HISTORICAL CONTEXT

OBSERVATORY HILL

SYDNEY

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For EDAW

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SECTION 1.0

CONTEXT OF THE STUDY

This study is one component of a Plan of Management and Masterplan that is being prepared for Observatory Hill on behalf of the Council of the City of Sydney. The role of this work is to provide an historical context for the study area. This analysis, derived from both primary and secondary sources, permits an understanding of why the various natural and cultural features have been established and how they have evolved from first settlement to the present day. The work informs and supports the several heritage and landscape assessments that have been prepared for this Plan of Management.

Observatory Hill is one of the best known historic sites in Sydney and has been an important part of the development of the city almost from the first day of settlement in 1788. Throughout that long period it has changed character several times, it has served a variety of related and disparate functions and residents’ and visitors’ perceptions of the site have reacted according to these variety of uses. The several names given to the hill have reflected its various incarnations; Windmill Hill, Citadel Hill, Flagstaff Hill and Observatory Hill.

For this reason a simple chronological history of the land encompassed in the study area would not achieve a useful understanding of the many ways in which Observatory Hill has served the city and has been viewed or altered by its residents and managers. This study presents thematic discussions which best encapsulate those several personas of Observatory Hill. The themes are as follows:

The Pre-European World

Long before Europeans arrived in Australia the land had been occupied by Aboriginal peoples. The environment of the future site of Sydney was attractive to them, at the very least, because of its plentiful resources. It was the home of several tribes or bands who took advantage of those resources and accommodating environment. Relics of those first occupants are extremely rare.

The Changing Environment

The relationship of the natural and cultural environment on Observatory Hill has been more closely integrated than perhaps in any other place in Sydney. Topography dictated the types of buildings constructed there and, in turn, the building programmes have had an immense impact on the evolution of the environment. The latter reached its ultimate expression as a planned public park. This section examines how Observatory Hill has evolved from a natural landscape to a heavily modified cultural landscape, the influences which have generated that evolution and identifies those who have been responsible for the site.

Feeding the Colony
The position of Observatory Hill, with its propensity to catch the prevailing winds from the Harbour and Cockle Bay, made it an ideal location to establish windmills to be used in grinding wheat for flour. Two mills were located on the hill with a third close-by. The first was in operation by 1797 and the last remained in use until the 1820s or slightly later at which time steam powered private mills replaced their services.

Defending the Colony

In the first decades of the nineteenth century several structures were erected on the hill which were intended to act as both an arsenal and the first line of defence in the event of an invasion of the colony. With few signs of threat and other more pressing concerns the fort and magazine were, at best, only partially completed and saw little service for their intended use. They were largely demolished in the 1850s.

Communicating with the Colony

Flagstaffs, semaphores and telegraphs were all constructed on the fort at various times. They were particularly visible elements on the Sydney skyline and each played a vital part in the communications of the colony. The Signal Station continued in operation until the 1930s and the flagstaffs were not demolished until the 1970s. Several structures were built within and close-by the fort to provide accommodation and storage for the signal master, messengers, equipment and stores.

Caring for the Colony

The hospital erected on the hill in 1812 replaced an earlier and, by then, deteriorated facility. Designed by Lieutenant John Watts it comprised a main ward block, surgeons' quarters and a kitchen all in a walled compound. This hospital was devoted to caring for ailing members of the military establishment. By 1839 space was sought in other buildings to accommodate patients. In the later 1840s with the removal of the military barracks at Wynyard to the newly constructed Victoria Barracks the military hospital in the city became redundant; it was closed soon afterwards.

Teaching the Colony

During the same period of military reorganisation education was undergoing an even more significant change in its administration. One outcome was the formation of National Schools. The appropriation of the empty former hospital buildings supported the establishment of one of the earliest National Schools. Fort Street became the pre-eminent model school famous for its innovative teaching methods. At first co-educational the boys were removed to a separate establishment at Taverners Hill in 1916. Teaching became more difficult at the school as land was appropriated for several purposes including the construction of the western distributor in the 1960s. Prior to that time a primary school had been
established during the 1940s-1950s to the north of the older schools. Fort Street finally closed as a school in 1974 after 124 years of continuous education.

Observing the Heavens

After its discovery Australia was highly valued as a site for astronomical observations. The first observatory was built by the French at Botany in 1788. Six months later an Observatory was built at the new settlement of Sydney. For the first half of the nineteenth century the science of astronomy had a troubled history. It was not until the mid-1850s that the decision was made to build a modern scientific observatory incorporating a time-ball. The highest hill in Sydney visible from the harbour was the obvious choice for its location. It became a popular and well-known landmark in the city. By the end of the century and particularly during the early decades of the twentieth century concerns were voiced regarding the increase in light, smog, vibration and other factors which were detrimental to the work of the Observatory. These issues, as well as several others, led to the final closure of the Observatory in 1982. Following a lengthy programme of renovation it was reopened in 1987 as a museum.

The Encroaching City: Changing Attitudes

During the early years of settlement Observatory Hill was separated both physically and in the public perception from the main town. Devoted principally to military purposes and difficult to gain access to because of few paths and rock barriers it was, in some senses, a place of mystery to the average Sydney-sider. Works undertaken during the 1830s and afterwards began to make the hill more accessible; streets were extended and houses and shops were built at its base. By the 1840s the hill was well-known as a magnificent vantage point; many views from it were recorded by artists. Closer integration with the mainstream life of the city was exemplified by the construction of the Agar Steps and Terraces in the 1880s as well as the landscaping of the hill as a public park. The "slum clearance" programmes initiated to combat plague caused The Rocks and Millers Point to drift into a period of neglect. This ensured the retention of much of the nineteenth century streetscapes. These areas, along with Observatory Hill, assumed a picturesque quality for the romantic and nostalgic. Nostalgia evolved by the 1970s into a more militant demand for preservation of the historic environment. The relocation of the National Trust to the hill in this period symbolises the particular attention and concern felt for this portion of the city and its historic values. Today, as it was during the later years of the nineteenth century, Observatory Hill is a popular tourist destination and is valued as one of the pre-eminent "historic" places of the city.

Dreams and Schemes

From as early as the 1820s Observatory Hill has been the focus of several schemes for buildings or works that ultimately did not come to fruition. These have included a gaol, a Mint, parking stations and bowling greens.
This work has been produced using a wide variety of sources and owes much to the several reports which have already been prepared for Observatory Hill or aspects of that precinct. A full bibliography is attached to this report.
Aboriginal people occupied the region that would be the future site of Sydney and its metropolitan area for at least 40,000 years, and possibly for much longer, before the arrival of Europeans in 1788. The environment described by those first white settlers as an untouched primeval wilderness had, in fact, been shaped by Aboriginal peoples for millennia. The plentiful marine and terrestrial resources and the accommodating environment of the future settlement site of Sydney were well known and frequented by those Aboriginal tribes and clans associated with the area (1).

There are numerous descriptions of Aboriginal people in the early camp-site and late town of Sydney although none are specific to Observatory Hill. The latter’s fine views across the harbour are likely to have been as prized by Aboriginal people as they later were by Europeans. However, apart from documentary and pictorial records, physical relics of the first occupants are extremely rare within the city area principally due to the overwhelming impact of successive building programmes.

Two sites only of relatively intact Aboriginal occupation and use have been recorded within the CBD. The first, at Moore’s Wharf, was probably the remnants of a midden, that is, a refuse pile. The second, in Cumberland Street, was the remains of a camp-site containing shell-fish and fish bones. The proximity of this site to Observatory Hill makes the occupation of the latter even more likely although there are no known or recorded sites on the hill.
The relationship of the built and natural environment in this part of Sydney has been more closely integrated perhaps than any other part of the city. Topography dictated where, when and how buildings could be constructed and, in turn, the types of buildings constructed there took advantage of the unique attributes of their location. In particular the impact of building programmes forever altered the pre-existing natural landscape to that of a carefully planned cultural environment.

The earliest plans of the colony provide little detailed evidence for the pre-settlement form of the area other than as a tree-covered hill probably supporting eucalypts, banksias, wattles, ti-trees and a variety of shrubs. It was the last of a series of undulating ridges which eventually culminated in this peak, the highest point in Sydney. Governor Phillip wrote that,

"The necks of land that form the different coves and near the water for some distance are in general so rocky that it is surprising such large trees should find sufficient nourishment, but the soil between the rocks is good and the summits of the rocks, as well as the whole country round us, with few exceptions are covered with trees, most of which are so large that the removing them off the ground after they are cut down is the greatest part of the labour" (1).

The lower slopes are likely to have supported a woodland of Scribbly Gum with an open, low shrubby understorey comprising Acacia, Banksia and ti-tree. The upper slopes and ridges probably supported Blackbutt, Eucalyptus and Angophora with a shrubby understorey and grass (2).

