

# BARDWELL PARK RAILWAY STATION

## A REACTIONARY OR REVOLUTIONARY DESIGN?



*The subject of this essay is built on the platform at Bardwell Park station.<sup>1</sup> The Architectural Section of the Way and Works Branch of the NSW Department of Railways prepared the building plans. It is a structure of modest size with a little eye-catching brickwork facing the camera, but nothing outstandingly attractive. The photographer is looking west towards Kingsgrove. The small opening in the end of the building is not the ticket window. The photograph was taken in June 1950. **SOURCE:** Photographer unknown. ARHS Bulletin, September 2001, p. 324.*

## PART ONE

### INTRODUCTION

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<sup>1</sup> There is one adjective which describes the entire railwayscape in this picture – dirty. Every item of infrastructure, including the building, the platform surface, the train indicator boards, the ticket collector's cabin and the picket fencing were filthy. Why? The photograph was taken in the 1950s when government transport priority was skewed towards the private motor vehicle and all forms of public transport were starved of adequate financing – a feature that had existed in almost every decade since the 1850s when railway operations commenced in New South Wales.

## THE DEFINING THE SUBJECT AND THE METHOD OF EXAMINATION

This document examines the architecture of a railway station on Sydney's East Hills line and reviews the evidence to determine whether the design was a way of concealing very conservative artistic values or was a subtle attempt at breaking away from the traditions of the Federation style. In short, there is a question to be answered. Was the design an attempt to hold onto an architectural style that had been in use for in excess of 30 years or was it the first move in a breakaway from the prevailing design towards something new and different?

## EXISTING DOCUMENTATION

The East Hills line buildings have been little studied. A Master of Economics (Hons.) was completed by Sharp in 1982 as a part of his analysis of all station buildings between 1855 and 1980 and the factors involved in the design process.<sup>2</sup> In 1984, Sharp prepared a report entitled *A Survey of Railway Structures* for the National Trust New South Wales which included the Bardwell Park building. Lastly, Andrea Humphreys and Donald Ellsmore, heritage industry specialists, prepared an unpublished report entitled *Inter-War Station Buildings* in 2002 for the State Rail Authority of New South Wales. Basic information about the structure was included in the text.

This concluding remarks of this present paper are consistent with the evidence and findings of those previous documents.



*Bardwell Park railway station opened in 1931 as one of 11 stations on the East Hills branch line. It was moderate in size, measuring 54 feet by 11 feet external. The structure has had*

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<sup>2</sup> S. A. Sharp, *The Railway Stations of New South Wales*, unpublished M. Ec. (Hons) thesis, University of Sydney, 1982.

*have only two substantial external alterations and both affected the same internal space. The first change was the conversion of a planned open-sided waiting area into a ticket office and the second significant alteration involved the relocation of the ticket office window from the city-bound platform side to the end of the building facing the station entry steps. The photograph was taken on 3<sup>rd</sup> March 1984 and shows the ticket office in the relocated position.*

## **METHODOLOGY**

### **1. THE SUBJECT**

This document looks at one of the eleven stations, namely Bardwell Park, on the East Hills line in Sydney's south-western region. It is largely in original condition and is the only station on the East Hills line free of post-construction platform canopies and lifts. Thus, it is the only station on the line unencumbered with the related visual pollution that attends such so-called customer improvements. The New South Wales Government opened the eleven stations in 1931. All stations were designed to the same architectural plan and, when built, shared a common design.

Two intermediate stations on the line (Kingsgrove and Riverwood) had slightly longer buildings to accommodate signal interlocking frames, which were provided for safe working purposes. Those spaces became largely redundant in 1948 when the mechanical interlocking frames were replaced small electrical panels. The other nine stations were a mirror image of Bardwell Park.

### **2. THE APPLIED TYPOLOGY**

Three main design criteria of the building have been grouped together to form a typology which helps to identify the emergence of any change in the design of platform buildings from the then prevailing style of platform buildings. These criteria are:

1. shape of the roof,
2. the method of support for the platform awnings, &
3. floor plan.<sup>3</sup>

These three criteria allow universal, analytical application to an examination of platform buildings between 1855 and 2005. They have been applied to the analysis of the Bardwell Park building. Additionally, other buildings elements have been examined, which are presented in the Appendix, to help identify the extent of further changes from the previous architectural style. The Appendix notes these changes as well as those design features that did not change following the approval of the East Hills line buildings.

These three criteria are described and their significance stated in the table below.

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<sup>3</sup> Developed in S. A. Sharp, *The Railway Stations of New South Wales*, unpublished M. Ec. (Hons) thesis, Faculty of Economics, University of Sydney, 1982.

**TABLE: BARDWELL PARK STATION BUILDING – BUILDING ELEMENTS AND THEIR SIGNIFICANCE**

<b>ELEMENT</b>	<b>DESCRIPTION</b>	<b>SIGNIFICANCE</b>
the roof shape	part hipped roof with part end parapets	first departure of the simple gabled roof from the Federation influences
the method of support for the platform awnings	horizontal timber beams extending beyond the roof joists to form awnings	first retreat from the use of cantilevered brackets associated with the Federation influences
floor plan	five internal spaces – [1] general waiting, [2] ladies' waiting, [3] female toilet, [4] store & [5] male toilet	continued inclusion of an open-sided general waiting room but first application of the term, "corridor", to describe that general waiting space & continued use of a porched entry to the female waiting and toilet facilities

### **3. THE DIVISION OF THE ESSAY**

The essay is divided into four parts. These are:

1. Introduction – defining the subject and the method of examination,
2. Bardwell Park and its antecedents - the way the subject related to the Federation style,
3. Bardwell Park and its descendants - the way the subject corresponded to subsequent Inter War Functionalist buildings, &
4. Two significant post-approval design changes, &
5. Concluding remarks – was the Bardwell Park building backward focussed to the 1920s or forward looking to the 1930s?.

## **THE PLANNING AND DECISION MAKING PROCESSES FOR THE EAST HILLS LINE AND ITS STATION BUILDINGS**

Physical construction work started in mid-1928 on the provision of a new railway line from the junction of the Illawarra line on the southern side of Cooks River near Tempe to East Hills. What was singularly odd about the project was that the branch to East Hills was not a railway line contained in Dr. Bradfield's 1915 plan for Sydney and suburban railways. Legislation to provide finance for the line had been passed by Parliament in December, 1924. After nearly three years, the first sod to start construction was performed by Premier, Jack Lang, on 3<sup>rd</sup> September, 1927. Five weeks after the turning of the first sod the state elections took place on 8<sup>th</sup> October, 1927.

It had taken nearly four years between the Parliamentary sanction for the line and the start of physical construction, though the new Bavin Government also supported construction of the line. Because of the widespread financial crisis at the time, the first casualty of the project was the truncation of the double track to Kingsgrove and the use of a single track from there to East Hills. That announcement brought a high level of displeasure from the communities along the line beyond Kingsgrove. Brian Madden, local history author, wrote about the press reaction to the decision, quoting a local newspaper which stated:

"The Railway Commissioners were noted for their short-sighted ideas, which is one of the reasons why the railways do not pay as well as it should, ....but this latest idea seems to be the limit of absurdity."<sup>4</sup>

Another accompanying measure was the rejection of requests by local councils to make all overhead bridge crossings 66 feet wide, instead making them 40 feet wide. Also, the Commissioners refused to pay compensation for the resumption of land, arguing that the owners were more than compensated by the enhanced value of the remainder of their property. That was an unusual decision but was reflective of the financial problem. By June, 1929 the earthworks had been completed and the workforce reduced with employment mainly focused on concrete work and bricklaying.

On 8<sup>th</sup> October, 1929, Francis Wickham, the Chief Engineer, Railway Construction, approved the plans for platform buildings for every station from Turrella to East Hills. This was only the second time that all platform buildings were to be constructed from a single Block Plan, the other instance being stations between Regents Park and Cabramatta Junction in 1924. As railway historian, John Oakes, points out, this system of providing all buildings to the same basic design was abandoned for the construction of the next railway line in Sydney from Sutherland to Cronulla, which opened in 1939.<sup>5</sup>

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<sup>4</sup> B. J. Madden, *Tempe – East Hills Railway*, Monograph No. 13, Hurstville Historical Society 1981, pp. 25 and 26.

