

# TROLLEY WIRE

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RETURN OF A BOON

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# TROLLEY WIRE

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1952 **30** 1982  
THIRTIETH YEAR OF PUBLICATION



## A LESSON IN PRESERVATION

### RETURN OF A BOON

On Saturday 21 November 1981 the fleet of Australasia's operating preserved tramcars was increased by one when The Tramway Historical Society's Ferrymead Tramway returned Christchurch 'Boon' car No. 152 to regular service after the most ambitious restoration project yet carried out in Australasia.

The restoration of this tramcar is of great significance historically as this group of 28 cars, designed by Mr. Scott Symington, the Engineer of the Christchurch Tramway Board, were the fore-runners of the Dropcenter Tramcar design used so extensively by Australian and New Zealand tramway systems. A total of over 1600 cars followed this design principle and in 1980 over 500 were still available for service in Melbourne.

The cars were built by the famous Christchurch coach building firm Boon & Co. and the first car entered service in April 1906. The cars were built in 5 groups as follows:-

1905 - 6	36 - 41	first in service April 1906.
1907	42 - 47	
1909	6 - 9	first in service 4th November 1909.
1910	150 - 155	first in service 9th June, 1910.
1910	156 - 161	first in service October 1910.
Total 28 cars.		

These cars were 40ft 7in in length, weighing approximately 15 tons; they rode on Peckham

14D-5 Maximum Traction bogies. Power to the two 48 HP GE 67 motors was controlled by GE K6 controllers in the early series cars and by GE K10 controllers in the later cars.

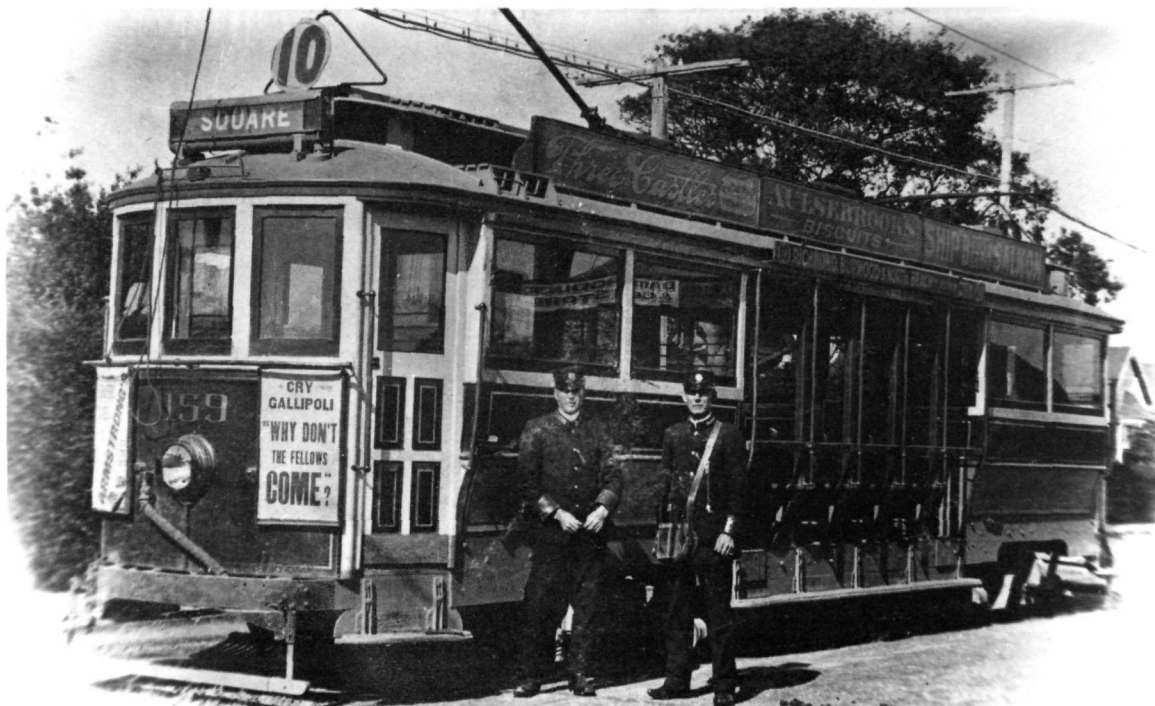
The bodies were of timber construction and used a mixture of Oregon pine, Jarrah, Yellow pine, Cedar, Mottled Kauri, Redgum and Blackwood, with ceilings of Birdseye Maple. The first six car bodies cost £680 (\$1360) each.

#### Layout and Seating

As built the centre section was open and fitted with four full width seats with roll over backs. A full length drop barrier rail was fitted to each side of the centre section to prevent passengers alighting on the wrong side of the car.

The saloon section was fitted with two large fixed windows on each side and sliding doors to the end platform and centre section. The seating layout in the saloons varied. Cars 6 - 9, 36 - 47 had longitudinal seats for 12 passengers. Cars 150 - 161 had back to back cross seats for 16 passengers. This gave seating capacities of 44 and 52 for the different layouts.

The Tramway Carriage Regulations of 1911 prohibited the use of footboards by conductors. To comply with this regulation a centre aisle was provided by removing the 4 original roll over seats and replacing them with 8 'garden seats' with tip



*Boon 159 in original condition - THS Archives*

over backs, thus reducing the seating capacity by 4 in both types.

Between 1929 and 1932 the centre section was enclosed and fitted with an external sliding door on each side between the centre pillars; the seats were taken off the pillars and rearranged to give a wider entrance and the footboard shortened to a step at the centre door. During the 1940s pram hooks were added to the aprons and sun shields over the end windscreens.

### Colour Schemes

Initially the cars had light grey underframes, white lower rocker panels, window and door pillars, mid green aprons and upper rocker panels. The roof was orange/brown. The rocker panels and aprons were lined out with silver as was the lettering 'Christchurch Tramways' on the lower panels. Each of the upper panels carried a coat of arms. The interiors were varnished to a high standard of finish.

When the centre sections were enclosed much of the lettering and lining was omitted and the aprons painted white. In the late 1940's they were painted all over green with a yellow stripe. The beautiful varnished interior woodwork was painted light brown.

### Destination Signs and Other Fittings

The early series cars 6 - 9 and 36 - 47 were fitted with large linen roll type destination boxes on the

aprons above the headlights; these used colour symbols in conjunction with the lettering until 1909. The 150 - 161 group were built with a smaller single line linen roll box mounted on the roof of the drivers platform, with a removeable route No. disc placed above it. The early series cars were altered to this style in 1909 - 10. Cars also carried narrow destination boards mounted on the centre section gutter rail for a period prior to 1919. Photos also show destination boards hung from the saloon rocker panels post 1910 - pre 1919.

In 1919 the destination boxes were moved to the left side above the drivers door and a large route number box fitted in the destination box's former location.

Photo's show early series cars fitted with large "people catcher" type lifeguards but it appears that these were replaced by conventional trip type life shields at an early date.

The cars were fitted with link and pin couplers and air hoses on each end for the haulage of trailers.

### Service and Withdrawal

The "Boon" cars were used on all of the Christchurch System with the exception of the Cashmere Hills line which required specially designed cars. They were the mainstays of the fleet for many years and although replaced on some



routes by the newer "Brill" cars, served the people of Christchurch until the closure of the system, operating the last evening revenue services on 10 September, 1954.

Number 152 came into service between June and October 1910 and served the City of Christchurch until it was sold on 17 June, 1952 to Mr. Woledge of South Brighton for use as a storage shed and workshop. It was the first Boon car scrapped.

### Restoration

After donation to the Tramway Historical Society in 1969, a start was made on the 3 August to move the car to Ferrymead, a task made difficult by the fact that a house now stood in the way. The car was traversed sideways into the adjoining allotment and raised by jacks until it could be loaded onto a semi trailer and with much difficulty removed to its new home. Now followed a period of 9 years while other more pressing jobs required by the Tramway Historical Society were carried out (building a tramway and restoring two other tramcars and a trolley bus among them).

During this time electrical, mechanical and body components for the restoration of the car were sought and collected. As the bogies (Peckham 14D-5) were unobtainable anywhere in the world the Tramway Historical Society in 1977 made the decision to fabricate two complete bogies from scratch.

Luckily, assembly drawings of the bogie type were still in existence and many hours were spent drafting up full size drawings of components for pattern making. A Tramway Historical Society member visiting England was able to photograph identical bogies in service at the Crich Tramway Museum and these photos greatly helped in interpreting some of the finer details of the original drawings.

