WINDSOR RAILWAY STATION

THE DREAM OF THE MAIN WESTERN LINE THROUGH WINDSOR AND RICHMOND

In the late 1850s, the route of the main western rail line was uncertain. The *Sydney Morning Herald*, 17th February, 1859, p. 4 contained an article which canvassed the issues at the time, including the likely profitability of a branch line, if the main line did not go through Windsor or Richmond. The full report is below, thanks to Goulburn Railwayman, Austin Mooney.

“The engineering evidence given before the committee on the Windsor branch railway is of great interest to the settlers in the West country, ns furnishing them with a statement of what has already been done in the way of running lines across the Blue Mountains, and what are the prospects of soon seeing the locomotive emerge on the plains of Bathurst. Mr. Edwin Barton is the professional gentleman to whom has been entrusted the rather arduous task of finding a track for the rails through the glens and across the ridges of this rugged country. A party of sappers and miners have been under his command. He began at Bathurst, in September, 1857, and worked eastward. From Bathurst three lines have been surveyed, or rather two main lines, with variations. The first goes by the Fish River, Solitary Creek, Piper's Flat, Lithgow's Valley, along the top of Darling's Causeway, following the ridge on which the present road is constructed and down on to the Emu Plains. This line is considered practicable. But there will be a stiff gradient of about one in thirty - five for two miles and three quarters, to mount up from the valley of the Nepean to the ridge, and a stiff gradient again of four miles when the line descends into Lithgow’s Valley. But then, these gradients avoid the necessity of tunnelling through the mountains. The second line is the same as the first from Bathurst as far as Antonio's Creek, but from that point, instead of going round northward to clamber to the ridge, it pursues a more direct course into the valley of the Cox to Hartley, and tunnels under the Darling Causeway to the head of the valley of the Grose. The third line marked out leaves the first at Piper's Flat, and crosses the Middle River and the Clarence Ranges to Darling's Causeway. A line has also been surveyed from Bathurst to Piper's Flats by way of the Green Swamp, Redbank, and Grieve's Gap, but this is considered inferior to the Fish River line. Bell's line has been examined from Richmond to Bowenfels, but has not been found very practicable. In the sketch submitted by Captain Martindale to illustrate his evidence, it is recommended that the valley of the Cox should be explored for a line, branching out from the southern line at Camden or Picton. This will probably give a more gradual ascent to Hartley, though the

absolute length of the line would be increased. The survey of the valley of the Grose is not yet completed. The floods drove the surveyors out during the winter, and the extremely rugged and tangled nature of the valley, which is in fact nothing but the bed of a mountain torrent, makes the work proceed slowly. But before the winter sets in again it is expected to be completed. The general result of the work that has been hitherto carried out is to show that there are two principal routes to choose from-as the best way to get across the Blue Mountains-supposing the line to commence from some point between Penrith and Richmond. One is to keep the valley of the Grose and tunnel under the Causeway; the other is to attain the high ground by the present road, and run along the top of the Causeway. Which is the best, can only be determined by a minute calculation of all the expenses, both of first construction and subsequent maintenance that each will involve; and these calculations cannot be made till the fieldwork is all finished, and the engineers have the complete case before them. And this will not be achieved till about the middle of this year. But the question of preference will virtually be one of tunnels versus gradients. It is possible, however, that the tortuous nature of the Grose Valley, the number of tributary creeks that will require to be crossed, and the sharp curves that will be necessary, in order to wind up the valley, and the necessity for extra solid works to guard against floods, may make it unquestionably bad policy to give preference to that route. The tunnel under the Causeway, at the head of the Grose, would be through sandstone, not by any means a difficult rock to work. The cost of such a tunnel, a little more than a mile long, would be, Mr. Whitton thinks, from sixty to eighty pounds a yard, that is, somewhere between one hundred thousand pounds and one hundred and fifty thousand pounds. Reports have appeared in the journals of tunnelling machines having been introduced into the Sardinian railway works, the motive power being hydraulic, but nothing definite is known about these machines, nor can we say as yet whether they could be applied in this colony so as to reduce the cost of tunnelling.

One great object of the Windsor people was to get the main trunk line to pass their way, and many questions were put to witnesses to elicit answers favourable to this view. But we doubt whether the inhabitants are altogether wise in their advocacy of this idea, for, according to Captain Martindale's evidence, it would seem that, if the Grose valley line should be ultimately determined on as the best, the line thither from Parramatta would be marked out pretty nearly direct, so that Windsor would be left four or five miles to the right, and would be only secondarily accommodated, unless a short branch were still made. The branch from the Penrith line, as at present proposed, comes right up to the town, and will, therefore, accommodate Windsor better than a mere trunk line to the Grose would do ; though the latter might be more convenient for Richmond and the Kurrajong.

Within the limits of the county of Cumberland, the surveys are said to be so far complete that no serious doubt can exist as to the best route having been marked out to Penrith,

as well as to Windsor, and the advocacy lately given to other routes in the Legislative Assembly, is said to be in opposition to the results of a careful examination of the country. One point, however, as respects any further extension to the west is still of somewhat immediate importance, and that is, that the route by way of the valley of the Cox, which is commended for exploration, should, if possible, be examined without delay. Because if this should appear to be the best line, the western rail will then branch off from the southern one at or near Campbelltown, and there will be no need of going to Penrith at all; and the works now being carried oh as far as the Blacktown Road, instead of being on the main western trunk line, will be merely the first section of what will become a branch to Windsor from Parramatta-though, perhaps, ultimately part of a great Northern line, by way of Wiseman's Ferry, to Merton. If Messrs. PETO and Co. are to be here soon, prepared to go on with the railway works at once, it" is necessary that the routes to be taken should be decided upon at once ; and if there is really any valid reason to suppose that the Cox Valley line would be the best, as freest from stiff gradients and tunnels, the survey should be carried on *pari passu* with that of the Grose Valley; for nothing can be done satisfactorily beyond the Blacktown road till this essential point is decided.

In an appendix to the Chief Commissioner’s evidence, the Cox and Warragamba rivers are included in a description of the country that has been explored, but nothing is said either here or in the evidence as to whether this is merely a rough examination or a survey, nor is anything hinted as to the facilities, or otherwise, offered by these valleys for a line of railway. In fact, the committee were more intent on trying to prove that the Grose line was the best, than on finding out what other lines were possible.

The cost of a branch to Windsor from the junction of the Penrith line is estimated at about £108,000, and the working expenses for the thirteen miles would be about £15,600 a year. This, allowing for interest of five per cent, on the capital, would not cover costs by about £10,000 a-year, that is, supposing -' there were no increase in the goods" traffic. There certainly would be an increase in this traffic, but whether it would amount to enough to give a net profit of £10,000 a year is a matter for speculation. If it would, then the proposed branch would be intrinsically a paying speculation. But Captain Martindale produces figures to show that, though by itself the branch might be a doubtful investment, yet it would throw so much additional traffic on to the line already constructed, that to the proprietors of the present line the branch would return slightly more than five and a half per cent.”

THE STATION LOCATION

The railway station at Windsor is in a very confined location between George Street at the Sydney end and Cox Street at the Richmond end. The platform was curved but at the opening and remains curved but the several buildings have been rectangular and there was a dock platform at the Richmond end. The new construction work that was undertaken in 2011 and 2012 involved the extension of the platform at the Richmond end. The work sub assumed the former dock platform.

GOVERNMENT ATTEMPTS TO LOWER THE FINANCIAL BURDEN ON TAXPAYERS - 1862

It was in 1862 that all the politics about further railway construction came to a head – or, that maybe more accurate to say, one of the many heads. It was also the first year after 1855 in which action was needed not only to provide plans for new lines but to provide new and replace existing stations on lines already opened for traffic. Another feature of the year was the preparation of a plan for the platform building at Hexham/Tarro. It was the planning for that station that introduced low-cost materials for the use in station buildings. In short, the year, 1862, was the most significant year in John Whitton's career since his arrival in December, 1856.

In 1860 and 1861, influential people prepared reports in support and against the continued engagement of Whitton's policy of First Class railways built to English standards. Engineering standards were not the only aspect of railway policy to receive oxygen. The more relevant aspect was who was to profit from the investment - the public or private individuals. There had always been a dream of some of the directors of the former Sydney Railway Company that they would monopolise the railway system to obtain personal profits from the public investment. It was in 1862 that they made their boldest move.

The Newcastle Chronicle and Hunter River District News, 26th July, 1862**,** p. 3 contained a Supplement to the Government Gazette, issued the previous Saturday, listing the *Conditions for Leasing the Government Railways*, tenders for which closed at the Public Works Office, Sydney on the 1st of November, 1862. The conditions stated that the Government was prepared to lease the railways in New South Wales, together with the whole of the rolling stock, machinery, tools, workshops, goods-sheds, stations, and all buildings and other related. One option was for the tender to include or exclude the maintenance of permanent way and works, but a preference was given to tenders for its inclusion. The newspaper stated that "the lines to be leased are severally the

Southern, from Sydney to Picton, 54 miles; the Western, from Parramatta Junction to Penrith, 20 miles; and the Northern, from Newcastle and Morpeth to Singleton, 52 miles." The term of the lease was three years, but it was noted that Parliament could "sanction" an extension. The closing date for tenders were postponed twice, eventually closing on 1st May, 1863.[1] The attempt to lease the railways shows that there was a substantial, influential sector of the economy that could manipulate NSW railway policy in a significant manner.

From the time before the opening of the railways in 1855, private investors realised that there was only one section of railway system required to be controlled in order to make substantial profits. That section of line or lines were the immediate links funnelling the trunk routes into Sydney and Newcastle as all trains from all country areas arriving at the coast had to use the tracks to reach the ports. Investors new that was not necessary to control the railway lines into the country beyond what was advertised for lease. In 1863, the newspapers reported that many tenders were submitted but none was accepted because the NSW Government realized that the rail system was profitable and was a consistent source of revenue for the colonial treasury.[2]

Other factors help to explain why the privatization off the NSW Railways did not take place. *The Sydney Morning Herald,* 19th April, 1862**,** p. 7 contained a progress report on railway construction. It stated that the northern line was opened as far as Branxton.

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[1] *The Newcastle Chronicle and Hunter River District News,* 6th December, 1862**,** p. 2 and 20th December, 1862, p. 2.

