

Register of Significant Twentieth Century Architecture

RSTCA No: R110

Name of Place: Kingston Transport Depot (Bus Depot)

Other/Former Names:

Address/Location:

Block 16 Section 8 of Kingston

Listing Status:	Other Heritage Listings:
Date of Listing:	Level of Significance:
Citation Revision No:	Category:
Citation Revision Date:	Style:

Date of Design:	Designer:
Construction Period:	Client/Owner/Lessee:
Date of Additions:	Builder:

Statement of Significance

The Kingston Transport Depot is important for its historic association with the development of public and government/parliamentary transport in Canberra, its social significance to the local community and especially for the architectural value of the buildings.

It reflects the decision made early in Canberra's history for the government to own and operate a public transport system based on buses. The identifiable sequence of development at the depot mirrors the expansion of both the settlement of the City and the growth of the public transport system that served it.

The community values the building for social reasons. The people who worked in the depot and their families value the building for its strong work and social associations.

The Depot is an example of significant structural engineering and architecture, and is an educational resource.

The fully welded steel portal frame exhibits creative design and demonstrates a high degree of technical achievement representing a new achievement for its time. It would appear that this is one of the earliest notable examples, if not the first, of a fully welded portal frame of any great size in Australia.

The single storey brick office extension was built when the Inter-War Functionalist Style (1915-1940) was new in Australia. The design incorporates nearly all of the principal design features which were specific to the style including asymmetrical massing, simple geometric shape, roof concealed by parapet and metal-framed windows. It is believed to be Canberra's best industrial/commercial example of the Inter-War Functionalist style.

The architecture and engineering may contribute to the education of designers in their understanding of inter-war architectural styles and the evolution of engineering.

With the passage of time many of Canberra's architecturally innovative buildings of this period and industrial buildings generally have been lost or have been significantly altered to their detriment. This gives greater significance to the Kingston Transport Depot.

The Kingston Transport Depot is one of the last remnants of the early industrial/service complexes at Kingston; the first intended permanent location for such uses in the development of Canberra.

Description

Setting

The Kingston Transport Depot is located in the Kingston Foreshore area, which was a relatively large industrial site. The whole site is now no longer used for industry. The Kingston Transport and Bus Depot building is located on Wentworth Avenue to the south of the Power House. The site slopes gently to the northeast allowing the sequential development of the Depot to step both up and down the site.

The building is not set parallel with Wentworth Avenue (formerly Interlake Avenue). The siting of nearly all the buildings on the Kingston Foreshore was related to the two sets of railway tracks that extended through the site rather than the avenue. The tracks were parallel and cut across the industrial site in a northwest direction, refer to the Site Plan. In 1926 the track closest to the Depot continued past the site to the Provisional Parliament House construction site and on to the Canberra Brickworks. In the same year Wentworth Avenue was a dirt road, a dual carriageway separated by a thick planting of trees along its centre. To the west were the new single storey FCAC houses of Kingston 1.

Depot Structures

The transport depot generally comprises two large joined sheds with some internal bricked rooms and an attached single storey brick office complex. These structures were designed and constructed over a period of about fifty years as follows:

1926

The original depot was designed by the Architect's Department (possibly the Commonwealth Department of Works and Railways) in 1926 2 and would appear to have been constructed the following year, refer to the 1929 photograph from the "Mildenhall Collection" and Plan Ag 313 (in the attachments). The main elements that remain of this building are the original front brick façade facing northwest and the return wall extending in part along the side of the main turning and parking area, refer to Plates 2, 3 & 4. The front façade facing northwest is a brick industrial structure that draws on elements from the Inter-War Georgian Revival Style (1915-40) with its symmetry, paned windows of vertical proportions and entrance given some high-style treatment 3.

1936

The lower level bolted steel framed covered workshop extension, located centrally off the north east side of the turning and parking area, was designed by the Department of Works in Canberra in 1936 4 and constructed soon after 5. Refer to Plate 5 that shows the roof in the foreground.

1940

The fully welded portal frame and roof over the existing main structure and its southeastern extension was designed by the Department of Works for the Department of the Interior, Canberra, in January 1940 6, and would appear to have been constructed in 1940-41 7. Refer to Plate 8, 10 & 11.

The attached single storey brick office building facing onto Wentworth Avenue was designed by the Department of Works for the Department of the Interior, Canberra, in early 1940 8 and would appear to have been constructed soon after 9. Refer to photograph on the title page. The building is an example of the Inter-War Functionalist Style (1915-1940) with its asymmetrical massing, simple geometric shapes, roof concealed by parapet and metal framed windows 10. Refer to Elevations Sheet 2 drawing number 11602, Sections Sheet 2 drawing number 11640 and Part Elevations Sheet 7 drawing number 11606 (in the attachments).