The pre-settlement environment was stripped from the area quite rapidly; even by the early 1790s views of the ridges from Dawes Point to Observatory Hill show few trees, stumps and bare hills (3). The steep sandstone outcrops that formed, particularly, the northern and western edges of the hill are highly visible in all these images.

Topography and location encouraged the use of the site for very particular types of buildings that could exploit those natural advantages. The prominence of the hill, its visual panorama and its propensity to catch the prevailing winds coming from the waters of Cockle Bay and the harbour led, inevitably, to the construction of windmills as well as a hospital. The isolation of the site supported the development of facilities not suitable to the more intensively settled portions of the town. These included a gunpowder magazine and fort. The elevation of the hill made it the ideal location for a flagstaff and, later, a signal station.

Almost all of these facilities required the surrounding trees to be removed as well as the scrub and other vegetation. In some cases this was to ensure clear lines of sight to the harbour and in others the danger of scrub fires was too great to allow those elements of the pre-settlement landscape which had survived to continue to do so. The soft landscape elements were removed leaving only outcrops of rocks and, at best, a low grass cover which became a favourite of the goats roaming the city. Only a few trees and shrubs were maintained around the hospital buildings.
The effect of this work is seen in several views of the hill, for example, George Edward Peacock's "View of Millers Point and Darling Harbour" recorded in 1845 which shows it to be completely bare of all vegetation. Prout's view of Millers Point from the Flagstaff Hill, 1842, shows a similarly bare but grassed, rocky slope with three of the goats which made their home on the hillside. Contributing in their small way to the overall appearance of the hill were the children who, in the mid 1820s, chopped away at what bushes remained on the slopes to take them home for fuel (4).

As the century progressed less and less attention was paid to the landscape surrounding the major buildings on the ridge. Apart from the plantations next to the Observatory or around the school (former hospital) grounds the rest of the hill assumed a neglected appearance. A correspondent from one of the daily papers described the scene in the 1860s. He stated that the land surrounding the Observatory and the School had been neglected for years although some levelling had been undertaken in 1864 by means of dumping rubbish. Despite these efforts it remained springy and spongy in many places for want of drainage with only a few straggly, yellow flowers. It had been extensively quarried on the northern and western sides and the steep cliff created by this work, particularly along Argyle Street, had proven fatal more than once (5).

This portion of the land that would become Watson Reserve, at first was completely encompassed in the rock face. In 1863 plans were prepared for a new footway to be constructed from Argyle Street to Upper Fort Street; this would become Watson Road. As part of the work, which involved leaving the quarried rock face to Argyle Street and creating the road behind it, two sets of stairs were constructed linking the upper and lower levels. Little or nothing was done to improve the amenity of the flat land between the rock face and Argyle Street at this time (6). By 1880, however, this had been formalised and the earlier stairs replaced with the current flight half way along the reserve (7). The reserve fronting Argyle Street was fenced during this decade (8).

Photographs of the hill taken during the 1870s show the land between the School and the Observatory to be virtually a wasteland. There were no trees, rock outcrops protruded and it supported only a few struggling plants. Rubbish was dumped in the gullies of the uneven surface and in one place someone had erected a washing line (9). The slopes leading down to Kent Street and Argyle Street are seen in similarly dated photographs to be bare or sparsely grassed (10). The bare quarried sandstone ridges were a feature of the Argyle Street frontage.

In contrast, the Observatory and the School maintained planned and tended landscapes both generally deriving from the later half of the nineteenth century. For example, the fig trees which are so strongly associated with the School do not appear, at least in the front of the building, in photographs of the 1870s but do so by the turn of the century. Prior to that only a circle of grass was planted there (11). By the turn of the century the beds edging the main entrance to the school appear to have been devoted to vegetable gardens on one side and specimen planting on the other. The works at the school during the later years of the nineteenth century with respect to the landscape surrounding the buildings related principally to levelling and filling the various playgrounds and to the construction of...
fences. The latter comprised a variety of types including stone walls, paling and post and rail.

In the earliest photographs of the Observatory in the 1860s it is seen to be surrounded by newly planted trees and shrubbery the whole enclosed by a half-round lapped timber paling fence with timber picket pedestrian and vehicle entrances. By the 1870s the vegetation was well established providing the southern front entrance with a dense hedge of foliage above the top of the fence. By this time, outside the northern wall of the Signal Station, was a crudely fenced -in garden or grazing area the fencing comprising slab posts and rough sawn or split timber pickets.

Throughout the 1860s and 1870s reforming journalists wrote vividly of the rookeries or slums of Sydney. They stressed the need for more open space in an increasingly unhealthy city. Moves were made to make Flagstaff Hill one such open space a proposal at least as much influenced by expenditure as other considerations; it was cheaper to improve on this existing open space than to commence a new project. Improvements or additions made to the hill at this time included the provision of dressed sandstone kerbing on the site access road and telegraph poles that ran north-south along the ridge.

The Government Astronomer was responsible for convincing Government in 1875 to improve the amenity of Flagstaff Hill. This was done by surrounding it with a palisade fence comprising iron pikes and rails on a dwarf stone wall and by transforming its rough surface into a conventional park (12). At about the same time the Executive Council was induced to place the Flagstaff Hill Reserve under the control of a Trust comprising the Lord Mayor, the Director of the Botanical Gardens and the Government Astronomer. Gas lighting was introduced in 1879 due to their efforts (13). As the hill became more accessible and amenable as a result of these works it was increasingly used by the public and it came to be valued as an important recreational area. In 1879 it was stated that,

"Fort Phillip, although not strictly speaking a park, is nevertheless a very important public reserve. It contains about eight acres, occupies the most elevated position of any reserve in Sydney and commands the most extensive views of the harbour, the Lane Cove and Parramatta Rivers and surrounding landscape... It is in the hands of Trustees..." (14).

In 1884 the hill was gazetted as a public park; the name was changed in 1887 to become Observatory Park. A civic planting scheme was prepared and initiated during the 1880s and 1890s and this appears to have extended to and included the Agar Steps. Features of the scheme included areas of open lawn scattered with shade trees, primarily figs, with fenced garden beds and shrubbery planting around the Observatory precinct and at road junctions. More ornamental garden beds were located close to the southern Messengers' Quarters. Seats and drinking fountains were provided for visitors.

Several of the paths including that skirting the Observatory precinct and the pedestrian path which joins it at the south-eastern corner of the Observatory were
created in this period. The principal paths circled the Observatory making it the centre-piece of the scheme. Two paths led to Upper Fort Street and a third to the path that circled the northern perimeter of the School. From here the path led to the principal access to Kent Street by the Agar Steps. Another path linking the two Fort Street exit paths was made in the later 1880s or first years of the 1890s (15). The current flight of stairs to the Watson Reserve were probably created at this time or in the earlier 1880s. The scheme for the reserve along Argyle Street called for numerous single specimen tree plantings. An enclosure for a plantation was reserved along the southern side of Watson Road (16).

Increases made to the Observatory precinct in the same period required changes to be made to the park. These works included the replacement of the earlier fence with a lapped and capped timber version and the relocation and reuse of the southern gates.

After a long period of maintaining this reserve the park became the legal responsibility of the City Council during the the early years of the twentieth century after a lengthy period of discussion with the Premier (17). The formal acquisition of the area by Council also included the Watson Road Reserve (18). Many of the improvements that are still to be seen on the hill were the work of the Council. These included the construction of a new entrance in 1909 midway between the entrance at Fort Street School and the northern boundary of the park (19). Similarly the removal of a number, such as iron railings (in 1908-9), gates and a particularly elaborate urinal also were the work of the Council.

Military band recitals were introduced on Observatory Hill in 1901 and in 1909 Council approved the construction of a bandstand. Originally it had been proposed that this structure was to be placed in the Argyle Reserve. With the lapse of one year and the planned relocation it was found that the original price for the bandstand, approximately 340 pounds, was now no longer sufficient for the project. It was proposed that the plan be modified to provide for a structure that would cost approximately 250 pounds. A tender was accepted for 266 pounds but the decision was deferred again (20). The bandstand/rotunda finally was constructed in 1912.

There have been few recorded changes made to this structure. Mostly works have been confined to repainting the first time in 1916 at which time the work was extended to include railings and playground fences (21). More painting was carried out in 1919 (22). In 1926 Sunday afternoon concerts were cancelled due to falling attendance. Evening performances attracted more people but complaints were made by Church authorities and gradually the recitals came to an end a victim as much of wowserism as changing tastes and the attractions of novelties such as moving pictures (23).

