

THE RECONSTRUCTION OF THE VICTORIAN PROVINCIAL TRAMWAYS



AN ILLUSTRATED ACCOUNT OF THE VICTORIAN PROVINCIAL
TRAMWAYS PRIOR TO AND AFTER TAKE-OVER BY THE
STATE ELECTRICITY COMMISSION OF VICTORIA

PREFACE

I feel sure tramway aficionados will tender their congratulations to the principals of Haddon Tramway Workshops (Tony Smith, Andrew Cook, Terry Oakley and Bill Smith) for their keenness and eagerness in accepting the onus for publishing this book. They offer it for the betterment of tramcar/tramway preservation and tramway history in Victoria.

The location of unpublished photographs was a major breakthrough, and as you will see, they compliment the text.

This book is dedicated to the Haddon Tramway Workshops, Bendigo Trust (who operate the "Talking Trams" at Bendigo), Ballarat Tramway Preservation Society and Tramway Museum Society of Victoria. May each and every one of them progress from strength to strength.

BOB PRENTICE

CREDITS

The article published herein is not my own work; all I have done is to collate various notes into order and sequence with some slight alterations to original text to suit present day terms of grammar. Accusations of plagiarise, plagiary, plagiarism or plagiarist are rejected herewith. The author(s) is/are not known at the time of publication and to him, her or them, I offer my apologies for non-recognition of his, her or their original work. Enquiries addressed to the S.E.C. as to the author(s) have drawn a blank. I would like to thank the S.E.C. and Mr. B. Miller for providing the photos in this book; also, special thanks is offered to Mr. James Lerk, of the Bendigo Trust, for his advice on certain matters relating to trackwork in Bendigo.

Extracts from this book may be reprinted on condition that the title "The reconstruction of the Victorian Provincial Tramways" and "published by the Haddon Tramway Workshops" is clearly stated.

The 12pt. times roman text in this book was entirely hand set by compositors Oakley, Smith, Bounds and Cook during 1976.

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CREATION OF A STATE ELECTRICITY COMMISSION IN VICTORIA

The creation of the State Electricity Commission of Victoria in 1919, gave every indication of an ultimate plan for a state-wide scheme for a publicly owned electricity supply and distribution Authority and to a certain extent, resolved the final destiny of the privately owned local electricity supply undertakings.

The Orders - in - Council granted to these companies were of limited duration and the State Electricity Commission Act 3265 of 1922, authorised the Commission to acquire such undertakings; however, the provisions of the Act provided some security for these systems with tramway commitments, because the Act expressly authorised the S.E.C. to acquire the tramways where they were operated in conjunction with electric supply, although it specifically refrained from providing authority to the Commission to operate any such tramway or tramways, probably by reason of an opinion at that time that the tramways should be a locally owned and operated concern and the delegation of authority to the companies provided for municipal acquirement. This provision in the S.E.C. Act caused some disquiet in the councils of the three provincial cities in that, whilst the electricity supply would be merged into the state scheme, there was no provision for the continuance of the tramways which at that time were an integral part of the supply undertakings; there was apparently no desire on the part of the municipal councils to take the tramways themselves. To placate the councils, the Hogan Government in 1927 gave unequivocal assurances that the tramways would be continued, if desired, by the councils after the electricity supply undertakings became merged into the state scheme.

HISTORY OF PROVINCIAL TRAMWAYS PRIOR TO ACT No. 3845 OF 1929

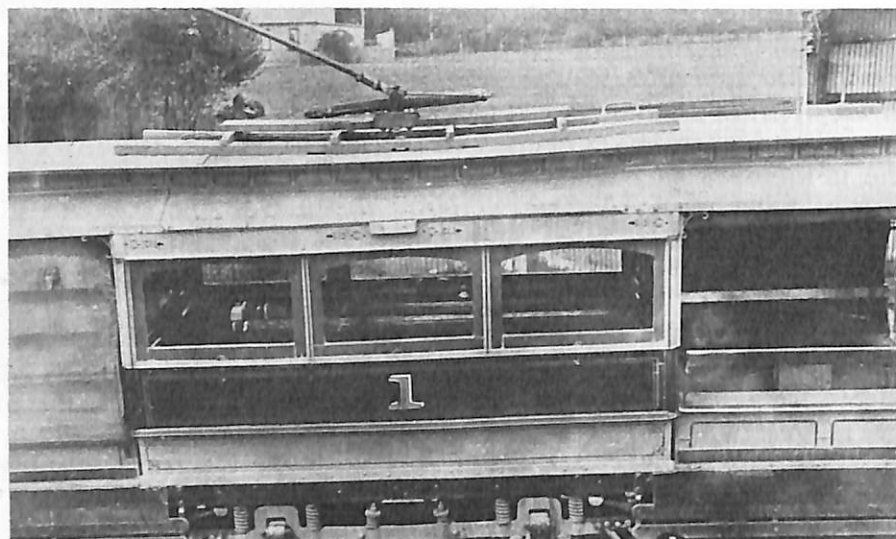
The tramways in question were operated by private companies in conjunction with electric supply undertakings at Ballarat and Bendigo by The Electric Supply Company of Victoria and at Geelong by The Melbourne Electric Supply Company.