Over 25 patterns were made for moulding the 70 items necessary for the fabrication of the bogies; others had to be made for some of the body fittings. They ranged from 3 in x 1 in for the smallest parts to over 8ft long for the sideframes. The castings were made at the foundry of Alloy Steel Ltd. and began to arrive at Ferrymead early in 1981. All the



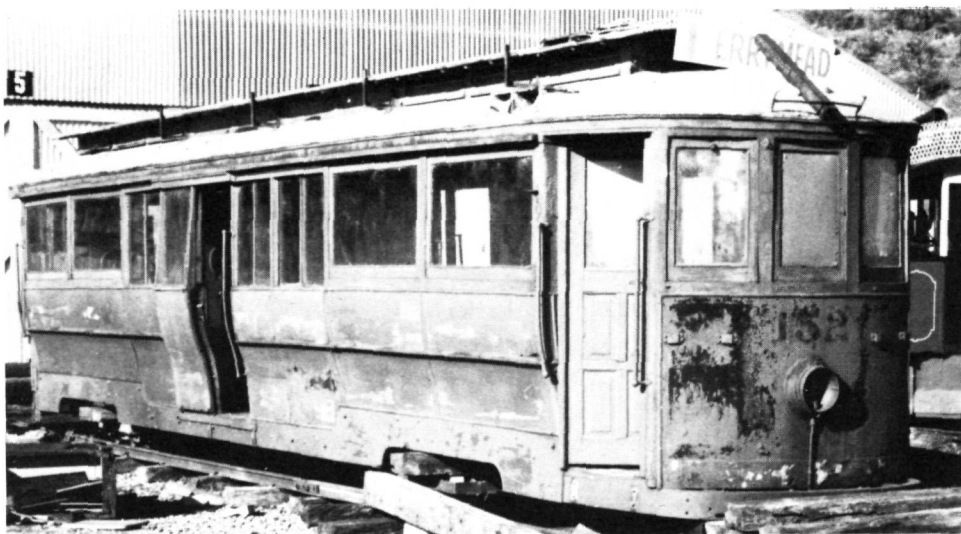
*Boon 157 near the end of its operating life, with drop centre enclosed. - G.C.Stewart*



*The body of 152 is readied for moving from its home of 17 years. - D.D.Hinman*



*The body of 152 is loaded, the Ferrymead destination sign in place and all is ready to go, but suburban yards are not designed to move trams around in and it was to be well into the night before 152 was on its way. - D.D.Hinman*



*Boon 152 awaits its turn in the workshops at Ferrymead. - D.D.Hinman*

machining and welding of these components was carried out in the Tramway Historical Society's workshop. The bending and shaping of the cross braces, struts and brake levers were carried out by the Ferrymead blacksmith.

The 2 x 40HP MV101AZ Motors, drivewheel sets and axleboxes are from a Melbourne No. 9 bogie. The pony wheel set came from Adelaide by courtesy of the AETM at St. Kilda. The wheel sets had to be turned and this, with the making of 28 coil and two leaf springs, was the only work done commercially.

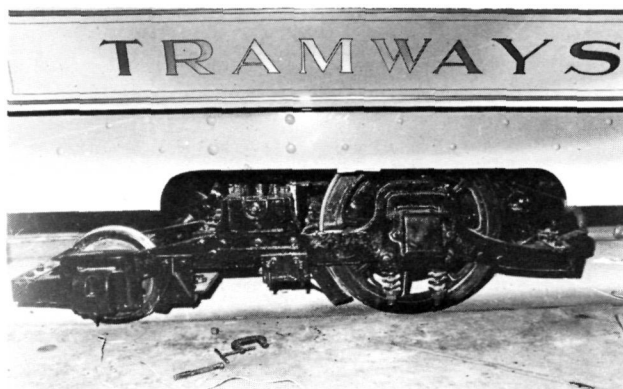
During the latter half of 1978 restoration of the body commenced. It had suffered badly from its years in the weather and much of the timber was rotten and required complete stripping for restoration.

It was decided to restore 152 as close to its original condition as possible. The original livery with lettering, coats of arms and intricate lining-out has been faithfully copied. Destination boxes have been placed on the front canopy. The central section is open as it was originally, with the long footboard replaced. With an eye to safety, a centre aisle has been provided, giving the car a seating capacity of 48.

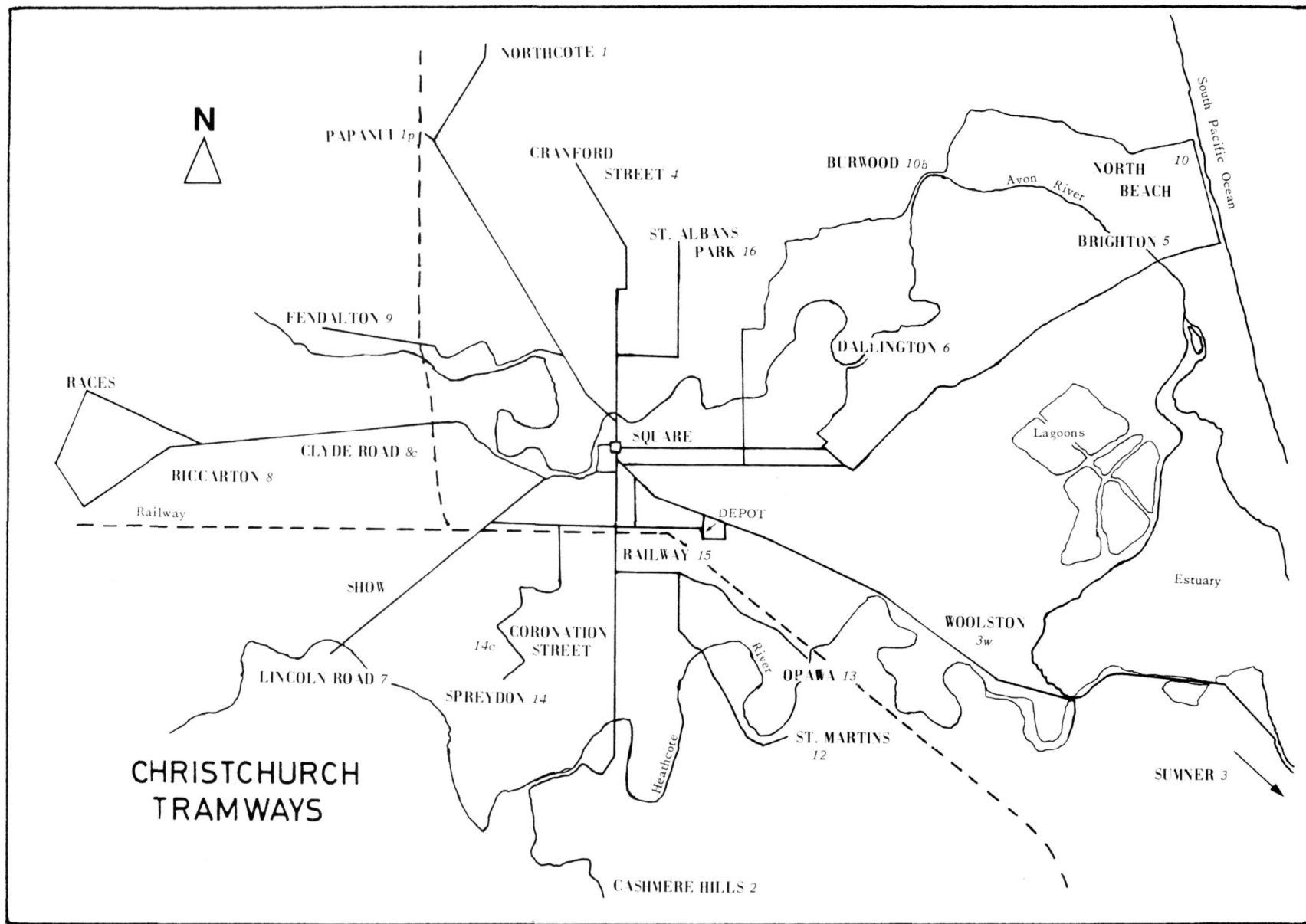
Work on the car has been undertaken, under the supervision of Murray Sanders, largely by members of the Government's Temporary Employment Programme, with help from voluntary members of the Tramway Historical Society. Memories fade, and so an album of photographs, both interior and exterior was prepared to assist the restorers. Trips were made to other vehicles of this class, now