<sup>5</sup> J. Oakes, "Salt Pan via Dumbleton – The Story of the East Hills Line", *Bulletin*, September 2001, p. 330.



*The above photograph shows the city bound side of the station looking towards Kingsgrove. The original corrugated asbestos cement roof sheeting is in place. The lady sitting on the seat closest to the camera marked the position of the approved but not built open-sided general waiting room. Above the lady's head is the original ticket window. The photograph was taken on 3<sup>rd</sup> March 1984.*

The East Hills buildings were initially (incorrectly) designated "A8" but the alpha-numerical code was deleted, no doubt because it conflicted with the existing "A8" design. The code "A11" was the replacement. This was the first addition to the existing alpha-numerical coded "A" series of platform buildings since 1917. It was also the second-last time the alpha-numerical design system was applied in New South Wales. The stations to receive the new design with 54 feet long buildings were Turrella, Bardwell Park, Bexley North, Beverly Hills, Narwee, Revesby, Panania and East Hills. Kingsgrove, Riverwood and Padstow station buildings were an additional 10 feet longer for signal boxes containing interlocking frames. East Hills station had a larger, stand-alone, brick signal box.

The year, 1929, was important in the history of New South Wales station building design. Something happened which did not happen often on the New South Wales Railways. The design of platform buildings had changed. For approximately the previous 40 years, the Federation-influenced design had been used virtually exclusively for the Sydney, Lithgow, Wollongong and Newcastle metropolitan areas and related corridors and for some of the rural network.



## PART TWO

### BARDWELL PARK AND ITS ANTECEDENTS - THE WAY THE SUBJECT RELATED TO THE FEDERATION STYLE

#### THE PREVAILING RAILWAY ARCHITECTURAL STYLE – FEDERATION INFLUENCES

From the 1890s, platform level buildings at railway stations commenced a transition from what may be called the New South Wales railway eclectic style of the 1870s and 1880s to one incorporating influences associated with the Federation form. Nearly every brick platform building from 1892 to 1924 contained elements of the Federation movement.

Over a period of 45 years between 1892 and 1937, a total of 267 examples of Federation-influenced architecture were built.<sup>6</sup> This class of building represented 16% of all structures erected on platforms between 1855 and 1980. A total of 143 or 53% were of brick construction and these were mainly in urban areas and on the trunk corridors extending to Newcastle, Maitland, Lithgow and Wollongong. Some brick examples were built in rural locations, such as Binalong, Moree and Casino. The remaining examples, numbering 124, were built of timber and tended to be located in rural locations.



*This photograph, taken on 30<sup>th</sup> September 2018, of the 1909 building at Waitara shows the ornamental features of the Federation-influenced buildings for the period between*

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<sup>6</sup> Sharp, op. cit., Vol. 2, p. 266

*1901 and 1911, which included the cement render on the window heads, sills and aprons and the application of a rendered string course (i.e., band of moulding) around the external walls. The brickwork has a semi-shiny, milky appearance which stems from the application of an anti-graffiti coating.*

The two following photographs of Lakemba also show the prevailing style of Federation-influenced buildings. The Lakemba building was approved in 1918 and built shortly thereafter. It possessed the usual decorative features common to members of the class, with few exceptions. These were:

- tuck-pointing of all face brickwork,
- station name expressed in lower window sash,
- painted, cement moulding on square window and door heads,
- similar moulding for window sills and aprons below the sills,
- double hung sash windows with the top sashes and fanlights above doors featuring small panes of Cathedral glass,
- provision of two moulded string courses, with cement render between them, around the exterior walls between which was painted,
- plinth course at base of all walls featuring darker red, bevelled bricks for the top course, &
- four panel timber doors.



*The photographer is looking towards the city. The photograph, which was taken on 5<sup>th</sup> November 1982, shows the simple gabled roof and the cantilevered platform awning brackets seated on sandstone corbels. The brick privacy screen across the entrance to the male toilet has replaced the original timber screen.*





*This photograph of the city bound side shows the decoration surrounding windows and door heads, the use of Cathedral glass for the upper window sashes and fanlights, the station name in the lower window sashes, the rendered string courses, with render between them, at door head height around the external walls and the four panel doors. The pattern of the corbels was typical of the standard design. Unfortunately, the Lakemba building has since been desecrated by the painting of the external brick walls. The photograph was taken on 5<sup>th</sup> November 1982.*

It was the tradition of the New South Wales Railways up to the 1950s to locate male toilets at a point furthest from the pedestrian entrance. This was the case at Lakemba, though the original timber privacy screen across the entrance has been replaced by a brick screen.

## **THE SIGNIFICANT REDUCTION IN THE LEVEL OF DECORATION ON FEDERATION-INFLUENCED BUILDINGS FROM 1924**

In 1924, the Railways Department introduced a new, cheaper version of the Federation-influenced style. It was stripped of much of the decoration previously applied to the same class of structures. History has shown that the introduction of new architectural styles on the New South Wales Railways overlapped with existing designs for quite an extensive period. In the case of the East Hills line, while a new design of platform building was approved in 1929, the then current Federation-influenced design continued to be used elsewhere for platform buildings up until 1937. Thus, there was a transition of building forms for a period of nine years.



*An example of the new, cheaper version of the Federation-influenced design introduced from 1924 is shown above. All the rendered cement moulding has been eliminated. Fireplaces have been eliminated, thus avoiding the need for chimneys. The only decoration was the use of red bricks for the arches over doors and windows, window sills and for the top course of the plinth. The image is of Croydon, the building being approved in 1926. The picture was taken on 11<sup>th</sup> October 2017.*



2013.

*Another example of the post 1924 version was approved in 1926 for Sydenham. In this case, Cathedral glass has been used in the upper window sashes while the station name appeared in the lower sash. The painting of the window sills and corbels is a later feature. There is no soffit under the platform awning, which was normal. The image was taken on 13<sup>th</sup> December*

## **THE START OF THE TRANSITION FROM FEDERATION INFLUENCES – CONSEQUENCES FOR THE BARDWELL PARK DESIGN**

### **1. A CHANGE OF MATERIALS**

Further evidence of the transition away from Federation influences was seen in the abandonment of timber work for the privacy screens across the entrance to male toilets. In place of the timber work, panelled brick walls were utilised on the buildings between Regents Park and Carramar, which opened in 1924. A nice decorative feature was the castellation at the top of the privacy screens



*The above image of Villawood between Regents Park and Carramar was taken on 3<sup>rd</sup> March 2021 and shows the replacement of the traditional timber privacy screen associated with the Federation design and, in its stead, the utilisation of brickwork. The change probably reflected the view of the Railway Department at the time that the cost of maintenance for timber structures was higher than for brickwork. No doubt the timber privacy screens required maintenance and there was very little money made available by governments at most times for that task. The design of the brick privacy screen was adopted for the East Hills line buildings.*





*This photograph taken in the 1970s shows the brick privacy screen at Bardwell Park. The New South Wales Railways applied the castellated, brick screen to the 1929 design for East Hills line buildings, having been pleased with the elimination of maintenance associated with timber screens on the line between Regents Park and Carramar. The roof is covered with corrugated asbestos cement sheets with terracotta ridging. **SOURCE:** Photographer unknown. Photograph No. 850125 ARHS Railway Archives.*

Another change in material relating to the East Hills line buildings that further research may confirm relates to the ceiling material for internal spaces. The near-universal ceiling product of the Federation period was what the Railway Department named “small, corrugated iron sheets”. Based on the surviving ceiling material in the male toilet at Bardwell Park, it may well be that the East Hills line structures represented the initial installation of flat asbestos cement sheets with timber battens for ceilings.

## **2. THE END OF RENDER AND THE LIMITED USE OF CONTRASTING COLOURED BRICKS**

There were other design changes from 1924 additional to the complete elimination of rendered moulding on the external walls of buildings. The images of the buildings at Croydon and Sydenham reveal minor progress away from Federation influences. Square-headed windows and doors and the use of fanlights were eliminated, though this was a slow process throughout the 1920s in which not every example built reflected the new thinking. Arched heads for window and door openings and the application of bullnose bricks for the window sills formed the new vogue. The New South Wales Railways introduced at this time the use of contrasting, darker red coloured bricks for the window and door openings, window sills and plinths.