In view of the ultimate acquirement of the three provincial undertakings by the S.E.C., the immediate future of the tram systems had to be resolved. Records show that seven alternatives received consideration; and these were as follows:

1. Tramways could be scrapped.
2. Tramways could be handed over to the municipal authorities.

3. Tramways could be run by a specially appointed provincial tramway board.
4. Tramways might be disposed of to private enterprise.
5. Tramways could be run by the Melbourne & Metropolitan Tramways Board.
6. Tramways could be run by the Victorian Railways.
7. Tramways could be run by the State Electricity Commission in conjunction with the local electricity supply.

Under private ownership, the tramways had (and especially since the development of motor transport) become an uneconomic factor in the undertakings and the Ballarat and Bendigo systems had, by reason of this fall in financial returns, been allowed to deteriorate to a scrap condition.



A Ballarat company car with a broken roof, 1935.

— S.E.C.

The Commission did not seek the responsibility of operating the tramway systems and more so from the fact that the small tramways were economically unsound and therefore, the loss would, of necessity, have to be made up by the consumers of electricity. The councils, however, desired the retention of the tramways, but refused to accept the responsibility themselves even when the systems were offered by the Commission free of charge.

The councils placed the onus for continuance of the systems upon the Government of the day, by reason of "unequivocal assurances" given by the Hogan Ministry in December, 1927;

the Commission eventually and reluctantly agreed to operate the tramways when it became clear that the extension of the state scheme would be jeopardised by the councils allowing the tramway question to dominate the matter of transmitted supply.

AGREEMENTS WITH MUNICIPAL COUNCILS

Since the Commission was not desirous of operating the tram services, but had undertaken to do so at the expressed desire of the combined councils and in order to afford protection to the electricity consumers, upon whom the loss from tramway operations would fall, the agreement provided certain safeguards to the tramway undertakings. In respect of omnibus services, this is contained in Clause 19, which reads as follows:-

19. The councils and each of them will assist the Commission in every lawful and reasonable way to restrict, prevent and/or overcome competition by omnibus or other vehicles in the carriage of passengers for gain or reward in the areas served by the commission and will enact and enforce such by-laws and regulations as may from time to time be within their power to ensure the rendering of such assistance or if the same be necessary amend or revoke by-laws or regulations already made and in particular, will not aid or encourage the establishment or continuance of any such competition or voluntarily grant facilities to the owners or undertakers of any undertaking which may be competitive as aforesaid. The councils and each of them will consult the Commission before prescribing, as a route for motor omnibus traffic, any route which or part of which may be competitive.

The city councils at Ballarat, Bendigo and Geelong were the licensing authorities of local urban omnibus services under the Motor Omnibus Act, 1928 and there had been considerable friction between the electricity companies with regard to the licensing of competitive services. The Commission was not prepared to undertake the responsibility of tramway operations under the conditions experienced by its predecessors and gave the councils to understand this quite plainly. It was by reason of this that the provisions required by the S.E.C. in the agreement, Clause 19 and later covered in the Act 3845, were incorporated. Agreements were entered into between the Commission and the councils concerned, after which the Act 3845 was passed by Parliament.

After completion of agreements, the revision of municipal by-laws with regard to urban omnibus services necessitated conferences between the various councils and the Commission. The

latter did not desire to adopt an arrogant attitude with regard to the bus services and submitted a policy that the tramways should be protected by keeping omnibus services at least $\frac{1}{4}$ mile from the tramway routes. This proposition was accepted as reasonable, although in practice it could be seen that if the bus services were allowed to operate to the business centres of the three cities, this policy could not be completely practised. The Commission also acknowledged the influence of railway reserves, creeks and other topographical features which would tend to impede access from certain districts to adjacent tram routes. Where conflict between the tramways and the only reasonably available route for an omnibus service could not be avoided, the Commission accepted restrictive provisions in the $\frac{1}{4}$ mile area of the tramways rather than veto the service.

SUPERVISION BY MUNICIPAL COUNCILS OF OMNIBUS SERVICES

In general, the Councils did not provide for any real supervision of the urban omnibus services until traffic officers were appointed immediately prior to 1950. The policing of the restrictive provisions in the omnibus licences throughout, devolved largely upon the Commission. Councils in general were not traffic minded; the officers delegated to supervise the licencing and operation of bus services were usually more specifically engaged in such duties as health or building inspectors. Complaints from the Commission to the councils were forwarded from time to time, but to the S.E.C.'s knowledge, no strong action in the form of prosecution or the withdrawal of a licence was ever contemplated by any council. The Commission's attitude was also somewhat restrained by reason that conflict between the Commission and local government authorities would be a most undesirable state of affairs. The Commission did not regard itself as the permanent authority in respect of passenger transport services, especially at Ballarat and Bendigo where a limited 15 years' operation was envisaged in the Government's financial stipulation of 1934.