A short time after the original decision was made to provide a bandstand a motion was carried in 1910 to commission an investigation into the advisability of providing a children's playground (24). The enquiry found in favour of the proposal and work on it commenced soon after. Shelter sheds were erected there in 1915 (25). During the influenza epidemic of 1918-1919 the playground was used to
provide amusement for children whose parents were suffering the illness; volunteer supervisors chaperoned the children (26).

Other recreational facilities were provided in 1924 through the construction of two tennis courts on Kent Street (27). In 1925-26 a single court was constructed on the hill at a cost of 483 pounds (28). It was available to those who were residents of the ward (29).

The hill, as most parks do, has become the site of memorials specifically the South African or Boer War Soldiers Memorial in 1902. In 1943 approval was given to erect the Boer War Gun on the platform having moved it from the Botanic Gardens.

As part of its formal responsibility for the reserve Council has been required to provide on-going maintenance. This has included, in 1909, the provision of a watering service which was laid during the course of a large programme of filling and levelling (30). It was renewed in 1949 (31). In 1917 changes were made to the nineteenth century design of the park. These included the removal of some trees, other vegetation and gravel paths. Flower beds were relocated and some large trees were lopped at the same time. Footpaths have been repaired many times (32). An elaborate two-person urinal was erected on the hill in 1910 at a cost of ninety pounds (33). It was removed in 1927 (34) and then reinstalled. It was finally removed in the 1970s amidst much public protest. It was re-erected under the south pylon of the Harbour Bridge.
In 1788 Governor Phillip arrived at the site of the new settlement provisioned with forty hand mills for grinding grain. However, there was no one with the necessary skills to maintain them and they soon proved to be useless. During the first years of the new settlement a recurrent theme of official correspondence was not only the need for food but for mill machinery and people skilled in its operation (1). By 1791 Phillip stated that the need for this technology was absolutely necessary.

A new Governor, John Hunter, arrived in Sydney in 1795 with machinery and a scale model of a windmill a useful example of how to erect and operate one. After much political and personal dissension the first successful windmill was erected by an "ingenious Irish convict" (2) on the crown of the hill. It had a masonry tower that was complete by 1796 and by early 1797 the machinery were sufficiently in place to give it a trial. Several early drawings and watercolours show the mill to be placed within the incomplete ramparts of the Fort Phillip, probably between the present site of the Observatory and the cottage. It became a central feature of the fort. During the first years of the new century the mill suffered several depredations, including the theft of the sails, and generally began to give way as the foundations started to crumble (3).

Early nineteenth century pictures show that two other windmills were located close by this first mill. One was on a site near the present western end of Grosvenor Street and outside the study area. This was the military windmill. The second, a Government mill, was located close to the south-western part of Fort Phillip near to the site of the Military Hospital. City subdivision plans show it to be placed north of the hospital out-buildings and in its own fenced compound (4). This second mill on the hill was octagonal in form and constructed from timber, the work of Nathaniel Lucas after he arrived from Norfolk Island in 1805 (5). It was described in the Sydney Gazette of February 16, 1806 as an "octagon smock mill".

The construction during the first years of the nineteenth century of the larger government mill as well as those privately managed establishments led to the abandonment of the first mill on Fort Phillip. Steam powered mills made the old wind driven forms completely redundant. By 1806 this eighteenth century structure was described as "useless" (6). By 1809 it had lost its vanes. It was noted in 1811 that,

"On the hill is the Citadel, with the Union flag flying, and two Government Windmills, one built of wood and the other of stone, the latter of which is unserviceable" (7).

Finally, in 1823, Commissioner Bigge's report on the State of Agriculture and Trade in NSW stated that,

"Two windmills were built at the public expense in the town of Sydney and they were worked under the management of a Superintendent... and a certain number of convicts subsisted at the expense of the Crown. The use of one of these mills has been for some years allowed to the regiment in garrison and they have
derived the advantage of having their own wheat well ground and a certain degree of profit from the grinding of wheat for others. The other mill is still kept up but since the establishment of a water mill and a steam mill near Sydney by individuals no necessity exists for its continuance...I should recommend that both these mills should be disposed of." (8).

The two remaining mills were leased for a time but soon fell into disrepair. It is unclear when they were finally removed from the hill although possibly one or both survived at least in part to the middle years of the nineteenth century.
Despite concerns about invasion by French and other European powers defence did not assume a high priority in the first years of settlement; near starvation conditions were of a much more immediate concern. To protect the colonists some small batteries were erected on Bennelong and Dawes Points but, despite some improvements, most were neglected and in the event of invasion would have provided no deterrent. Two canons had been erected on Windmill Hill by 1802 and these soon were in a state of decay (1). In the period of 1800-1801 a powder magazine was built "at the back of Windmill Hill...of heavy stone and the inner part finished with brick" (2). It was not a success; the gunpowder became damp and it was soon transferred to a hulk moored in the harbour.

Other and more substantial works were undertaken at Georges Head in 1801 and Dawes Point was remodelled at the same time. With some security against external threats afforded by these new works the Governor became concerned about the potential threat posed by convict insurrections. The measures taken to protect the citizens encompassed the formation of a volunteer brigade of citizens, an early militia, and the construction of a citadel or fort which would dominate the town and protect it in the event of convict riots (3). It appears to have commenced construction in June 1804 using stone quarried from the western side of the hill (4).

The site selected for the fort enclosed the, by then, disused tower windmill. Ensign Francis Barrallier and Lieutenant George Bellasis have both been identified as the possible architects of the work. It was supervised by Ensign William Minchin (5). In 1804 the Sydney Gazette reported that,

"... His Excellency proceeded to the Windmill Hill... to lay the foundation stone of the hexagon fort, to which His Excellency... gave the name of Fort Phillip...the inscriptive stone was deposited in the flank commanding the town and Surrey Hills; the fort will be encompassed with a large ditch and glacis, which are nearly compleated; and from its elevated situation commands the Cove, with the upper and lower approaches to the Harbour, and the whole surrounding neighbourhood to an extensive distance" (6).

Work on the fort was sporadic throughout 1805 no doubt partly due to the fact that the threat from convict riots was no longer perceived as so pressing; the chief agitators of the Castle Hill rebellion had been moved to Newcastle. Despite this slow progress fourteen guns were placed on the partially completed walls (7). Work at Fort Phillip finally ceased in March 1806 at which time it was reported that,

"Fort Phillip. - The ramparts, merlons and embrasures of the three sides nearly finished; the outer wall of the rampart of the fourth and fifth sides raised 5 feet; a bomb proof (chamber) of 14 feet square completed on one side, and the foundation of the sixth side nearly laid...." (8).
A retrograde step in the life of the fort was made when Governor Bligh assumed office. He began to dismantle it, apparently in spite against his predecessor (9). It was reported that,

"...the merlins of the fort are all taking off and several other alterations, I am told, are to be made - not for the better I assure you. I understand the foundation stone on which y’r (King’s) name is, as the then Govr, is to be taken out and something else substituted...." (10).

Sketches and watercolours completed soon after show that Bligh did in fact remove the merlons.

For many years the old fort structure, although well-built, appears to have remained a half completed ruin. It was not until the arrival of Governor Macquarie in 1810 and his plans for a rejuvenated city that work recommenced on defensive measures on the hill. In 1815, having surveyed the environs of the city, Macquarie’s architect Francis Greenway determined that Windmill Hill was the best place for "a regular citadel". Greenway in fact had plans for massive defence works that would completely enclose the town (11). Only a few fragments of the plan were to achieve reality; Dawes Point Battery, Fort Macquarie and a few others.

The magazine was Greenway’s first work after his appointment as civil architect in 1815. It had a bomb-proof arched stone vault that was four feet thick. It was to have side passages and a roofed upper storey. The roof was to be clad with large stone “tiles”. It was partially occupied prior to completion of the roof and side passages and this caused some damage which led to the construction of a temporary roof. The temporary works became permanent. After this the only additional work was the construction of a surrounding wall as a security measure. The rest of the planned arsenal was never constructed; its ambiguous status was highlighted by Commissioner Bigge when he recommended the erection of a palisade or wall around the magazine if it was to become the principal arsenal of the colony (12).

Commissioner Bigge stated that Sydney had no need of expensive defence works, that its defence would depend on sources outside those that could be mustered by the town. That pronouncement, as well as Macquarie’s departure from the colony in 1822, caused the end of any serious consideration with respect to the fort as part of Sydney’s defence strategy. After that houses began to be built in the lines of fire of the fort making it completely useless as a working battlement. The situation was neatly assessed in 1829 when it was stated that,

"For Phillip...is a regular hexagon, never quite finished and is now so surrounded by houses as to be useless, excepting as a signal station..." (13).