[2] *The Maitland Mercury & Hunter River General Advertiser,* 14th May, 1863**,** p. 4 said that "ten or twelve tenders for the leasing of the Government Railways have been opened, but none were accepted". The *Launceston Examiner,* 16th May, 1863**,** p. 4 mentioned that 'the revenue from the railways is increasing. They will not be leased at present." The *Goulburn Herald,* 16th May, 1863**,** p. 2 copied information from the *Sydney Morning Herald*:" For several months past tenders have been invited by the government for the leasing of the railways. The 1st November last was at first fixed for receiving the tenders; subsequently the time was extended to the second December and afterwards the time was still further extended to the first of the present month the reason alleged for the alteration being that the government had decided not to give a lease of the railways until Sir M. Peto and Co.'s lines were completed. Some ten or twelve tenders were received last week, and were opened by Mr. Cowper and Mr. Arnold. We learn that there are among them some very good offers, or rather offers which would have been considered good a few months ago. There has, however, been a steady increase in the railway receipts during the last few months, and consequently a considerably higher rental than formerly is now looked for. The improvement in this source of revenue has recently been so progressive, and the indications of a further advance consequent on the opening of the new extensions are so promising, that the government are disinclined for the present to let the management of the lines pass out of their hands; and it is therefore probable that they will not accept any of the tenders before them, but that they will continue to work the railways themselves until they have opportunities for judging as to what the amount of traffic is likely to be upon the opening of the three trunk lines to Penrith, to Picton, and to Singleton."

The western extension was finished as far as St Marys, but the traffic terminated at Rooty Hill. The construction of the viaduct at Menangle delayed the completion of the line. The construction of a branch line connecting the East Maitland with Morpeth was about to start. The most interesting construction was the "experiment of horse railways", which also was about to commence from Blacktown to Richmond. It was one of the three lines of horse railway proposed by the Government but the Richmond branch was the only one that was sanctioned by the Assembly. The newspaper said that, "as the horse railway scheme was proposed against the recommendation of Mr. Whitton, it was determined that the construction of these should be carried out under a new and distinct branch of the department ; accordingly the Government advertised for an engineer having experience in the construction of horse railways to take the superintendence of the works. There were several applications for the appointment, and upon these being taken into consideration Mr. Weaver received an official intimation that he would be com- missioned to carry out the work. Mr. Weaver filled for some years the office of Colonial Architect, and recently directed the construction of a short locomotive line connecting the Wallsend coal mines with the Great Northern Railway; his principal qualification for the above appointment was under- stood to be, his having published several letters in this journal in favour of horse railways, as the most adapted to the wants of this colony. In his application for the appointment, Mr. Weaver represented that no professional man in practice would be disposed to give up a permanent engagement to carry out a short line, but offered to undertake the work upon a commission. These terms are the same as those on which Mr. Gibbons is carrying out the harbour works at Wollongong and Kiama; but there is this difference in the case of Mr. Weaver, that he will act both as engineer and as manager of the works. The country between Blacktown and Windsor was a few years since surveyed with a view to the construction of a locomotive line, and Mr. Weaver has been informed that all the plans, surveys, and other documents then prepared would be placed by the Government at his disposal. It has been stated that Mr. Weaver proposes to lay down a permanent way somewhat similar to that upon the present railways, but a lighter rail and lighter works generally will be adopted. The railway is, however, to be of such permanent character as to be capable of being used for locomotive, traction, should this be found desirable. Previous to the execution of the works, the plans and specifications for the line will have to be laid before Parliament, and it is thought by some that, after the decided opinions that have been expressed in the Assembly against horse railways, it is doubtful whether the members will sanction the carrying out of the plans. The experiment is regarded by the public with considerable interest, as being likely to settle the long disputed question as to the practicability of constructing cheaper railway lines than those at present formed, and to lead, in the event of their succeeding, to the extension of the system in other directions."

Conservation Architect, David Sheedy, has researched the background of William Weaver, who was an architect in 1862 but previously trained as an engineer under the famous I. K. Brunel in England and another architectural firm. Then, he migrated to Australia where he became articled to architect, Edmund Blacket, the Colonial Architect, and Weaver himself became Colonial Architect between 1854 and 1856. In 1857, he went into private practice. After completing the Richmond line, he moved to New Zealand but returned to Australia and died at Goulburn in 1868.

Finally, the proponents of low-cost railways had been given their chance to validate the cost effectiveness of horse-drawn railways. Politicians assumed in the 19th century that if you build tramways or narrow gauge railways then everything associated with those projects comes at a cheaper price. When the railways of Queensland and Victoria are examined, it is clear that there was no fundamental link between track gauge or tramway construction unless narrow gauge railways of two feet six inches or less were built, such as the Victorian narrow gauge lines in the 1890s. The Queensland narrow gauge line between Brisbane and Wallangarra featured high quality, brick buildings and the Victorian broad gauge lines of the 1920s featured tin sheds of lower quality rather than the pre-cast concrete unit construction at the same time in New South Wales. This experiment on the Richmond line, unfortunately, did not deter New South Wales politicians throughout the 19th century from seeking new railway lines at ever cheaper costs.

Mr. Weaver did not build cheap platform buildings to match the cheap rail lines. He built roughly what John Whitton was using for towns of lower status, namely combination offices and residences, those at Riverstone and Mulgrave still surviving. Mulgrave, Richmond and Windsor were handsome ornate brick combination office/residence built on a rectangular footprint. They had gabled roofs with ornate barges. The structure at Riverstone was built in the Gothic cruciform style, unlike the others on the branch line. It survives on the platform towards the Sydney end.

The evidence indicates that both Whitton and Weaver considered their platform buildings as sufficiently low cost. They did not decide to use buildings which may have been smaller, made of timber or provided by private enterprise acting as an agent for the railway.

Whitton had lost the battle in 1862 against the trial of horse-hauled railways but his opponents were not limited to the Richmond branch line. There was a Parliamentary Board of Enquiry in the operation of the Public Works Department. During the Enquiry, Whitton was asked why he did not use standard plans. He replied that each station was different and required a different approach. The real reason why Whitton did not use standard plans is possibly that, once he used standard plans, each town served would complain that it was bigger or different to another town but got the same station

building. By using individual plans, Whitton was able to hide the reality of his use of the same designs and able to convince the leaders of each town that it got the best building ever constructed on the rail system.[3] The explanation given by Whitton was believable and the Parliamentarians accepted his evidence. Notwithstanding that Whitton's station policy was appropriate for the time, he was never going to enjoy an environment in which he received universal, political support. Another point to remember is that, while Whitton did not use the same plan over and over, virtually every aspect of the plans for buildings were standard. He just did not want to make that information publicly known because of the tender egos of people in control of country towns.

CONSTRUCTION OF THE LINE - 1864

On the 23rd of May, 1864, the New South Wales Government issued a contract to W. and A. L. Elphinstone for the construction of the brick combination offices/residences at Mulgrave, Windsor and Richmond. The building at Windsor and a higher pitched roof than was the norm for combination structures but precedences were located at other locations with this design, such as the gatehouse at the western end of Penrith railway yard. The buildings were very attractive with Gothic-styled bargeboards and tuck pointing of the brickwork. There is a photograph of the 1864 building in *Bulletin*, December, 1964, page 228.

In a recent article, Craig McPherson has indicated that John Whitton did attend the opening ceremony on 29th November, 1864.[4] Why would Whitton do that, considering all his protestations and pooh-poohing of light railways? Whitton probably attended because, with the presence of the Governor of New South Wales, Whitton would have thought it politically and socially was wise politics to attend.

The *Sydney Morning Herald*, 2nd December, 1864, contained a small review about the new branch line and concluded with a very balanced outlook on the future of light railways. The article stated that “the experience of the first six months will enable us to form a fair judgement…….. The experiment must have a fair trial and the true lessons it teaches must be gathered up for our future experience…… The experience of the

[3] A comment made by Mark Langdon, 17th September, 1999.

[4] C. McPherson, "Celebrating 150 years: the opening of the Blacktown to Richmond Branch Line", *Australian Railway History*, January, 2015, p. 25.

Richmond railway will give us some aid towards solving the problem, and we shall learn either to imitate or avoid the model now set."[5]

JOHN WHITTON INSPECTS THE LINE - 1865

Although John Whitton, Engineer-in-Chief, had spat the dummy and told everyone that he did not wish to be associated with the construction of the horse tramway between Blacktown and Richmond, he surprisingly paid an official visit to the line only six weeks after was opened. He submitted an inspection report on 24th January, 1865, in which he expressed the view that the present condition of the track was unsafe for public traffic. William Weaver should not be held totally responsible for the condition of the permanent way because it was the New South Wales Government that had changed its view on the use of horsepower and, shortly before track construction commenced, the Government decided that the line should be worked by light-weight steam locomotives. It can only be assumed that Whitton did not win any friends with his report of condemnation of the line. As far as is known, Whitton did not make any comment on the platform buildings as these were pretty much standard works and very much in the style of what he would have approved had he been in charge instruction of the line.

IMPROVEMENTS - 1866

The Goulburn Herald and Chronicle, 1st August 1866 p. 2 contained the following information.

"In the Legislative Assembly, In reply to questions put to ministers, the following information was elicited:- That instructions had been given, plans and specifications prepared, and tenders would forthwith be invited for the required improvements to the railway stations at Mulgrave, Windsor, and Richmond."

It is unknown these improvements turned out to be.

ENGINEERING REVIEW - 1876

In 1876, John Whitton again inspected the Blacktown-Richmond branch line and prepared plans for the reconditioning of the line in order to support heavier locomotives. This reconditioning work took 10 years, which is an indication that, even at this time, Whitton had lost a substantial degree of his influence with those people who control the

[5] ibid

supply of money. So, the upgrading works must not have been too was sensual if it talk a decade for them to be completed.

It seems that the New South Wales government thought that a separate position should be created in the New South Wales Railways to look after existing lines, possibly because the design and construction workload for expansion projects on existing lines became so onerous. Thus, in 1876, a new position of Engineer-in-Chief for Existing Lines was created to handle new works on lines that were already open for traffic.[6]

The reality was that the workload was insignificant, with only one new building approved and built of any significance – at Petersham – and in 1869 the position of engineer in charge of existing lines was abolished and the incumbent dismissed.

THE FAMILY OF PLATFORM BUILDINGS TO WHICH THE 1883 WINDSOR STATION BUILDING BELONGS

The 1867 building at Windsor belongs to a group of platform buildings which followed roughly a Georgian influenced design. The design features were:

- Rectangular shape,
- Symmetrical plan based on centre, pedestrian access,
- Attached pavilions with lower roofs at both building ends,
- A hipped roof of uncluttered appearance,
- Posted awnings, &
- Moderate in size and restrained in decoration

John Whitton implemented the first prototype example at Campbelltown in 1858 and revised the design in 1862 for the first production example at Penrith, and Singleton and Picton in 1863. By 1871, Whitton had used the design family of which Moss Vale belongs for the last time. Between 1858 and 1871, the following locations featured the Georgian influenced design upon the opening of the three trunk lines:

- Campbelltown (a slightly different prototype design)
- Picton
- Mittagong
- Moss Vale

[6] This was the second time that John Whitton had lost control of works on existing lines. The previous period was between 1867 and 1869.