*The 1925 approved building for No. 10 platform at Redfern shows the more attractive red coloured bricks for the window heads. Although not so obvious, the same colour has been applied to the bullnose bricks on the window sills and to the bevelled course on the top of the building plinth.*

The building at Bardwell Park incorporated the application of bricks on their sides for window and door heads, bullnose bricks for window sills and bevelled bricks for the top course of the plinths. However, the East Hills line buildings did not feature a more attractive red colour for the brickwork. Instead, the same colour of bricks was used for these design features as was applied to the walls.

### **3. FLOOR PLAN CHANGES – 1 THE USE OF PORCHED ENTRY ACCESS**

As well as a move away from Federation influences relating to material and design factors, there was a withdrawal from the long-established floor plan of Federation buildings. Traditionally, access to female toilets occurred only after entering the ladies' waiting room, which acted as an ante-chamber to minimise unwanted loitering and other activities by men around female toilets. From 1921, floor plans started to show what was officially called a porched entry in which women stepped up from the platform and had a choice of turning one way into the female waiting room or turning the other way into the female toilet. No longer did the ladies' waiting room function as a physical protection for women entering their toilet.



*The image shows the building on No. 1 platform at Lindfield taken on 4<sup>th</sup> October 2018. The lady standing on the platform is adjacent to the door that is located in front of the porched entry. The different window style either side of the door indicates the function of the internal*

*space. Behind her is the ladies' waiting room and above the platform bubbler is the female closet.*

The use of porches to enter female toilets commenced in 1921 but implementation of the idea depended on the Railway architect in charge of the project. Throughout the 1920s, some Federation-influenced buildings continued to use the female waiting room as an ante-chamber while other Railway architects adopted the porched entry concept. The designers for Bardwell Park chose the porched entry approach. Though it is impossible to interpret the original concept on the Bardwell Park building in 2022 because the former ladies' waiting room has been repurposed as a staff kitchen and rest area – for the single attendant on duty. The original female toilets have been replaced, though a door marks the former porched entrance.

#### **4. FLOOR PLAN CHANGES – 2 THE USE OF OPEN-FRONTED/ OPEN-SIDED WAITING ROOMS**

Another change to the traditional Federation-influenced floor plan was in the abandonment of doors on general waiting rooms.

Open-fronted waiting sheds had been built on the New South Wales railway system since the earliest days, the with the oldest surviving plan dating from 1857 at Newtown. There were the usual couple of exceptions. The story was different, however, for buildings incorporating general waiting rooms as a part of the floor plan and, up to approximately 1885, any building containing three or more rooms possessed a general waiting room with the doors. After 1885, the situation changed because of the shortage of capital funding and open fronted waiting areas became more common with a mixture of some structures having general waiting rooms doors and some without.

With the increasing use of the Federation-influenced style after 1900, enclosed general waiting rooms became very much the norm for the urban areas of Sydney, Newcastle, Wollongong and Lithgow and along those lines connecting those centres. The use of doors continued almost exclusively in that geographically defined area up until 1924.

From about 1924, the New South Wales Railways decided to abandon the use of heating by coal-fuelled, open fireplaces in the urban areas of Sydney, Newcastle, Wollongong and Lithgow and along those lines connecting those centres. In turn, the Department was then not obliged to place doors on general waiting rooms. As was the case of porched entries, the decision to provide doors or to omit them was left in the hands of the Railway architect assigned to the plan preparation. Quite clearly, there was no uniform design policy in the 1920s to the extent which dictated the mandatory incorporation of new ideas. Even prior to that decade, the Railway Department granted individual Railway architects considerable license in the application of design details.





*The above photograph shows the former open-fronted general waiting room in the 1925 approved building on platform No. 10 at Redfern. Decoration on this building and others after 1924 manifested only one decorative element, namely the use of contrasting red coloured bricks for the heads of window and door openings, window sills and the top course of plinths. The image was taken on 26<sup>th</sup> October 2022.*

The use of open-sided waiting rooms for the East Hills line structures was adopted enthusiastically. The Railways Department took the economy a step further by eliminating the need for flooring and placing gravel on the surface as was used elsewhere on the platform.

## **THE PROTOTYPE FOR THE EAST HILLS LINE BUILDINGS – DULWICH HILL**

As well as the 11 structures on the East Hills line, there is one additional structure, namely Dulwich Hill, which also shares the same design features. While it was constructed in 1935, it was built to a plan prepared in 1929, which was the year the East Hills line buildings were approved. More importantly, the plan for Dulwich Hill was prepared four months prior to the plan for the East Hills building.

The East Hills structures were not an exact copy of the Dulwich Hill building. It was longer by the provision of an office for the Station Master and that space required a fireplace and, hence, a chimney. The Dulwich Hill building was 61 feet long by ten feet wide internally, which was approximately seven feet longer than Bardwell Park but was narrower internally by one foot. With a width of ten feet, the Dulwich Hill building was one of the narrowest on the New South Wales railway system. The open-sided waiting area was named a “shelter”, a term that was not used later in 1929 to describe the same facility on the East Hills line structures, which was labelled a “corridor”. The detail of the brickwork on the gables was also slightly different.

The Commissioner for Railways explained the delay in construction by saying that the “heavy expenditure which would be involved in providing new buildings at Dulwich Hill station would not be warranted at the present time”.





*The standout design feature was the open-sided waiting area which is identified in the above picture of Dulwich Hill by the paired steel gates. The Railway Department intended to make nine of the 11 stations on the East Hills line unattended. As was proposed for the East Hills line structures, there was no ticket office in the Dulwich Hill building. A subsequent overhead combined ticket/parcels office fulfilled that role at Dulwich Hill. Thus, there was no need for any physical alteration to the Dulwich Hill platform building to provide a ticket office. The photograph was taken on 13<sup>th</sup> January 1997.*

## **STYLISTIC SIGNIFICANCE AND THE KEY DESIGN ELEMENTS OF THE BARDWELL PARK BUILDING**

The Bardwell Park building is significant in that it introduced, for the first time in nearly 40 years, a different roof style, a different method of support for the platform awnings and different nomenclature in regard to the floor plan. The major features of the floor plan were the open-sided general waiting room and the porched entry to the female waiting room and female toilet.

While the parity between the awning width and building width remained, it was in the method of support of the awnings where there was a major difference to the Federation influences. In the Federation-influenced design, engaged brick piers gave load-bearing support to sandstone or concrete corbels on which were seated steel brackets in the shape of an inverted “U”. For the buildings on the East Hills branch, the platform awnings were formed by extensions of the ceiling joists on each side of the structure. Thus, there was no visual system of awning support. Also, a soffit was placed on the under surface of the platform awnings, thus creating a streamlined affect. This feature was absent on the Federation-influenced design.

Oddly, the buildings on the East Hills line also featured engaged brick wall piers but for no apparent reason. For the first time, three engaged piers were provided at the

non-toilet end and this was probably done as an ornamental feature to balance the three piers at the opposite end of the building on the brick privacy screen protecting the entry to the male toilet. The use of the engaged piers or protruding brick columns created four recessed panels on each side and two at each end and this may have been another way in which the brickwork was used as a decorative feature. This intention becomes more convincing when the treatment of the 1935-built platform building at Dulwich Hill is considered. The design of that structure was the prototype for the plan for the East Hills line buildings but was a more restrained version. There, engaged piers and recessed panels were not used but there were five indented oblongs along each side and one at each end outlined in a brighter colour of red bricks. It is important not to over-interpret the use of engaged piers on the East Hills line buildings. The explanation may simply be that no one bothered to check whether engaged piers would be useful or useless if they did not support anything.

From 1924, there were minimal, ornamental design elements on platform buildings and this overall approach continued with the new design used on the East Hills line. Rather than decorations being a contrasted material, such as cement render, decoration on the East Hills line buildings was expressed by the actual wall material, in this case the bricks. The decorative brickwork was applied to the following areas:

- design of the gables,
- two corbelled courses of bricks for the external cornices,
- chamfered reveals on doors and windows with stop-chamfer bricks,
- two course of bricks on their side for window and door heads,
- bullnose bricks for window sills, &
- bevelled bricks for the top course of the plinths.