In 1851 Fort Phillip, along with other defence structures, was transferred from the Ordnance Department to the Colonial Government; it was noted at the time that it contained six 24-pound, smooth-bore, muzzle loading guns. These were removed before work began on the observatory. The fort occasionally had been used as a
saluting battery and it was this service that was its last official duty. The guns were fired in 1852 to announce the death of the Duke of Wellington.

The magazine remained on the hill until the 1850s at which time it was demolished, probably as a measure to prepare the site for the Observatory. It is clearly shown on many plans of the city paralleling the south-western arm of the partly completed fort. A sketch plan of c.1856 notes the magazine "being pulled down" (14).
Flagstaffs, announcing the arrival and departure of ships, were an important and obvious part of the maritime skyline of early Sydney. One was erected at South Head in 1790 and a second at Dawes Point. Both were destroyed by lightning strike in 1799 but were reconstructed shortly afterwards (1). By 1808 another flagstaff had been erected on the eastern rampart of Fort Phillip. It is seen in many drawings and paintings of the early decades of the nineteenth century and it was during this period that the hill became more commonly known as Flagstaff Hill (2). A second flagstaff was to be erected on the ramparts of the former fort at some time prior to 1871.

In 1820 Bigge advised Macquarie that a semaphore was to be erected at both South Head and Fort Phillip to make the signalling process more effective than that offered by the flags of the flagstaffs. The semaphore was to be built on the same lines as those constructed at Hobart Town (3). It had certainly been built by 1823 at which time it was included in a lithograph by Joseph Lyceott. In this it was shown to have two arms. A hut for a signal man was shown there and it also depicted the flagstaff (4). All the representations of the semaphore show that the post had at least two swinging arms, probably controlled by ropes. The arms could be changed to a variety of positions that spelled out numbers. These could be translated into letters by means of a code book (5). In 1827 responsibility for the semaphore was transferred from the Brigade Major to the Harbour Master.

The flagstaff and the semaphore (which was also known as a telegraph) were used together in a variety of combinations. In 1839 James Maclehose included an engraving which showed the two staffs along with the Telegraph master and his hut, a military guard and several visitors enjoying the views in Sydney (6). During the 1830s the Harbour Master published a precis of the code signals in a variety of calendars and almanacs; in 1841 readers were informed that the code encompassed upwards of 5000 words and 3400 sentences. Not surprisingly, the job of those responsible for the signals was becoming increasingly complicated; the salary of the Signal Master was doubled and he received quarters in recognition of this responsibility. The latter comprised the hut on the rampart and the windmill tower. They were not capable of accommodating the Master and his family as well as the equipment required for his job but the onset of an economic recession in the first part of the 1840s precluded construction of new facilities (7).

In 1847, after the worst of the depression was over, approval was given for the construction of a Telegraph House at Fort Phillip. The sandstone ashlar cottage was designed by the Colonial Architect Mortimer Lewis. Tenders were advertised in November 1847 and the work was completed in the following year by Peter McBeath who was to be responsible soon after for the work of converting the former military hospital, on another part of the hill, to a school (8).
of this extension was intended to provide housing for the signal equipment. The latter had been stored in the house since the demolition of the old windmill tower. As well it contained a bedroom for the children. Some other works are likely to have been carried out at the time to extend the living space and, as well, a timber lean-to was made to connect the basement rooms and WC (10).

In January 1858 an electric telegraph was connected between South Head, the city and Liverpool. The stationmaster then became responsible for morse reception and transmission as well as the manual signals which continued in use (11).

In 1862 another cottage was built on the northern boundary of the National School. This was to serve as quarters for the Signal Station messengers. Additions were made to this building in 1877. Early in 1868 tenders were called for the erection of a second brick messengers' cottage situated immediately to the north-west of the signal station. It was designed in the office of the Colonial Architect, James Barnet, and was completed at some time before 1871. After this time there were no other major additions made to the signal station complex.

The station was an essential element in the communications of the city, however, its situation immediately adjacent to the Observatory also made it a valuable tool for the astronomer. In 1882 it was reported that,

"The Government Astronomer maintains telegraphic intercourse with nearly a hundred scientists on the coast and in the interior enabling him to collect voluminous data on the interesting question of meteorology and other phenomena" (12).

During the 1930s the Signal Station ceased to operate as a point of receipt for signals from South Head. The station then was leased as accommodation for widows of former Maritime Services Board employees. The Messengers' Quarters was included in this arrangement. It was handed over to the Sydney Harbour Trust in 1900 and then became the responsibility of the Maritime Services Board in the 1930s when that organisation superseded the Trust. The buildings were then used for retired MSB staff. The two flagstaffs were demolished in the 1970s.
A few years after Governor Macquarie’s arrival in the colony in 1810 he turned his
attention to the state of the military hospital then located close to the present-day
intersection of Clarence and Erskine Streets. It was in a ruinous condition.
Macquarie announced his attention to build a new military hospital at the end of
1812. He entrusted this project to his aide Lieutenant John Watts who, prior to his
commencement of a military career, is said to have received some architectural
training. It was to be one of several buildings that Watts would design for the
Governor.

The location of the new building took advantage of the vacant ground in an area
that was increasingly devoted to military activity and which was close to the site of
the barracks at Wynyard Square. Like the General Hospital, which was then under
construction on the opposite side of the town, the location took advantage of the
high hill-top to catch breezes which were considered to be health-giving for the
wards. There are no plans of the hospital known to have survived or of its
out-buildings. The buildings were under construction by April 1814 (1) and were
completed in July 1815. Macquarie described the completed hospital as,

"Brick-built, two Stories high, having upper and lower Verandahs, with all the
necessary out-offices for the accommodation of 100 patients; the whole being
enclosed with a stone wall or stockade" (2).

As well there was,

"A brick built Barrack for the Accommodation of the Military Surgeon and One
Assistant Surgeon" (3).

The hospital conformed to a standard pattern seen in other buildings designed by
Watts, such as the military barracks at Parramatta. The main building comprised,
within a wrap-around verandah on each level, two wards on each floor separated
by a central passageway. At each corner of each floor was a staff room (4). The
roof was M-shaped, a shortage of long timbers forcing this design on the architect
(5) although it was later changed to a single pitch. The hospital was brick-built with
stone quoins running the full height on all four corners. The door heads were
semi-circular arches crowned by a keystone and the windows were spanned by
flat stone arches. The lower verandah was paved with stone and the upper floored
with wood (6). The surgeons’ barrack, apart from a pitched roof, appears to have
been of a similar type and was probably like the officers’ barracks Watts designed
for the Lancers Barracks. Presumably so was the third out-building, most likely a
kitchen.

The materials used were all local. Apart from the stone, shingles were rose
she-oak (Casuarina torrulosa) the beams in the verandah and roof were
narrow-leaf ironbark (Eucalyptus crebra) and the floor timbers grey ironbark
(Eucalyptus paniculata) (7).
A town survey of 1822 shows the main hospital as well as the two substantial out-buildings inside what appears to have been a walled compound. The out-buildings also were separated from the main hospital by a wall (8). The most famous view of the new building is the aquatint prepared by Major James Taylor in 1820-22. In the foreground is the hospital with members of the military wandering the grounds in their long, convalescent nightshirts. It shows, amongst other details of the building, the verandah on the upper level enclosed to waist height with a simple palisade railing. The site is surrounded by a paling fence and appears to be grassed although there are some shrubs and small trees around the out-buildings. The fence separating them from the main hospital appears in this drawing to be of palings (9).

There are some details regarding the repairs and changes made to the site during its life as a military hospital but the impact of the later works is likely to have removed most evidence of them. The principal problem, apart from decay, was lack of space. In 1839 a portion of the southern wing of the General Hospital in Macquarie Street was appropriated for the use of the military as additional ward space (10).

By the 1840s the presence of a major military establishment in the town was becoming increasingly embarrassing, a reminder of convict origins. As well, the value of the land encompassed by the fifteen acres in the heart of the city was becoming too great to be locked away in the barracks. In 1848 the Wynyard Barracks was superseded by the newly constructed Victoria Barracks at Paddington then a respectable distance from the town centre. With the removal of the barracks the military hospital on the hill became redundant as new facilities were available at the Victoria Barracks. The hospital was closed a short time afterwards.

Unlike most of the early nineteenth century works on the hill the hospital buildings survived into the twentieth century having been used, after remodelling, for the Fort Street School. What remains of the ward block is contained within the National Trust Centre. The out-buildings were demolished in the 1960s to make way for the western distributor.
At the same time that the military was experiencing substantial changes in deployment the education system in NSW also was undergoing far-reaching changes and expansion. For the first few decades of settlement the State had taken responsibility for establishing many charitable and orphan schools as well as local school houses. By the 1820s, however, the Anglican Church was keen to assume formal responsibility for this aspect of community life. Their involvement until then generally had been confined to the daily supervision of the state or charitable organisations. The Clergy and School Lands Corporation was formed in 1826 with the power to manage and care for the various educational institutions. The Corporation was retired in 1833 but various denominations, apart from the Anglican Church, continued to support and found educational establishments.