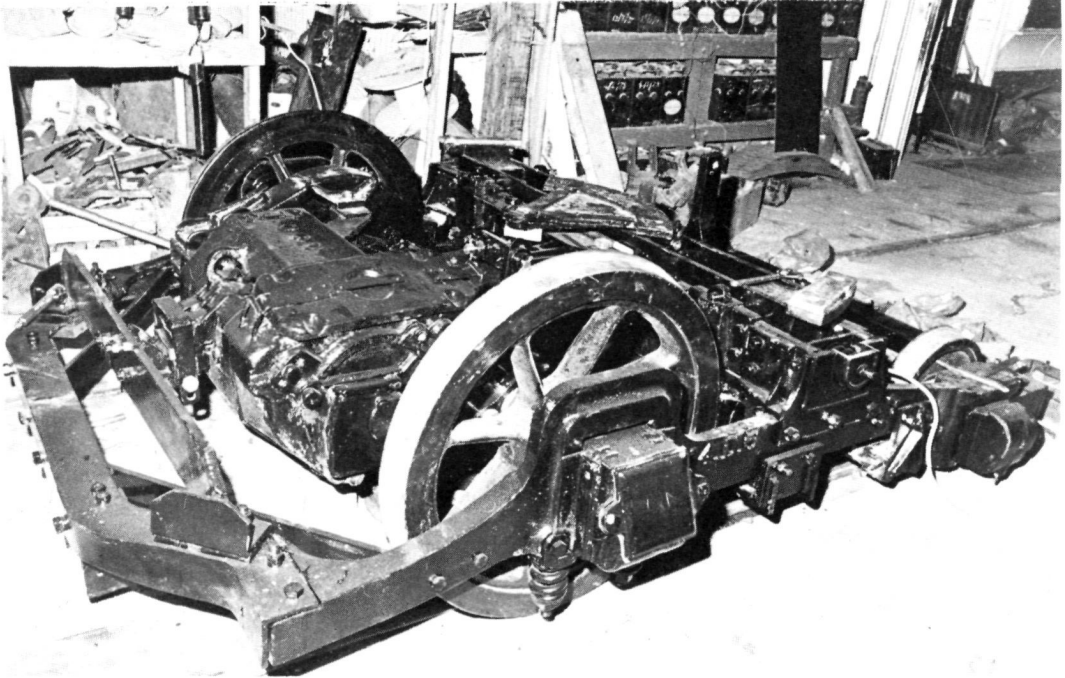
widely scattered around the countryside, and permission obtained to remove many parts vital to the restoration work. Two trams were completely demolished in this quest. No. 152 is, therefore, something of a hybrid, with pieces of 150, 151 and 153 incorporated.

Work commenced on the "B" end platform and saloon and repairs were completed before the "A" end structure was touched. The original timber types, Kauri, Oak and Mahogany, were re-used where visible. In enclosed places exterior ply and tanalized white pine has replaced original timbers. All framework and panels have been treated against rot and borer. By late 1980, dismantling had been completed, and some 400 individual items had been



*New Peckham 14D-5 maximum traction bogie in place under one end of 152. - THS Archives*





*One of the two Peckham 14D-5 maximum traction bogies manufactured by the THS for 152. - THS Archives*



*Dunedin 22 with Boon 152 at the crossing loop near the depot terminus at Ferrymead.  
- P.Hallen*

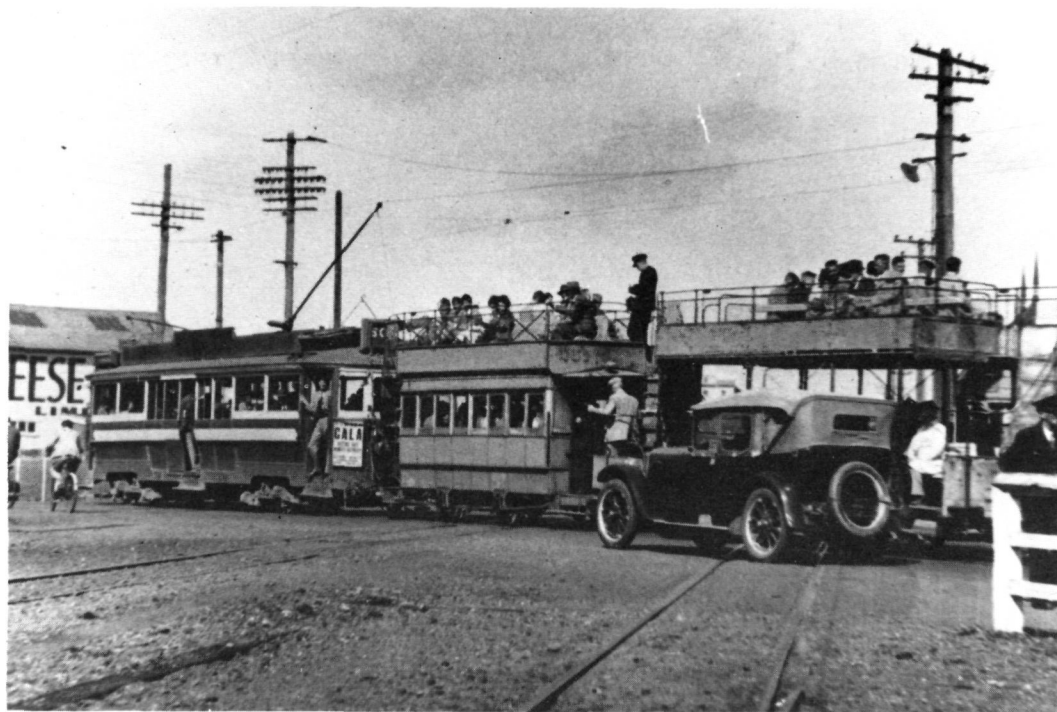
removed awaiting restoration. All rotten body frames and rusted panels had been repaired or replaced.

A massive array of equipment, switches, fuses, circuit breakers, resistances, rheostats, trolley poles, and controllers (GE K10, ex Melbourne), was refurbished and waiting to be fitted. Three Employment Programme workers had the seemingly endless task of sanding, planing and repairing a mountain of worn wooden fittings (doors, seats, etc.). Several coats of paint were removed from the interior and the original signs found underneath were restored. The interior was then varnished. Patterns were made for the casting of light fittings, canopy bells, coupling bases and hand brakes.

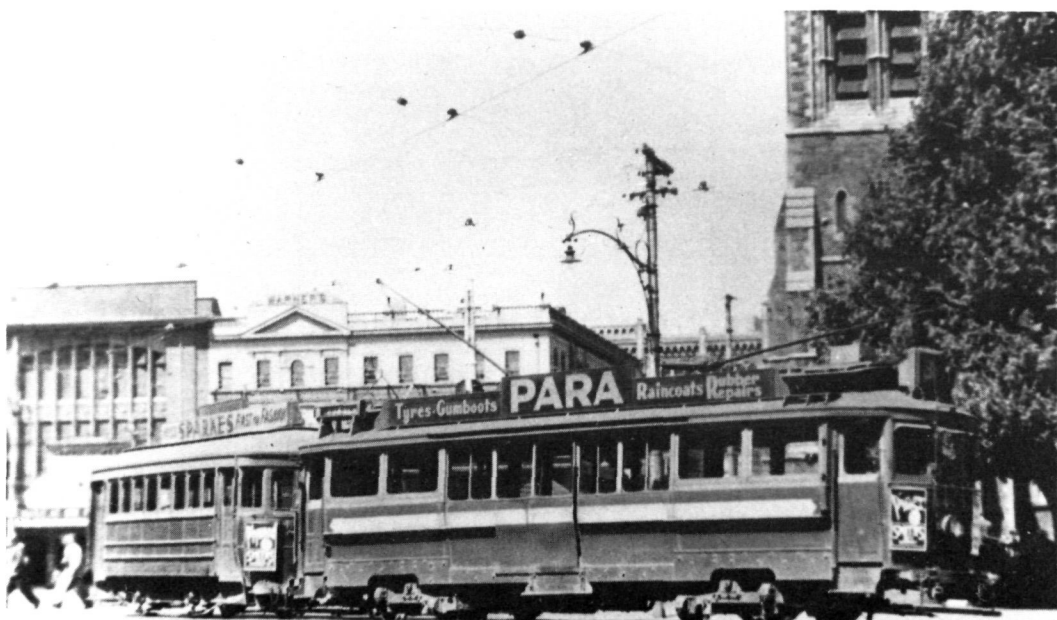
The Tramway Historical Society is extremely proud of the achievement of its workers, which must rank high in tramway restoration throughout the world. The restoration has been costly and time consuming. \$17,000 has been spent on materials, and 23,000 man hours have gone into the work. The finished product as seen by this writer is of the highest quality and detail and Murray Saunders and his crew should be congratulated on this tremendous achievement of tramway preservation.

This article was prepared by Mal McAulay from material supplied by Tramway Historical Society members Les Dew, Dave Hinman, Bruce Maffey, Murray Saunders and John Shanks.