- Parramatta
- Penrith
- Mount Victoria
- Bowenfels
- Singleton
- Muswellbrook
- Scone
- Murrurundi

It is of interest that each of the trunk lines received four buildings of the same design.

Whitton had Government approval and funding to take the three main trunk lines to Goulburn, Bathurst and Murrurundi and these lines represent the first period of trunk line development. When the lines reached their initial destinations, there was a lively debate in government and elsewhere about the best way, meaning cheaper, of extending the trunk lines further. What emerged as Government policy was a need for Whitton to build cheaper platform buildings in the early to mid-1870s. Throughout the 1870s, Whitton moved away from his beloved Georgian influenced design, and used temporary structures and combination offices and residences. He also commenced trials, at Gunning, with a new design in 1874 using for the first time a gabled roof as the dominant form of roofscape. It was at Gunning that the idea of a stand-alone residence for the Station Master was first implemented.

From the mid to late 1870s, there emerged a design for more structures with much higher levels of ornamentation and much larger size. Buildings at Newcastle, Sydney (the second station), Wagga Wagga, Tamworth, Albury and other locations became locations for the use of Whitton's First Class design. He used his gabled roof design, later known as the standard roadside station, as a third class of platform structure. How did he plug the status gap between the First and Third class buildings? He re-introduced the Georgian influenced design that he had applied at Moss Vale and elsewhere. The work of replacing buildings was taken from Whitton in 1879 but there was no change in the design for the Second Class of platform building on existing lines. The list below shows those examples where Whitton and his subsequent design colleagues, William mason and George Cowdery, used the same design as at Moss Vale as replacement structures or new structures on existing lines between 1876 and 1889.

- Binalong
- Blacktown
- Burwood

- Honeysuckle Point
- Eskbank
- Greta
- Harden
- Morpeth
- Newbridge 1877
- Newtown (1876) – asymmetrical with one attached pavilion
- Richmond
- Riverstone
- Lawson (1879)
- Liverpool (1879) – used of gabled rather than hipped ends for the roof
- Granville (approved in 1880) with matching brick waiting shed
- Spring Hill (1885) – asymmetrical with two semi/unattached attached toilet pavilions, centre transverse gable
- Stanmore (1886) – an improved version with hipped roofs for the main roof and also on the attached, balanced pavilions
- Windsor (1883)

Twelve examples were built as the First Class of platform building between 1858 and 1871 on new lines and 17 examples were built as the Second Class of platform structures between 1877 and 1889 on existing lines. All 29 examples shared the same, simple hipped roof and attached pavilions with parapeted walls.

APPROVAL OF THE REPLACEMENT BUILDING - 1883

Windsor was an important town and the Station was going to have to be smart looking building or, otherwise, the local people would complain that their town's high social position had been ignored. Between 1883 and 1915 Windsor railway station was lit by gas as the town during that period had a public coal-gas supply.[7] The operation of a town gas company was an indicator of the high social status of Windsor. This status was also reflected in the availability of a public town water supply system in 1890, which the New South Wales Railways took advantage of by connecting the station to the town water supply and providing water columns at each end of the platform for steam locomotives.

When George Cowdery decided to replace the 1864 brick building at Windsor, the first act was to dispose of it. It appears that the 1864 building at Windsor had been removed

[7] Ibid., p. 7

in 1882, well before George Cowdery had approved a replacement structure. Normally, a new building would be erected by the side of the existing structure and then demolished but, because so little free land was available at Windsor station, it was not possible to use the normal manner. Firstly, the brick building was dismantled brick by brick, this being possible because of the use of lime mortar bonding the brickwork. The building was transported and re-erected at 8-10 Mileham Street, not far from the station. Although not totally recognisable as a former railway station or combination residence/ office, it is possible to interpret the former narrow platform awning. Greg Lekosis considers that the 1864 building at Richmond, or part of it, was used as a temporary station at Windsor before the present building was erected. This explains the different shape of the roof ventilator in the building in Mileham Street.[8]

Cowdery approved the building design for Windsor station on 9th February, 1883. It was a copy of what he had approved for Richmond on 13th September, 1881, except that the floor plan was reversed and that brown bricks were used for Windsor and red bricks were used for Richmond. The same design was also used for Blacktown, also approved in 1883, though Cowdery added a porched entry on the road side of the structure for the Blacktown building. The building at Windsor contained seven rooms and was 109 feet long by 16 feet wide at the breakpoint in the centre. It was the hipped roof design that William Mason had been using since 1876 and, his replacement, George Cowdery, had been using since 1878 for Second Class buildings. It was a near-symmetrically shaped structure with a breakpoint over the pedestrian entry on the road side and an elegant, uncluttered hipped roof covered with Welsh slate. At each end of the building there were pavilions with parapeted roofs but the one at the Richmond end was longer. The room designations were Porters' Room (under the Sydney end parapet), Telegraph Office, Booking Office, General Waiting Room, Parcels Office, Ladies' Waiting room and "anteroom" (which was code for female toilet) and the male toilet under the parapet at the Windsor end structure. The building had exquisite detailing including:

- fluted cast iron veranda columns on the platform side,
- ornate cast iron awning and veranda brackets on the platform side,
- attractive, turned timber verandah columns on the road side,
- detailed window sills,
- protruding string courses around the external walls,
- a curved iron veranda roof on the road side,
- ornate brick chimneys with terracotta covers,
- detailing to the door heads, &

[8] G. Lekosis, *Conservation Plan – Windsor Railway Station*, unpublished manuscript, 1990, p. 19

- dentils under the eaves.

As was done on the building at Blacktown, the brickwork was set in cement mortar.

At Windsor, two ticket windows faced into the general waiting room, which was the normal practice in Whitton's time. The provision of two ticket windows is an indicator that passenger loadings were healthy. Fireplaces were provided in every room which, again, was the standard for the time. Because this was a very important station from a community perspective, the New South Wales Railways decided against using a system whereby the toilets were served by night soil pans and instead dug cesspits under both the male and female toilets for the deposit of human bodily waste. This would have created a disgusting odour.

There is not 100% accuracy about the name of the contractor for the Windsor building with sources showing both Frank Brakbutt and G. Jones signing the contract plan on 23rd April, 1883. Another source says that Messrs. Jones and McIntyre of Sydney signed the contract. It is quite possible that more than one individual signed the plan.

Windsor station had a platform coping made of sandstone and this stone was also used on the platform surface underneath the platform awning. It was also used in the front of the station under the verandah where pedestrians entered the building. It looked a flashy product and certainly its selection reflected the high status of Windsor but the down side of sandstone is that it wears and eventually looks unmaintained and becomes a trip hazard. This is why the sandstone was to be removed from the front of the station in the 1990s though, from the appearance of the stone today, it looks like the present replacement sandstone dates from the recent work in 2011.

Between 1883 and 1915 Windsor railway station was lit by gas as the town during that period had a public poll-gas supply.[9]

In 1884, a new two-storey, single-fronted residence was approved for the Station Master. It survives in private ownership. The location of the residence at the side of the station forecourt was a well-planned, intentional act not necessarily to heighten the status of the station but rather to show to the local community that the New South Wales Railways well understood the above normal social, economic and political status of the town of Windsor.

[9] G. Lekosis, *Conservation Plan – Windsor Railway Station*, unpublished manuscript, 1990, p. 7

IMPACT OF WORLD WAR TWO - 1941

Many railway stations during world War two had a massive increase in passenger and parcels business. Windsor station was one of these as it was closer to the Richmond airfield than was Richmond station. The Acting Chief Civil Engineer, W. R. Beaver, approved on 23rd July, 1941, a rearrangement of the platform building to provide more room for parcels and out ofs. Oddly, despite the increase in passenger business, the number of ticket office windows was reduced from two to one, possibly due to a staff shortage. The New South Wales Railways from 1855 had sold tickets through very small windows measuring 18 inches high by 12 inches wide and in 1941 the new ticket window retain the 1855 dimensions. The staffing problem may also be the reason why interconnecting doors were provided between the booking office and the two rooms forming the parcels office.

No doorway was provided into the new, timber framed out of room because out ofs were second-class parcels and were not afforded the same level of security as normal parcels. All hardwood for the framing had to be dressed but there was no lining on the internal walls, which was consistent with the treatment generally of out of rooms from the time of their introduction in 1890. Rather than the normal use of concrete, the floor of the out ofs room was 4 inch wide by 1 inch thick, tongue and grooved Tallowood. The room was externally clad in weatherboards and the skillion roof had the traditional No. 26 gauge galvanised, corrugated iron sheeting. The new doors had Plywood panelling, which was a fairly new product but probably was used because of its low-cost. The top of benches in the parcels office were set at 3 feet above the floor, which was a long-held standard dimensions of the New South Wales Railways.

RAISING OF THE PLATFORM - 1946

The Chief Civil Engineer, Albert Fewtrell, approved the raising of that part of the platform in front of the 1883 building and for a fair length of the platform at the Sydney end to the new standard level of 3 feet 2 inches. It was not necessary to raise the timber deck section over the George Street subway as it was constructed to the 3 feet 2 inch level in 1939. Up to this time, the platform had been constructed at three different stages – one, in front of the 1883 building at some time before 1883; two, a similar length at the Sydney end in 1912 and, three, over the George Street subway using a timber deck in 1939.

REMOVAL OF PAINT ON EXTERNAL BRICK WALLS - 1996

The white paint on the external brickwork, thought to be applied in 1953, was removed, though the work was poorly executed.

CITYRAIL UPGRADE - 1997

With the start of CityRail in 1989, every station in the CityRail network was upgraded at some time of its 24 years of its existence. It was the turn of Windsor station in 1997 in which every aspect of the building was rehabilitated or replaced. In the same year, the booking office received the standard makeover featuring carpet on the floor and the then standard design of “workstation”. All the work proceeded except the booking office where a revised plan was prepared in 1998 with a new standard modified workstation. In year 2000, CCTV cameras were installed.

EASY ACCESS UPGRADE - 2010 and 2011

One of the blunders undertaken during the 1997 upgrade was the decision to demolish what was perceived to be an addition on the end of the male toilet at the Richmond end of the station building. While it had the appearance of a subsequent addition, the structure was in fact an original component of the 1883 approval and was one aspect which made the structure asymmetrical. A photograph showing the now demolished western section of the male toilet is in *Australian Railway History*, January 2015, page 2. Luckily, the Windsor building was a copy of the Richmond building, though with reverse floor plan, and the Richmond building survives intact.