The restrained design of the toilet accommodation was much the same as in the Federation design, with the only real and visual difference being the use of ornately designed privacy screens in front of the entrance to the male toilet for the buildings on the East Hills line. Before 1924, screens were formed of simple vertical boards. The toilets at the station were designed to be connected to the sewerage system but “absorption trenches” were used to drain the urinal initially. Externally, the joinery was painted in a combination of No.5 “light stone”, No. 6 “medium stone” and No. 7 “dark stone”.

While many of the more minor architectural features of the East Hills line buildings were not carried forward in subsequent exemplars, a few elements popped up in subsequent examples. This included decorative brickwork on the gables, the use of bullnose bricks on window sills, decorative brickwork on the reveals for doorways and the occasional use of general waiting rooms without doors.

Not every building possessed all elements of the Inter War Functionalist style, but platform buildings for existing urban areas were more likely to possess a higher number of elements. Examples in Sydney were more likely to have parapeted roofs,

awnings with soffits enclosing the RSJ supports and more extensive use of rounded features.

The only classification of the 83 Inter War Functionalist buildings that makes interpretation both meaningful and easy is to divide them according to their roof style with the omission of other individual building elements.

## **THE COMPARISON BETWEEN THE FEDERATION-INFLUENCED STYLE AND THE BUILDINGS APPROVED FOR THE EAST HILLS BRANCH LINE**

An Appendix has been prepared in order to understand the changes between the Federation-influenced design and that proposed for the East Hills branch line. It notes the similarities and dis-similarities between the two styles.

There were clear changes between the Federation-influenced design and that style applied to East Hills line buildings. For instance, the design of the roof was far more elaborate than the style it replaced and this was achieved by the extension of the end wall brickwork up to the roof gables and the use of hipped roofs for the ends of the platform awnings. Brickwork as a decorative agent was used to a larger degree on the East Hills line buildings than was previously the case. The other obvious feature, as designed, was the omission of a general waiting room and its replacement by a “corridor”, which was an open-sided space with fixed benches without backs.

This essay now focuses on those structures that were designed after the opening of the Bardwell Park structure 1931 to help determine the extent of elements that had a forward-looking component.

## **PART THREE**

### **BARDWELL PARK AND ITS DESCENDENTS - THE WAY THE SUBJECT CORRESPONDED TO SUBSEQUENT INTER WAR FUNCTIONALIST BUILDINGS**

#### **THE DESIGN FAMILY TO WHICH THE BARDWELL PARK BUILDING SEEMS TO BELONG**

From 1929 until 1960, a new architectural style appeared and was used for platform buildings at 55 stations. At some of those stations more than one example existed. Heritage Architects over the last 30 years have referred to these buildings as the Inter

War Functionalist style. There were no Art Deco designed buildings on the NSW railway system.

The design characteristics of the style were:

1. The visual dominance of horizontal massing of buildings (and vertical massing to a much lesser degree),
2. Polychrome bricks; the use of ornate brickwork, including courses of soldier bricks; application of recessed courses; courses proud of walls and the use of raked mortar for horizontal joints and flush mortar for vertical joints,
3. Low-pitched or flat roofs behind two or more parapets, wide fascias and flat, concrete for subsidiary roofs,
4. The engagement of rounded building ends, rounded dwarf walls and the extensive use of bullnose bricks for building corners, balustrades and door and window reveals,
5. Low-pitched roofs, often with the use of parapets to conceal the roof,
6. The use of terracotta roof tiles rather than galvanised, corrugated sheet iron,
7. The utilisation of large, steel RSJ beams to support platform awnings rather than fabricated, steel brackets,
8. Metal framed windows to replace timber, double-hung sashes, &
9. Asymmetrical floor plan.

Not every example reflected all the above characteristics and the 55 stations do not represent the total number of station buildings approved and erected between 1924 and 1960. At those stations where the platform buildings reflected the Inter War Functionalist style, the design was not applied to overhead booking/parcels offices.<sup>7</sup>

The word, "Functionalist" gives the idea that the buildings were utilitarian and void of attractive elements. This was not the case. Some Functionalist buildings, such as Cronulla, Parramatta (No. 1 platform) and Granville, are highly attractive. All examples at the 55 stations do not share the same universal appearance with the major difference amongst the members of the design family relating to the roof style. Over the 38 year period of the use, there were five different roof designs. These were:

1. part hipped roof with part end parapets,
2. hipped roofs, some with subsidiary hipped, gabled or flat roofs,
3. parapets hiding to some extent the low-pitched roofs, with one, two, three or four sides parapeted,
4. flat roof buildings, &
5. gable roofed buildings.

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<sup>7</sup> There were two off-platform Booking Offices – at Coniston and Eastwood. At Maitland, the Booking Office was constructed on a street corner adjacent to a road overbridge but not over the tracks.

The building at Bardwell Park and the others on the East Hills line relate to the first category.



*This image, taken on 19<sup>th</sup> October 2022, shows the rounded bricks for window sills, the timber framed windows, the slightly arched window heads and the bevelled reveals on windows and doors. All of those elements had been applied before 1931 to Federation-influenced buildings. The only new elements were the horizontal platform awnings, the use of soffits and terrazzo for thresholds. The “mind the steps” sign on the platform reflected departmental policy at the time to place building floor levels six inches above platform levels to facilitate washing of floors. There was one exception to the floor policy at Bardwell Park. The floor of the open-sided waiting room was to be positioned at platform level. Why? Because the floor surface was to be gravel like the rest of the platform.*

## **THE INTER WAR FUNCTIONALIST DESIGN FAMILY – A COMPLICATED CLASSIFICATION**

The comparison of the building elements of the Bardwell Park structure against subsequent examples of the Inter War Functionalist design is a far more difficult task than evaluating the Bardwell Park building against the predecessor, Federation-influenced style. A total 267 examples of Federation-influenced architecture were built over a period of 45 years whereas only 83 Inter War Functionalist examples were approved and built over a 31 year between 1929 and 1960, though not one structure approved after 1950 was built. However, the smaller size and shorter time span of the family of Inter War Functionalist buildings do not provide, per se, the tricky aspects of their analysis and taxonomy. The challenge lies in the variation of the detailed elements applied to the family members.

Variations of design in the Federation-influenced era were identified with the passing of time and limited to four distinct sub-periods. Moreover, the dis-similarities amongst

the periods related solely to the style and level of decorations. In all examples, the roofscape remained the same. As well, the design of the platform awnings remained stable and the floor plan was mostly constant. None of those factors were consistent in relation to the Inter War Functionalist buildings where there were five different roof variations and the level of decorative brickwork changed with almost every example. The choice of roof design of the platform buildings was usually related to the existence or otherwise of a signal box at the respective station.

While the method of support for the platform awnings was constant for Inter War Functionalist buildings, the materials used and the concealment or otherwise of the awning beams did not vary with both time and location as in the case of Federation structures. Like the Federation-influenced family, time played a role in the explanation of the pattern of approval for Inter War Functionalist buildings with the design of roofs changing over time. Nevertheless, the level of inclusion of stylistic influences of the Inter War Functionalist style generally were related to an additional factor. It was the source of funding. Unlike the consistency of the source of money from State governments in relation to Federation-influenced structures, money for Inter War Functionalist buildings at times came from special allocations by the State government, as in the case of the Sutherland-Cronulla buildings in 1939, and the Commonwealth Government between 1941 and 1945.