*An unidentified Boon and two trailers cross the railway at Lincoln Road on a short working on line 7 to the 'trois'.  
- G.C.Stewart*



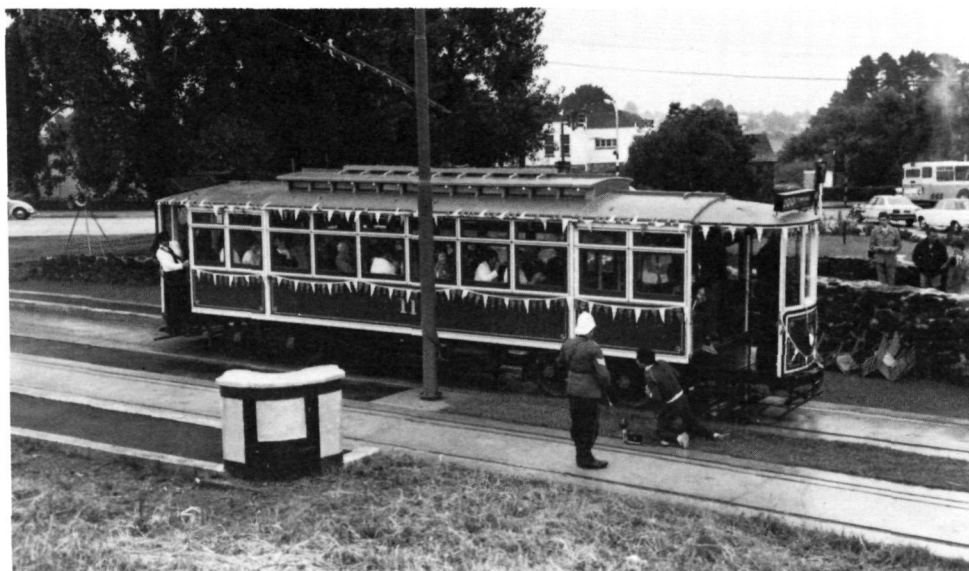
*A Boon car and trailer leave the Square for Sumner circa 1950.  
- G.C.Stewart*

# AUCKLAND

## TO THE ZOO BY ELECTRIC TRACTION

*December 1923, March 1953, December 1981*

*By James Duncan*



On 5 December 1981 Stage 2 of the Western Springs Tramway between Motions Road and the Auckland Zoo was officially opened. From 19 December 1980, until 4 December 1981 the trams had been operating between MOTAT's main gate and the passing loop at Motions Road, known as Stage 1 of the extension.

December 5 dawned bright, with a few clouds in the sky, and all of Auckland crossed its fingers hoping that the weather would hold for the official opening. For in the past any Tramway opening in Auckland has been christened by rain. Unfortunately tradition was not going to be broken and by 10am the sky had darkened, and yes, the rain was falling in buckets, once again "The angels were weeping with joy".

The tramcars in the procession were lined up outside the Tramway Workshop, in the Museum grounds in the following order. At the head was Auckland's first Electric tramcar, No. 11 built 1902, restored to 1912 period; second was one of the latest Auckland Streamliners of 1938 No. 248, restored to original condition, and was the last tram to turn a wheel through

the streets of Auckland; next was Wellington Fiducia No. 257 of 1951, and also restored to original condition. To end the official line-up was 1891 Wanganui ex Sydney Baldwin steam motor No. 100.

An additional tram which brought up the end of the line up was 1940 Auckland streamliner No. 253, affectionately known to thousands of Aucklanders as the "Queen Mary". For the last year she has been in moth balls under the lower shelter awaiting complete restoration, but although not in the happiest of condition she had every right to be in the procession up to the Zoo Gates. Firstly, the Queen Mary was half the reason for MOTATs' inception and secondly, she had been in service on the Museum line since 1967, rain, hail, or shine, with or without No. 257 as a back-up car. During 257s' restoration in 1976-78, the Queen braved her way through live weekends, and other busy weekends, plus weekday service without one cough or sneeze. Bear in mind that she was taken off the streets in 1956 when the Tramway System closed, and was placed in storage until 1967, when the internal line at

*ABOVE: Auckland 11 passes through the Motions Road loop on the opening journey to the Zoo. - M.McAulay*



*Auckland streamliner 248 was the second car in the opening procession. - J.Duncan*

MOTAT opened. With the advent of No. 11, and later No. 257s return, the load was lifted slightly until sister tram No. 248 was outshopped in December 1980. This meant that another big car was available to take the workload, and thus 253 was placed in moth balls to await her rather extensive restoration. As one member put it so aptly, she may not look the best, but she's waited nearly 14 years to go to the Zoo, so just try and stop her!!!

So with all the cars decked with flags they lined up prior to the opening. The guests had gathered in the workshop forecourt where a display of photographs and uniforms etc. had been erected. It was planned that the guests would travel by tram to Motions Road where the opening speeches would be held. But, because of the angels lack of emotional control, plan B was put into action. The speeches were held in the Aviation Pavilion and while they were in progress the trams were moved to the loading zone at the main gate.

MOTAT's Director, Mr Jameson, welcomed the guests and introduced the first speaker. Speeches were given by the Chairman of the Trustees of MOTAT, Group Captain Watt; Chairman of the Auckland City Council Parks Committee, Mr Bill Clark; His Worship the Mayor, Mr. Colin Kay; and the General

Manager of The Western Springs Tramway, Mr Ian Stewart. Briefly the speakers paid tribute to the Volunteer members of the W.S.T. and the excellent job made by the workers who had constructed the line. Also tribute was paid to the Auckland City Council for its continued support, and the firms who have assisted with sponsorship and supply of materials. Mr Bill Clark congratulated MOTAT's members and staff on the progress the Museum was making. He also cautioned those who drive the trams to be aware of the safety of those who use the Western Springs Park so that pedestrian and tram would never come into conflict. The Mayor welcomed the development of the tramway which he said was another jewel for the Mayoral Crown. He also drew the comparison between the 63 million passengers carried by the A.C.C. trams in 1926 to the 50 million carried by the A.R.A. buses in 1981.

From the Pavilion the guests moved back to the trams, dodging the many puddles, even Mr. Kay was seen doing a hop, skip, & jump over one large mass of water. The official party boarded No. 11 while the other guests boarded either 248 or 257. One or two members children had perched on the front of 100 while the rest of the Tramway Section took their seats in the Queen Mary. The N.Z.

Herald photographer did his dash and the all clear bell was given by No. 11's conductor Mr Jack Brewerton. With the track being very greasy, it took a bit of 'on off... on off...' to get 11 moving and with a little help from the sand hoppers the car was soon under way. The Mayor Mr Kay, drove 11 down to the Motions Road corner, with Ian Stewart along side him. No. 248 followed with Ian Mison at the controls. Bryan White piloted 257, tending 100's boiler was Messers Messenger, Shore & Cutriss, and finally in all her glory the Queen Mary brought up the rear with Mark Kilpatrick at the controls.

At the passing loop, a blue ribbon had been placed across the track which Mr Kay piloted 11 through. After rounding the bend on to the straight in Motions Road he brought the car to a smooth stop. Where upon the official party transferred from 11 to a dray, which was then pulled up to the Zoo gates by Mashwe the 18 year old Indian Elephant. I should point out that poor Mashwe had been patiently waiting at the corner since 10.30 am when the cars should have arrived. She stood through the downpours quietly waiting, the dray covered with tarpaulins to keep the hay 'upholstery' dry. When the official party moved

off in the dray, the trams then followed Mashwe along Motion Road to the terminus by the Zoo gates. Here the guests disembarked and walked up into Western Springs Park where a Marquee had been erected, and within that, a splendid luncheon was served. Meanwhile the trams travelled back to MOTAT where No.'s 11, 248, & 257 immediately commenced service, 100 went inside for a stoke up, and the Queen returned to her palace under the lower shelter, and went back into moth balls.

It is interesting to note that since 1923 Aucklanders have been able to use electric traction to travel to and from the Zoo. First with the trams, then 30 years later in 1953, the trolleybus provided the service. The last Westmere trolleybus ran in 1975, and by the end of 1976 the other alternative, the Pt. Chevelier trolleybuses, had been superseded by diesel buses. Now after a five year absence, Aucklanders can once again travel to the Zoo gates by Electric Traction, although this time it's back to the railed variety. Also the Zoo's main gates are in Motions Road instead of Old Mill Road where the original Zoo terminus was, back in 1923.