1945

Stage two of the single storey brick office building was designed by the Department of Works for the Department of the Interior, Canberra, in 1945 11, and would appear to have been constructed soon after.

The eastern side second floor level lunchrooms and lavatories located over the existing recreation

room were designed by the Department of Works, Canberra, in 1945 12.

1947-49

The re-location of the petrol bowsers in front of the single storey brick office was designed by the Department of Works & Housing ACT, Canberra, in 1947-49 14

1951

The two storey eastern corner extension was designed by the Department of Works for the Department of the Interior, Canberra, in 1951 16 and would appear to have been constructed shortly after.

1951-60

The double height northern extension to the workshop was constructed some time after 1951 but before 1960 15.

1960

The attached single storey brick office building southern extension, facing onto Wentworth Avenue was designed by Moir and Slater Architects, for the NCDC in 1960 17. It was designed in the same Inter-War Functionalist Style. The precast concrete solar screens were not constructed. These screens would not have been in keeping with the Inter-War Functionalist style since they detract from the horizontal emphasis of the facade.

Various other additions and alterations were constructed over the next 20 years as the need for additional space was required, due to the increasing number of vehicles. In 1973 a boiler house was designed and located to the south with the main floor slab being covered with an additional slab and heating system. At some stage after the 1950s a single storey structure called the 'Hive' was built to the south 18.

Description of the Buildings

The following description begins as one would enter the building(s) from Wentworth Avenue and includes as sub-headings the dates referred to in "Depot Structures".

1940, 1945 & 1960

As a result of the building not being parallel with the Avenue, the designers of the attached single storey brick office building made a virtue of this and in plan, stepped the office building progressively along the avenue, as it extends to the south, enhancing the expression of the three dimensional cubic massing that is characteristic of the Inter-War Functionalist Style of architecture, refer to the title page, and Plates 4, 6 & 7.

The office building has two entries. The original 1940 entry, which is not currently used as a main entry, is given greater emphasis by its central location and the rounded corner that is the further most stepped section of the façade. The original glazing of the rounded corner has been bricked up, refer to Plates 6 & 7. The combination of the repetitive glazing with five transoms, though divided by brick mullions, and the continuous horizontal rendered band, which extends over the glazing and forms the edge to the concrete soffit of the original entry, gives the impression of horizontal fenestration implying a stream-lined effect emphasizing functionalism and clean lines. The transoms of the glazed timber entry doors and sidelights mirror the windows. The second entry is located further to the south and was part of the 1960 extension.

In addition to the fenestration the characteristic clean lines of this style are evident in the plain surface of red brickwork and the parapet that conceals the low pitched roof.

The three-sided clock tower that extends a few meters above the parapet provides a contrasting vertical feature to the overall horizontal emphasis. Prior to the 1960 extension this was the chimney for the heating system and it extended as an external engaged element from the ground level. The sides of the chimney have an elegant central vertical stylized low-relief brickwork.

The windows are painted steel framed.

Internally, the southern section of the building is predominantly a number of rooms off a central corridor while the northern end includes larger rooms. The spaces have been partitioned and

altered over time.

The major architectural elements that are specific to the Inter-War Functionalist Style (1915-1940) and that are displayed by this section of the building relate to the external forms. They are:

- asymmetrical massing,
- simple geometric shape,
- roof concealed by parapet and
- metal-framed windows.

The major architectural elements listed above place this building in the Inter-War Functionalist Style (1915-1940) 19.

Another but secondary architectural element of this style displayed by the building that relates to the external form is the rounded corner form.

Other external elements of significance are the plain surface of the face brickwork, the brick chimney (clock tower) and associated vertical stylized low-relief brickwork, the horizontal rendered band at window head height and associated entry soffit, and the original entry doors and sidelights with their transoms mirroring the metal-framed windows.

The façade of this section of the depot, along Wentworth Avenue, is relatively well maintained and is in good condition. The changes have not diminished its integrity.

1926 & 1940

Directly behind this office area is the main turning and parking area of the depot, referred to on the 1960 drawing as the "Garage". Most of the doors that were present when the depot was in use appear to have been closed off. The 1940 plan shows the main entry leading directly through into the Garage. There were also several other secondary entries from the front office and staff areas.