Fair provision or financial support of these agencies became an increasingly great problem for the Government. Its answer was to implement a system of state founded and run schools. As early as 1837 it was intended to create a system based on the Irish National Schools but, for a variety of reasons, the impetus of this development stalled. In 1848 state education was placed under the management of two boards. The Board of National Education was responsible for the regulation and inspection of those state schools to be established under the national system of education. The Denominational School Board was responsible for church-founded schools. Both were subsidised by State funding.

From its inception the National School system was intended to be a country based one bringing education to areas where denominational schools had not been established to that time. Eventually, however, both National and Denominational Schools were founded in the same areas. The first National Schools were built at Kempsey (1848) and then at Largs (1849). Between 1848 and 1851 the Board of National Education opened thirty-seven schools. The majority were in the country. Only four schools of this type were established in the city during the formative period. The first was at Crown Street (1849), the second at Riley Street (1849) and the third at Fort Street (1850). A fourth was opened at William Street later in 1850.

The Fort Street school was the pre-eminent of these schools. It was the first model school which was intended to demonstrate how a National School should be built, arranged and managed; it was also the largest. It provided training for teachers in new educational methods. Even with the many changes made to the system of education throughout the later years of the nineteenth century Fort Street retained its reputation as the implementor of innovative and successful teaching methods. It trained some of the best and most famous educators of the period and produced hundreds of "Fortians" who were to be outstanding in their later careers. To achieve this exemplary reputation the school had to make do with buildings not designed for the purpose and, at times, hopelessly inadequate for the tasks.

Following the establishment of the National School system the Board of National Education applied to the Government for a building in Sydney suitable for a model school for training teachers. The former hospital building was requested and
agreed to by the Government. Tenders were called for alterations, repairs and additions all to a design by the Colonial Architect Mortimer Lewis (1).

The Board was given formal possession of the site at the beginning of 1849 and, in the same month of January, tenders were called for alterations to the buildings. Three were supplied by contractors. One to the value of 849 pounds was submitted by Peter Macbeath and accepted for the work. The contract time was for five months (2). Work on adapting the buildings and site for the new purposes included excavation in front and at the end of the main building to level the ground, construction of a stone parapet wall seventy-eight feet in length to enclose the south-eastern corner of the site, construction of a new stable in stone with an open front and paved floor, removal of the old stable and water closets and construction of new water closets, repairs to the main building and repairs to the kitchen (3). The former, light Georgian appearance of the building was transformed to that of a heavy Italianate pile. Work went over time but was considered to be satisfactory except for the coat of arms which was carved in stone rather than rendered in cement as per the contract (4).

The earliest perspective of the building as it appeared after its conversion by Lewis was provided by Joseph Fowles. This shows the building elongated with columns to the front and large arches with lattice inserts (5). Fowles described the remodelling process as one of considerable expense, the result being a complete transformation of the old building;

"The exterior aspect has been changed from the unsightly building it was... Its internal economy has also been altered, the old wards having been converted into spacious and convenient class rooms and the extensive grounds surrounding afford ample space for exercise and training" (6).

The former hospital was reopened in 1850 as the Fort Street Model School. Sketch plans of that period show that, essentially, the configuration of the former hospital in the placement of the buildings had been retained with little change (7).

As early as 1851 the headmaster of the new school stated that there was a need for additional accommodation. It was not until 1856, however, that the school was remodelled to cope with the growing numbers of students as well as to provide the first kindergarten in the country. As part of this work the main school was remodelled, although the extent of that work is unknown, and tenders were let for two other buildings which were to form part of the boys and part of the girls schools. One of these buildings was the future S.H. Ervin Gallery. Contemporary sketch plans show the new configuration; most of the new buildings were to the north outside the wall of the former hospital (8). W. S. Hatton's view of Kent Street North, recorded soon after the completion of the principal new building, shows the distinctive "bulge" of that building as well as several of the older hospital out-buildings.

A school inspection report of 1859 stated that the buildings at that time did not need repair, improvements or enlargements (9). By 1862, however, there is reference to a building in the course of construction on the north side of the school.
(10). Around that time it was reported that the buildings occupied 11,535 square feet and the area of the grounds was 7123 square yards. Water closets were in the least exposed parts of the ground, the boys toilets were placed at the southern end and those for the girls at the northern (11).

The early 1860s were marked by agitation for social reform and concerns for living conditions. Provisions to ensure the health of the city were emerging as important social issues. At this time, in 1864, criticism began to appear in the press of the conditions of the school particularly the changes made to the main building. Bricking in the old hospital, it was claimed, produced a potentially deleterious effect to the health of the scholars and, incidentally, a less than attractive external appearance. It was stated that,

"The Board of National Education have succeeded in making the latter (National School) as useful as a school and as a training establishment for teachers as they have in rendering it anything but handsome as a building. In its original state it may not have been ornamental but it was useful, the deep verandah and balcony around it left it cool, open and airy. By the changes they have made, the Board have bricked out as much of light and air as it was possible to do without leaving the inmates in utter darkness and asphyxiating them..." (12).

By 1871, however, the school inspection report stated that this was a most healthy institution even when it was operating at capacity with 1952 pupils in attendance (13). Deficiencies, however, had become apparent in the design and services of the school by the later 1870s. In particular the problems of too few toilets and inadequate sewerage and drainage were highlighted in most correspondence. At the same time the inadequacies of some of the old military hospital buildings were complained of, especially the cottage and the kitchen. The cellars under the kitchen were said to be particularly unpleasant, the foul odours being both noxious and unhealthy (14).

Improvements were made to the site at this time including some to the playgrounds, retaining walls and the construction of a fence (15). Gymnasium equipment was introduced in 1876 (16). It is likely that, during this decade, the process commenced of enclosing the formerly open arches of the renovated hospital building (17). In the early 1920s one former school boy remembered the school as it was during the 1870s. He recalled how some classes were held in open sheds enabling the boys to see the spaces between the sheds, the main buildings and the gymnasium shed. When the headmaster gave lessons the boys were marched to the main building (18).

Despite the improvements, by 1880, it was stated that the buildings, furniture and playgrounds were all in need of repair (19). Immediately some works were begun to up-grade the drainage but it was not until 1884 that work commenced on significant new works for the school.

The latter included the construction of what was termed the new practising school as well as numerous other lesser works such as improvements made to the ventilation of the buildings and the provision of water (20). The same programme
included repairs to the stone wall along the western side of the site. During the work a substantial portion fell onto a cottage below which required the school to effect extensive repairs to that house (21).

Between 1887 and 1889 several new classrooms were added to the school and repairs were made to the existing buildings to the value of 1275 pounds (22). In approximately 1890-91 a carpentry shed was built along the western end of the playground (23). As space in the school became restricted the area under this shed, which was built on stilts on the sloping part of the site, was used as teaching space. Another outcome of the over-crowding was the need to stop children running in the crowded playgrounds (24).

Reminiscences of former students described how, in the 1880s, the teaching area for the second class

"...was in a sort of open shed on the south side of the playground. This shed was replaced, shortly after I became a Fortian, by the two-storey brick building which is still standing. The eastern portion of the ground floor, however, in its early days, was open to the weather instead of being glassed and boarded in as now" (25).

This is likely to be the building still standing on the western side of the S.H. Ervin Gallery. It was certainly present in 1889 when it is shown on a survey plan (26). Later it was used as a primary school and arts and crafts building.

Another addition still visible today and created at about the same time was the link made between the old hospital building and the 1856 school building, the "Bulge". Prior to its construction former school pupils remembered that, as a punishment, recalcitrant boys were made to stand at the top of the dozen or so stone steps that led to the back of the old building. It was a cold and windswept spot and the sure precursor to a caning (27). Comparison between the details of the various survey plans suggest that the link may have been constructed in the 1870s or early 1880s. The buildings were separate in 1865 but joined by 1886. These rooms during the twentieth century were referred to as the libraries.

The same comparison shows the extent of development in this period throughout the rest of the school particularly to the north. Several buildings had been constructed, for example, a two-storey brick building in front of the school known as Siberia. This provided accommodation for sewing and general classrooms.

The early decades of the twentieth century were times of great change for both the physical environment of the school and its organisation. It commenced in 1916 when the boys were moved to a new school at Taverners Hill leaving the old Fort Street site solely for the girls' school.