*One feature of the Bardwell Park building that was continued in virtually all subsequent Inter War Functionalist buildings was the use of flat asbestos cement sheets for ceilings with one or two inch wide timber cover strips. The above image shows the original ceiling in the male toilet at Bardwell Park. Usually, there were no ceilings in male toilets of Federation-influenced structures as an aid to disperse unsavoury odours. The East Hills line buildings may have been the first time ceilings were fitted to male toilets and the initial use of flat asbestos cement sheets to replace the “small, corrugated iron sheets” of the previous Federation period. The original timber*

*frame windows survive. The wall tiles date from the 1980s. The image was taken on 13<sup>th</sup> July 2022.*

## **DEFINING THE PREVAILING RAILWAY ARCHITECTURAL STYLE FOLLOWING THE CONSTRUCTION OF BARDWELL PARK**



The word, "Functionalist" is one adopted broadly through the NSW heritage industry and is supposed to make the distinction between Art Deco and buildings that have limited stylistic features of the Art Deco design. However, 'Functionalist' gives the idea that the buildings were utilitarian and void of attractive elements. This was not the case for every example. For instance, some Functionalist buildings, such as Cronulla, Parramatta and Granville, were highly attractive. One interesting aspect relates to the design of overhead booking/parcels offices at those stations where the platform buildings followed the 'Functionalist' style. Those structures on elevated concourses were excellent examples of functionally-designed, pedestrian-looking affairs which were nearly entirely void of design inputs.

The Inter War Functionalist influences were applied to varying degrees to 83 buildings at 62 stations. All but seven examples were of brick construction. The Department of Railways approved the application of the design to a further 11 stations but they were never built.

The governing design characteristics of the Inter War Functionalist style, as applied to New South Wales station buildings, were:

1. visual dominance of horizontal massing of buildings (and vertical massing to a much lesser degree),
2. polychromatic bricks,
3. the use of ornate brickwork, including courses of soldier bricks, application of recessed courses, courses proud of walls and the use of raked mortar for horizontal joints and flush mortar for vertical joints,
4. low-pitched or flat roofs concealed behind partial or full parapets,
5. wide fascias,
6. concrete for subsidiary flat roofs,
7. engagement of rounded building ends, rounded dwarf walls and the extensive use of bullnose bricks for building corners, balustrades and door and window reveals,
8. terracotta roof tiles rather than galvanised, corrugated sheet iron,
9. engagement of large, steel RSJ beams to support platform awnings rather than fabricated, steel brackets,
10. metal framed windows to replace timber, double-hung sashes,
11. open sided general waiting areas, &
12. asymmetrical floor plan, with off-set rear pedestrian access.

Not every building possessed all 12 elements but platform buildings for existing urban areas were more likely to possess a greater number of the elements. Examples in Sydney were more likely to have parapeted roofs, awnings with soffits enclosing the RSJ supports and more extensive use of rounded features.



After the opening of the East Hills line buildings, the next Inter War Functionalist building that was approved was at Civic on the Newcastle branch line in 1935.<sup>8</sup>



*The very first building that belonged to the Inter War Functionalist style after the approval of the East Hills line structures was at Civic on the Newcastle branch in 1935. It bears very little visual connection to the East Hills line structures, the difference most notably evident in this photograph being the angle of the platform awning and exposed steelwork. The Civic structure showed the single, common characteristic of Inter War Functionalist buildings between 1929 and 1938, namely an inconsistent approach to the overall departure from the Federation influences. Like the Federation period, the design of New South Wales stations in the 1930s continued to mirror domestic rather than commercial architecture. The photograph above was taken on 2<sup>nd</sup> December 1996.*

In 1935, plain hipped roofs covered with Marseilles pattern, semi-glazed tiles were introduced. Civic station near Newcastle was the first to be treated in 1935 and Griffith in 1936 was the second. Both these buildings survive.

Not all station buildings approved and erected between 1929 and 1960 reflected the Inter War Functionalist style. To varying degrees, Federation influences continued to be occasionally applied up to 1937, mainly at country locations. The most puzzling, simultaneous application of both Federation-influenced principles and the Inter War Functionalist style occurred in 1935 when the Railway Department approved the use of the first-mention design at Wickham and the engagement of the second-mention design at the adjoining station of Civic.

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<sup>8</sup> Dulwich Hill station had been approved in 1929 but built to the 1929 plan in 1935.

At stations where the platform buildings followed the Inter War Functionalist style any contemporary overhead booking/parcels offices did not adopt that style to any significant extent. Sutherland, Clyde, Granville, Denistone, Wiley Park and Dulwich Hill were examples. In fact, no overhead booking/parcels offices featured more than a token of influences from the Inter War Functionalist style.<sup>9</sup>

The only classification of the 83 Inter War Functionalist buildings that makes interpretation both meaningful and easy is to divide them according to their roof style. There were five different roof variations. These were:

1. part hipped roof with part end parapets,
2. hipped roofs, some with subsidiary hip, gabled or flat roofs,
3. parapets hiding to some extent low-pitched roofs, with one, two, three or four parapeted,
4. flat roof buildings, &
5. gable roofed buildings.



*The above photograph of Griffith shows an example of the Inter War Functionalist style approved in 1936. It is impossible to see any resemblance to the Bardwell Park building, apart from the movement away from the Federation style. Different coloured soldier bricks above and below the windows, metal framed windows, the application of terracotta roof tiles, the variable building width and the use of ramps are all features void on the Bardwell Park building. Nevertheless, the Griffith and Bardwell Park buildings had one characteristic in common – a farewell to the Federation style. The photograph was taken on 27<sup>th</sup> December 1978.*

Very roughly, the design of roofs changed over time but, as noted, time was not the only explanation of the variations. The first sub-group had a part hip/part gabled roof, as on the East Hills line and at Dulwich Hill. In 1935, the use of hipped roofs was introduced at Civic and the application of parapets in 1938 at Eastwood. The one-time use of a gabled roof occurred in 1940 at Merrylands while flat roofs were restricted

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<sup>9</sup> There were two off-platform Booking Offices – at Coniston and Eastwood. At Maitland, the Booking Office was constructed on a street corner adjacent to a road overbridge but not over the tracks.

to 1942 and only on the Main West between Rooty Hill and St Marys. The dominant sub-group was the one using parapets to some extent (40 buildings in total) and the next dominant group was the hipped roof examples (19 buildings in total). Examples of these two groups were constructed during the period 1938 to 1945. The level of influences on each example from the Inter War Functionalist style increased generally over time.



*This image of Toongabbie taken on 1<sup>st</sup> February 2018 shows some of the influences that flowed onto examples subsequent to the Bardwell Park building. In particular, are the use of decorative brickwork for the reveals four doors, decorative bricks for window sills and the provision of a general waiting room without doors. However, some other features are not related to the earlier building at Bardwell Park, including the use of metal framed windows and the elimination of soffits under the platform awnings. The Toongabbie building was approved in 1943.*

The stylistic elements applied to each building were not unique to anyone sub-group. The most dominant feature seen on the hipped roof sub-group, the parapeted sub-group and the flat roof sub-group is in the method of the application of the mortar between the bricks. In all three groups, the vertical joints are flat but the horizontal joints are raked, this being an aid to strengthen the appearance of the horizontal massing of the buildings. The use of rounded building ends was restricted to the parapeted sub-group and the flat roof sub-group.



*It was not until 1939 that the Inter War functionalist style shifted away from domestic to commercial influences. The original Sutherland station was demolished and redesigned in 1939 in connection with the opening of the branch line to Cronulla. Thus, the year, 1939, was an important year for railway design history. There are many elements of the Sutherland structure that did not appear on the Bardwell Park building, which was only opened eight years previously. These include the horizontal massing which has been facilitated by the flat awning complemented by the wide fascia with coloured, highlight painting, the low pitched roof and the decorative and parapets. The use of 11 inch cavity brickwork also helped to provide the notion of a wider building though, internally, structures at Sutherland and Bardwell Park were roughly the same internal width. The above photograph, taken on 5<sup>th</sup> February 1977, shows the platform No. 1 Inter War Functionalist building.*

The Department's selection of the sub-group design was related to two characteristics. Firstly, the importance of the town served by the station and, secondly, the physical requirements of the Department of Railways in terms of passenger, parcels and other traffic. Either the hipped roof sub-group or the parapeted sub-group was chosen for more important locations and the size of the buildings increased according to the local town status and Departmental requirements. The part hip/part parapet sub-group and the flat roof sub-group were applied to minor locations. No building smaller than three rooms received a parapet roof.