The vehicle entries are to the northwest and the southeast via large roller shutters, refer to Plate 2. The north western entry was the original main entry and the original brick façade displays special brick detailing including continuous soldier courses in the parapet, at sill height and extending around the window perimeters over-sailing and framing the openings, refer to Plate 3 & 4. The parapet has an implied cornice formed by bricks laid at 45 degrees in stretcher bond. The parapet above this level has been re-built, however, the original stepping and detailing has not been reinstated. The symmetry of the original façade has been hidden by the northern extension. The roller shutter openings were widened in the 1940 renovation and over time window openings have been altered to doors or bricked up.

The footprint of the Garage is based on the overall floor area of the original 1926 building with the addition of 9.75 metres to the south. The entry, from the northwest, opens into a large portal framed space. The original small offices are located just inside the two roller shutter doors. The internal office structure, centred about the entries, appears to still retain its original galvanized steel roofing. The floor is reinforced concrete and most of the walls are painted brick, some of which appears to be the original perimeter walls. To the central northeastern side the space ramps down to an additional large double height area. The eastern section includes a two-storey brick structure with toilets and various rooms.

The main Garage level is constructed from a fully welded portal frame, refer to Plates 8 & 11. Generally this space is about 85 metres long. The engineering drawings show that the end portals have a span of approximately 31 metres and the typical portal spans 29.7 metres. The central portal spans approximately 35.5 metres.

The typical portal frame is constructed from 600x200mm I sections with the knee and the pin joint base of the column fabricated from welded plate. The central portal has slightly smaller rafters with 820x360mm columns fabricated from welded plate. The base of the central column differs from the typical column in that it has not been fabricated as a pin joint but appears to be designed as a moment joint.

The roof purlins are I sections fully welded to the rafters.

The roof is clad in corrugated fibro cement sheet and skylights extending along both sides of the

roof. There are various pipes and heating appliances attached to the frame.

This part of the building structure is well maintained and is in good condition. The integrity of the fully welded portal frame is intact.

1936, 1951 & Later

The lower level large open plan spaces are approached down a concrete ramp. This area appears to consist of a number of structures that have been built at different times with steel bolted roof trusses, refer to Plate 5. The central section is a double gable roofed area constructed from a simple bolted steel truss system supported on steel columns.

The northern area is enclosed with brick walls and metal roofing, part of which is two storeys, with the upper level used as a commercial office. The northeastern wall has continuous horizontal glazing. The southeastern area has a smaller double height space and a two-storey brick structure with toilets and various other rooms.

The boiler room structure is located to the south of the main structure.

Condition and Integrity

Background/History

This section of the citation does not cover the earliest years of Canberra and does not extend beyond 1960. The earliest years of Canberra are covered in the "Kingston Foreshore Site Cultural Mapping Study", by Freeman Collet & Partners and the later period covers works of little architectural significance.

The early part of this background draws on:

- the above report,
- "Canberra's Engineering Heritage" Chapter 3 "Urban Public Transport", by the Australian Institute of Engineering: Canberra Division, 2nd Edition 1990 and
- a report prepared by Ann Gugler titled "Public Transport in the Federal Capital Territory in the 1920s & 1930s".

Bus Service and the Early Depot

It appears that the first omnibus service in Canberra was begun in 1923 by the Commonwealth Department of Works to transport workers to and from their places of work using two Graham Dodge charabancs. There was no public omnibus transportation in Canberra prior to 1925 when Mrs H Barton started a service between Canberra and Queanbeyan. Other than taxi services, and the train from Sydney, transportation was dominated by the horse.

The Federal Capital Commission, started in 1925, was required to construct public buildings, infrastructure and housing to adequately enable the transfer of public servants to Canberra before and after the opening of the Provisional Parliament House in 1927. On the 19th of July 1926 the Federal Capital Commission started a public City omnibus service using a second hand omnibus. Four additional omnibuses were added to the service shortly after.

In 1926 there were two public bus routes in Canberra with a small three-space bus-parking depot at Corroboree Park, Ainslie, the end of one bus route.

In July 1927 the Canberra Times reported that tenders were being called to privatise the service. The successful tenderer pulled out from the tender process possibly due to them not being able to finance the purchase. At the end of 1927, Mrs Barton was informed by the FCC that she was not permitted to conduct her bus service within Canberra, presumably since it would compete with the FCC's own bus service.

In 1926 the Kingston Transport Depot was designed for the site in Wentworth Avenue, and was

opened in 1927. This area of Kingston was used for a variety of industrial and service purposes. The architectural elevations and the photograph taken in early 1929, show the original Kingston Transport Depot. The building was constructed around a vehicle turning courtyard with brick external walls to all sides except along part of the northeastern façade that faced onto the Molonglo River and away from the Avenue. A continuous brick parapet concealed the skillion roofs that sloped inward to the unroofed vehicle turning area. The parapet stepped up in the center of the northwestern and southeastern elevations. The photograph shows that the land to the northeast of the depot falls away steeply towards the railway line.