CityRail proposed further upgrading in 2010 which focused mainly on the commuter carpark, new bus stops, new taxi stand, a kiss and ride drop-offs own and bicycle parking facilities. Work was supposed to start in March, 2011, but did not get underway until October of that year, with work extending into 2012, when the present structures were completed. Part of that work was the construction of the present booking office, which was an unnecessary expense for two reasons. Firstly, there was adequate accommodation within the 1883 building and, secondly, the project involved the demolition of a substantial compound to hold garbage bins which had only been built in the previous year. Local staff at the time had no idea why the new booking office was being built and why it was being built on top of the “bin hold” erected in 2010.

Of course, while local staff are usually unaware of any event affecting the station, the then line manager knew precisely why the 1883 building was being abandoned and a

new structure erected. Simply, money was available and had to be used. The departmental propaganda story maintained that, because the platform had to be raised, the doors of the 1883 building would be much lower and this step up and down between the building the platform would be a safety hazard. For the amount of money involved, it would have been cheaper to raise the 1883 building to the new platform level. Of course, no one in CityRail wanted to raise the building because the local manager wanted to have a new office.

In 2011, the CityRail management promoted the idea of the new building as a way of attracting revenue for the occupation of the 1883 building. Reasonable people knew this to be simply a fantasy and, today, the building continues to be unoccupied and advertised for lease. The contractor for the present station complex was Axis Constructions NSW, which signed the contract on 26th September, 2011, for a contract cost of $2.4 million. The project was entitled Easy Access Upgrade. The platform was raised again by approximately 250-440 mm. At that time, CityRail stopped access to the platform through the 1883 building because the platform was then so high that pedestrian access would have to endure a trip hazard to proceed between the building and the platform. Now, the problem is that there is now no use for the 1883 building, making it target for vandalism and, ultimately, demolition.

The work involved the construction of a new steel framed building which was sheeted externally with compressed fibreboard. It has a skillion roof sloping towards the rail with a skillion roofed awning over the platform sloping back towards the building. The building is painted a dark grey colour with two contrasting bands around the exterior walls and is virtually the same colour scheme that was applied to Quakers Hill, which was built at the same time.

The present building contains a ticket office at the Sydney end, an office for the Stations Customer Manager, a staff amenities area including a staff toilet, two uni-sex, accessible toilets for the public and a communications room containing electronic equipment towards the Richmond end. There is a new Bin Hold at the end of the structure.

There are two sets of interpretive plaques at the station, one near the relocated goods crane and one on the platform. The one on the platform allegedly shows a photo of the 1883 building at Windsor but, unfortunately, the photograph is of the similar building at Blacktown, the difference being the porched entry on the Blacktown building.

Stuart Sharp

24th January, 2015

RICHMOND RAILWAY STATION

THE LOCATION OF THE STATION - 1862

The *Sydney Morning Herald*, 7th November, 1862, p. 2 contained a letter to the Editor about the reason the station was located where it is today. It stated:

"To the Editor of the Herald.

SIR,- In your issue of Monday, 3rd instant, I read an account of a meeting which had been held at Mrs. Seymour's, Black Horse Inn, Richmond, for the purpose of petitioning the Government to carry out its former intention, of placing the terminus of the railway upon the Richmond Market square. The gentleman who moved the first resolution is reported to have stated that this was a subject of vital importance to the inhabitants of Richmond; but as no reasons for its being of such importance are reported as having been adduced, I am certainly at a loss to discover in what way the interests of the Richmond public can be so materially affected, or why the circumstance of the railway station being built upon the Richmond Common, a quarter of a mile from the Market-square, should be so seriously detrimental to the public interests. It would appear from precedent, both European and colonial, that it is desirable that a railway station should, if possible, be at some little distance from the centre of the town. Now, assuredly in this case a more convenient position could not well be chosen, than the edge of the Richmond Common. Should this site be determined upon the public will be as much benefited as if it were upon the square, and a considerable number of the inhabitants would not incur that loss from the deterioration of their property, which they inevitably must do, should the line of railway pass through their paddocks, orchards, and gardens, on its route to the Market-square. Without doubt, the Government will grant them some compensation. But will this compensation be in any degree adequate to the injury done to property situated in the immediate vicinity of the dwellings of the proprietors? Possibly if compensation be not applied for in proper time, the applicants may receive no compensation at all. This very circumstance actually happened on a former occasion in the case of a different line; the party was too late in his application and consequently received no remuneration whatever, although he had previously given a verbal notice that such application would be made. Taking these things into consideration, as well as the enormous additional expense which must necessarily be incurred by the Government, should the Market-square be fixed upon as the site of the terminus, a counter petition has been numerously signed, which has been most undeservedly stigmatised in the report referred to, as having been got up in an underhand manner. Certainly, no public meeting was called for the purpose, nor was it thought necessary,

but the substance of the petition was explained to and fully understood by all those who affixed their signatures. In fine, there is every reason to believe that the interests of the public will be better served should the railway terminus be placed upon the Richmond Common than if built on the Richmond Market-square.

I am, Mr. Editor, yours very obediently,

A SUBSCRIBER. Richmond, November 5th"

GOVERNMENT ATTEMPTS TO LOWER THE FINANCIAL BURDEN ON TAXPAYERS - 1862

It was in 1862 that all the politics about further railway construction came to a head. It was also the first year after 1855 in which action was needed not only to provide plans for new lines but to provide new and replace existing stations on lines already opened for traffic. Another feature of the year was the preparation of a plan for a platform building - at Hexham/Tarro - that introduced low-cost materials for the use in station buildings. In short, the year, 1862, was the most significant year in John Whitton's career since his arrival in December, 1856.

In 1860 and 1861, influential people prepared reports in support and against the continued engagement of Whitton's policy of First Class railways built to English standards. Engineering standards were not the only aspect of railway policy to be oxygen. The more relevant aspect was who was to profit from the investment - the public or private individuals. There had always been a dream of some of the directors of the former Sydney Railway Company that they would monopolise the railway system to obtain personal profits from the public investment. It was in 1862 that they made their boldest move.

The Newcastle Chronicle and Hunter River District News, **26th July, 1862,** p. 3 contained a Supplement to the Government Gazette, issued the previous Saturday, listing the *Conditions for Leasing the Government Railways*, tenders for which closed at the Public Works Office, Sydney on the 1st of November, 1862. The conditions stated that the Government was prepared to lease the railways in New South Wales, together with the whole of the rolling stock, machinery, tools, workshops, goods-sheds, stations, and all buildings and other related. One option was for the tender to include or exclude the maintenance of permanent way and works, but a preference was given to tenders for its inclusion. The newspaper stated that "the lines to be leased are severally the Southern, from Sydney to Picton, 54 miles; the Western, from Parramatta Junction to Penrith, 20 miles; and the Northern, from Newcastle and Morpeth to Singleton, 52

miles." The term of the lease was three years, but it was noted that Parliament could "sanction" an extension. The closing date for tenders were postponed twice, eventually closing on 1st May, 1863.[10] The attempt to lease the railways shows that there was a substantial, influential sector of the economy that could manipulate NSW railway policy in a significant manner. In 1863, the newspapers reported that many tenders were submitted but none was accepted because the NSW Government realized that the rail system was profitable and was a consistent source of revenue for the colonial treasury.[11]

Other factors help to explain why the privatization off the NSW Railways did not take place. *The Sydney Morning Herald,* **19th April, 1862,** p. 7 contained a progress report on railway construction. It stated that the northern line was opened as far as Branxton. The western extension was finished as far as St Marys, but the traffic terminated at Rooty Hill. The construction of the viaduct at Menangle delayed the completion of the line. The construction of a branch line connecting the East Maitland with Morpeth was about to start. The most interesting construction was the "experiment of horse railways", which also was about to commence from Blacktown to Richmond. It was one of the three lines of horse railway proposed by the Government but the Richmond branch was the only one that was sanctioned by the Assembly. The newspaper said that "as the horse railway scheme was proposed against the recommendation of Mr. Whitton, it was determined that the construction of these should be carried out under a new and distinct

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[10] *The Newcastle Chronicle and Hunter River District News,* **6th December, 1862,** p. 2 and **20th December, 1862,** p. 2.

[11] *The Maitland Mercury & Hunter River General Advertiser,* **14th May, 1863,** p. 4 said that "ten or twelve tenders for the leasing of the Government Railways have been opened, but none were accepted". The *Launceston Examiner,* **16th May, 1863,** p. 4 mentioned that 'the revenue from the railways is increasing. They will not be leased at present." The *Goulburn Herald,* **16th May, 1863,** p. 2 copied information from the *Sydney Morning Herald*:" For several months past tenders have been invited by the government for the leasing of the railways. The 1st November last was at first fixed for receiving the tenders; subsequently the time was extended to the second December and afterwards the time was still further extended to the first of the present month the reason alleged for the alteration being that the government had decided not to give a lease of the railways until Sir M. Peto and Co.'s lines were completed. Some ten or twelve tenders were received last week, and were opened by Mr. Cowper and Mr. Arnold. We learn that there are among them some very good offers, or rather offers which would have been considered good a few months ago. There has, however, been a steady increase in the railway receipts during the last few months, and consequently a considerably higher rental than formerly is now looked for. The improvement in this source of revenue has recently been so progressive, and the indications of a further advance consequent on the opening of the new extensions are so promising, that the government are disinclined for the present to let the management of the lines pass out of their hands; and it is therefore probable that they will not accept any of the tenders before them, but that they will continue to work the railways themselves until they have opportunities for judging as to what the amount of traffic is likely to be upon the opening of the three trunk lines to Penrith, to Picton, and to Singleton."

branch of the department ; accordingly the Government advertised for an engineer having experience in the construction of horse railways to take the superintendence of the works. There were several applications for the appointment, and upon these being taken into consideration Mr. Weaver received an official intimation that he would be com- missioned to carry out the work. Mr. Weaver filled for some years the office of Colonial Architect, and recently directed the construction of a short locomotive line connecting the Wallsend coal mines with the Great Northern Railway; his principal qualification for the above appointment was under- stood to be, his having published several letters in this journal in favour of horse railways, as the most adapted to the wants of this colony. In his application for the appointment, Mr. Weaver represented that no professional man in practice would be disposed to give up a permanent engagement to carry out a short line, but offered to undertake the work upon a commission. These terms are the same as those on which Mr. Gibbons is carrying out the harbour works at Wollongong and Kiama; but there is this difference in the case of Mr. Weaver, that he will act both as engineer and as manager of the works. The country between Blacktown and Windsor was a few years since surveyed with a view to the construction of a locomotive line, and Mr. Weaver has been informed that all the plans, surveys, and other documents then prepared would be placed by the Government at his disposal. It has been stated that Mr. Weaver proposes to lay down a permanent way somewhat similar to that upon the present railways, but a lighter rail and lighter works generally will be adopted. The railway is, however, to be of such permanent character as to be capable of being used for locomotive, traction, should this be found desirable. Previous to the execution of the works, the plans and specifications for the line will have to be laid before Parliament, and it is thought by some that, after the decided opinions that have been expressed in the Assembly against horse railways, it is doubtful whether the members will sanction the carrying out of the plans. The experiment is regarded by the public with considerable interest, as being likely to settle the long disputed question as to the practicability of constructing cheaper railway lines than those at present formed, and to lead, in the event of their succeeding, to the extension of the system in other directions."