One of the themes that consistently appeared on the NSW Railway station buildings was the bias in favour of urban areas and against rural areas after 1890. That trend was apparent in Inter War Functionalist collection of buildings. No building in Sydney or Maitland had exposed vertical steel columns but they were used on almost every building in rural areas. Even at Civic there were exposed, vertical and horizontal beams, with no soffits between the beams. Exposed horizontal awning supports were introduced in 1942 in Sydney on the quadruplication of the Main West between Westmead and St. Marys but exposed steel vertical columns were never used in Sydney. The use of parapets was largely confined to Sydney and to the Hunter region

(at Maitland and Cockle Creek to lesser extent). Parapeted roofs were never built in rural locations, though some were planned.



*The apogee of the Inter War Functionalist style in New South Wales was represented by the terminal building at Cronulla, which dates from 1939. Flat roofs, parapets, variable building width and height combined with the use of rounded corners on both the structure and awnings combined to emphasise the horizontal and vertical presentation of the structure. Cronulla was the first station on the railway system to apply integrated landscaping. It is impossible to see any link between the Cronulla building and that at Bardwell Park. The main differences related to the size and the source of funding. The Cronulla line buildings were funded by a State special account to provide unemployment relief. No special funding being made available in the case of Bardwell Park. The photograph was taken on 5<sup>th</sup> February 1977.*

Many of the buildings in the hipped roof sub-group or the parapeted sub-group were substantial in size and with a high level of ornamental features. This is explained by the provision of funding between 1939 and 1945 by the Commonwealth Government as part of assistance during World War Two.

After 1945, the later a building was approved to be built the more likely that it was not built. Two factors were at play. Firstly, the Commonwealth Government gave NSW funds during World War Two to build wartime related infrastructure but, once the War ended in 1945, so too did the Commonwealth funds. Secondly, after World War Two, the NSW Government stopped funding railway stations in favour of funding roads to encourage the use of private motor cars.

There is an interesting link between the Inter War Functionalist buildings and the use of single-pitched buildings after 1948. In 1948, the Department of Railways commenced using single-pitched roofs for some Inter War Functionalist buildings. In fact, single-pitched roofs became the dominant roof form after 1948 with four stations receiving single-pitched roofs (Maitland and Cockle Creek in 1948, Eastwood finished in 1956 and the Sydenham Parcels Office in 1960) and two other pairs of buildings with very low double-pitched roofs (Granville and Clyde both completed in 1960).





*The above photograph shows the side platform building on No. 1 platform at Eastwood that was approved for construction in 1938. There was an exact same designed building on the opposing platform. A few features were incorporated from the Bardwell Park building into the ones at Eastwood. These were: the brick privacy screens outside the male toilet entrance, timber framed windows, open fronted general waiting rooms and soffits under the platform awnings. On the other hand, there were features that not seen on the Bardwell Park building, such as the use of terracotta roof tiles and the wide fascias surrounding the platform awnings. Nevertheless, the Eastwood buildings shared the single important link with the Bardwell Park and all subsequent Inter War Functionalist buildings up to 1938 – a ocular difference to the Federation influences. It is unbelievable that the Electrical Branch of the Department of Railways would ruin the appearance of the buildings by the placement of a portal structure through the platform awnings. Such poor behaviour was common by the Electrical Branch. The photograph was taken on 9<sup>th</sup> April 1977.*



*The above image of Pendle Hill, taken on 1st February 2018 shows one important characteristic that dates back to the Bardwell Park structure, namely the use of decorative*

gables. There is a number of other features that have no relationship to the Bardwell Park building, especially the low pitch of the roof, the extension of the roof line to form an awning over the ticket window as well as the placement of the ticket window in the end of the building. The structure was approved in 1943.

## PART FOUR

### A SIGNIFICANT, POST-APPROVAL DESIGN CHANGE

Overall, the building at Bardwell Park is very much in original condition. Only one external alteration has been made to the approved plan. The most significant exterior change embraced the Department of Railways' decision to include a ticket selling facility.



David Keenan took this photograph on 10<sup>th</sup> October 1971 of a four car Sydney bound train arriving at Bardwell Park platform. At that time, the ticket window continued to be located under the platform awning adjacent to the first carriage of the train. **SOURCE:** J. Oakes, "Salt Pan via Dumbleton – The Story of the East Hills Line", ARHS Bulletin, September 2001, p. 331.

Around the time of the line opened in 1931, the Railway Department had a change of heart about the provision of staff accommodation and converted all those intermediate stations that were to be unattended to provide a staffed ticket office. The Department achieved the revision by bricking up the open spaces on each side of the “corridor” and providing a ticket window on the Sydney-bound platform facing the rails – a relatively unusual arrangement for the New South Wales Railways. A door was added to the opposite side of the “corridor” for staff entry/exit. A significant omission from the



buildings was the elimination of any form of internal to cater for parcels following the decision to provide a ticket office. The station officer, his tickets and other stuff had to share a space of 11 feet by 10 feet. The internal wall treatment and colours remained the same with the new design.



*The above image of Dulwich Hill shows the approved arrangement of the general waiting room, called on the plan a “corridor”, proposed for Bardwell Park. As the plans, details of the change of thinking and the construction are unknown, there is no way of visualising the original intention other than by imagination. However, as previously stated, the 1929-approved prototype building at Dulwich Hill was erected in 1935 and utilised an open-sided waiting room. For the previous three or more decades up to 2022, the facility at Dulwich Hill has been closed to the public with the use of a pair of steel doors. Fortunately, a small window of time opened up in 2022 when workmen converting the station building for Metro use decided to replace the steel doors with a timber frame sheeted with Plywood. There was just sufficient time on 6<sup>th</sup> April 2022 to capture the space in its both approved and as-built form. The poverty of the design was mirrored in the omission of back to the fix seats, which were located on each side of the space. That style of backless seating had last been in use in the years prior to 1880.*



The above picture of Panania on the East Hills line shows the conversion of the open-sided "corridor" by the insertion of a ticket window on the right side of the image. The Bardwell Park building was similarly treated. In 1956, approval was given for the extension of the Panania ticket office and that extension explains the presence of the new ticket window on the left-hand side of the original facility. Unfortunately, the original face brick walls at Panania have been painted allegedly to make it easier for staff to remove frequent graffiti attacks. The image was taken on 5<sup>th</sup> April 2017.



This photograph of the booking office facing the stepway faintly shows the absence of render on the painted brick walls, a primitive feature that would have matched the frugality of the gravel floor and backless benches of the original design of the "corridor". New South Wales buildings up to the 1950s were characterised by their narrow internal width and the 11 feet width of Bardwell Park accorded with that policy. The photograph was taken on 24<sup>th</sup> March 1999.



*The above image shows the poor quality work associated with the removal of the original ticket window at Bardwell Park on the city bound side of the building. The railway administration subsequently relocated the ticket window at the city end of the structure in roughly the location of the small window that provided natural light into the ticket office. The image was taken on 2<sup>nd</sup> June 2022.*

The sale of tickets continued through the window on the city bound side up to until the late 1970s or early 1980s. At an unknown time, the State Rail Authority decided to relocate the ticket window to the end of the structure facing the stairs by converting the existing window. This change reflected a shift in policy which previously dictated that tickets were sold from a window facing into a general waiting room. Like most everything else in the New South Wales Railways, there was no instantaneous end to any prevailing policy and procedure and an equally swift introduction of a new policy. In fact, the process to relocate ticket windows to face the pedestrian entry point took approximately 50 years to evolve between 1910 and 1960.





*This photograph taken on 24<sup>th</sup> March 1999 shows the relocated ticket window from the Sydney side to the end facing the stepway. This particular, bullet-proof window dates from the early 1990s. How thoughtful was it of the CityRail planners to erect a shelter over the new ticket vending machine so that the platform numbers could be obscured! Two of three of the engaged piers at the end of the building can be seen. While the piers may have been a delightful design touch, they served no structural purpose.*



*Another external alteration was fairly recent and relates to CityRail's decision in the 1990s to demolish of the privacy screen in front of the male toilet on the basis that it provided a place of concealment by villainous and vulgar humans eager to abuse unsuspecting, waiting customers. The mauve paint reflects the implementation of the official policy to manage the removal of graffiti. The image was taken on 27<sup>th</sup> March 2017 and shows the type of station nameboard used by CityRail in the 1990s. Three months after this image was taken, Sydney Trains replaced the nameboard with one approved by the then coalition Government which assumed power in 2011.*

## PART FIVE

## CONCLUDING REMARKS

## **WAS THE BARDWELL PARK BUILDING BACKWARD FOCUSED TO THE 1920s OR FORWARD LOOKING TO THE 1930s?**

Did the designers of the East Hills line buildings succeed in moving New South Wales railway architecture away from Federation influences? Were the designers looking back to have regard to the Railway Department's familiarity with the Federation era or were the Railway architects endeavouring to take a little inspiration from their limited exposure outside the railway fences to the designs associated with the Art Deco movement? In short, was the design reactionary or revolutionary?