The "Garage at Kingston", plan number Ag 313, shows that it provided undercover shelter for 4 buses, 13 cars and 18 lorries. At the four corners of the depot were rooms used as storage, toilets and a mess room. At the main entry, on the northwestern side, were two centrally located offices. The fuel pumps were located in the northern half of the turning area.

The location of the depot in the industrial area provided a convenient point of departure close to two main shopping areas, Kingston and Manuka, close to the railway station and on a major road that connected Canberra to Queanbeyan.

During the opening of the Provisional Parliament House the omnibuses were used to transport the Commonwealth's guests. Between August 1926 and June 1927 some 246,000 passengers used the service and each school day 330 children were transported to and from schools.

By the end of 1928 the omnibus fleet totaled 11 vehicles. The depot also housed other vehicles including chauffeured cars for the parliamentarians and higher-level public servants (special duty cars) and some trucks.

In 1932 the omnibus fleet included 5 AEC Renown buses, 3 ADC buses, 4 Bean buses and one Graham Dodge bus.

The increase in the number of vehicles led to the design, in 1936, by the Commonwealth Department of Works Branch, of a new covered workshop lower level extension to the east of the centre of the depot. This structure was constructed with a bolted steel trussed double gabled roof supported on steel columns. Freestanding brick walls were built along the railway line to separate the workshop from the line and to enclose unroofed yards at either end. The vehicles, requiring maintenance, were driven into the workshop area at the lower level through new roller shutters located between the staggered freestanding brick walls. The new workshop housed the mechanics and provided a covered area for lubricating and general repair work. Five vehicle inspection pits were constructed in the central northeast section next to the original building, at the upper level, to allow the mechanics to work on the underside of the buses from the new lower level workshop.

Offices were constructed on the opposite side of the building and in the southern corner. As a result of these new offices the original building housed fewer vehicles requiring some of the lorries to be parked in the enclosed lower yards. The electrical workshop, lathe room, machine shop and carpenters workshop were adjacent to the northern lower level enclosed yard.

The bus system in Canberra during this period is considered to have been innovative in that it was one of the first operators in Australia of AEC Renowns, in 1926, of AEC Regal buses, in 1933, and the first city to operate a diesel bus, in 1934. There were other innovations from 1960 to 1981.

The future of Canberra would depend on road transportation. Griffin's plan for Canberra, based on wide boulevards and axial planning, was utilized by the post WWII traffic engineers who took for granted that the bus service would provide the extensive network needed for the public transport system.

1940 Additions

It appears that there was continual concern that the vehicles were stored and worked on in an environment that was not conducive to keeping the vehicles clean. Nor were all of the workers kept out of the weather. The first major alterations to the new building were planned in 1939-40 with the Garage and existing covered bays being fully roofed over and a new administration and management office section being provided off Wentworth Avenue.

The Civil Engineering Section of the Commonwealth Department of Interior Works Branch designed the fully welded steel portal frame over the circulation area in early 1940, using an exceptionally high degree of creative and technical skill. The use of a welded steel portal frame as the structure to support the roof was innovative at that time. Prior to WWII, in Australia, only two fully welded steel structures appear to have been built. These were bridges in Tasmania, not portal frames. It appears that there were no fully welded structures built by BHP in Newcastle until after the war 20.

It is also believed that a portal frame of this span, even if bolted and not welded, would have been very rare in Australia before WWII because engineers at that time did not fully understand the dynamics of a portal frame 21.

The Depot's portal frame knee fabrication and the column base pin joint detail would most probably have been shop welded and possibly transported to site using the rail system, which passed directly next to the depot. The spliced joints at the ridge, rafter to haunch and haunch to column would have been site welded.

A photograph taken by Val Emerton's father shows the structure under construction, refer to Plate 10. The fabricated haunch can be seen lying on the ground prior to installation with its splices clearly evident.

The single storey modern brick architecture of the office extension designed in 1940 was a new achievement at the time in Canberra. It expresses the three dimensional cubic massing of the Inter-War Functionalist style. The smaller second stage designed in 1945 by the Works Department of Canberra was in sympathy with the 1940 structure.

The introduction of modern (functionalist) architecture from Europe came relatively late to Australia. While it began in the 1920s in Europe it was not introduced into Australia until the mid to late 1930s. The period of 1915-1940 is a convenience of chronology, which could lead to a misunderstanding of the significance of a building designed in this style in 1940. The authors of "Identifying Australian Architecture" used the start of WWI to the start of WWII as an easily recognised period in history, not because this style of architecture began in Australia in 1915.