TRANSPORT ACT 1951, No. 5559, PART III, SECTION 14, CLAUSE 5A

The anticipations that the Act would provide for the determination of the future of the uneconomic provincial tramways, after the reports to the Minister by Mr. H. H. Bell (Jnr.), did not materialise. The transfer of licencing authority of the provincial urban omnibus services from the municipal authorities to the

control of the Transport Regulation Board was considered, however, to be a desirable provision. This view was, by reason of the S.E.C.'s past experiences and the fact that the Board was a specialist authority with an impersonal outlook, quite distinct from the characteristics inseparable from local government bodies.

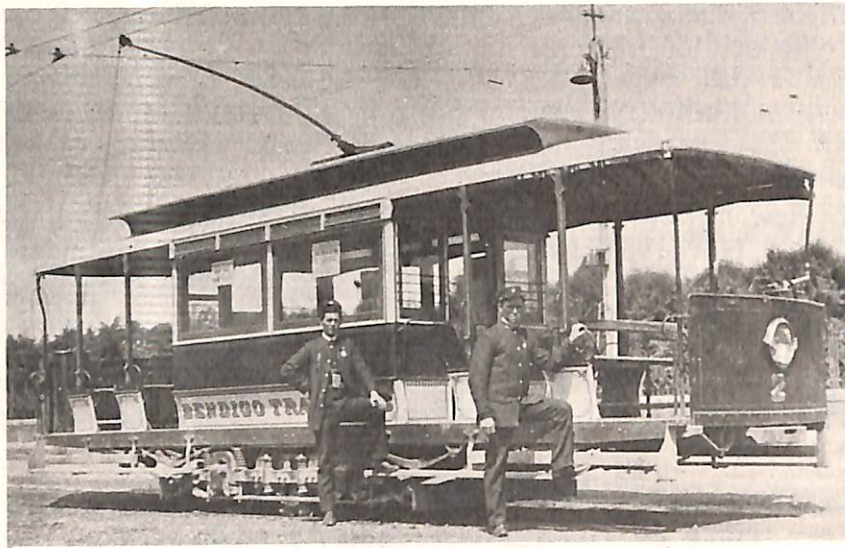
In view, however, of the provisions of the Transport Regulation Act 1933, No. 4198, Section II and by reason that the Commission, as primarily an electricity production and distribution authority, could not reasonably be placed on the same plane in respect of its unsought traffic responsibilities as the Tramways Board and the Railways Department, it was recommended that the provisions in Act No. 3845, II(B), should be continued; this was granted by Parliament.

DESCRIPTION OF THE PROVINCIAL TRAMWAYS WHEN TAKEN OVER BY THE STATE ELECTRICITY COMMISSION

The condition of the tramway systems was, to a large extent, a reflection of the relative prosperity of the private companies.

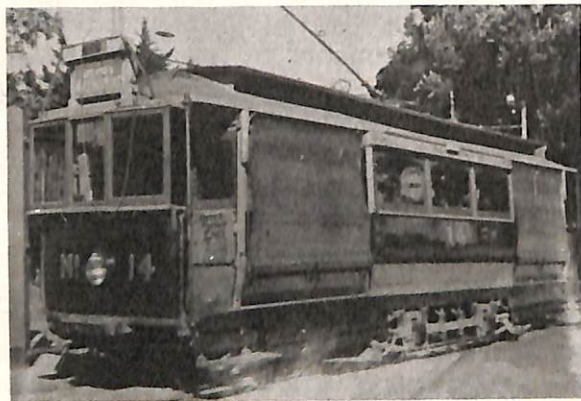
Geelong was a much more recent installation, (opened 14th. March, 1912) and operated by a prosperous company, whereas Ballarat (18th. August, 1905) and Bendigo (14th. April, 1903) were much older installations and the private company was much less prosperous. The cessation of gold mining activities was a major factor in relation to the prosperity of Ballarat and Bendigo. There was also the conditions of the franchises held by the companies and naturally, the private company nearing the end of its term and faced with the possibility of having to remove its assets, could not be expected to be lavish on its improvements or even maintenance. The position at Geelong was that the tramway assets were taken over by the Commission at a reasonable valuation as they were in fair order for the existing requirements; besides, there had also been quite recent extensions to the Belmont and North Geelong routes. As for Ballarat and Bendigo - these systems could only be described as very decrepit.