### **1. AN ANALYSIS OF THE INDIVIDUAL BUILDING ELEMENTS**

The following analysis compares the elements of the Bardwell Park building and the former Federation-influenced style as a way of determining the extent to which the Railway designers moved towards the future. Of 35 structural features listed in the Appendix, 15 elements changed and 16 remained the same. The elements of four features were not comparable .

#### **A. DESIGN ELEMENTS THAT CHANGED**

Those features that changed were the:

1. style of the roof and related and brick walls (from gable to gable and hip),
2. roof material from steel to asbestos cement,
3. the provision of a ceiling in the male toilet,
4. the use of flat asbestos cement sheets in male toilets and for ceilings in all other internal spaces
5. door reveals (from square to bevelled),
6. removal of rendered banding around the external walls (from render to brickwork),
7. floor plan (with the general waiting-room now open-sided and called a "corridor",
8. thresholds (from slate and concrete to terrazzo),
9. awning supports (from cantilevered metal brackets to extended ceiling rafters),
10. engaged brick piers (from structural to ornamental),
11. building width (from 12 feet to 11 feet),
12. provision of soffits under the platform awnings,
13. elimination of fanlights over doors,
14. toilet ventilation (from roof cowls to wall ventilation),
15. material for the back wall of urinals (from slate to concrete).

#### **B. DESIGN ELEMENTS THAT DID NOT CHANGE**

The 16 design features which did not change from the Federation-influenced style in use from 1924 were the:



1. roof pitch,
2. awning width,
3. window head design,
4. wall material (using solid nine inch walls on protected sides and cavity work on the ends, which were exposed to the weather,
5. use of engage piers,
6. utilisation of excrement-coloured face bricks,
7. use of bullnose bricks for window sills,
8. employment of small sized window panes for upper window sashes,
9. the use of slightly arched window heads,
10. castellated, brick privacy screen across entrance to male toilet,
11. timber for window frames,
12. style for toilet closet doors,
13. length of toilet closets,
14. ventilation of male toilet,
15. urinal material, &
16. porched entry to female toilets.

### **C. THE THREE EVALUATIVE TESTS**

Three tests have been applied to determine whether the Bardwell Park building was backward or forward focussed.

The first test considers the analysis of the 31 design elements. The design features displayed a balance between the 15 elements that changed for the East Hills line buildings and the 16 elements that remained constant. That appraisal is inconclusive.

The second test examines the Bardwell Park building against the three essential design criteria of the typology that identify new building designs. It is a 'yes' for the roofscape and a 'yes' for the method of awning support. It is a 'no' in relation to the floor plan, one space of which changed in name only – the "corridor". The typology test tends to indicate that the Bardwell Park building did form a new classification of station building design.

Now to the third test. This is the test where photographs of Bardwell Park and of earlier Federation-influenced buildings are shown to the common man/woman. Voila! It is a unanimous result. Because Bardwell Park looked different to its predecessors, it was different to its predecessors. Thus, the Bardwell Park building was forward looking.

## **2. WHAT WERE THE NEW VISUAL IDEAS?**

The features of the design used on the East Hills line embodied a number of new ideas, including:

- the first time that platform station building design had changed in nearly 40 years - it was the first transition step away from the Federation-influenced style and formed the first sub-group of the Inter War Functionalist design,
- the use of a more complicated roof style – – the first time this idea had been used since the 1880s,
- the first use of cantilevered awnings without supporting brackets,
- the use of the name “corridor” to denote a general waiting room,
- the first time that a general waiting room had not been included in a platform building over 50 feet long in Sydney,
- the elimination of open fireplaces and, it appears, the elimination of all forms of heating,
- the first time a new design had been initially implemented in Sydney rather than The Bush,
- elimination of fanlights above doors,
- the introduction of a new type of platform seat (marking a move away from cast iron to fabricated construction),
- first ever proposed use of a gravel floor in an internal space (in the “corridor”),
- use of redwood for window sashes with elimination of coloured “Cathedral” glass panes, &
- use of three-panel doors, with two vertical panels at the bottom and one horizontal panel in the centre with nine small panes of Arctic glass in the top half,
- windows with Arctic glass in the lower sashes and six small panes of 21 ounce sheet glass in the upper sashes.

### **3. BRICKS AS DECORATION**

Rather than decorations being a contrasted material, such as cement render, decoration on the East Hills line buildings was expressed by the actual wall material, in this case the bricks. The decorative brickwork was applied to the following areas:

- design of the gables,
- two corbelled courses of bricks for the external cornices,
- chamfered reveals on doors and windows with stop-chamfer bricks,
- two course bricks on their side for window and door heads,
- bullnosed bricks for window sills, &
- bevelled bricks for the top course of the plinths.

The emphasis on the bricks themselves as decoration was enhanced by the elimination of the use of contrasting red coloured bricks for window and door heads, window sills and plinths. That elimination further focusses attention on the bricks themselves and not their colour.

One aspect about the construction of all the examples on the East Hills line was the unattractive colour of the bricks. Also, the bricks contained chips and broken corners, suggesting that they were either seconds or commons or were roughly handled. This last suggestion gains further weight when the poor quality of the brick cleaning is also examined. There were extensive instances where the mortar had been allowed to spread across the face of the bricks and the excess mortar had not been removed. Overall, the presentation of the bricks shows poor workmanship and an absence of supervision.

#### **4. THE FURTHER APPLICATION OF THE DESIGN OF THE EAST HILLS LINE BUILDINGS**

The Railway Department made a very sensible contribution to its own financial economy in 1929 by abandoning the preparation of individual plans for each of the 11 stations on the line. Instead, it prepared a single general arrangement plan from which all platform structures were constructed. That provided significant monetary and time savings. Unfortunately, for the next new line to be opened – between Sutherland and Cronulla in 1939 – that notion of economy was abandoned and plans prepared individually for each station. Why? Possibly because the Department of Railways had been funded to construct the Cronulla branch from a special allocation from the State Treasury, supposedly to provide work for unemployed men. With such a special allocation, there was no need for frugality and this attitude also possibly explains the very elegant nature of the platform buildings on the Cronulla line.

The new design used for the buildings on the East Hills branch line would be only used once more – at Dulwich Hill in 1935. From that time until 1938, a sub-group was introduced towards the evolution of the more identifiable Inter-War Functionalist design as on the Cronulla line in 1939.

#### **5. PRESS REACTION TO THE NEW EAST HILLS LINE DESIGN**

Not a single word has been recorded in the metropolitan press about the new design of buildings on the East Hills line.

#### **6. NON-BUILDING MEASURES TO MINIMISE EXPENDITURE**

Capital funding was a problem and, in order to save money on the construction of the branch line to East Hills, a number of measures were implemented to reduce expenditure. These included the decision to terminate track duplication at Kingsgrove and the abandonment of electrification beyond that point. Electrification was provided in 1939 but track duplication did not reach East Hills until 1987. As well, in 1930 the number of hours per week for each employee who worked on the project was reduced from 44 to 30, in order to reduce overall expenditure to meet the financial crisis.<sup>10</sup>

#### **7. THE LEGACY OF THE EAST HILLS DESIGN**

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<sup>10</sup> *National Advocate*, 2<sup>nd</sup> April 1930, p. 2.

What was the legacy of the East Hills line design? The architecture of the platform buildings used on the East Hills line contributed to future examples of the Inter-War Functionalist style. They introduced features that were utilised on virtually every subsequent example until the style disappeared after 1960. These were:

- the use of brick parapets to conceal part or entire roofs,
- the use of brickwork itself for decoration, including the location of bricks, the positioning of bricks either recessed or proud of building walls or decorative arrangements, especially on gables,
- the abandonment of doors to waiting rooms, &
- elimination of heating in waiting rooms.