There is one other industrial/commercial example of the Inter-War Functionalist style in Canberra, that being the original section of the Canberra Milk Building, Griffith, designed by Ken Oliphant in about 1937, however, this building does not display as many of the style indicators that are specific to the Inter-War Functionalist style and has been unsympathetically altered, diminishing its integrity.

There are some very good domestic examples of the Inter-War Functionalist Style in Canberra including the house at 43 Melbourne Avenue, Forrest, 1935, and the Evans Crescent Housing Precinct, Griffith, 1938-40, both by Moir & Sutherland. The former Forrest Fire Station Precinct, Forrest, 1938, by E H Henderson is an example of this style but does not display as many of the major architectural elements that are specific to the Inter-War Functionalist style and many of the houses have been altered diminishing their integrity 22.

Other domestic and commercial examples of the style in Canberra no longer exist or have been altered significantly.

There are other examples of industrial/commercial architecture in Canberra of this time that still exist, such as the City of Canberra Garbage Incinerator, Yarralumla, 1938-41, by E M Nicholls and Coggins Bakery Braddon, 1926, however, these are not in the Inter-War Functionalist style. The incinerator is a strongly modeled brick structure designed by W B Griffin's partner (after Griffin had died in India) that exhibits Griffin's special brand of organic architecture. This innovative architecture has its origins in F L Wright's architecture in the USA, which differs greatly in philosophy from the European influenced Inter-War Functionalist style. The architecture of Coggins Bakery is of an earlier period prior to the knowledge, in Australia, of the existence of modern architecture.

It is fundamental to the understanding of the significance of the 1940 designed single storey brick

extension that the differences between Inter-War styles are understood. The Inter-War Functionalist style was new, it was not a revivalist style as were the Inter-War Mediterranean, the Inter-War Georgian Revival and the Inter-War Stripped Classical styles that dominated Canberra's architecture up to this period. Nor was it one that incorporated ornament, as did the Inter-War Art Deco style. It was not 'organic' architecture as was much of WB Griffin's work. The Inter-War Functionalist style was radical, it was progressive and it gave the owner of an industrial/commercial building the appearance of a dynamic commercial organization. This modern brick architecture of the Depot may have been influenced by Australian architecture of the time or published work from Europe. In Australia this may have included the Sanitarium Health Foods factory, Warburton, Victoria by E F Billson architect, 1936, and the Automobile Engineering Building, Sydney Technical College, Ultimo, by the NSW Government Architects, 1938 23.

In Europe, influences may have been the brick architecture of Mies van der Rohe and his houses at Krefeld 1928, and Berlin 1932, Lois Welzenbacher's Schulz House in Westphalia 1928, and Willem Dudok's Townhall, Hilversum, 1930 24.

This architecture used face brickwork rather than light-tone painted render, the other external wall finish of the Inter-War functionalist style.

The preliminary design by the Works Department for the Electrical Workshop, in 1948, on the adjacent site was in the same architectural style 25. It appears that at this time, and after the WWII, the Inter-War Functionalist style was the preferred style of architecture deployed by the Works Departments. Most of these works were not realized. A different design for the Electrical Workshop was later constructed using lightweight materials instead of brickwork.

The functionalist or modern movement, with its rejection of ornament and past styles, is considered to be the 20th century's most significant architecture. The attached single storey brick structure was designed and constructed at the start of the modern movement in Canberra. Along with the house at 43 Melbourne Avenue, Forrest, and the Evans Crescent Housing Precinct, Griffith, this modest structure represented the beginning of modern architecture in Canberra, the architecture that has dominated Canberra's built form since.

Technical Value of the Fully Welded Portal Frame Structure

In the early days of steel framed industrial buildings, the economic solution was a column-and-truss configuration. However, since truss fabrication is inherently labour intensive, rising labour costs have now made this system less economical.

Today the rigid portal frame is often the most economical structural solution in spans between 15 metres and 45 metres. Although the portal frame may require a greater mass of steel than the equivalent column-and-truss structure, the savings in the cost of fabrication and erection due to the relative simplicity of the work nearly always make it the optimum system. Almost all portal frame structures built in Australia are custom designed and manufactured.

A rigid portal frame is generally designed to span the full width of the structure requiring no additional internal supports. For spans over 20 metres haunching of the rafters near the columns is usually required. Each rigid frame consists of a rafter in two segments and two columns with the maximum depth of the section occurring at each haunch, refer to Plates 8 & 11.