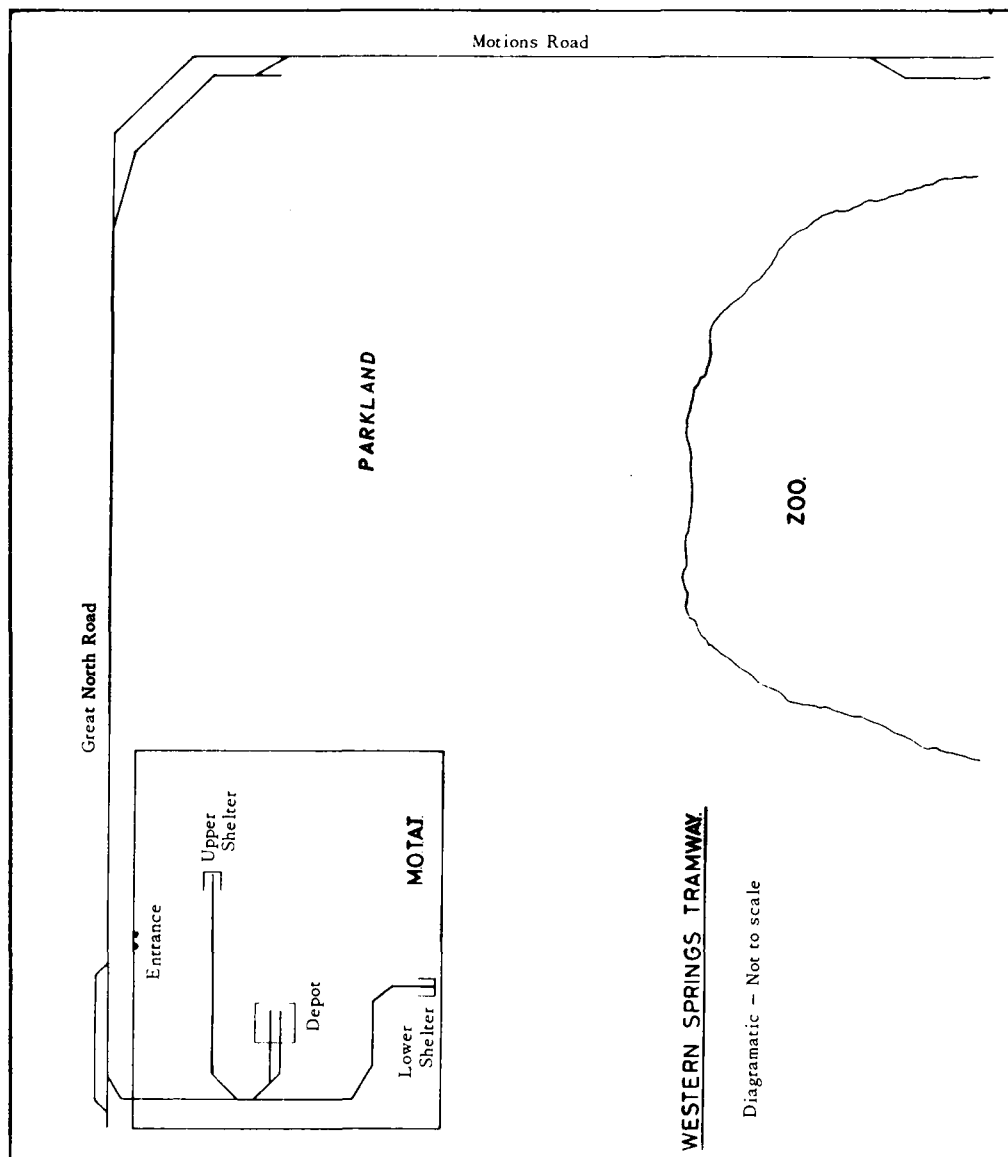
The thanks of MOTAT, and especially of the Tramway Division, go to those museums



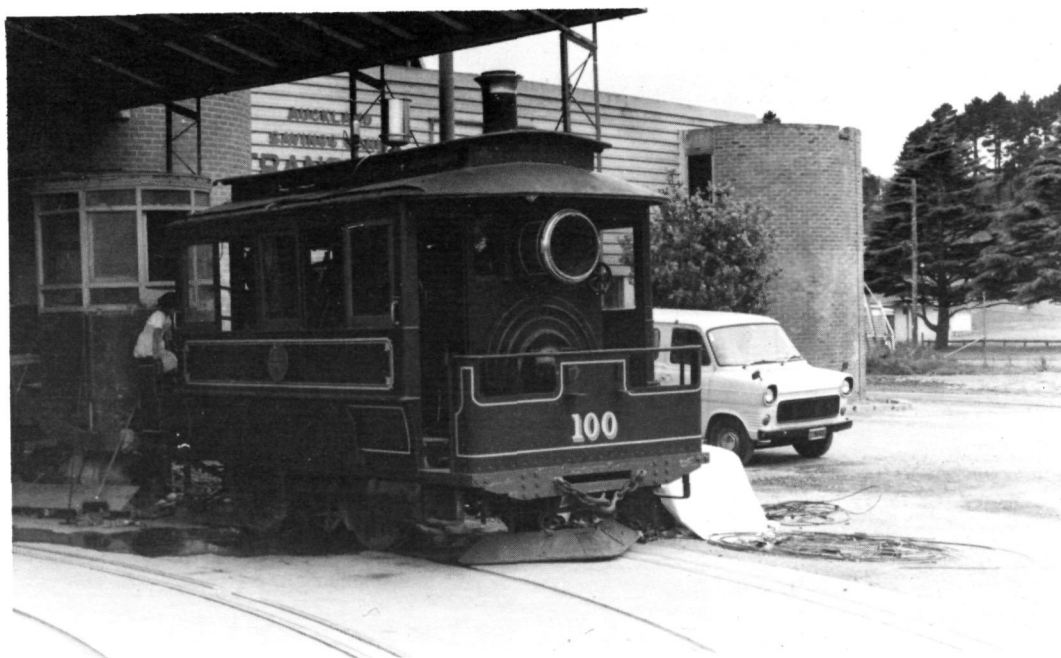
*Wellington Fiducia car 257, running on the four feet gauge track, returns from the Zoo, followed by Auckland 248 and 11.*

*- J.Duncan*

and other people, who sent congratulatory telegrams, those museums who were able to send representatives, (even from Australia), and all of you who prayed for fine weather, once again thanks to you all. The line from MOTAT to the Zoo gates now Measures 3,642 feet of mixed 4ft and 4ft 8½in gauge track and is single with passing loops at the Zoo, the halfway point at Motions Road and at the MOTAT gates.







*Baldwin steam motor, ex Sydney and Wanganui 100, outside the tram depot. - P.Hallen*



*Auckland streamliner 253, bedecked with bunting, on the depot fan. - P.Hallen*

# DUNEDIN

## THE FINAL DECLINE OF THE TROLLEY BUS

It is now certain that the Dunedin trolley bus system will close permanently during March. Opened in 1950 it expanded to 14 routes with 79 buses. The remaining four routes are through worked as two services, Opoho to Shiel Hill and Normanby to St. Clair Beach.

These routes have been closed before, Opoho to Shiel Hill in 1973 and a second time in 1978 and Normanby to St. Clair Beach, in what was to be the final closure, on Friday 6 July 1979. This date was the centenary of public transport in Dunedin and celebrations were held over the following week which included running trolleybuses on Saturday 7 and Sunday 8 July over all four routes mentioned! The Opoho to Shiel Hill service has also since been suspended for a period while the wires re-routed due to freeway construction. Wires for some of the other routes remain in part but are isolated. The re-openings were caused by world fuel problems which presumably are far enough removed now to be forgotten, although the high cost which remains should be a reminder.

The closure of Normanby – St. Clair in 1979 only lasted for five weeks, with service being resumed on Monday 13 August; Opoho – Shiel Hill re-opened, again, on Monday 10 September 1979.



ABOVE: Trolleybus 8 at Shiel Hill Terminus.

BELOW: Trolleybus 6 at Normanby terminus.



photos:  
Peter Hallen



ABOVE: Trolleybus 8 at Opoho terminus

BELOW: Trolleybus 76 at St. Clair Beach terminus.



# CITY SECTION

## TRANSPORT NEWS FROM MELBOURNE

The State Government introduced free travel on Sundays on Melbourne's trains, trams and buses (MMTB and Private) from 6 December 1981 for a two month summer trial; this was subsequently extended by a week to 7 February. Patronage steadily increased and at the end of January it was stated to have doubled at least for MMTB services and quadrupled for the trains; it is believed that both modes now carry about 120,000 or so passengers per Sunday.

As off-shoots to the free Sunday travel, the Batman Avenue tourist tram (V214) was also free, while it was decided to operate chocolate and cream L 106 from the Elizabeth Street terminus to the Zoo (in Royal Park on the West Coburg route). 106 alternated with the regular timetable and the service became so popular that L 104 joined the service (both running from Essendon depot). Subsequently, one of the Ministry of Arts decorated trams was added, thus giving a five minute headway to the Zoo. Also, an extra tram has been added to the St. Kilda Beach (Acland Street) line while the

North Balwyn route now operates separately from the East Burwood from about 9am to 6pm on Sundays. It is a shuttle from Hawthorn Bridge at other times.

As a flow on from CHOGM, the several hand held radio transceivers purchased to help traffic operations during this event, have been placed in regular use with inspectors at key locations throughout the metropolitan area on a daily basis.

The new fare system is reported to be proceeding quite well, with *Travel Card* being heavily purchased. A new weekly card was to be introduced in January.

A variety of matters were raised in Parliament throughout the several weeks leading up to the Christmas recess. More petitions were lodged protesting against the proposed closure of the Upfield line, the free Sunday travel matter caused several Questions to be asked and a Bill passed increasing the borrowing powers of the MMTB from \$100 million to \$130 million to permit the programme of purchasing



*Elizabeth Street City terminus, Sunday 3 January 1982 about 10.50 am with Z3 160 ready to leave for North Coburg where it will connect with the M&MTB Sunday bus to Upfield, and L 104, painted Chocolate and Cream, on the 'Free Sunday Travel' shuttle service to the Zoo.*  
- K.S.Kings

new trams and the works programme to continue.