Conservation Architect, David Sheedy, has researched the background of William Weaver, who was an architect but trained as an architect under I. K. Brunel in England and another architectural firm for emigrating to Australia where he became articled to architect, Edmund Blacket, and was Colonial Architect between 1854 and 1856. In 1857, he went into private practice. After completing the Richmond line, he moved to New Zealand but returned to Australia and died at Goulburn in 1868.

Finally, the proponents of low-cost railways had been given their chance to validate the cost effectiveness of horse-drawn railways. Politicians assumed in the 19th century that if you build tramways or narrow gauge railways then everything associated with those

projects comes at a cheaper price. When the railways of Queensland and Victoria are examined, it is clear that there was no fundamental link between track gauge or tramway construction unless narrow gauge railways of two feet six inches or less were built, such as the Victorian narrow gauge lines in the 1890s. The Queensland narrow gauge line between Brisbane and Wallangarra featured high quality, brick buildings and the Victorian broad gauge lines of the 1920s featured tin sheds of lower quality than the pre--cast concrete unit construction at the same time in New South Wales. This experiment on the Richmond line, unfortunately, did not deter New South Wales politicians throughout the 19th century from seeking new railway lines at ever cheaper costs.

Mr. Weaver did not design cheap platform buildings to match the cheap rail lines. He built exactly what John Whitton was using for towns of lower status, namely combination offices and residences, those at Riverstone and Mulgrave still surviving. Mulgrave, Richmond and Windsor were handsome ornate brick combination office/residence built on a rectangular footprint. They had gabled roofs with ornate barges. The structure at Riverstone was built in the Gothic cruciform style, unlike the others on the branch line. It survives on the platform towards the Sydney end.

The evidence indicates that both Whitton and Weaver considered their platform buildings as sufficiently low cost. They did not decide to use buildings which may have been smaller, made of timber or provided by private enterprise acting as an agent for the railway.

Whitton had lost the battle in 1862 against trialling horse-hauled railways but his opponents were not limited to the Richmond branch line. There was a Parliamentary Board of Enquiry in the operation of the Public Works Department. During the Enquiry, Whitton was asked why he did not use standard plans. He replied that each station was different and required a different approach. The real reason why Whitton did not use standard plans is possibly that, once he used standard plans, each town served would complain that it was bigger or different to another town but got the same station building. By using individual plans, Whitton was able to hide the reality of his use of the same designs and able to convince the leaders of each town that it got the best building ever constructed on the rail system.[12] The explanation given by Whitton was believable and the Parliamentarians accepted his evidence. Notwithstanding that Whitton's station policy was appropriate for the time, he was never going to enjoy an environment in which he received universal, political support.

[12] A comment made by Mark Langdon, 17th September, 1999.

TROUBLE WITH THE LINE CONTRACTOR - 1863

The Empire newspaper, 23rd September, 1863, p. 4 reported that “that Randle and Gibbons had thrown up their contract for the construction of the Windsor and Richmond railway, and that the engineer was negotiating for a resumption of the work.”

REPORT ON COMPLETION OF THE LINE - 1864

On the 23rd of May, 1864, the New South Wales Government issued a contract to W. and A. L. Elphinstone for the construction of the brick combination offices/residences at Mulgrave, Windsor and Richmond. The building at Richmond had a higher pitched roof than was the norm for combination structures but precedence were located at other locations with this design, as the gatehouse at the western end of Penrith railway yard. The buildings were very attractive with Gothic-styled bargeboards and tuck pointing of the brickwork.

The Sydney Morning Herald, **30th November, 1864,** p. 5 reported on the works at the completion of the line.

“Before proceeding to report the formalities at the celebration, it may be desirable to give a few particulars respecting the new line. The residents in the Hawkesbury district had, for several years agitated for the construction of a railway to Windsor; and in 1858, the subject having been referred to a select committee of the Legislative Assembly, evidence was taken, and they reported that the traffic on the line would give a paying return on the cost of construction. The first public intimation that the wishes of the Windsor people were to be complied with was made at the dinner given to his Excellency Sir John Young, on his visit to the Hawkesbury, three years ago, when Mr. Cowper announced that the Government had, the previous day, come to the determination to place a sum of money on the estimates for a railway, or a tramway, to Windsor and Richmond. The announcement as might be expected, gave great satisfaction; and shortly afterwards the Government fulfilled the promise by placing the sum of £60,000 on the estimates for a horse railway to Windsor and Richmond." Some opposition was effected to the vote when the estimate was submitted in the Assembly, chiefly on the ground that, being a branch railway, the inhabitants of the Hawkesbury district might, if it promised to be a remunerative undertaking, themselves raise the money to construct the line. The formation of a horse railway was also objected to as a retrograde movement, but it was promised that the works should be made sufficiently heavy to carry locomotive engines if that description of traffic should be thought desirable, and the vote was agreed to. The construction of horse railways appears to have been a pet scheme of Mr. Arnold's, and as Mr. Whitton had reported very strongly

against the experiment it was determined that it should be carried out under a new and distinct branch of the Works Department. Accordingly in carrying out the resolution of the Assembly, the Government advertised for "a competent engineer having experience in the formation of horse railways to take the superintendence of the works." There were several applications for the appointment. Mr. W. Weaver was commissioned to carry out the work; the arrangement being that he should receive a commission of 5 per cent, on the sum voted, and a further commission of 10 per cent on the estimate - Mr. Weaver acting as engineer-in-chief, and also as manager of the works.

The first sod of the Windsor and Richmond Railway was turned in January of last year, Messrs. Randle and Gibbons having taken the contract for the earthworks to Windsor, and Mr. Gwynneth for the continuation to Richmond. In the meantime the intention of the Minister for Works had undergone some change with regard to the character of the line, and he stated at the dinner given to celebrate the commencement of the works, that horses were not to be used upon the line, but a light kind of locomotive. Both Mr. Arnold and Mr. Weaver expressed themselves upon that occasion in favour of horse railways for certain kinds of traffic; and their abandonment of the principle, as applied to the Windsor line, was stated to be owing to the experience of the satisfactory working of a locomotive that had recently been introduced by Sir M. Peto and Co.'s agents for use on their works; the engine in question having frequently drawn a load of from thirty- five to forty tons up on incline of one in twenty. Consequent on this alteration in the views of the Minister, alterations were made by Mr. Weaver in his plans; designs for stronger bridges were prepared, and works generally of a more substantial character were prepared for.

It was promised, at the starting of the works, that the railway should be opened for traffic in twelve months' time. The carrying out of the works was, however, interrupted by various causes. Messrs. Randle and Gibbon failed before they had done their contract, which had to be completed by their sureties. The first contractor for the South Creek viaduct declined to proceed with the work, and considerable delay occurred in calling for fresh tenders. A still greater obstruction was erased by the disastrous floods in July last, which washed down the embankments in some places and carried away portions of the banks at South Creek. The floods were known to have been higher than any that the district had experienced for the last forty-five years, and they were consequently to that extent higher than the levels given to the engineer in setting out the line.

The new line branches from the Great Western Railway at the Blacktown station, and, leaving the Blacktown road to the left, passes at the back of Quaker Hill and ascends the Quaker Hill Range at a gradient of one in thirty-five for a distance of fifteen chains ; it then runs for some distance parallel to and on the northern side of Eastern Creek, passing through the farms of Mr. David Pye and Mr. Schofield; after traversing the Riverstone estate, the property of Mr. A. H. McCulloch, for a distance of three miles, at

the end of this property, opposite to a point known as the Vineyard, the line ascends, by a gradient of one in forty one, the Dividing Range, which runs from Prospect to McGrath's Hill on the Western Road. The line keeps to the high table land of that range, passing through Mr. Williams' and several other farms on the Richmond Hill Common, which it crosses about a mile to the left of the old Windsor Road, at McGrath's Hill, and crossing South Creek at Mr. Cunneen's. The viaduct across South Creek is a very substantial structure; it is twelve chains in length, and has an opening over the main creek ninety feet in the clear, spanned by a laminated arch. After crossing South Creek, the line passes close by the extensive farm buildings and boiling-down establishment of Mr. R. Fitzgerald, and enters the town of Windsor immediately at the back of the old Government poor-house, the station being on the property of the late Mr. Cope, facing the main street of Windsor, and adjoining the Presbyterian burial-ground. After leaving Windsor, the line takes at first a considerable course to the westward, and then proceeds in an almost direct course to the town of Richmond, passing through the estate of Fairfield, where it crosses the Chain of Ponds - a formidable watercourse at flood times - and also passing through the Windsor racecourse. Across the Chain of Ponds there is a timber viaduct sixteen chains in length, with twenty feet openings. The steepest gradient on the line is 1 in 33, but in no case is this gradient adopted for more than a quarter of a mile in length. The sharpest curve on the line is one of thirteen chains radius, at the junction with the Great Western Railway; in no other case does the curve exceed twenty chains radius. The gauge is the same as that of the other railways. The rails are T shaped, and their weight is 55 lbs. to the yard; they are placed three feet apart, and rest on iron bark sleepers. The entire line is ballasted with fine gravel, obtained from the Richmond Common; it is firmly packed under the sleepers for a depth of eighteen inches. The length of the line from the junction, at Blacktown, to Windsor, is fourteen miles, the entire length to Richmond being a little over sixteen miles.

The works have been carried out under the immediate supervision of Mr. J. Moore, who has acted as Mr. Weaver's agent. It is generally known that a few months since Mr. Weaver left Sydney for New Zealand, and was appointed Engineer-in-Chief tor the Province of Auckland, It was expected that he would have returned to Sydney for the purpose of finally passing the line before handing it over to the Government; he has, however, been unable to leave Auckland, and in his absence Mr. Moore has Certified that the works were properly finished, and that the line was ready for opening It is understood that the line will be placed under the Railway Department, and that Mr. Whitton will make an official inspection of the works, which he has not yet done. It would be at present premature to pronounce as to the success of this experimental cheap railway. The traffic now about to commence will soon test the character of the works, as well as the adaptation of the line to the requirements of the traffic; it will also be shown whether there will be an actual saving in the construction of lines of a less substantial character than our trunk railways. In the meantime, it is right to state that the Windsor

and Richmond railway has cost considerably less than £5000 per mile, while the cheapest of the main lines has not cost less than £8000 per mile. So far as the opinions of the visitors could be gathered from the general appearance the line, those expressed yesterday were decidedly favourable.