Essentially, the building was significant in that it introduced, for the first time in nearly 40 years, a different roof style and a different method of supporting the platform awnings.

## **8. THE FINAL WORDS**

The Bardwell Park design was neither reactionary nor revolutionary. However, it was more forward than backward looking.

## **ACKNOWLEDGEMENTS**

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Stuart Sharp

20<sup>th</sup> March 2023

## APPENDIX:

### THE COMPARISON BETWEEN THE FEDERATION-INFLUENCED STYLE AND THE BUILDINGS APPROVED FOR THE EAST HILLS LINE

DESIGN ELEMENT	FEDERATION-INFLUENCED STYLE 1892-1928 <sup>11</sup>	APPROVED FOR THE EAST HILLS BRANCH LINE, 1929
<b>NOMENCLATURE</b>		
Alpha-numerical code	A1 to A10	A8, subsequently altered to A11; the use of an alpha-numeric code was subsequently abandoned
<b>INTENDED LOCATION</b>		
Platform configuration	Side and/or island platforms	Island platforms
<b>BUILDING STRUCTURAL FEATURES</b>		
Floor plan	Linear	Linear
Building length external	Variable – from 20 to 89 feet	54 feet or 64 feet
Building width internal	12 feet, with some narrower examples	10 feet
Roof style	Gabled with flat eaves	Gabled with end brick walls extended to project above gables and platform awnings ending in hips
Roof pitch	Medium	Medium
Roof material	Galvanized, corrugated iron sheets and, after 1926, iron sheets as well	Corrugated Fibrolite with terracotta ridging

<sup>11</sup> A few examples of the Federation-influenced style continued to be approved until 1937 – at Casino later in 1929 and 1930, Jannali in 1930, Wickham, Pennant Hills, Condobolin and Uranquinty in 1935 and Bundanoon in 1937. There were also later additions to existing Federation-influenced styled buildings to match the existing design approved between 1938 and 1944.



<b>DESIGN ELEMENT</b>	<b>FEDERATION- INFLUENCED STYLE 1892-1928<sup>11</sup></b>	<b>APPROVED FOR THE EAST HILLS BRANCH LINE, 1929</b>
	as corrugated Fibrolite sheets	
Wall material	Brick or timber with solid 9 inch thick brickwork initially, then cavity brickwork at ends 14 inches thick	Brick with solid 9" walls along the sides with 14-inch cavity brickwork on exposed faces (i.e., at ends) – internal brick walls extend above the ceiling level to the height of the roof ridge (first building type to possess this feature) - cement mortar without tuckpointing
Bond of the brickwork	Predominantly English	English – some examples with flushed mortar and others with raked mortar
Style of door reveals	Early examples chamfered; later examples square	chamfered brickwork
Colour of brickwork	Various, depending on location of brick quarry	Light red facing bricks on exposed faces and dark red for string course, window arches and sills
Names of rooms/spaces	Variable - booking office, parcels office, general waiting room, ladies' waiting room and male and female toilets – with some timber examples containing out of rooms and open-fronted general waiting rooms	Open-sided "Corridor", ladies' waiting room, ladies' lavatory, cleaner's room and men's lavatory
Staff accommodation	Provided in longer examples only	Not provided as originally planned, except the safeworking stations at Kingsgrove, Riverwood and Padstow (at East Hills staff used detached

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		signal box) – revised prior to opening by the conversion of the “corridors” to booking offices
Internal wall surfaces	Render on brickwork with a purple-brown Dado to a height of 5 feet above the floor – the body of the wall was painted light stone – male toilet whitewashed – refreshment rooms varied, often with green	Render on brickwork with a purple-brown Dado to a height of 5 feet above the floor – the body of the wall was painted light stone – male toilet whitewashed
Internal ceiling material	Small, corrugated iron sheets or fibrous plaster – no ceiling in male toilets	Flat asbestos cement sheets with timber battens + fitting of a ceiling in the male toilet
Material for thresholds leading from platform to rooms	Slate initially; later concrete	1 ½ inch thick terrazzo, though the conversion of the corridors to offices resulted in the use of concrete thresholds for the office entry
<b>AWNING STRUCTURAL FEATURES</b>		
Method of awning support	Inverted steel “U” brackets or timber braces seated on corbels	Extension of ceiling joists
Use of engaged wall piers	Used to support the corbels and awning brackets	Engaged piers used on building sides but without any structural role – possibly applied as an ornamental feature
Width of platform awnings	9 feet	9 feet 8 inches, with 3 stations reduced to 8 feet 6 inches wide
Soffits of awnings	Not covered	Covered with Fibrolite sheets but without cover strips between the sheets

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<b>DECORATIVE FEATURES</b>		
Provision of fanlights above doors	Yes	No
Decorative brickwork on gables	No	Yes. Three vertical courses of bricks standing proud of wall with gables topped with bullnosed bricks
Banding around building exterior	Cement moulded string course up to 1923; no string course from 1924	Band of soldier bricks around external walls in contrasting colour
<b>WINDOWS</b>		
Window heads	Square with cement moulding up to 1923; from 1924, slightly arched with soldier bricks	Slightly arched with some examples with a single course of soldier bricks (as per the plan) and others with two courses of bricks set on their sides <sup>12</sup>
Window frame material	Timber	Timber
Window sills	Pre-1924 rendered concrete with rendered aprons; post-1924 bullnosed soldier bricks	Bullnosed soldier bricks
Application of engaged piers at building ends	No	Three engaged piers used at the Sydney end of all buildings.

<sup>12</sup> The 1929 plan provided only for the use of soldier bricks as decoration, including a course of soldier bricks at the building end above the male toilet entry. This feature was omitted during construction. The buildings at Revesby, Padstow, Riverwood and Kingsgrove feature one course of soldier bricks in accordance with the plan, though Riverwood has one course of soldier bricks on the side walls and two courses of bricks on their side above the entrance to the male toilet, as does Bexley North. The example at Bardwell Park has two courses on their sides above all openings. Another source of deviation from the planned standard related to the shape of the island platform. The design of the brickwork adjacent to the vents in the gables differ. For instance, at Bardwell Park there are three small arches above the vents but at Kingsgrove and Revesby the design uses three sets of soldier bricks. At all stations except Beverly Hills, the platforms were configured with both walls curved. In the case of Beverly Hills, the East Hills-bound platform is curved but the Sydney-bound platform is straight. Also, Beverly Hills is the only intermediate station where the pedestrian stepway from the overhead road to the platform is not at the Sydney end. How and why did that happen? Station access also had variations. All stations, except (Revesby to be confirmed), Panania and East Hills had access from the ends of the platform. Stairs and ramps were built at Revesby in 1956 in connection with the installation of a passing loop, & possibly at Panania at the same time.

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<b>TOILET ASPECTS</b>		
Nature of entry to ladies' toilet	Through the ladies' waiting room to 1920; porched entry from 1921	Porched entry
Ventilation	Vent cowls through roof ridge and timber or glass louvres	Wire-impregnated glass with four small circular openings – first building type not to feature ventilation of the ceiling void by the use of “Breaches Cowls” through the roof ridge
Material used for privacy screen covering the entry to the male toilet	Timber with vertical boarding	Brick with three engaged piers presenting a paneled appearance, much like the four side panels and two panels on the opposite, entry end. Also, short return brick walls on each side. Castellations at the top of the brick screen.
Design of closet doors	Four panel	Four panel
Closet width	3 feet 8 ¼ inches	3 feet
Closet length	5 feet	5 feet
Provision of enameled hand wash-basin	In female toilets only	In female toilets only
Urinal material	Initially Welsh slate, then concrete or galvanized, sheet iron - initially full-length stall divisions and from 1914 half-length divisions	Back wall was made of impervious cement with one inch thick Welsh slate stall divisions – half-length stall divisions commencing 2 feet above the floor and extending upwards for 3 feet
Urinal stall measurements	2 feet wide with each stall partition 2 feet wide	2 feet 3 inches wide with each stall partition 18 inches wide



*Our visit to Bardwell Park is over. We started well on our way back to the city until we got to Turrella, and then two reds.....*

Stuart Sharp

20<sup>th</sup> March 2023