The Premier also answered some questions on the Government's involvement with the Bourke Street mall project. Initiated by some large retailers and the former City Council and continued by the City Administrators, it plans to rebuild, to greater or lesser extent, the block between Elizabeth and Swanston Streets (initially; later eastward extensions at least to Russell Street are being considered) and totally or partly eliminate trams from this block. Mr. Thompson stated that the estimated cost of \$5 million would be borne equally by the State Government, City Council and retailers. The area will be levelled and paved to appear like a square. Drains will have to be put underground and will absorb much of the cost. He also said that the cost of the "scissors tracks to be located at each end of the mall in order to allow a shunting process to operate outside peak hours will be some hundreds of thousands of dollars and that the cost will be borne by the Government in conjunction with the Tramways Board." — Hansard, 10 November 1981. He also intimated that these two financial agreements would bring to an end the long wrangle about the mall and that he was not going to be diverted from completing the job by the Tramways Union which had stated that it would continue to drive trams through the mall at all hours of the day.

On Sunday 6 December the double track right angle crossing at the corner of Church and Swan Streets Richmond was renewed and set in concrete. The corresponding special work at the corner of Swanston and Flinders Streets City was similarly treated on Sunday 20 December.

Track renewal commenced in Elizabeth Street City early in February. The outbound track northwards from Bourke Street received new rails which were set in concrete. Night work is involved and had progressed north of Lonsdale Street within a few days.

Tall doors were fitted to the front of the northern shed at Nawthorn depot during August and September 1981.

## NEW SUBURBAN TRAINS

Some initial notes on the introduction of the new air conditioned stainless steel suburban trains appeared in *TW* for October 1981 and further delivery details in December 1981. Some background information and additional details are presented herewith.

Rollingstock replacement for Melbourne's

suburban railway network has been of top priority for VicRail in the last decade or so. The old Tait cars have operated well over their life expectancy, parts have not readily been obtainable for many years and maintenance has become excessive. Their wooden construction makes them undesirable for use in the underground loop.

Replacement of the remaining wooden stock commenced in 1973 when new stainless steel clad trains emerged from the works of Martin and King at Somerton. These cars were radically different from the wooden cars and from their immediate predecessors, the harris trains. Many new features were introduced, heating being the most innovative. A new type of vandal resistant seat pad was used but met with criticism from the travelling public and some politicians who claimed that they were extremely uncomfortable on long journeys.

The last car of the second series from Martin and King, 238M, was placed in service in August 1980; there were now 50 six car sets with four motor cars and one six car set with three motor cars. Thus more than half the existing Tait car fleet had been replaced.

The new cars now being delivered by Com Eng are not compatible with the Martin and King cars and when the last of the Tait's are withdrawn there will be three distinct fleets in Melbourne suburban service.

Com Eng commenced construction of the new cars in 1979 but several industrial disputes at the Dandenong plant held up the building programme and the first three cars were not completed until February 1981. The unfitted body of trailer 1T was mounted on standard gauge bogies and sent to Clyde N.S.W. where Com Eng carried out structural tests in September 1980.

On Friday 16 January 1981 E class electric loco 1110 hauled the first of the new motor cars to Jolimont for turning to enable the first three car set to be assembled. The three car set was delivered to Jolimont where they were numbered 301M 1T 302M and final testing took place. The first appearance on the new train under its own power was on Monday 16 February 1981 when trials took place on the Belgrave line. The train later returned to Com Eng.

The cars are 22.9 metres (75ft 1½in) long and are distinctively highlighted with an orange line around the outside edges of the front end with a VicRail logo and stripes on the sides. The maximum width over the curved sides is 3.05 metres (10ft 2in) and this is the cause of the present restriction on operation over



some lines. Each car has three pairs of doors per side and the trailers are symmetrical about the transverse centre line. Most of the seating is in a two and three across layout. The seat bases are of moulded fibreglass with a heavy duty covering. There is also a fold up double seat near each doorway. Heavy duty pile carpet extends across the floor and partly up the side walls. The carpet is on a felt underlay which in turn is on a heavy plywood floor. It remains to be seen if carpet is a practical proposition for suburban service.

A new feature is the provision of remote control destination indicators. Each destination on the plastic roll, which is at the bottom of the offside front window, has a code number. The code for the required destination is selected by the driver on a control panel in the cab. These new rolls are currently being fitted to the existing stainless steel stock and will probably

be incorporated in the Harris trains under a refurbishment programme.

On the motor cars, the single arm pantograph is now mounted at the non driving end. This change from the traditional Victorian position over the drivers end is to allow a more even distribution along the overhead when two motor cars are marshalled together as they will be in six car trains. Electrical equipment is supplied by GEC. Traction motors are rated at 124 Kw each, giving a total of 496 Kw or 664 HP per motor car. Scharfenberg couplers are used on the outer ends of each three car set. These provide mechanical, electrical and air connections. This type of coupler is also used on the Brisbane electric trains and is basically a more sophisticated version of the Tomlinson coupler used on Sydney P class and Adelaide H class trams.



*Interior of new air conditioned suburban car. - VicRail*



*New generation air conditioned suburban electric train in Flinders Street yard on 1 October 1981. From right to left the cars are 301M 1T 302M 303M 2T 304M. - B.A.Tilley*



*The driver's cab in new electric suburban motor car. - VicRail*

# THE SYDNEY SCENE

## *Transport News from the Sydney Region*

### POWER HOUSE MUSEUM

The first stage of the Power House Museum at Ultimo was opened by the Premier, Neville Wran, on Friday 4 September 1981. During the opening ceremony two passenger trains stood in the adjacent Darling Harbour yard. Steam loco 1243 of 1881 headed the vintage train and this contrasted with the newly delivered XPT. The vintage train remained for the weekend. The museum was open to the public from Saturday 5 September.

Intended as the new home of the Museum of Applied Arts and Sciences, the new complex, when completed, will centre around the old Ultimo Power House, the first major power station in Sydney which was opened for the

George Street electrification in 1899. The first stage of the project is housed in the remains of the Ultimo Tram Depot, also opened in 1899 and extended in 1911. Although out of use as a running shed for almost 30 years this building remained basically intact until rebuilt for the museum. Only the original side walls remain.

About two thirds of the depot building is used for storage and restoration with the display, which is drawn from the MAAS Special Collection, in the front one third and entered from Mary Ann Street. The front wall is glass and the display area is carpeted and air conditioned. The display is centred between an 1837 Maudslay beam engine and locomotive 1 and second class car 9 of 1855, standing at



*The oldest operating double deck bus in Australia, AEC Regent 0661 of 1937, M/o 1286, poses with its crew, in appropriate uniform, in Eddy Avenue whilst operating on the Power House Museum service.*



*The restored cable grip car at the Powerhouse Museum. -Bob Merchant*

a replica station of the period, which houses a theatrette. Other major items are a cable grip car, Beriolet monoplane (suspended from the roof), 2 motor cars, 2 horse drawn vehicles, 6 bikes, a motorbike, Marshall 4NHP portable engine, VJ sailing boat and a Ming Dynasty bronze bell.

The existing museum displays will continue in the old building in Harris Street until further stages of the new complex are open.

Special outdoor displays were arranged for the Saturday and Sunday and a free bus service provided by HCVA and SPER vehicles with two Atlanteans on standby, ran a circular route from the north side of Eddy Avenue at Sydney Terminal Station via Elizabeth and Park Streets to Town Hall Station then via Druid, Day, Harbour and Pier Streets to Harris Street, returning direct by way of Railway Square. This working was slightly disrupted on the Sunday by having to operate (unnecessarily) from the south side of Eddy Avenue.

Buses used on special service.

100	1930s Bedford/Perkins normal control*
1275	1937 Leyland Tiger TS7 half cab
1286	1937 AEC Regent 0661 double deck
1615	1939 Albion Venturer CX19W double deck
1792	1947 AEC Regent 3 double deck
2023	1948 Albion Venturer double deck
2087	1948 Leyland OPD2/1 double deck
2547	1952 AEC Regal 3 single deck
2599	1952 Leyland OPS2/1 single deck
2619	1952 AEC Regent 3 double deck
2669	1953 Daimler CVG6 single deck
2878	1954 AEC Regal 3 single deck
1137	1971 Leyland Atlantean double deck
1184	1972 Leyland Atlantean double deck

## TRANSPORT & POLITICS

The delivery of the first units of the new XPT trains on Thursday 27 August 1981 set in motion a demonstration of how closely transport and politics are interwoven in Australia. With a State election to be held on 19 September 1981 only a few days were taken for proving trials before the part train went on a barnstorming tour of the eastern and central western areas of the state from the Victorian border at Albury to almost the Queensland border. The train was certainly campaigning for the Labor Government although politicians only rarely appeared with it. It set an Australian speed record of 113.7 mph (183 kmh) whilst returning from Albury on 6 September. So successful was the tour that the minor opposition Country Party spent more time attacking the train than the Labor Party. The Labor Party won the election with an increased majority.