The environment of the site changed through the creation during the 1930s-1950s of a new focus of school buildings to the north of the old site. These included a hall and gymnasium as well as several classrooms. However, the most substantial impact was made through the construction of the approaches to the Harbour Bridge which required the resumption, demolition and excavation of a large portion...
of the front of the school, including several buildings, as well as Princes Street. Photographs of the front of the school prior to this work show it to present an imposing termination to the streetscape at the top of the hill. In 1940 Council approved plans to construct a primary school building in the portion of park that was to be surrounded by the open cut roadway (28). An additional classroom was added to this in 1954 on land leased from the Council for the purpose (29).

Plans to close the school surfaced in the 1960s but were postponed for some time. As an alternative, in the mid 1960s, a proposal to modernise the old buildings was prepared by the Government Architect. It included the introduction of a classroom on Kent Street where several terraces had been acquired as well as refurbishment of several older buildings. The only outcome was one new roof and the removal of several sheds (30).

As discussion about the possible closure of the school became more public a delegation from the National Trust, the School and several other groups approached the Minister in 1969 to request clarification about its fate. They were assured that, if moved, it would be rebuilt (31). A large part of the problem had come about through the construction of the western distributor to the Bridge in the 1960s. This work had caused the demolition of several later nineteenth century school-buildings as well as the military out-buildings. A letter sent from Senior Girls to the Sydney Morning Herald in April 1970 stated that;

"It has destroyed the only lawn we had; it has taken four classrooms (not good ones but classrooms nonetheless); it has destroyed our tennis courts; the noise from drills and blasts makes classroom activity impossible. And we have received nothing in return except greater crowding" (32).

The girls wanted a new school but the basic problem, as always, was money. The site was worth many millions and in 1972 the government released a statement that said the redevelopment of the school on its present site would cost over three million dollars; for that sum three other schools could be constructed elsewhere (33). The Minister responsible stated that consideration was being given to relocating the school but "I feel that one should preserve the historic nature of Fort Street Girls High and also the historic buildings on the site" (34).

Fort Street Model School was closed in 1974 after 124 years of continuous service. Amidst considerable controversy Fort Street Boys and Girls Schools were combined at Petersham.
The first Australian observatory was established in February 1788 by the French navigator La Perouse on the northern side of Botany Bay. It was a temporary structure within a small stockade that only had a life of one month. Its construction, however, emphasises the importance that was attached by several European countries to the value of Australia as a place to observe the heavens.

In Sydney an observatory was established in July 1788 by Lieutenant William Dawes on Point Maskelyne, later Dawes Point. Dawes had volunteered for the journey specifically to undertake astronomical and meteorological readings, particularly to observe the return of a particular comet in 1788. His observatory was a small building set against a rock outcrop. It had an octagonal structure atop living quarters; it was a basic structure. With many other duties to perform Dawes' work as an astronomer was intermittent. He left with his instruments in 1791 (1).

The next major advance in the development of astronomy in the colony was the arrival of Governor Brisbane in 1821. He brought with him astronomical instruments and two astronomers. Brisbane's observatory was constructed on the hill behind the Governor's residence at Parramatta (2). Several clashes occurred between the astronomy-minded Governor and his German astronomer; eventually the latter was relieved of his post. When Brisbane departed the German, Rumker, was appointed in 1827 as the first Australian government astronomer (3). Despite this promising start the observatory and its instruments began to fall into disrepair. Following a commission appointed in 1847 to enquire into the observatory it was closed and the old instruments placed into storage (4).

In the following years several private observatories were established in the colony including those of Tebbutt at Windsor and, particularly, those of P.P. King (the son of the former Governor) who had small observatories at both his properties at Port Stephens and Dunheved. King was to lobby for an official observatory and advise the government on the issue until his death in 1856 (5).

By the mid-nineteenth century the colony was showing signs of maturing and a growing desire to be treated as an equal. This was expressed in many ways including the formation of educational and philosophical groups. The University of Sydney, for example, was founded in this period. Attempts were made in 1852 to found a new observatory but these were met with little enthusiasm by the Astronomer Royal mainly due to the poor reputation gained by the Parramatta Observatory. The only agreement was in the need for a time-ball to be provided which would enable ships in the harbour to rate their chronometers (6). It was to be the passage of a decade and the arrival of another governor before a new observatory was established in Sydney.

The real impetus for new work was the continuing debate over the need for a time-ball. Fort Phillip, with the removal of its saluting guns, was selected as the preferred site as it was the most visible point to ships in harbour and in Cockle Bay. The first plan was prepared by the Colonial Architect, Edmund Blacket, in 1850 and it was for a modest one room observatory with another room set aside.
for time-keeping purposes. The plan was to undergo several major changes generally for the purpose of enlarging the building and the services it provided (7). Estimates were finally placed in 1852 for three hundred pounds for the time-ball and the same sum for a residence for the astronomer (8). Even so the plans continued to evolve giving to the proposed buildings architectural pretension and even more services. The project acquired the next Colonial Architect, William Weaver, but still remained in the doldrums until the arrival of the new Governor Denison in 1855.

Denison’s reasoning for establishing an observatory, as well as the time-ball, that it was a necessary educational resource complimenting the new university, that it could be used to aid the precise survey of the rest of the colony and that it would connect Australia with the scientific communities of Europe and America (9). As a result the initial sum of six hundred pounds approved a few years earlier was augmented with an estimate for 7000 pounds which was to be used to construct a complete observatory. Denison provided the parameters for the new building. It was to include a two-roomed building that would house the telescope and time-keeping machinery, a second circular building designed for additional observations (this was to have an open ceiling to provide a clear and unobstructed view), a house for the astronomer with detached kitchen and offices and all of this was to be enclosed with a fence (10). During this planning process Weaver was replaced, under a cloud of mistrust, by the new architect Alexander Dawson.

The new astronomer, William Scott, arrived in 1856 and assisted with the final decisions regarding the site for the observatory. All agreed that Flagstaff Hill at Fort Phillip would provide the best position although Scott may have been deferring to the Governor. He wrote privately that he would have preferred a position away from the town. The principal problem, however, lay in the need to connect the time-ball to the observatory and the ball to the harbour. There were few other suitable sites that could achieve this linkage.

Scott consulted at length with the architect over the designs and tenders were finally let in 1857. The building, with some alterations to the original design including an increase to the height of the time-ball tower, was completed in stages between 1858 and 1859. It was a picturesque design that complimented its site and drew on major streams of architectural style to produce a landmark building. The time-ball was tested in June and from then on fell at one p.m. every day. Scott required little addition to be made to the site during his tenure, principally a messenger’s cottage which was approved in 1861 and built in 1862. It was built in brick and was located some distance from the Observatory. It is now in the centre of the Cahill Expressway climbing circle. Scott resigned in 1862.

In 1864 a small thermometer shed was built to the south of the Observatory and in 1866 a room was built to the north of the transit room for magnetic observations. The thermometer shed survived until about the time of the First World War; it was replaced with a similar structure in 1986. Four thermometer pits were dug in 1868 (11). In 1870 Henry Russell was appointed Government Astronomer and he became the best known of all the incumbents. It was during his administration that the Observatory was considered to be at its height. It was and had been a notable
visitors' point of interest mentioned in all guide books to Sydney. Access was made available at least for one hour per day or by private appointment (12).

Russell lost no time in pressing the government for finance to support physical improvements and the provision of instruments. The main work was the addition of a west wing which was designed in the office of James Barnet in 1876. The work was completed in 1878. It provided a major ground floor room for Russell, a library above and a second equatorial dome at its northern extremity. The old equatorial tower was upgraded. An entrance lobby was created for the west wing offices through changes made to the transit room.

Improvements were also made to the Astronomer's residence. This work included the construction of a northern extension to the drawing room. It was completed in 1880. In about 1875 an addition was made to the Observatory precinct which brought it to the present size. Russell also was to be instrumental in improving the public land that surrounded the Observatory during the 1870s and 1880s.

By the later years of the nineteenth century the increasing light and smog levels in Sydney were making the work of astronomy particularly difficult. In 1893 a small site was selected at Pennant Hills to locate an astrographic instrument to help overcome this problem (13).

In 1906 meteorological work became a Commonwealth responsibility leaving astronomy as a state responsibility. During this time Russell was succeeded by Henry Lenehan. The meteorological department at the Observatory was controlled by a small Commonwealth agency housed in the same building. A new building for this department was constructed in 1918-1919 on land provided by Council adjoining the then present building. A new entrance was constructed for the Fort Street school because of this new building (14).

At the same time as these important changes were occurring in both the organisation and administration of the Observatory substantial changes also were being made to the physical fabric. In 1906 a two-storey rendered brick addition was made to the eastern side of the 1877 wing. This was to be demolished in 1986. As well, the astronomer's residence was remodelled in the following year (15). It was a period when there were plans to move the Observatory away from this site but it was a scheme abandoned amidst a public display of affection for the old observatory (16).