In a typical portal frame designed in recent times the major connection at the knee joint is designed with haunches fabricated from cut universal beams spliced to the columns using either,

- splice plates shop welded to the ends of the haunch and connected to the column using high strength bolts, rather than site welding, or
- shop welded haunch joints and bolted rafter splices beyond the haunch zone..

Site welding is generally avoided since it is more economical to bolt connections on site rather than to weld. With large steel framed buildings, however, the cost of welding may be spread over many connections and may be considered as an economical solution.

The base connection is generally designed as a pin joint and is usually connected using only commercial bolts.

Computers are now used to carry out the complex analysis and determination of section sizes for a rigid frame structure. Stiffness analysis programs have been developed in the past 40 years to alleviate the complex calculations required for steel portal frame design. Before the advent of the computer, engineers often used formulae produced by Professor Kleinlogel to calculate moments, shears and support reactions for specific load cases.

Fillet welding of large structural steel frames was a new procedure before the 1950's in Australia. The process requires minimum edge preparation and probably would have been done using manual metal arc welding.

Later Additions

The 1960 additions are in the same style, however, the bricking up of the glazing to the rounded corner takes away some of the delight of the architecture, refer to Plates 6 & 7. The design of the new entry and associated roof does not have the design refinement of the original. The 1960 extension hiding the lower section of the chimney has reduced the intended contrast between the horizontal elements and the brick vertical feature of the chimney. Overall the integrity of the architecture has not been greatly diminished.

The various alterations and additions to the depot since this time do not appear to have great architectural significance in themselves.

The alterations and additions do, however, have significance because they explicate a long sequence of history in one location reflected in their fabric representing an identifiable sequence of development. The building development runs parallel with the development of public transport in Canberra from its very beginning in 1926, continuing as the only workshop for Government buses, trucks and cars for most of its existence, until the closure of the depot in March 1994.

Social and Community Value

The Retired ACT Transport Employees Association Incorporated is an association of people who worked at the depot including conductors and drivers, and the earliest apprentices who started work there in the 1930s. The association holds monthly meetings in one of the depot's original storerooms located in the western corner. This office area is now the home of the depot's WWII Honour Roll, with some 50 names of workers who enlisted, some being killed in action, which had pride of place in the entry lobby of the 1940 single storey addition along Wentworth Avenue.

The Association has collected various items relating to the depot and the history of transport in Canberra with the intention that this is the beginning of the accumulation of heritage items to be displayed in a future transport museum inside the existing Depot 27.

Presently the Transport Depot's large structures house the "Old Bus Depot Markets" where each Sunday thousands of people browse purchasing food, furniture, crafts, artworks, clothes, etc., refer to Plates 5 & 9. A short story titled "Ghosts of Kingston and the Old Bus Depot" written by Val Emerton, whose father was one of the original workers at the depot, concludes with the following passage which describes the social significance of the Depot to the local community and the families of the people who worked there.

" The smell of grease and petrol, and the sound of men talking and laughing as they worked have long since gone. All evidence of the pin-up girl calendars and jokes on the walls, side by side with technical diagrams of buses, cars and trucks, and the paraphernalia of routes and shifts, times of parliamentary sittings, and the lists of materials and equipment to be ordered, has worn off, or been painted over.

There are men still around who, for many years, helped keep the wheels moving. As former bus, car and truck drivers, mechanics, fitters and office workers, walk in through those big roller doors facing onto the Power House, memories are revived of the strident noise of motors, footsteps on the concrete floors and the banter and laughter of the men.

Sad memories too of accidents, hardship, and the uncertainty of the war years.

Now on Sundays the Old Bus Depot echoes to the happy sound of families wandering amongst a variety of stalls, and the old hangars smell of fresh cut flowers, hand crafted woodwork and all sorts of culinary delights, but for some, the ghosts still walk the concrete floors.”

Analysis against the Criteria specified in Schedule 2 of the Land (Planning and Environment) Act 1991

(i) a place which demonstrates a high degree of technical and/or creative achievement, by showing qualities of innovation or departure or representing a new achievement of its time

The design of the fully welded steel portal frame of the Garage in 1940 represented a new structural system in Australia at the time. It would appear that this is one of the earliest notable Australian examples, if not the first, of a fully welded portal frame of any great size. The design and construction of this structure demonstrates a high degree of technical achievement by the government structural engineers representing a new achievement of its time.

The design of the single storey brick office in 1940 in the Inter-War Functionalist Style (1915-1940) represented a new architectural style in Australia at the time. The earliest notable industrial/commercial Australian examples built in the style date from the late 1930's, including the Sanitarium Health Food Factory, Warburton Victoria, 1937, by E Billson and the Automotive Engineering Building, Sydney Technical College, Ultimo, NSW, 1938, by E Rembert.