The station buildings at Windsor and Richmond were much admired for their tasteful design and for their internal adaptation. The steady motion of the carriages was also remarked, there being a comparatively little oscillation. The small locomotives (manufactured for this line by Messrs. Manning, Wardle, and Co, of Leeds) were regarded with much interest; they are tank engines and have six wheels, all coupled. Those who inspected the line somewhat carefully remarked the occasional steep gradients and sharp curves, travelling on which it was thought might be attended with danger unless much care were exercised in driving. We learn that it is not intended to drive the trains on the new line at a greater speed than twelve or fourteen miles an hour. The sum originally voted for the Windsor and Richmond Railway was £5000 per mile, which was exclusion of land and stations. By the alteration of the plans in order to adapt the line for locomotive traffic, an additional outlay of more than £500 per mile was incurred, one-half of which was caused by the heavier weight of the rails, as compared with those which would have done for horse railway; the balance was expended in giving extra strength to the viaducts and other portions of the works. The sum of £15,000 was placed on the Additional Estimates for this year, and was voted by the Assembly; of the above sum about £5,000 was for three locomotive engines, and the remaining £10,000 was for the additional cost that was entailed in altering the line from a horse railway as at first intended to a locomotive railway."

JOHN WHITTON INSPECTS THE LINE - 1865

Although John Whitton had spat the dummy and told everyone that he did not wish to be associated with the construction of the horse Tramway between Blacktown and Richmond, he surprisingly paid a visit to the line only six weeks after was opened. He submitted an inspection report on 24th January, 1865, in which he expressed the view that the present condition of the track was unsafe for public traffic. William Weaver should not be held totally responsible for the condition of the permanent way because it was the New South Wales Government that had changed its view on the use of horsepower and, shortly before track construction commenced, the Government decided that the line should be worked by light-weight steam locomotives. It can only be assumed that Whitton did not win any friends with these report of condemnation of the line. As far as is known, Whitton did not make any comment on the platform buildings as these were standard shall works and very much in the style of what he would have approved had he been in charge instruction of the line.

IMPROVEMENTS - 1866

The Goulburn Herald and Chronicle, **1st August 1866** p. 2 contained the following information.

"In the Legislative Assembly, In reply to questions put to ministers, the following information was elicited:-That instructions had been given, plans and specifications prepared, and tenders would forthwith be invited for the required improvements to the railway stations at Mulgrave, Windsor, and Richmond."

It is unknown these improvements turned out to be.

ENGINEERING REVIEW - 1876

In 1876, John Whitton inspected the Blacktown-Richmond branch line and prepared plans for the reconditioning of the line in order to support heavier locomotives. This reconditioning work took 10 years, which is an indication that, even at this time, Whitton had lost a substantial degree of his influence with those people who control the supply of money. It seems that the New South Wales government thought that a separate position should be created to look after existing lines, possibly because the design and construction workload for expansion projects on existing lines became so onerous. Thus, in 1876, a new position of Engineer-in-Chief for Existing Lines was created to handle new works on lines that were already open for traffic.[13]

THE FAMILY OF PLATFORM BUILDINGS TO WHICH THE 1881 RICHMOND STATION BUILDING BELONGS

The 1867 building at Richmond belongs to a group of platform buildings which followed roughly a Georgian influenced design. The design features were:

- Rectangular shape,
- Symmetrical plan based on centre, pedestrian access,
- Attached pavilions with lower roofs at both building ends,
- A hipped roof of uncluttered appearance,
- Posted awnings, &
- Moderate in size and restrained in decoration

[13] This was the second time that John Whitton had lost control of works on existing lines. The previous period was between 1867 and 1869.

John Whitton implemented the first prototype example at Campbelltown in 1858 and revised the design in 1862 for the first production example at Penrith, and Singleton and Picton in 1863. By 1871, Whitton had used the design family of which Moss Vale belongs for the last time. Between 1858 and 1871, the following locations featured the Georgian influenced design upon the opening of the three trunk lines:

- Campbelltown (a slightly different prototype design)
- Picton
- Mittagong
- Moss Vale
- Parramatta
- Penrith
- Mount Victoria
- Bowenfels
- Singleton
- Muswellbrook
- Scone
- Murrurundi

It is of interest that each of the trunk lines received four buildings of the same design.

Whitton had Government approval and funding to take the three main trunk lines to Goulburn, Bathurst and Murrurundi and these lines represent the first period of trunk line development. When the lines reached their initial destinations, there was a lively debate in government and elsewhere about the best way, meaning cheaper, of extending the trunk lines further. What emerged as Government policy was a need for Whitton to build cheaper platform buildings in the early to mid-1870s. Throughout the 1870s, Whitton moved away from his beloved Georgian influenced design, and used temporary structures and combination offices and residences. He also commenced trials, at Gunning, with a new design in 1874 using for the first time a gabled roof as the dominant form of roofscape. It was at Gunning that the idea of a stand-alone residence for the Station Master was first implemented.

From the mid to late 1870s, there emerged a design for more structures with much higher levels of ornamentation and much larger size. Buildings at Newcastle, Sydney (the second station), Wagga Wagga, Tamworth, Albury and other locations became locations for the use of Whitton's First Class design. He used his gabled roof design, later known as the standard roadside station, as a third class of platform structure. How did he plug the status gap between the First and Third class buildings? He re-introduced the Georgian influenced design that he had applied at Moss Vale and

elsewhere. The work of replacing buildings was taken from Whitton in 1879 but there was no change in the design for the Second Class of platform building on existing lines. The list below shows those examples where Whitton and his subsequent design colleagues, William mason and George Cowdery, used the same design as at Moss Vale as replacement structures or new structures on existing lines between 1876 and 1889.

- Binalong
- Blacktown
- Burwood
- Honeysuckle Point
- Eskbank
- Greta
- Harden
- Morpeth
- Newbridge 1877
- Newtown (1876) – asymmetrical with one attached pavilion
- Richmond
- Riverstone
- Lawson (1879)
- Liverpool (1879) – used of gabled rather than hipped ends for the roof
- Granville (approved in 1880) with matching brick waiting shed
- Spring Hill (1885) – asymmetrical with two semi/unattached attached toilet pavilions, centre transverse gable
- Stanmore (1886) – an improved version with hipped roofs for the main roof and also on the attached, balanced pavilions
- Windsor (1883)

Twelve examples were built as the First Class of platform building between 1858 and 1871 on new lines and 17 examples were built as the Second Class of platform structures between 1877 and 1889 on existing lines. All 29 examples shared the same, simple hipped roof and attached pavilions with parapeted walls.

THE REPLACEMENT BUILDING - 1881

In Sydney, George Cowdery approved a brick building of the Second Class type as he had at Granville short time before. The Richmond building was 109 by 16 feet external. It was asymmetrical, with a slate roof and a concave awning on the road approach. There was a break point in the centre rear wall. The awning featured fluted cast iron

columns with ornate cast brackets on the rail platform side. The contractors were James McDonald, Joseph Coulton and William Seale.

The design details are below:

- Hipped roof covered with red Bangor slates 20” x 10” with a flanked parapeted pavilion at each end of the roof,
- No. 24 gauge iron on awning,
- Iron columns, fluted six inch diameter at base to support the platform awning, with ornate capitals and brackets,
- Ornate chimneys with semi-circular terracotta all tops,
- Red coloured bricks with the brickwork set in cement,
- Dentils under eaves,
- Ornate door heads,
- Moulded string course,
- Stone flagging in front of the building and on platform and for coping,
- Verandah on road side,
- 100 feet by 14 feet wide with the general waiting room proud of walls on both sides,
- the roof extended over entrance as a breakpoint, &
- Contractor was James McDonald

Buildings of similar design were approved for Windsor and Blacktown in 1883, though the example at Blacktown had the added status of a porched entry on the road side.

There was a dock platform at the Sydney end of the station.

IMPACT OF KURRAJONG EXTENSION – 1926

In 1926 the branch line was extended to Kurrajong on the road side of the building was converted into a platform, making the station positioned on an island platform. Richmond is one of those locations on the New South Wales rail system where the station forecourt was abused for departmental purposes rather than being preserved as an attractive forecourt to the actual building. Facilities for loading animals and buildings and equipment for the servicing of steam locomotives were in place in the forecourt area at least in 1916 and it seems that the forecourt was appropriated or departmental purposes well before 1900.

Apart from the further desecration of the former forecourt area, the extension to Kurrajong made no impact on the 1881 platform building. In other locations, when a

platform was converted from side to island, additional doorways were provided into some of the rooms, such as the ladies' waiting room and the Station Master's office for the parcels room. Clearly, traffic levels in 1926 was so low as to not require any alterations whatsoever, apart from the construction of the second platform wall around the rear of the building.

THE PROPOSED NEW STATION - 1944

In the middle of 1944, the Chief Civil Engineer, Albert Fewtrell, approved two sets of drawings for the conversion of the 1881 building into a completely different design, reflecting the stylistic features of what is known as the Inter-war Functionalist design, including the rounded end of the building facing Market Street. The main features were the dominance of vertical and horizontal windows and the design incorporated a short tower with a flag pole, much in the design of the present building at Cronulla. The mortar joints for the brickwork were also expressed to emphasise the horizontal design of the building by having 3/8 inch flush joints for the vertical joints and ½ inch raked joints for the horizontal joints. The Richmond project was one of many buildings approved between 1944 and 1965 which were never built.

THE 1950s CLEANER'S BUILDING

There is a detached building at the rear of the 1881 building for use by supposedly by cleaning staff. The plan of the structure does not survive and the time of its construction is unknown but it is possible that it was built in the late 1940s or early 1950s when it became known that the New South Wales Department of Railways was not going to receive government funding for the new station building proposed in 1944. Although plain in design, the structure has a couple of nice features. At the base of the building, there is a bevelled plinth course around the exterior walls. To express the window sill, rows of bricks on their heads have been used. The window frames are metal. These features, plus the use of a near-flat roof, are consistent with design features of the 1940s and early 1950s. The building was positioned to facilitate the work of railway staff but, in so doing, added to the unattractiveness of the station environs. Probably ruining the attractiveness of the 1881 building was not even on the radar at the time as the whole area was covered with a locomotive soot and was also visually polluted with parts of the locomotive depot and railway yard.

