

**MACQUARIE PIER AND NOBBYS HEAD**

**HISTORICAL REPORT**

**by**

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**June 1994**

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### THE ORIGINS OF MACQUARIE PIER

At first sight the estuary of the Hunter River did not appear to be suitable for development into a port for the export of coal. So unimpressed was Governor Philip King that he suggested that Port Stephens be developed as the port with small ships carrying coal from Newcastle to that port for transshipment to larger vessels. Nevertheless a settlement was established at the Hunter River in 1801 and, after it failed, Newcastle was permanently established in 1804.<sup>1</sup> Dependent on sea transport for its supplies from Sydney, the new settlement soon found that the Governor's fears about navigation into the Hunter River were justified. By 1816, when Lieutenant Jeffreys made the first detailed map of the port, three ships had been lost (*Maple*) and his own ship, "Kangaroo", struck three times when negotiating the channel between Signal Hill and Stockton. One contributing factor was the surge entering the estuary between Signal Hill and Nobbys and in 1818 the Commandant of Newcastle, Captain James Wallis of the 46th Regiment, sought a solution to the problem.

## MACQUARIE PIER COMMENCED

In 1818 the Governor of New South Wales, Lachlan Macquarie, made a visit to Newcastle which was then the principal penal settlement in the colony. Wallis took the Governor to inspect the area between the mainland and Nobbys at 1 p.m. on 4th August. The relevant entry in Macquarie's *Journal* does not indicate who suggested that a breakwater be constructed but it is clear that that was the object in view:

*At 1 p.m. I went along with Capt. Wallis to look and examine the channel dividing Coal Island (Nobby) from the South Head of Newcastle Harbour, with the view of filling it up entirely by constructing a strong mound or causeway between the island and the main for the purpose of deepening the main channel or entrance into the harbour. We landed on the island and sounded the channel between it and South Head, which does not exceed 7 feet in depth at low water and only about a quarter of a mile in breadth. After examining both sides of the channel, it was finally determined to commence forthwith filling it up by constructing a strong causeway of 30 feet broad from South Head to Coal Island After deciding on this important work, we went...<sup>2</sup>*

With characteristic vigour, Macquarie approved the huge undertaking after a couple of hours inspection and the next day he returned to the site at 4 p.m. to lay the foundation stone.

*At 4 p.m. accompanied by Capt. Wallis, Revd. Mr. Cowper, Major Antill, Lt. Macquarie, Ensn. Roberts and Mr. Meehan, I went to the shore of the channel dividing Coal Island from the South-Head, for the purpose of laying the foundation and first stone of the causeway or pier to be constructed across from the main to the island; and the stone being cut and ready, with an inscription, it was laid accordingly with all due form*

*in presence of the artificers & labourers to be employed in the construction of it; and Capt. Wallis having proposed that it should bear my name it was accordingly called after me Macquarie Pier, which [with] the present year 1818, was cut and inscribed on the foundation stone. After the foundation stone had been laid the artificers and labourers were served with an allowance of spirits to drink success to the undertaking, which they did with 3 hearty cheers.*<sup>3</sup>

To advise him on the breakwater project, the Governor does not appear to have had any engineer but he was accompanied by James Meehan, a surveyor, whose plan of Newcastle of 7 August 1818 shows the lines of the intended pier. (*Map 2*) Moreover, Meehan had been appointed Superintendent of Roads, Bridges and Streets in 1814.<sup>4</sup> Whether the lines laid out by Meehan for the breakwater were adhered to is difficult to say and it is possible that further advice was taken in the early stages of the project. Francis Greenway, the serving Colonial Civil Architect, later claimed responsibility for the lines of the pier but there is no documentary evidence to support him. One point tends to lend credence to Greenway's involvement: as Civil Architect, such a project would have been within his sphere of responsibility. According to Greenway he had been directed by Government order to attend to "the reforming of the Hunter River mouth, the survey of the town of Newcastle and the creation of a port".<sup>5</sup>

## **CONSTRUCTING MACQUARIE PIER**

Work began shortly after the Governor's visit and continued until about 1822 when the project was discontinued because Newcastle ceased to

be a penal settlement.<sup>6</sup> Until then a large number of convicts were employed cutting stone and moving it into position as the breakwater slowly moved towards Nobbys from its starting point at the foot of Signal Hill.<sup>7</sup> Exactly where the foundation stone was laid is not known but a map by the A.A. Company surveyor Armstrong, drawn in 1831, indicates the point of commencement of the stonework. (*Map 3*).