There is one other industrial/commercial example of the Inter-War Functionalist style in Canberra, that being the section of the Canberra Milk Building, Griffith, designed by Ken Oliphant in about 1937, however, this building does not display as many of the style indicators that are specific to the Inter-War Functionalist style, it has been unsympathetically altered and is rendered and not face brick.

There are some very good domestic examples of the Inter-War Functionalist style in Canberra including the house at 43 Melbourne Avenue, Forrest, 1935, and the Evans Crescent Precinct, Griffith, 1938-40, both by Moir & Sutherland.

The external architecture of the 1940 addition is a very good example of the new style. It is the best industrial/commercial example of this style in Canberra.

(ii) a place which exhibits outstanding design or aesthetic qualities valued by the community or a cultural group

The design of the fully welded steel portal frame for the Garage exhibits outstanding design qualities. It is an exceptional example of innovative design valued by the architectural and engineering community.

The single storey brick office exhibits nearly all of the particular architectural elements specific to the Inter-War Functionalist Style (1915-1940) including asymmetrical massing, simple geometric shape, roof concealed by parapet and metal-framed windows. It is the best industrial/commercial example of this style of architecture in Canberra and is valued by the architectural community.

The following design features are of additional significance, the rounded corner, the plain surface of the face brickwork, the brick chimney (clock tower) and associated vertical stylized low-relief brickwork, the horizontal rendered band at window head height and the original doors.

(iii) a place which demonstrates a distinctive way of life, taste, tradition, religion, land use, custom, process, design or function which is no longer practised, is in danger or being lost, or is of exceptional interest

(iv) a place which is highly valued by the community or a cultural group for reasons of strong or special religious, spiritual, cultural, educational or social associations

The community values the building for social reasons.

The Retired ACT Transport Employees Association Incorporated, the people who worked in the depot, and their families place a high value on the building for its strong work and social associations: they have retained the WWII honour roll and various heritage items related to the history of the transport depot for exhibition in a future transport museum. The association uses

part of the building for their monthly meetings. The building is prominent in the community for its social association as the Old Bus Depot Market where thousands of people gather each Sunday.

(v) a place which is the only known or only comparatively intact example of its type

(vi) a place which is a notable example of a class of natural or cultural places or landscapes and which demonstrates the principal characteristics of that class

(vii) a place which has strong or special associations with person, group, event, development or cultural phase which played a significant part in local or national history

The transport depot forms a complex of structures and is important for its long and special association with the development of the public transport system in Canberra. It has a symbolic association with the past and the present, and reflects the decisions made throughout this time to provide Canberra's residents with a public transport system based around the bus. Canberra depended upon this public transport system to provide for the increasing number of Government staff and the increasing general population.

The depot also housed cars that were used exclusively for the Commonwealth to transport Prime ministers and other politicians and high-level public servants. Some of these drivers have their own significant oral history.

(xi) a place which demonstrates a likelihood of providing information which will contribute significantly to a wider understanding of natural or cultural history, by virtue of its use as a research site, teaching site, type locality or benchmark site

Through its structural design and architectural style this building is a valuable educational resource for designers.

What remains of the original entry façade is an example of a simple but pleasant brick industrial structure, one of Canberra's earliest, that draws on elements from the Inter-War Georgian Revival Style (1915-40).

The innovative design of the fully welded steel portal frame is an exceptional example of early structural steel design in Australia.

The external architecture of the single storey brick extension facing onto Wentworth Avenue is a Canberra's best example of the Inter-War Functionalist Style, 1915-1940. The architecture can be contrasted with the organic modern architecture of the City of Canberra Garbage Incinerator, by E M Nicholls, 1938-41.

The industrial site played an important role in the development of the public transport system in Canberra. The identifiable sequence of development at the depot mirrors the expansion of both the settlement of the City and the growth of the public transport system that served it.

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- 1 National Library of Australia (NLA) Canberra Buildings, Sir John Butters Collection and Kingston Foreshore Site Cultural Mapping Study. Freeman Collett & Partners, 1996.
- 2 National Archives of Australia (NAA) Mildenhall Collection, A 3560; Frame 5128. NAA A2506 Ag 313 (stored with Series A9663) Plan "GARAGE AT KINGSTON" drawing number Ag 313, date 13.12.1926, drawn by Architects Department. National Trust (ACT) (NT) Tutty Collection, Folder 10 "KINGSTON DEPOT"
- Elevations and Sections "GARAGE AT EASTLAKE" drawing number Ag 314, date 6.12.26, drawn by Architects Department.
- 3 Richard Apperly Robert Irving Peter Reynolds. Identifying Australian Architecture

Styles and Terms from 1788 to the Present. Angus & Robertson 1989.