IMPACT OF ELECTRIFICATION - 1991

On17th August, 1991, electrification was extended to Richmond station. Apart from attaching another of the several clerks to the wall of the building, no alterations were carried out at that time stop

CITYRAIL UPGRADING - 1996

As part of its station upgrading programme, CityRail undertook a comprehensive upgrading of virtually every aspect of the station. As was typical for the time, the former ladies' waiting room was converted into a train crew locker room. The only two rooms that were untouched were the former general waiting room in the centre of the building and a store room at the Market Street end of the building.

One of the significant changes to the structure was the relocation of the ticket office. Up to 1996, tickets were sold through the traditional, small window that faced into the general waiting room but in 1996 this arrangement was changed and the ticket office was transferred to a former store room at the Kurrajong end of the building, with the ticket window facing onto the platform.

Prior to the upgrading work, contractors did a disgraceful job on the removal of the paint on the external brick walls. It is fair to say that the brickwork is ruined. CCTV was installed in 2001 at the station.

Stuart Sharp
24th January, 2015

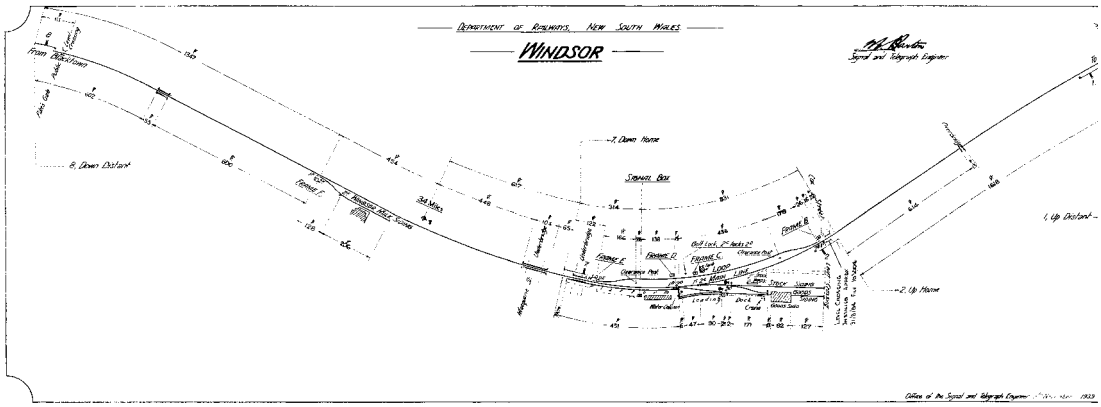
Windsor – Richmond: Notes on Sidings

Windsor

The Windsor Milk Siding opened on 28 August 1922 and was renamed the Hawkesbury Dairy and Ice Company's Siding in January 1954. It was a dead-end siding 220 feet (67 metres) long located on the Up side of the line south of the station. The points, which faced Down trains, were connected to Frame A, which was unlocked by a key on the Electric Train Staff for the Mulgrave - Windsor section. In later years, a key from a duplex lock released Frame F. The key on the Staff released another key to unlock Lever 1 in the Frame. Pulling over Lever 1 released the facing point lock and allowed Lever 2 to be pulled over to operate the points. The Milk Siding was removed on 2 March 1991.

Goods traffic was being received at Windsor by 1878. At Windsor station, the goods sidings were located on the Up side of the line at the Richmond end of the platform by 1916. There was a stock siding serving a stockyard plus a goods siding and shed. An interlocking machine on the platform operated the points from 8 November 1916. In 1934, a key on the staff unlocked the points, but release from a signal box was later provided. An unloading hopper for Road Contractors Pty Ltd was brought into use in the goods siding on 28 July 1958. Taylors Produce was making use of a siding at Windsor by 1961. The stock siding (operated by Frame C) was abolished on 23 August 1981 but the goods siding, which was operated by Frame D, remained

The loop at Windsor was located on the Down side. The points at the Sydney end, which were operated by Frame E, were removed on 22 July 1990. The siding became a dead end and Frame B operated the remaining points, which were located at the Richmond end and faced Up trains. Part of the yard on the Up side had been removed by 1985 but a part of both sidings was used for crossing trains until electrification. The remaining sidings were removed on 3 March 1991 in preparation for electrification and lengthening of the platform. Windsor closed as an Electric train staff station on 15 June 1991.



Windsor in 1939. ARHSnsw Track and Signal Diagrams 5384, page 2.

The Goods Sidings at Windsor looking towards Blacktown. The date is 28 November 1964. The tracks from left to right are Goods Siding, Stock Siding, Main Line and Loop. NJ Simons Collection. ARHSnsw Railway Resource Centre 063067.

The wagon and locomotive are on the stock siding with the goods siding next to it. A Down train is shunting the siding but, as the points are facing Down trains, it would probably be easier to shunt it from an Up train. ARHSnsw Railway Resource Centre 063064

Looking towards Richmond from Windsor Station platform.

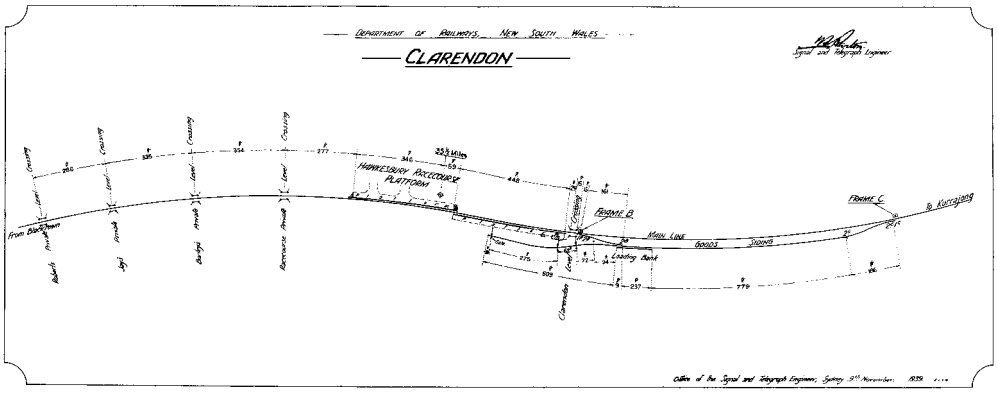

Making use of the former Goods Yard for crossing trains at Windsor.

Clarendon

Clarendon's goods siding was in the form of a loop on the Up side at the Richmond end of the platform. The ground frames for the points at each end (B and C) were brought into use on 28 January 1913. A key on the ordinary train staff for the Windsor – Richmond section unlocked the points. The siding became a dead-end on 9 October 1979 when the points at the Richmond end were placed out of use. Clarendon

closed as an electric train staff (crossing) Station on 29 February 1992. Frame B and the siding were taken out of service. However, a new crossing loop for electric trains opened on 20 March 2000.

The remains of the siding at Clarendon that was located behind the platform. The main Goods Siding extends behind the camera and was generally used for crossing trains. The date is 22 September 1973. NJ Simons Collection, ARHSnsw Railway Resource Centre 063074.



Clarendon in 1939. ARHSnsw Track and Signal Diagrams 5390, page 2.

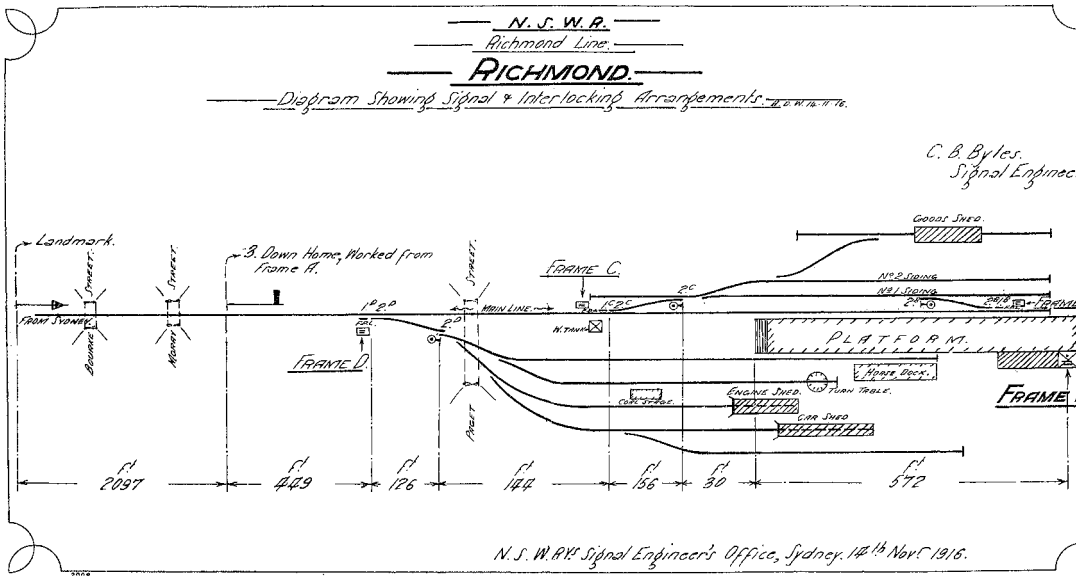
Richmond

A siding was provided east of Richmond for Blue Metal Industries on 3 September 1959. The Blue Metal Siding was located on the Down side of the line on the approach to the terminus and was connected to No. 1 Down Siding at the station.

Goods traffic was being received at Richmond by 1878. Sidings on both sides of the line were located at the station. Land was purchased in 1909 to extend the yard. A locomotive runround (No. 1 Siding), a dead-end No. 2 Siding and a Goods Siding with a goods shed were provided on the Down side. A locomotive depot opened about 1880. A carriage shed and turntable were provided on the Up side. The dock siding on

the Up side at the Sydney end of the yard was in use by September 1914. A sawmill siding was also provided.

A standard interlocking machine was brought into use on 23 November 1916.



Richmond in 1916.ARHSnsw Track and Signal Diagrams 5399, page 2.

Richmond Loop (No. 1 Siding) was extended on 19 June 1923. A key from No. 2 Lever in Frame A unlocked No. 1 Lever in Frame C at the Sydney end.

Richmond showing the Down yard. Tony Woodland. 183

The turntable on the Up side was moved closer to the boundary in November 1924.

The sawmill siding was removed in May 1936.

The locomotive depot closed about 1969.

Sheep, pig and cattle races were removed in February 1973 and Richmond had closed to goods traffic by 1 February 1977.