At first the work was carried on only at low tide but by 1820, when Commissioner J.T. Bigge conducted an enquiry into conditions at Newcastle, the Superintendent of Public Works, Sergeant John Evans, stated that the work was proceeding “at all times”.<sup>8</sup> Despite this, after eighteen months of endeavour only one eighth of the pier had been completed. (*Plates 1 & 2*)

A quarry had been opened in the Fort Scratchley area to provide stone for the breakwater and for building purposes. Here the stone was cut with pickaxes and wedges before being lifted by clamps and cranes onto iron wheeled trucks for transport to the site. Two gangs of men worked on the breakwater, one of about forty skilled or semi-skilled convicts who attended the cranes, loaded the trucks and bedded the stones and the other of about sixty men from the gaol. They had been sent to the gaol gang as punishment for offences in Newcastle or had come from Sydney with either ‘bad characters’ or long sentences. These men wore fetters or chains while in gaol and some of them were heavily chained while at work. Those who were being punished for escaping, ‘the bushrangers’, were heavily fettered even at work and Sergeant Evans described how they had to be put to tasks which did not require much moving about, e.g. loading stone onto trucks or standing at the cranes.<sup>9</sup>

Progress was steady, if not spectacular, until 1822 and when work ceased the Governor reported that some 625 yards of the 930 yard wall had been completed at a cost of £25,000.<sup>10</sup>

### **CONSTRUCTION OF MACQUARIE PIER RESUMES, 1833**

After the withdrawal of the main body of convicts to Port Macquarie in 1822, Newcastle did not possess a workforce capable of continuing the construction of the pier. Only about a hundred convicts remained to work the coal mines and to perform essential public works so that the breakwater had to wait for about a decade. Nevertheless, the development of the Hunter Valley was rapid in the 1820s and its port became increasingly important as a result. Consequently, the settlers began to press for Government action to resume the building of Macquarie's Pier.

From 1833 onwards the Governor allocated funds for the continuation of the breakwater and convict gangs were stationed in stockades around the southern side of the harbour to carry out the work. In 1841 construction was being supervised by Captain Simon Fraser of the 80th Regiment as Assistant Engineer and Superintendent of the Iron Gang and Stockade and by Frederick Lawson, the Foreman of Works, Newcastle Breakwater. Higher responsibility rested with the Colonial Civil Engineer, Colonel George Barney, in Sydney. In that year there were 354 male convicts in Newcastle, the vast majority of whom were employed on the breakwater.<sup>11</sup>

While work was suspended much damage had been done to the breakwater by the action of the sea and there was concern about the quantity and quality of stone available. Until 1836 the stone came from two quarries

at the base of Signal Hill but in 1836 Colonel Barney decided to quarry away the top of Nobbys in order to obtain more stone. From about this time construction began from the Nobbys end and views of the island show it terraced from this period. (*Plate 3*)

By the middle of 1846 it was possible to walk across the pier to the island, the first person to do so being Walter Scott, the Clerk of Works of the project.<sup>12</sup> (*Map 4*) However, the structure was by no means secure as southerly gales continued to breach it to the point where it was considered to be a joke. For this reason maintenance continued to be a problem and in 1852 Captain John Bull was the Superintendent of Works at Newcastle Breakwater.<sup>13</sup> F.C. Terry showed convicts at work in 1853 in his "The Nobbys from Newcastle" but the Governor was soon to withdraw both convicts and soldiers from Newcastle, bringing half a century of their presence to an end (*Plate 4*)

## **THE BREAKWATER RECONSTRUCTED**

In 1866 the Government announced that the Southern Breakwater was to be rebuilt using stone from a quarry at Waratah. The plan was to build an embankment from the Great Northern Railway to the base of the breakwater and use the line to bring in the necessary materials. By February 1866 the embankment was reported to be "rapidly approaching the breakwater" and it was intended "to obtain blocks of stone from the Waratah quarries which will be conveyed by rail direct to the edge of the breakwater, and taken thence to those parts which stand in need of repair."<sup>14</sup> Two months later a juncture with the breakwater was said to be

only “a few days” away and “repairs to the dilapidated structure will be proceeded with immediately.”<sup>15</sup>

Before the end of September 1866 the *Newcastle Chronicle* reported that the embankment had been completed and the top of the breakwater had been levelled. Forty feet of railway had been laid on the breakwater and the contractor for the project intended

*“to employ a locomotive for the conveyance of stones and ballast for the repair of the breakwater and the railway will gradually be carried farther along as the gaps are filled up. The complete repair of the breakwater will occupy a considerable time as the breaches have been much enlarged by the terrific storm which visited the coast on the 11th and 12th instant.”*<sup>16</sup>