(The XPT — Express Passenger Train — is an adaption of the British HST; it is described as a high performance rather than high speed train. It is powered by two high power light weight streamlined diesel power cars and has five air conditioned passenger cars. It rides on air suspension bogies and has Westcode controlled EP disk brakes. It represents as major a step forward as did the Silver City Comet in 1937. The tour train only comprised one power car, two passenger cars and an adapted Southern Aurora van.)



*A new comer to the operating fleet of preserved buses in Sydney is M/o 100, a 'nominal' Bedford with Perkins diesel engine, formerly operated by Jamiesons Bus Service of South Hurstville. It is seen in Elizabeth Street Sydney whilst operating on the Power House Museum service.*



## CELEBRATIONS IN SYDNEY

To celebrate the 75th anniversary of Australia's premier railway station, Sydney Terminal, and to mark the completion of the first stage of a renovation and modernisation programme, a display of locomotives, rollingstock, photos and small artifacts was held at the station over the weekend of 28 and 29 November 1981.

The SRA held a ball on the main concourse on Saturday night and early into Sunday morning. Tickets were eagerly sought after and many guests were in Victorian and Edwardian costume (including railway uniforms). The concourse has been resurfaced with terazzo which provided a good dancing surface. During the evening two locos were in steam at the buffer stops and the XPT, which was present all the weekend, was externally illuminated.

Steam locos 3214 and 3642 operated special trains on circular trips via Lidcombe and Bankstown.

As part of the weekend's activities the 50th anniversary of the opening of the railway to East Hills was celebrated on Sunday 29 November 1981. The double track electrified line from Tempe to Kingsgrove opened on 21 Sept-

ember 1931 with the steam and railmotor worked single track thence to East Hills on 21 December 1931. Electrification was extended to East Hills on 17 December 1939 and the double track to Herne Bay (now Riverwood) on 30 November 1948.

On the Sunday afternoon 3642 was taken off the circular tour and operated a special train to East Hills. The Railway Institute Band played on the platform at East Hills and a commemorative plaque was unveiled by the Minister for Transport. Refreshments were partaken in a marquee and the train returned to Sydney.

This unusual event for a suburban branch line was initiated by the two local State MPs and was supported by Hurstville Historical Society and, of course, the SRA.

In pre-electric days the base service to East Hills was provided by a shuttle service of CPH railmotors from Kingsgrove with through steam workings in the peak hours. This working would usually be with a 30 class tank loco although 32 class were also used. Special workings occasionally brought 36 class to the line. There were no turning facilities for the tender locomotives.



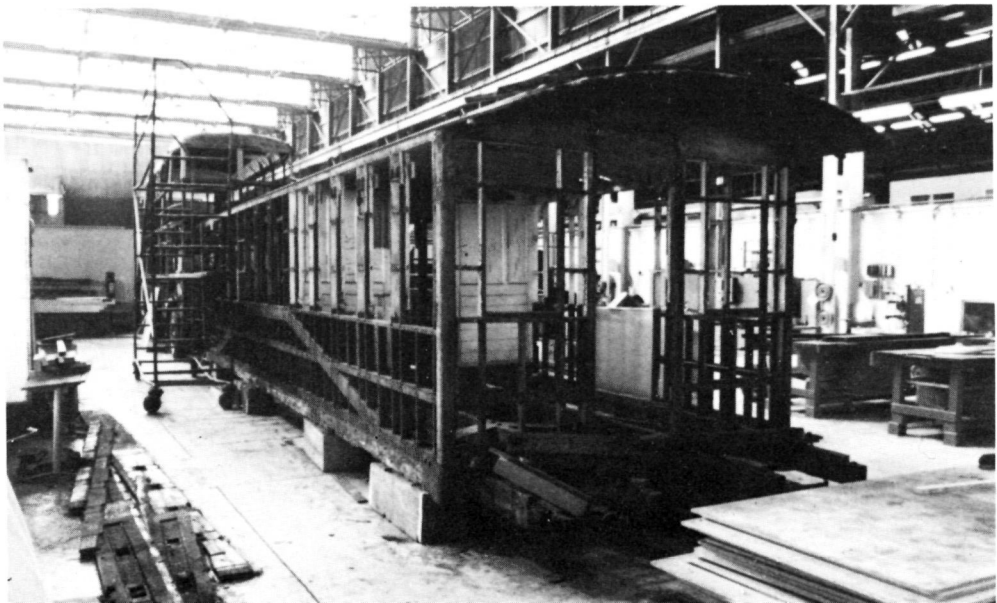
*The shovel nose of the XPT contrasts with the austere flat front of a Goninan built suburban double decker. The XPT was campaigning for the Labor Government for the forthcoming State election. The Labor party failed to retain the local seat of Willoughby.*



*Steam loco 3642 runs around its train at East Hills on the occasion of the 50th Anniversary celebrations of the opening of the line.*

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*The body of KA 778 stripped for rebuilding at the SRA Apprentice Training College, Chullora, in September 1981. Trolleybus 19 is behind.*  
- Frank Millier



# ★ Museum Notes and News

## BYLANDS . . .



Tramway Museum Society of Victoria



*Kilmore Shire President Cr. Knight driving the first spike on Saturday morning 14 November 1981 to officially start track laying for the Hudson Park horse tramway. Looking on are a group of TMSV and Kilmore Apex Club volunteers, while museum caretaker George Wilcox holds the gold painted spike.*

-K.S.Kings

### Kilmore Horse Tramway

Work on the Hudson Park horse tramway project started in early November 1981 with the construction to date being completed on or near the dates agreed on by the Shire of Kilmore and the society.

Plans drawn up by the shire of both the track layout and the proposed two car depot, were placed on display at the society annual general meeting on 6 November. The area was graded and ballasted by the shire the following week and sleepers, rail and other materials

organised by the society were delivered to the site.

The track runs approximately north-south for 150m on the east side of Hudson Park a reasonable distance back from Kilmore Creek. The track curves in line with the bank and rises slightly up to the north end on to abandoned tennis courts where the authentically designed shed has been built. This building has a verandah on the west side and both cars fit in side by side. Work was carried out by the shire.

The bulk of the trackwork was laid over the weekend of 14-15 November with consider-

able help from the Apex Club of Kilmore and TMSV members.

On the Saturday morning the Shire President Councillor Knight, placed the first dogspike in position at the north end of the line and by Sunday night the mainline was gauged and spiked between the points and the south end. The whole project, including the shed, is visible from the northern highway and a paddock on the other side of the creek has been made available for Charlie Horse thanks to one of the *Kilmore Free Press* articles on the project.

The official opening of the Hudson Park Tramway by the Hon. G. Weidman M.P., Minister for Tourism, will take place on Sunday 7 March 1982 at 1pm after the Minister has had a tour of Bylands.

### Bylands

Preparatory work for the new tram depot at Bylands has reached a stage where a loan from the Kilmore Shire Council will be made to finance the project. Immediately this is finalised work should commence on erection of the building by a contractor. The work seems set for the first half of 1982.

The society was approached about ex-MMTB AEC halfcab bus 537 as the owner was going to sell the vehicle. It has been decided to purchase this vehicle as it has had a considerable amount of work carried out to both the interior and exterior and is in reasonable original condition and it is in sound working order with registration. As the society is only to preserve one of this type of bus, 564 will be sold.

### Prahran Festival

This weekend proved fairly successful for the society with approximately 1900 passengers being carried (mostly on Sunday). Once again both cars drew considerable interest from the large crowd present.

The sales department, with several new items, did exceptionally well.

The new bus, 537, was also on display for the first time since its purchase.

The festival was held over the weekend of 28 and 29 November 1981 with Chapel Street being closed to traffic and shops remaining open on both days.

### North Melbourne 75th Anniversary Tour

This event, to commemorate the 75th anniversary of the opening of the North Melbourne Electric Tramway and Lighting Company's routes to Essendon and Maribyrnong River, was quite a success. There was a good attendance and the two cars used, Y1 613 and X2 676, both carried a comfortable load.

The tour started from South Melbourne depot and travelled to West Maribyrnong, Airport West and the Elizabeth Street terminus. The society thanks the MMTB for the use of these unique cars for this special historical tour.

### Boxing Day Tour

The 1981 *Golden Sunset Tour* was held on Saturday 26 December using AEC halfcab bus 537. First stop was the Diamond Valler Railway at Lower Eltham, thence Hudson Park at Kilmore to inspect the new horse tramway and on to Bylands for the traditional BBQ.

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*Building the Hudson Park horse tramway. The TMSV's electric welder is in use on the turnout to the two track car shed. 14 November 1982. - K.S.Kings*



# FERNY GROVE ...



## Brisbane Tramway Museum Society

The 20th of January 1982 saw another major acquisition by the Society when the Vice Mayor of Brisbane, Alderman Harvey, handed over to the society the now retired Transport Department Scammell recovery vehicle. After a short ceremony at the City Hall the vehicle made what will probably be its final journey on public roads to the museum. (See later for further details.)