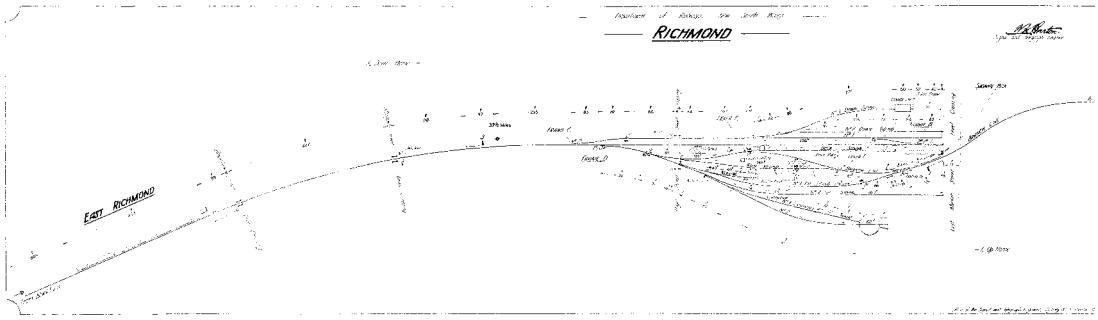
On 8 June 1988, the yard consisted of (from Down side) the Shed Road (to the old Goods Shed), the Down side Runround (with a shunting neck at the Sydney end), the Main Platform, the Dock Siding (Up side of platform), Up side Runround, Rail Motor Siding and Up Siding. The Up runround and Siding converged at the terminal end alongside the former Kurrajong Platform.

The Blue Metal Industries Siding and Numbers 1, 2 and 3 Down Sidings were removed on 24 February 1991.

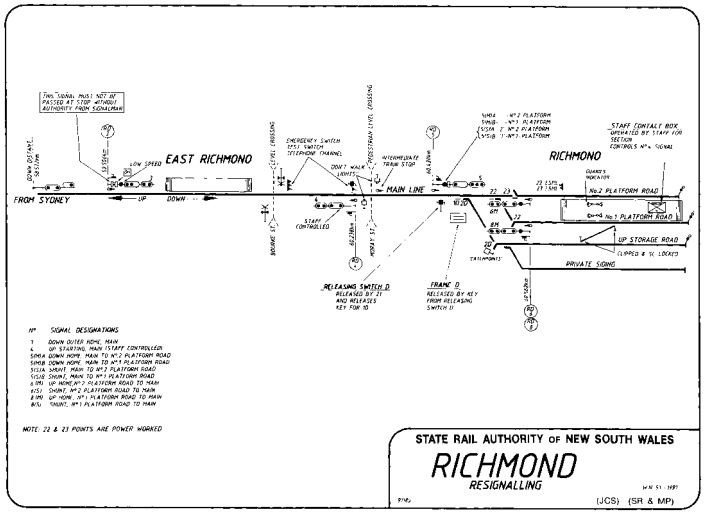
The tracks on the Up side were then removed and a new straight platform (No. 1) brought into use, together with a Runround and No. 2 Up Siding.

The points at Frame E (for the platform on the Up side) were converted to power operation on 13 December 1991. Frame D (for the sidings on the Up side) was electrically released by No. 21 pushbutton in Richmond Signal Box. No. 1 Storage Siding was removed and the Runround Road was renamed the Up Storage Siding. No. 2 Up Siding was renamed the Private Siding but was placed out of use in April 1992 and removed in 1994. The points at the terminal end between No. 1 Platform Road and the Storage Siding were removed on 5 June 2010. This meant that a locomotive could no longer run around a train at Richmond. All that remains is two platform roads plus one electrified stabling siding (the former runround, which is 264 metres long) on the Up side.

The sidings on the Up side at Richmond. 17 August 1963. EG Skiller Collection, ARHSnsw Railway Resource Centre 051547.



Richmond in 1939 in the days of the Kurrajong Line. ARHSnsw Track and Signal Diagrams 5405, page 3.



Richmond in 1991. ARHSnsw Track and Signal Diagrams 5412.

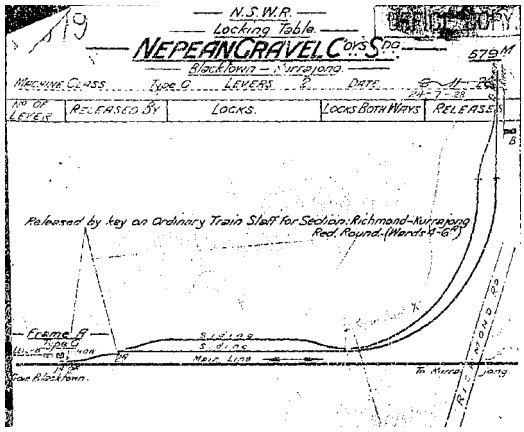
Looking towards Richmond Park and Kurrajong from Platform 1 before it was straightened. The war memorial is directly behind the signal.

The Kurrajong train crosses Richmond Park.

Kurrajong Line Sidings

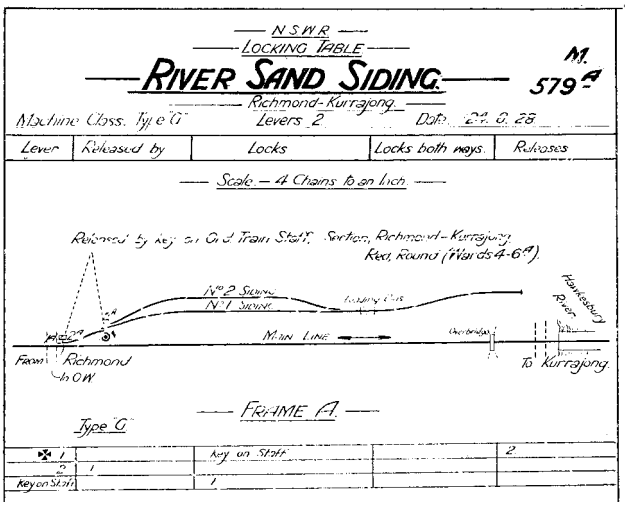
The Richmond to Kurrajong extension opened on 8 November 1926.

The Nepean Sand and Gravel Siding was located on the floodplain east of the Hawkesbury River, and opened on the Down side of the line on 18 April 1925 (before construction had reached Kurrajong). A runround loop was provided at the junction. The siding was extended as a private branch owned by Nepean Sand and Gravel in October 1927. The main line points faced Down trains, and were unlocked by a key on the ordinary train staff for the Richmond - Kurrajong section. The branch terminated at a quarry on an island at Yarramundi Falls in the Hawkesbury River. The last train ran in July 1946.



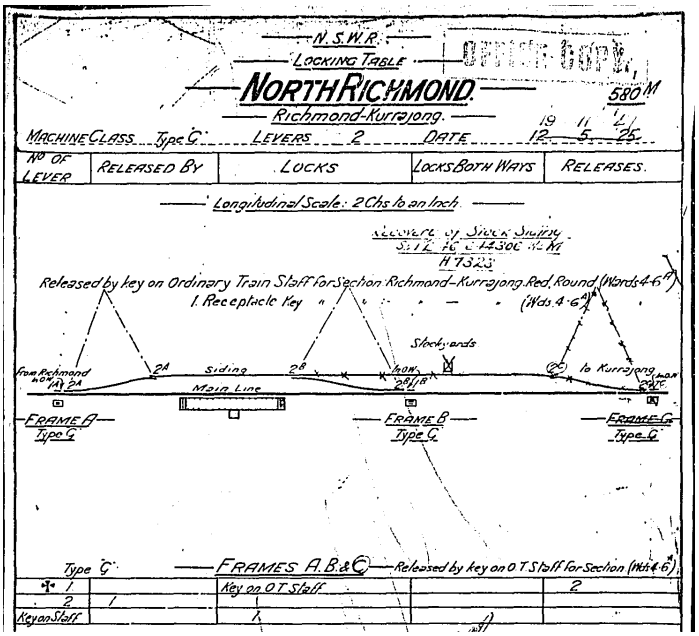
Nepean Sand and Gravel Company Siding in 1928. ARHSnsw Track and Signal Diagrams 5417.

River Sand Siding, which was owned by the Nepean Sand Company (a separate enterprise to Nepean Sand and Gravel), was a dead-end located on the Down side of the line on the Kurrajong side of the Richmond Road level crossing and the Sydney side of Phillip. The main line points faced Down trains, and were unlocked by a key on the staff. The main siding was 1360 feet (414 m) long and the loop was 548 feet (167 m). It opened on 3 October 1928 but closed on 12 October 1936 when the company failed.



River Sand (Longworth) Siding in 1928. ARHSnsw Track and Signal Diagrams 5420.

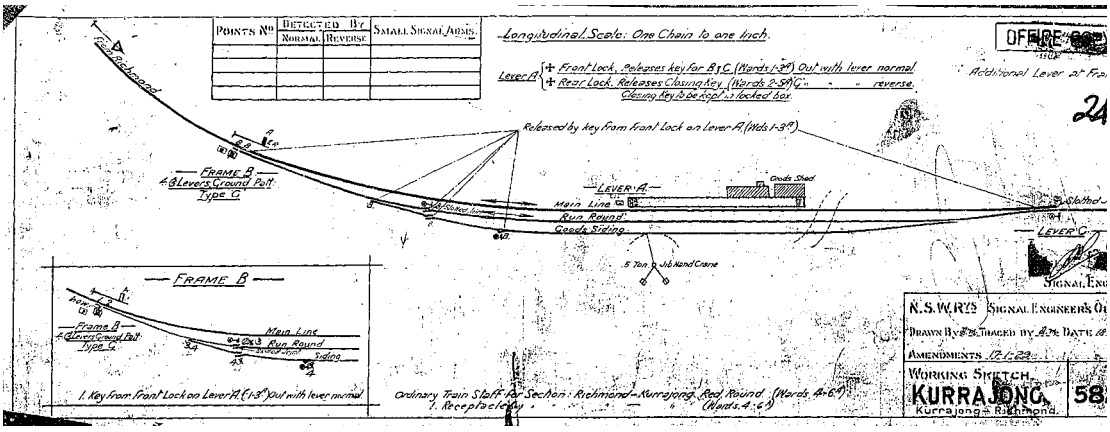
North Richmond was provided with a goods siding in the form of a loop on the Down side of the line. A key on the staff unlocked the levers for the points. The stock siding extension of the goods siding was long enough for seven cattle or sheep wagons. The extension closed on 1 December 1947.



North Richmond in 1941. ARHSnsw Track and Signal Diagrams No. 5423.

Fruit was also loaded onto trains at stations along the line.

The goods siding at Kurrajong was in the form of a loop on the Up side of the line at the station. A runround loop was also provided.



Kurrajong in 1929. ARHSnsw Track and Signal Diagrams 5425.

The line to Kurrajong was closed (following floods of the Hawkesbury River and subsidence problems near the terminus) on 26 July 1952.

Kurrajong looking back from the end of the line. The Goods Siding is on the left and the Runround is in the middle. ARHS Victorian Division. September 1947. ARHSnsw Railway Resource Centre 046287.