In 1867 C.W. Darley, who was to play a key role in the development of the port of Newcastle, took up the position of Engineer in Charge of Harbours and Rivers in Newcastle. According to his evidence to a Public Works Committee in 1895, he sought and found a suitable stone for use on the breakwater and took the first delivery from the Waratah Coal Company quarry on 4 February 1869. Work continued until funds ran out in February 1872 but after a brief halt the Government provided more money and the work was completed before the end of 1873.<sup>17</sup> (*Map 5*)

The first breakwater extension beyond Nobbys was commenced in 1875 and completed in 1883. (*Map 6*) Its purpose was to protect vessels from the reef which extended as far as Big Ben Rock. Ships entering port had great difficulty in heavy weather because they encountered seas broadside on at the entrance to the harbour. The Southern Breakwater was

further extended in 1896 when the railway line was re-laid and new plant permitted the carriage of stones weighing up to 30 tons. This work was carried out by the Department of Harbours and Rivers using day labour.<sup>18</sup>

The breakwater beyond Nobbys served as the base for a large fog warning bell which was installed in 1878. (*Map 7*) The distinctive sound of this bell, “rung with three distinct beats with an interval of half a minute before the next three beats”, became a feature of the life of the city and could be heard a great distance out to sea.<sup>19</sup> The bell, which weighs half a ton, survives in the Newcastle Maritime Museum. It was operated by one of the staff of the Nobbys Signal Station. An electronic fog warning system was installed in the 1950s but as late as 1958 the bell was still maintained for use during electricity blackouts.

## THE HISTORY OF NOBBYS

Captain Cook noted the “clump of an island” as he sailed up the east coast in 1770. He might well have described this landform as a “knob” or “rounded protruberance” for this is the origin of the name given to the distinctive landform at the entrance to Newcastle Harbour. Those who have tried to explain “Nobbys” in terms of some imaginary resident of that name are mistaken for there are early references to the two knobs at Newcastle, Nobbys and the site of Fort Scratchley.

The name “Nobbys” first appears in the written record in 1810 and the island has also been known as Coal Island.<sup>20</sup> The island had once been connected to the mainland and it possesses the same geological series as the Fort Scratchley site. Only half the height it was when Cook saw it, the

island was a landmark for the entrance to the Hunter River from the earliest days. When Captain James Reid was sent to the Hunter for a coal cargo in 1800 he was directed to Nobbys as a marker.<sup>21</sup> Mistaking the island at the entrance to Lake Macquarie for Nobbys, he obtained his coal there but the point remains.

It has also been alleged that female convicts were imprisoned on the island in the penal settlement period but there are no primary sources to support this claim. There were very few female convicts in Newcastle and it is unlikely that any commandant found them so troublesome to deal with that he chose to imprison them on a place so difficult to reach as Nobbys Island in the pre-breakwater period. However, there is some evidence that William Gore, the Provost Marshal of New South Wales (appointed 1805) was isolated on Nobbys after being sentenced to seven years in Newcastle by the ringleaders of the Rum Rebellion. He claimed that he had been imprisoned on an island and was forced to swim for his life when attacked by Aborigines: Nobbys is the most likely site of his imprisonment since the other islands of the estuary would have been easier to escape from.

Apart from occasional visits, Nobbys was little affected by the presence of Europeans at the mouth of the Hunter River until the commencement of the northern end of the breakwater in 1836 or shortly afterwards. As it was time wasting to transport the convict workforce from Newcastle by boat each day, a stockade was established on the island. According to J.S. Kerr, these stockades were placed under the control of the Department of Ordnance in 1836 and standardized. Accepting White's description of the typical stockade, Kerr quotes:

*Convicts in irons were divided into gangs of about 80 prisoners each, and this number occupied 4 wooden houses, which, with the officer's and soldiers' barracks, guard room, store and convicts' mess shed, formed what was called the "stockade". Formerly the buildings were surrounded by a staked fence, but this was discontinued as it was found that the convicts were more securely guarded by placing sentries at the angles of the wooden houses, and leaving a space all round to open their fire...<sup>22</sup>*

Whether this was the form of the Nobbys Stockade is open to question, given the limited space on the island. It seems that there were also moveable huts on wheels on Nobbys: designed to lodge five men each, they are described in Kerr's *Design for Convicts*:

*They are 7½ft. wide, 14ft. long, and rather more than 6ft. high, which allows of barely 1½ft. space for each prisoner, as they lie side by side on shelves; they are necessarily very crowded, as they can hardly avoid touching one another. Most of the moveable huts or cages...[are] about 9ft. in width. Confinement to these places during the hours the prisoners are not at work or at meals must involve considerable suffering as only half of them can sit at the ends of the platforms on which half of them sleep; the rest must sit back with their legs at a right angle with their body. In addition they were all in chains which were fastened to both ankles and waist.<sup>23</sup>*

The presence of the convicts on the island added a new dimension to its history. For the first time it served a residential function but it also became a restricted area for other than convicts and their supervisors. On 13 September 1849 the Government announced that Nobbys and the breakwater had been appointed places where male convicts would be made to serve their sentences and simultaneously those places were placed out of

bounds to other people and subject to a penalty of £20 and/or three months gaol.<sup>24</sup>

One of the disadvantages of the island as a prison was the scarcity of fresh water but coal was readily available and worked on a small scale while the prisoners were stationed there.<sup>25</sup>

## **A LIGHTHOUSE FOR NOBBYS**

From the early days of the penal settlement a primitive lighthouse in the form of a coal beacon (fire) served to indicate the site of Newcastle. Placed on Signal Hill, this device was unsatisfactory as the light was not at the actual entrance but about half a mile to the south of it. In bad weather a navigator might sail right into the breakwater believing it to be the harbour entrance. As the coal trade grew in the 1850s the need for a better lighthouse became pressing. Accordingly, in 1852 a select committee of the Legislative Council was set up to recommend a suitable site and design for the new facility.

There was general agreement that the site should be Nobbys but some variation of opinion about the height at which the tower should be erected.

The first select committee recommended that Nobbys be reduced in height to about 20 metres and it was proposed to accomplish this reduction by blasting away the top section. This plan has inspired many journalists to suggest that the whole island was to be blown up but this was never intended. A second committee of enquiry in 1854 resolved simply to level the top of the rock to create a suitable base for the lighthouse and there was

no need for the blasting technique.<sup>26</sup> (*Plate 5*) The whole operation was supervised by Colonel George Barney.

According to Goold, a 23 feet high lighthouse, a small signal station (*Plate 6*) two houses for staff and a large brick well were erected on the one quarter of an acre site.<sup>27</sup> The fixed white light was 115 feet above high water level and visible on a clear night for about 18 miles. Edward Blackett did the preliminary architectural work for the lighthouse but the Colonial Architect, Alexander Dawson, took final responsibility for the design.

The lighthouse of 1857 remained in service without significant alteration until the late 1880s when the first lighthouse keeper, Jesse Hannell, retired and J. Johnson took over. This change marked the end of an era for in the next two years the original twin teak oil burning lamps were replaced by four kerosene burning lamps of much greater brilliance: the new lamps were fuelled from a raised fountain beside them. In the same period a “battery wall” was erected around the hill to protect the lighthouse and three dwellings from the wind.<sup>28</sup>

The tower was also strengthened by the installation of iron beams and “the dwellings and offices” were thoroughly renovated. The approach from the mainland ;which had been “simply a sandhill” was also tar-metalled and “rendered easy of ascent”.<sup>29</sup> (*Plate 7*)

## **NOBBYS TUNNEL**

A tunnel was cut into the northern base of Nobbys in the last century. Its origins are a mystery and various explanations for it have been offered

*(Appendix 1)* None of them are convincing as the tunnel does not connect with a coal stratum, it is far too low to have been intended for blasting the top off the island and it seems an elaborate solution to the need of a few convicts for shelter. The answer to this puzzle may be discovered if an investigation is permitted as Mr. Terry Callen has suggested.

### THE NOBBYS SHANTY TOWN

During the Great Depression when up to one third of the male workforce was unemployed, camps or shanty towns were established in many parts of the Newcastle district. One of the best known of these grew up on the beach inside the Macquarie Pier. *(Plates 8 and 9)* By July 1930 there were about 170 men camped around the beaches of Newcastle in “humpies, improvised from sheets of old galvanised iron, timber and stones”.<sup>30</sup> To improve this situation, as Sheila Gray explains in her *Newcastle in the Great Depression*, the State and Commonwealth Governments set up a large camp on a patch of scrubby beach known as Horseshoe Beach.

This camp existed until 1937 when it consisted of 81 shacks housing 144 people. The opposition of Newcastle citizens then forced the removal of the camp on the ground that the site was required by the Defence Department as a parade ground.<sup>31</sup> The presence of such a large number of people for such a long period added a new chapter to the history of the breakwater.

