common; there were accounts of vandalism, hooliganism and car dumping even as people moved into the new flats. These persisted, but despite publicity about crime and anti-social behaviour, the buildings were broadly popular. Refurbishments of 1991–2 addressed both security and

maintenance concerns. The medium-rise blocks of the late 1960s were given closed walkways and pitched roofs and their common areas were relandscaped. Nightingale Heights was overhauled by Hunt Thompson Associates in a project that was awarded the RIBA's Housing Design Award for refurbishment in 1995. The tower was completely reclad, forming a cavity that improved insulation and made little-used balconies into small double-glazed conservatories. The under-floor heating, which had proved prohibitively expensive for tenants, was replaced with communal gas-fired central heating, its boiler in a roof space that was refinished with a swept canopy. The success of this work prompted Greenwich Council to carry out similar refurbishments on its other Bison Wall Frame tower blocks.⁸⁴

Officers' married quarters

It was not just the local authority that was carpeting the east side of Woolwich Common with new houses in the post-war decades. There were also changes on the military estate, determined by its shrinkage elsewhere, heightened expectations as to housing and the availability of lands for which other uses had fallen away. Scattered precursors sprang up on the south side of the Jacob's Corner playing fields, where a single house of the 1850s, Herbert Cottage (since demolished), was supplemented in the late 1930s by three houses for married officers, latterly 1–3 Academy Place. Red-brick, tile-hung and typically suburban in character, these are set to be replaced in 2012, the Ministry of Defence intending three houses designed by DLA Architecture. Development extended more systematically eastwards in the early 1950s when the cul-de-sac of Academy Place was formed around the field's edge, with twelve plainer houses in six pairs on its outer side. Other miscellaneous additions to military housing had been made on the east side of Red Lion Lane, across from the Royal Military Academy, where Plantation Cottages, a short row of quarters of the 1860s, had been supplemented by warrant officers' quarters and other married quarters by the mid-1920s (Ill. 448); from this there survives a single semi-detached pair at 3–5 Red Lion Lane. Further north, County House, on a south-west corner of Ordnance Road, is a block of military housing of the early 1950s.⁸⁵

A far more ambitious housing scheme was undertaken in the wake of a general masterplan for redevelopment of large parts of the military estate prepared by Birkin Haward. In 1962 the Austin-Smith/Salmon/Lord Partnership was commissioned by the War Office and Ministry of Public Building and Works to design a complex of seventy married officers' quarters on a secluded site of about nine acres directly south of the Royal Military Academy. Galbraith Bros Ltd was the general contractor and the project was finished by 1968. The houses were laid out around a long cul-de-sac, named **Prince Imperial Road** after one of the Academy's most famous cadets (Ills 436, 437, 453, 467).



465, 466. Woolwich Common Estate, perimeter blocks of 1975–80 in front of Nightingale Heights, 1967–70, and Woolwich Common Nursery School, 1943 (above right). Views from Woolwich Common in 2010



467. Prince Imperial Road, 1962–8, photographed by John Gay from the west c.1968

These amply planned three- and four-bedroom houses were given up-to-date domestic amenities, garages, small private gardens and privacy. Care was also taken to reflect sympathetically the proximity and architecture of the Academy. Trees were retained and the short rows of up to five red-brick houses were laid out in a rectilinear array, most slightly staggered to give some sense of detachment. There are small greens and subsidiary culs-de-sac, suitable places for children to play. Levels vary, and broken parapets suggest castellation to add to a picturesque effect that is comparable to that of contemporary work by Span (Eric Lyons and Partners) at New Ash Green, Kent. Internally the houses have large double-aspect living rooms adjoining dining-rooms deemed suitable for entertaining (Ill. 16), a factor identified in the original brief as particularly

important for officers. Residency was on average two years. The Prince Imperial Road development was well received and won a Civic Trust Award in 1970 for the sensitivity of its interaction with the Academy and for its style, described as ‘unfussy, clearcut and possessed of authority without being authoritarian’.⁸⁶

After this the Ministry of Defence shifted its attention to the other side of the Academy, where the Governor’s House and remnants of the late eighteenth-century Hutton-period buildings and former Field Officers’ Quarters still stood facing Woolwich Common. Haward’s revised masterplan of 1966 projected clearance here for more married officers’ housing in short parallel rows, as on Prince Imperial Road. But when seventy more married-officers’ quarters were built on the site in 1973–5 the layout had been altered, as if in anticipation of the perimeter ‘wall’ that was yet to be built to the north. Plans had been prepared by the Property Services Agency, seemingly in association with what had become Austin-Smith Lord, with Wallis as contractors. Forty-five three-storey houses in two long terraces back onto the common. The row is broken only for the entrance to a two-pronged cul-de-sac, called **Woolwich Common**, from which the houses are accessed (Ills 436, 437). On the far side of this cul-de-sac there are four staggered rows of five to seven houses set at right angles to the long terraces. As at Prince Imperial Road, these homes were generously proportioned by contemporary standards, and the focus of the external landscaping was on making a pleasant private enclave with communal space. Finish was similar, in red brick with broken parapets and long windows. For the long terraces garages were made integral.⁸⁷

Finally, a triangle of the military estate on the east side of Red Lion Lane south of Herbert Road was given up for commercial redevelopment, undertaken by Laing Homes Ltd in 1986. A mix of two- and three-storey buildings of standard types, polychromatic brick on timber frames, fourteen houses and seven blocks of six flats, faces Herbert Road (for Nos 195–197, Wise, Walters and Bondfield Houses) and Red Lion Lane (for Nos 9–17) with two new culs-de-sac, Matchless Drive and Garrison Close (for 1–7 Matchless Drive and Horsley, Robson, Newman and Pankhurst Houses).⁸⁸