The Australia Day weekend saw a visit to the museum by the new Transport Department manager, Dr. K. Davidson, who expressed his future support for the museum after a comprehensive tour of inspection.

In preparation for the recovery of the body of baby centre aisle car 94, a crane was used to transfer all the spare bogies stored between the workshop and stores building on to a storage track. This track is an extension of the no: 1 workshop road and runs beside the stores building on the depot side.

The programme of continuing improvements to the caretakers house has moved a step forward with the installation of fly screens.

The fire safety programme has also moved a step forward with the acquisition of a number of fire extinguishers which have been installed in the workshops and depot buildings. All trams are also being so equipped.

The Christmas period saw a considerable increase in patronage due to considerable media publicity with a desirable increase in revenue.

Finally, it is requested that all visitors from other museums who desire to visit the site at other than normal operating times contact any of the current museum council so that arrangements can be made to extend every assistance without, as has happened frequently of late, disrupting the works programme. If possible about a week of advance notice would be appreciated. Some mid week visits can be arranged.

### THE SCAMMELL

One of the few remaining links with the tramway era in Brisbane was severed on Wednesday 20 January 1982 when the Vice Mayor of Brisbane, Alderman Roy Harvey, officially handed over the Scammell recovery vehicle to the Brisbane Tramway Museum.

The Scammell was handed over during a ceremony held at the Brisbane City Hall; it then proceeded under its own power to the museum at Ferny Grove where it is presently housed in the No: 1 depot.

The vehicle was purchased on 19 February 1945, complete with tools and 12 ton jack from the Australian Army at Army Depot, 4 AVOP, Mt. Gravatt, after it was advertised for sale by the Department of Supply and Shipping. The Scammell is understood to have been in service at El Alamein. It is a 1939 model RP13 tractor, chassis no: 2606, Army no: 391947. Produced for the War Office (U.K.) as a heavy artillery tractor, it was capable of towing artillery pieces up to 15 tons in weight and carrying 8 tons of ammunition within the body.

This vehicle was bought as a breakdown truck for tramcar derailments and bus recovery work. It was first registered by the Transport Department on 11 June 1945 as Q 394-575 and deregistered on 20 January 1982. The has been granted permission to retain the original number plate.

In tramway days, the Scammell was used to recover up to five or six cars per week. During March 1947 it was used to tow a scrubber car on the new Chermide extension prior to power being connected.

### TECHNICAL DETAILS:

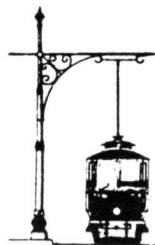
Engine	Gardiner 6LW 6 cylinder 8.4 litre diesel 102 bhp @ 1750 rpm
Transmission	6 speeds forward, 1 reverse power take off 4 wheel drive by centre worm and wheel, power transmitted by shafts to gears in pivoted side gear cases
Winch	Scammell vertical type maximum load 8 tons 430 ft of cable rope speed 108 ft per minute @ 1750 rpm

The winch is fitted in such a manner that a pull can be taken from ahead, astern or at right angles to either side.

— Peter Burden

# LOFTUS . . .

## South Pacific Electric Railway



### Members Day

Another successful members' day was held at Loftus on Saturday 12 December 1981, attended by a larger number of members, families and friends than in recent years as it is anticipated that this will be the last time that all the cars will be together for some time.

The highlight of the day for the children was the arrival of Santa Claus from South terminus (if not the north or south pole) by tram K 1296.

Members showed more interest in the coupled sets that operated. O 1111 and O 1030 ran in MU while a three car set of saloon cars, R 1740 R 11971 R 11979, made a number of runs after being lined up for photos. As these cars are not MU equipped it was necessary to drive the end cars when ascending the grade from South terminus; the leading car was able to haul the other two on the flatter northern end of the main line. R 11971 is not operable at present.

The usual bevy of double deck buses was present and were used for inspection trips to the new site.

### New Site

Work has been concentrated on laying track in the building on roads 5 to 8. Short lengths have been laid on 1 and 3 with temporary extensions outside.

The Water Board has finally started driving the water main under the Illawarra railway. The delay in starting this work was caused by the inordinate time taken for the SRA to give approval to go under the line.

### W3 Bogies

The track on and outside roads 1 and 3 of the new depot were used on Friday 12 February to unload and accommodate four W3 bogies from Melbourne. Two of these bogies are awaiting shipment to the THS in Christchurch. The body of ABV 7604 which has been serving as the site shed was lifted from its position and mounted on the other two bogies and moved inside on 1 road. The length of the two bogies is greater than the van body.





## MUSEUM DIRECTORY

### BALLARAT TOURIST TRAMWAY

Ballarat Botanic Gardens, Wendouree Parade, Ballarat, Victoria  
(Ballarat Tramway Preservation Society Limited).

Tram Rides, Static display of trams, photos;  
Sales Department etc.

Operates Saturdays, Sundays and Public Holidays (Christmas Day excepted) and most days during Victorian School holidays and the Ballarat Begonia Festival 11 am — 5 pm.

Telephone: Tram depot (053) 34 1580,  
Bungaree House (053) 34 0296

Correspondence: The Secretary, B.T.P.S.  
Box 632, P.O., Ballarat.  
Victoria. 3350.

### BRISBANE TRAMWAY MUSEUM SOCIETY McGinn Road, Ferny Grove, Queensland

Tram rides Sundays and most public holidays between 1.30 pm and 4 pm.

Correspondence: The Secretary, B.T.M.S.,  
McGinn Road, Ferny Grove,  
Queensland. 4055.

### AUSTRALIAN ELECTRIC TRANSPORT MUSEUM (SA) INC. St. Kilda, South Australia.

Trams — Trolley Buses — Electric Locomotive

Trams operate Sundays & Public Holidays 1 — 5 pm.  
(Except Christmas Day and Good Friday)  
Groups may arrange inspections on Saturdays by appointment.  
No public transport available. Interstate visitors please contact AETM if transport required.

In emergency phone (08) 297 4447.

Correspondence: The Secretary, AETM (SA) INC.,  
Box 2012 G.P.O., Adelaide,  
S.A. 5001.

### ILLAWARRA LIGHT RAILWAY MUSEUM SOCIETY Albion Park N.S.W.

Museum open on the second Sunday of each month between 11 am and 5 pm.

Correspondence: The Honorary Secretary,  
Box 1036, P.O. Wollongong  
N.S.W. 2500

### STEAM TRAM & RAILWAY PRESERVATION (CO-OP) SOCIETY LIMITED Parramatta Park Steam Tramway, Parramatta N.S.W.

Steam Trams are operated on the 3rd Sunday of every month, from 1.30 to 4.30 pm.

The Society possesses 1 steam tram motor, 2 steam locomotives and 5 various trailer cars.

The surrounding parklands are suitable for picnics, barbeques, etc. and contain historical buildings.

Public transport is available. Rail to Westmead station then walk across parklands to the depot.

Correspondence: (SAE would be Appreciated)  
The Secretary, S.T. & R.P.S.  
Box 108 P.O., Kogarah.  
N.S.W. 2217

### SYDNEY TRAMWAY MUSEUM Princes Highway, Loftus N.S.W. (South Pacific Electric Railway Co-op. Society Limited).

Electric trams from N.S.W., Queensland and Victoria.

Tram rides Sundays and Public Holidays (Except Christmas Day and Good Friday) 10.30 am — 5.00 pm.

5 minutes walk south from Loftus Railway Station.

Correspondence: The Secretary, SPER,  
Box 103 G.P.O., Sydney.  
N.S.W. 2001.

### TASMANIAN TRANSPORT MUSEUM SOCIETY, Glenorchy, Tasmania.

Comprehensive transport museum under construction

Correspondence: The Secretary, T.T.M.S.,  
Box 867J, G.P.O.,  
Hobart. Tas. 7001.

### VICTORIA'S TRAMWAY MUSEUM Union Lane, Bylands, Victoria. (Tramway Museum Society of Victoria Limited.)

Horse tram rides, museum site, trams, photos and other items on display, Sunday 11.00 am to 5.00 pm.

Correspondence: The Secretary, TMSV,  
Box 4916 Mail Exchange,  
Melbourne, Victoria. 3001.



OPPOSITE: *The body of ABV 7604 mounted on a pair of W3 bogies outside 1 road at the new Loftus Depot. 12 February 1982.*

BACK COVER —

TOP: *The BCC Transport Department Scammell at the Brisbane City Hall prior to the handing over ceremony to the BTMS on 20 January 1982.*

BOTTOM: *The bush is gradually taking over the tramline at Loftus. R1 1979, R1 1971, R 1740, coupled into a three car set stand at South terminus. 12.12.81.*