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## **NOBBYS AND MACQUARIE PIER IN WORLD WAR II**

During the Second World War the operations of the lighthouse and signal station were controlled by the military authorities. Army personnel moved into the cottages on Nobbys and a radar system was installed for the duration. However, the exigencies of the war did not prevent the demolition of the existing cottages, beginning on 22 October 1941, and their rebuilding. During the reconstruction of No.1 cottage, a Japanese submarine shelled Newcastle and one shell landed on its corner: fortunately, it did not explode.<sup>32</sup>

On the breakwater below Nobbys was Camp Shortland, an army camp which had replaced the Nobbys Shanty Town of the Depression years.

On the northern side of Nobbys a concrete fortification housed two 3 pounder quick firing guns as a defence against torpedo boats and there may also have been anti-aircraft guns on the base of the island. One of Fort Scratchley's three "fighting lights" was also positioned on Nobbys.<sup>33</sup>

## **THE BREAKWATER SINCE 1945**

The struggle to maintain Macquarie Pier continues although Nobbys Beach protects it on the ocean side. Since 1968 concrete blocks weighing 60 tons have been used to strengthen the extension beyond Nobbys. (*Plates 10 and 11*) The western side of the breakwater between Nobbys and the mainland has also required attention to the stonework.

## CONCLUSION

Nobbys is Newcastle's landmark, the symbol of its vital relationship with the sea which continues to play a key role in the industrial and transport life of the region. It and Macquarie Pier are also key elements in the social and recreational activities of the citizens.

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## NOTES

<sup>1</sup> J.W. Turner, *Coal Mining in Newcastle 1801-1900*, Newcastle, 1982, p.15.

<sup>2</sup> L. Macquarie, *Journals of his Tours*, Sydney, 1979, pp.135-6.

<sup>3</sup> *ibid.*

<sup>4</sup> "James Meehan" in *Australian Dictionary of Biography*, Vol.2.

<sup>5</sup> P. Spark, "Greenway and the Breakwater", *Newcastle Morning Herald*, 15 June, 1957.

<sup>6</sup> *ibid.*

<sup>7</sup> J.W. Turner, *Newcastle as a Convict Settlement*, Newcastle, 1973, pp.23-4.

<sup>8</sup> *ibid.*

<sup>9</sup> *ibid.*

<sup>10</sup> Spark, *op.cit.*

<sup>11</sup> E. Guilford, *Hunter Valley Directory: 1841*, Newcastle, 1987, pp.1,3.

<sup>12</sup> *Maitland Mercury*, 10 June, 1846.

<sup>13</sup> Report of N.S.W. Legislative Council Select Committee on the Newcastle Lighthouse, *Votes and Proceedings*, July, 1852, pp.3,4.

<sup>14</sup> *Newcastle Chronicle*, 10 February, 1866.

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<sup>15</sup> *ibid.*, 19 May, 1866.

<sup>16</sup> *ibid.*, 26 Sept. 1866.

<sup>17</sup> N.S.W. Public Works Enquiry proceedings, *Newcastle Morning Herald*, 22 March, 1895.

<sup>18</sup> *ibid.*, 4 April, 1895.

<sup>19</sup> *Newcastle Morning Herald*, 31 May, 1958.

<sup>20</sup> W.J. Goold, "Nobbys: Its History", *Newcastle Morning Herald*, 9 April, 1932.

<sup>21</sup> K. Clouten, *Reids Mistake*, Newcastle, 1967, p.9.

<sup>22</sup> J.S. Kerr, *Design for Convicts*, Sydney, 1984, p.62.

<sup>23</sup> *ibid.*, p.63.

<sup>24</sup> *N.S.W. Government Gazette*, 13 September, 1849.

<sup>25</sup> Report of the N.S.W. L.A. Select Committee on the Newcastle Lighthouse, p.3.

<sup>26</sup> E. Coulin to the *Newcastle Herald*, June, 1989.

<sup>27</sup> *Newcastle Morning Herald*, 10 April 1932.

<sup>28</sup> *ibid.*, 26 November, 1980.

<sup>29</sup> *ibid.*

<sup>30</sup> S. Gray, *Newcastle in the Great Depression*, Newcastle, 1984, p.18.

<sup>31</sup> *ibid.*, p.19.

<sup>32</sup> J.E. Silva to the Maritime Services Board, 18 November, 1945, a report on the Board's War Activities at Nobbys.

<sup>33</sup> G. Davison, "Fort Scratchley and the Coast Defences of Newcastle", a draft history prepared for the Fort Scratchley Military Museum Society, pp.9,10.