- 4 NT Tutty Collection "EXTENSION TO WORKSHOP" dated 1936, drawn by Works Branch.
 - Ground Floor Plan drawing number 6529.
 - Sections & Elevations drawing number 6530.
 - Sections & Elevations drawing number 6531.
 - Site Plan & Under-pinning drawing number 6440.

- 5 Conversation with Mr Eddie Carnall who started work at the depot in 1938.

- 6 NT Tutty Collection "TRANSPORT DEPOT – KINGSTON ACT. ADDITIONS & ALTERATIONS & STEEL FRAMED ROOF TO EXISTING GARAGE" drawn by Director General of Works.
 - Plan Sheet 1 drawing number 11548, dated January 1940.
 - Elevation Sheet 2 drawing number 11602, dated January 1940, Also NAA Series A9663.
 - Sections Sheet 3 drawing number 11640.
 - Details Sheet 4 drawing number 11603, dated February 1940.
 - Details & Steel Window Section Sheet 5 drawing number 11604, dated February 1940.
 - Details Entry Sheet 6
 - Wentworth Avenue Part Elevations & details Sheet 7 drawing number 11606, dated February 1940, Also NAA Series A9663.

NT Tutty Collection "TRANSPORT DEPOT KINGSTON CANBERRA ACT. PROPOSED GARAGE ROOF" drawn by Civil Engineering Section Works Branch, dated 29.3.1940.

 - Roof Plan drawing number C1614.
 - Elevation & Details drawing number C1615.
 - Elevation & Details drawing number C1616.
 - Elevation & Details drawing number C1617.
 - Footings drawing number C1618.

- 7 NLA Series No. 1-55-16-451 "CANBERRA REGION RUNS"
 - Box A Aerial Photograph dated 19.3.40. This shows the Workshop with a roof, the turning & parking area unroofed & the single storey brick addition not yet constructed.
 - Box K Aerial Photograph dated 14.3.42. This shows the turning & parking area fully roofed & the single storey brick addition completed.
 - It was most probably constructed before war was declared against Japan since it would have been unlikely that steel would have been made available for this structure during the war.

- 8 NT Tutty Collection "TRANSPORT DEPOT KINGSTON CANBERRA ACT. PROPOSED GARAGE ROOF" drawn by Civil Engineering Section Works Branch, dated 29.3.1940 opcit.

- 9 NLA Series No. 1-55-16-451 "CANBERRA REGION RUNS" opcit.

- 10 Richard Apperly Robert Irving Peter Reynolds opcit

- 11 NT Tutty Collection "TRANSPORT DEPOT KINGSTON ALTERATIONS & ADDITIONS", drawn by Works Department Canberra, 27.7.45.
 - Drawing number 16114.
 - Drawing number 16115.

- 12 NT Tutty Collection "TRANSPORT DEPOT KINGSTON ADDITIONS LAVATORIES & LUNCH ROOM OVER EXISTING RECREATION ROOM" drawn by Department of Works Canberra, dated 17.9.45.

- 13 NT Tutty Collection.

- 14 NT Tutty Collection "PETROL BOWSERS" drawn by Department of Works & Housing ACT, 13.10.47 with additional drawings dated 1949.

- 15 NGA Series No. 1-55-16-451 "CANBERRA REGION RUNS"
Box I Aerial Run, dated February 1960.
 - 16 NAA Series A9663 Item No. 20844 "EXTENSION TO WORKSHOP AT BUS DEPOT,
KINGSTON", dated 10.12.1951.
 - 17 GHD. "TRANSPORT DEPOT KINGSTON ACT ALTERATIONS & ADDITIONS" drawn by
Moir and Slater Architects for the NCDC, dated 16.3.60.
 - 18 GHD. Drawings, dated 1973, copies held by Brown & Root Services, contractor.
 - 19 Richard Apperly Robert Irving Peter Reynolds opcit
 - 20 Conversation with Bill Jordan, consulting heritage engineer.
 - 21 Conversation with Harry Trueman, founding partner of Hughes Trueman and a structural
engineer.
 - 22 RAlA Register of Significant Twentieth Century Architecture.
 - 23 Richard Apperly Robert Irving Peter Reynolds opcit
 - 24 Alison & peter Smithson. The Heroic Period of Modern Architecture. Thames & Hudson
Ltd, London 1981.
 - 25 NT Tutty Collection.
 - 26 Conversation with Mr Eddie Carnall
 - 27 Conversations with Mr Eddie Carnall, Mr Stan Brill & Mr Jules De Smet
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Other Information Sources