Throughout the early decades of the twentieth century concerns were expressed regarding the growing levels of city light, vibration from traffic and magnetic disturbance which made the hill site increasingly unsuitable for the purposes of astronomy. There were several new recommendations made for a move to a new site.

During the 1930s - 1940s the major work of the Observatory was completed, a recording and publishing programme. This, as well as major developments in radio-astronomy that occurred away from Sydney and the increasing problems of
light and smog inevitably meant the closure of the Observatory. This finally occurred in 1982.

A programme was announced to convert the site into a Museum of Astronomy attached to the Museum of Applied Arts and Sciences in 1984. In response to this decision, between 1984 and 1987, a major programme of renovation and restoration was undertaken to repair the deterioration and ad hoc works, particularly of the twentieth century. The work has been described as "sterilising" the ambience of the observatory (17).
10.0 THE ENCROACHING CITY: CHANGING ATTITUDES

During the first years of settlement Observatory Hill was quite isolated and separate from the main part of the town due at at least partly to the physical difficulties or exertion of approaching it. Its separation and elevation recommended it as an ideal location for several government purposes principally defence or military-related works. The topography of the site and the nature of its occupants served to make Observatory Hill somewhat remote from the daily life of the town and, even to a degree, mysterious.

If the picturesque qualities of the area might not have been or could not be appreciated by residents the area did have its compensations. The exposed rock provided a freely-available building material which was utilised in several of the buildings on the ridge. Government quarries were established on the northern and western sides of the hill by the 1830s. Six quarrying parties were working there in 1830. Others worked at extending Argyle Street and creating Fort Street.

Several plans were prepared that showed the extent of the quarrying particularly along the western side the hill where a number of prominences were removed to create a level cliff side (1). More quarrying was planned for the north-western corner of the hill in 1869. Permission for the work was given to Edward Tweedie but the Government Astronomer objected to the possible consequences of the project and so it did not proceed (2). Council Rate Books, however, still referred to the Kent Street Quarries in the 1860s.

The same outcrops, however, for some time prevented the extension of Kent Street to this part of the peninsula and for this reason inhibited the development of residential buildings although many houses were built on top of the rock outcrops, Glovers Cottage, for example, in Kent Street was one of the first. Kent Street was finally able to provide an important access area to the hill when it was extended to the north to a scheme devised by the Government Architect Mortimer Lewis in 1833. With the removal of the rock barrier and the construction of the Argyle Cut, commencing in 1843, Fort Street could be continued to the north and ready access provided between Millers Point and The Rocks.

Commentaries of the period provide some idea of the essentially maritime environment that surrounded the hill in the 1830s and 1840s. James Maclehose stated in 1839 that,

"At the north end of Kent Street a considerable population has of late accumulated...At this end of Kent Street the land rises abruptly to a considerable height above the adjacent waters, and by this means, the water frontage in the vicinity is of less value than in most parts of the harbour of Sydney; but not withstanding this disadvantage, it has been formed into wharfs, which, like those in Darling Harbour, have been rendered valuable and convenient by the erection of spacious and conveniently situated stores...there is also a pretty extensive shipping establishment adjacent...Between the north end of this street and where it crosses the Church Hill, a deep cut has been made through the west side of the hill on which Fort Phillip stands - this part of the street is called the Quarries on
this account... although many of the houses in Kent Street are of the humble order of wooden huts... even in this street a number of respectable stone houses have been erected and every month is adding to the number of stone and brick cottages...." (3).

The growing accessibility of the hill is demonstrated by the numerous views of visitors standing near the fort and enjoying the scenery. The hill, in fact, became one of the principal vantage points for viewing the rest of the city. This was particularly well described in 1847;

"The Flagstaff at Fort Phillip is certainly one of the most airy of the scenes about Sydney - situated on an eminence so lofty that a person looking from it can see the mighty City and a large portion of country around it, spread out beneath him like a large panorama; where roofs of houses and church steeples are crowded together in the centre, close as nails in a gaol door, and bounded by a broad margin of fields and water. From it can be seen the distant castle of Darlinghurst, the Harbour, Dawes Battery, and in fact, the whole of the scenes about Sydney.

"How grand, how sublime, must be the feelings of the worthy signal-master, as he paces with his long glass in hand in front of the staff, or sits at ease on the simple unassuming seat (a board supported by two stones) beneath his window, surveying the busy haunts of men, with a telescopic eye. Beneath him even the Government House sinks into insignificance and the very top of St James steeple barely comes up on a level with the threshold of his cottage.

"A visit to the flag-staff we assure our readers...would be a source of great pleasure and amusement. A fine afternoon we are convinced could not be spent in a more delightful manner. There they will see the town far beneath them - with the Gaol on a hill in the distance like a hostile tower. What portions of the streets can be discovered seem to have dwindled to the size of the new foot-paths and the passengers therein are diminished in proportion...Let him look round - what a magnificent picture does the Harbour present with its many bays and islands....But this exalted locality - this picturesque spot - is not destitute of more homely scenes. Below on the grass may be seen a group comprising a nursemaid, two children, a dog and a goat, all collected together in one spot; in another are assembled a number of the beaux and belles of that part of Sydney; and yonder walk two ladies whose veils fluttering in the wind seem to rival the signal which has just been hoisted on the flag-staff. Even in the enclosure round the signal-master's cottage may be seen the animals of our lower earth. Fowls and goats roam about totally unconscious of the importance of the place they inhabit..." (4).

By the later years of the nineteenth century with the change from a predominantly military precinct to one more devoted to public purposes the area became a favourite with residents and tourists alike. The construction of Watson Road made access to the hill easier from 1863. The relandscaping of the area as a public park during the last decades of the nineteenth century emphasises the public role of this space.
However, its closer integration with the city is most clearly demonstrated by the construction of the Agar Steps during the 1880s. From the earliest period when the hill was predominantly used for military purposes there may have been an informal track or passage in this location leading down to Kent Street and the quarries. Plans of the 1830s suggest as much although there was certainly not a flight of stairs as it now exists. A perspective of this end of Kent Street in 1856 shows a paling fence running down to the street in the location of the Agar Steps (5). However, if a passage or a track did exist it was probably closed off by the 1860s. Even the school appears to have been walled off from the land below in Kent Street.

It is possible that three small cottages occupied this slope prior to the construction of the present terraces and steps. Directory listings for the later 1860s and early 1870s list residents that appear to be living at addresses that equate with this site. A carpenter and shipwright are amongst those listed in occupation in the 1870s (6). There is, however, no record of any dwellings or structures of any kind shown on this land on an 1865 town survey (7). Certainly, however, Kent Street by the later 1860s was attracting a great many more residents and businesses. Its convenience had been increased by the completion of the Argyle Cut in 1865.

The land on the slope of the hill was purchased in 1870 along with lots in Kent Street. It was noted on the certificate of purchase that the land bordered "the proposed approach to Flagstaff Hill " indicating that no formal passage along the line of the Agar Steps existed at that time (8). The land was resold, undeveloped, in 1875 although this transaction was cancelled; it was successfully sold in 1878 to Carl Carlson (9). Carlson was responsible for the construction of the terraces in 1882 as well as the Agar Steps. They were occupied by a variety of trades and professional people. Carlson lived in Number 7 for several years. Later it became the Scandinavian Sailors Home (10).

By the end of the nineteenth century Millers Point and The Rocks were amongst the most densely populated parts of the city. When plague arrived in 1900 it was traced to the wharves of this area. Properties were resumed and destroyed to combat the spread of the disease. It provided an opportunity to further Council's ambitions to commence a programme of urban renewal in what were considered to be sub-standard areas of housing. In fact the destruction of properties and loss of residents contributed, not to a renewal, but to a gradual decline. Many of the properties left standing were resumed by the newly formed Sydney Harbour Trust in 1901 and many became Council property. The Agar Steps Terraces were resumed at this time.

As the terrors of the plague receded and emphasis on development shifted to different portions of the city, the impact of the "slum clearance" programmes of the turn of the century and the further dislocation caused by the construction of the Harbour Bridge in the 1930s, caused The Rocks and Millers Point to drift into a period that almost saw them forgotten by the rest of the city. The park, however, was requested and used for a variety of purposes, particularly during the Depression years, including for outdoor religious services (11).
This neglect by default of the area contributed to a high retention of what remained of the nineteenth century townscapes as so much of the same environment was removed in the rest of the city. These areas assumed a picturesque quality for the nostalgic and artistic.

Even as early as 1907 views were expressed in the public press of the historic values of the hill. Amidst pans to relocate the Observatory hopes were expressed that "the present generation will not rudely sweep away the historic remains where our pioneers built forts and raised guns to protect their small town and science stepped in and raised her tower" (12). Many views were produced of the tumbling buildings, streets and old buildings contained in the area. The School and the Observatory were favourites. Nostalgia began to evolve into a desire to "restore" the past, possibly into a reflection of what the present hoped the past had been like. Ruth Park, in the early 1970s, was irritated that nothing had been done to "beautify" the Agar Steps;

"Agar Steps are much photographed and sketched. Harmoniously proportioned, romantically situated, they will give you a fair case of the pip. All is dirty, dismal, secretive. Directly above, the steep rise is blind, leading only to shut-up, cryptic looking houses...How beautiful these stairs could be with steam cleaning, the compassionate touch of a vine along the blackened banisters, a flowering treat in a tub...." (13).

As nostalgia evolved into a more militant demand to save what remained of the earlier Sydney, particularly when plans were presented in the 1970s that would have required most of The Rocks and Millers Point to be demolished, individual battles were fought to preserve those features which were highly valued by the community or portions of it. The retention of the Fort Street School and its reuse as the National Trust Centre from 1974 is the best example of the strength of this movement. The relocation of Richmond Villa in 1979 to a site at the lowest level of Observatory Hill was the logical outcome of a growing community awareness of "heritage" in general and the particular values placed upon this area of the city. The Agar Steps terraces were given to the National Trust at the same time being formally vested in the Minister for Public Works in 1980. They were restored in 1982 by the Public Works Department. During 1986 to 1993 the National Trust Centre also was given a new fit-out by the Public Works Department. The buildings, including the Agar Steps Terraces, are included on all authoritative heritage schedules and registers.

Today, as it had been during the later years of the nineteenth century, Observatory Hill is included in tourist guides and walks and is considered one of the pre-eminent "historic" places of the city.
The position, views and advantages of the hill have made it the focus of several speculative plans beginning as early as the 1820s. In 1820 Commissioner Bigge, sent from England to evaluate Macquarie's works and the new colony, formed the opinion that the colony's much needed gaol should be sited on Fort Phillip Hill. Macquarie had objected to this plan on the grounds that it would interfere with his intentions for a citadel on the same site. He preferred a site near Hyde Park Barracks (1). Bigge gave way although the gaol was not be located at Hyde Park either (2).

With the area fully occupied and in use during the nineteenth century it was not until the twentieth century that new schemes were put forward to use the hill site. In 1907 plans were prepared to move the Observatory away from the hill and relocate the Mint to the old buildings. It was abandoned amidst a wave of public nostalgia (3). Prior to that, in 1903, The Rocks had been the subject of an investigation which had as its ultimate intention to wipe the area clean and begin building, even the street pattern, from a blank slate.

In 1927 a proposal was made that would have provided for a parking station under the hill with an entrance to be provided from Kent Street. It was considered not feasible from a commercial viewpoint and the Government Astronomer also made strenuous objections to the concept (4). Another proposal for parking was made in 1946; this also was rescinded in time (5). In 1944 a Sub-Committee of the Public Buildings Advisory Committee was appointed to consider major redevelopments of several areas in the city including Observatory Hill. The several conferences devoted to these issues and their recommendations came to nothing. It was one of several similar plans that came before as well as after with a degree of regularity that was to transform this area and make it conform to the rest of the city.

Observatory Hill again became a focus for ambitious schemes during the building boom of the 1960s. General approval was given in 1960 to the Rocks Observatory Hill Redevelopment Plan (6). This was later withdrawn. In 1964 a proposal was made to build two bowling greens on the hill, a suggestion met with vigorous outcry particularly from the National Trust (7). The initial planning by the newly formed Sydney Cove Redevelopment Authority in 1968 also permitted for high-rise to be constructed on the hill. With the growing environmental awareness of the value of the area as a "heritage" resource fewer schemes have been made public from the 1970s with respect to Observatory Hill.
SECTION 12.0

SUPPLEMENTARY DOCUMENTATION

12.1 Abbreviations Used in the Text

LD Lands Department

ML Mitchell Library

SAONSW State Archives Office of NSW

SPF Small Picture File
12.2 Endnotes to the Text

Section 2.0


Section 3.0

1. Quoted in Doug Benson, Taken for Granted The Bushland of Sydney and Its Suburbs., 44.

2. Ibid.

3. For example see "A View of the West Side of Sydney Cove taken from Too-Bay-Ulee or Bannallongs Point" 1792, reproduced in T. McCormick, First Views in Australia., 57.


8. Metropolitan Detail Series, City of Sydney Section R4 (1888), ML M Ser 4 811.17/1


10. For example, Millers Point and Argyle Place in Graeme Aplin and John Storey, Waterfront Sydney 1860 - 1920.


13. Ibid.


Historical Context

16. Ibid.

17. Minutes of the Council of the City of Sydney.

18. Ibid., 1906: 6, 197.


22. Ibid., 1919: 346.

23. Ibid., 1926: 301.

24. Ibid., 1910: 192.

25. Ibid., 1915.


27. Ibid., 1924: 206, 333

28. Ibid., 1925: 474.

29. Ibid., 1926: 252.

30. Ibid., 1909: 292.

31. Ibid., 1949: 652.

32. Ibid., 1909: 155.

33. Ibid., 1910: 142.

34. Ibid., 1927: 76.

Section 4.0


2. Historical Records of Australia Volume III, 123.
6. Ibid.
7. D.D. Mann, Present Picture of NSW 1811

Section 5.0
1. Historical Records of NSW IV, 198.
7. Travis Partners., Loc Cit.
8. Historical Records of NSW VI., 165.
10. Minchin reported in Historical Records of NSW VI., 336.
Section 6.0

2. Ibid.
3. Historical Records of Australia IX, 385.
6. Ibid.
7. Ibid., 11.
8. Ibid.
9. Ibid.
10. Ibid., 26.
11. Ibid., 26.

Section 7.0

1. Historical Records of Australia Volume VII., 42.
2. Ibid., Volume X., 684.
3. Ibid.
5. Ibid., 50.
7. Ibid., 138. Based on the evidence of the demolished materials of the surgeons' barracks.


Section 8.0


2. Ibid., correspondence of P. McBeath.

3. Ibid.

4. Ibid.

5. Joseph Fowles, Picture of Sydney in 1848., Plate facing 86.

6. Ibid., 88.

7. Surveyor General Sketch Books Volume 7 Folio 162.

8. Ibid.

9. Board of National Education, Returns of Schools 1859. SAONSW Reel 1797.


11. Board of National Education, Returns of Schools 1859. SAONSW Reel 1797.


13. L. E. Gent, Fort Street Centenary Book.


15. Ibid.
16. Ibid., 19/4/1876.


19. Memo to Department of Instruction 20/12/1880. Correspondence re. Fort Street 1880-87. SAONSW 5/15925.

20. Ibid.

21. Ibid.

22. Ibid., 5/5/1881.


24. Ibid.

25. Ibid., 85.

26. Metropolitan Detail Series, City of Sydney Section R4 (1888). ML M Ser 4 811.17/1


28. Minutes of the Council of the City of Sydney 1940, 29.

29. Ibid., 1954.


31. Ibid.

32. Quoted in Ibid., 180.

33. Quoted in Ibid., 181.

34. Ibid.

Section 9.0

Historical Context

Observatory Hill, Sydney

2. Ibid., 12.
3. Ibid., 13.
4. Ibid.
5. Ibid., 14.
6. Ibid.
7. Ibid., 15.
8. Ibid., 16.
9. Ibid., 18.
10. Ibid., 18-19.
11. Ibid., 26.
14. Minutes of the Council of the City of Sydney 1918., 238.
16. Ibid., 32.
17. Ibid., 37.

Section 10.0

2. Plan of Quarry Flag Staff Hill Showing Extent of Rock Permission to Remove which has been Given by the Hon The Minister for Lands to Edward Tweedie 1869, Surveyor General Sketch Books Volume 10 Folio 154.

Wendy Thorp
5. W. S. Hatton, View of Sydney - Kent Street and Darling Harbour c. 1850
7. Trigonometrical Survey of the City of Sydney 1865.
8. CT Volume 246 Folio 81.
9. Ibid.
11. Minutes of the Council of the City of Sydney.

Section 11.0
2. Peter Bridges, Foundations of Settlement., 163.
4. Minutes of the Council of the City of Sydney 1927, 743.
5. Ibid., 1946, 162.
7. Ibid, 1964, 266.
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Joseph Fowles

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S.T. Leigh and Co. 1867.

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12.3.3 Council Records

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12.3.4 Correspondence

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