The Commission considered, that apart from such items as land, the undertakings had no value whatever and that they were really just scrap! There have been some features as between Ballarat and Bendigo which are hard to understand, for both tramways were owned by the one company; for instance, Bendigo had a depot of sound construction and in the city area, there were substantial lengths of double track, granite spawl paved and more or less, in original condition; also, it was supplied with new trams,



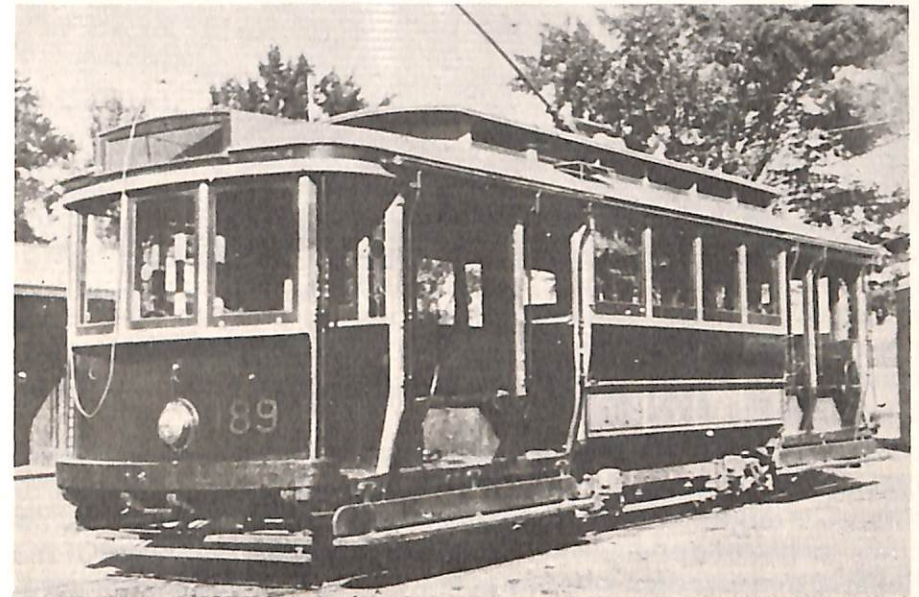
Bendigo company car 2, in original condition, at Quarry Hill terminus. — B. W. B. Miller

(the trailers were second-hand though). On the other hand, Ballarat had an old car barn which, incidentally, had to be propped up at the time the S.E.C. took over, in order to allow trams to be moved from the pits to the workshop area. The section of track in Lydiard Street, between Sturt Street and the railway station, had very little substantially constructed track. It was generally held that as Bendigo was the first installation of the two, the company spent too liberally in that city, so that Ballarat had to be content with a make-shift depot from the horse-trams and a less substantially constructed track system. The rolling stock at Ballarat was largely a relic from the Sydney trams, as cars were purchased from that city, to which ends were built by Duncan and Fraser, Adelaide and placed on short wheel-based (6' 6") trucks.



Ballarat company car 14 after alteration to one man condition provides contrast to the Bendigo car above. — S.E.C.

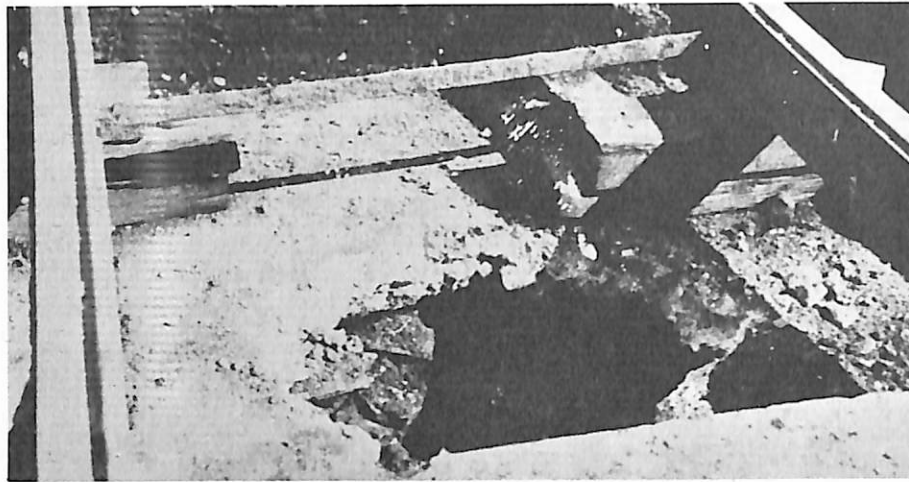
All the trams in the two cities had handbrakes only and had reached a very bad condition, both structurally and electrically in the latter years of the company's operations; during these years it was not unusual for trams to be running in service with only one motor functioning. As soon as the future of the tramways was more or less determined and before the Commission actually acquired the undertakings, it was necessary to purchase a number of second-hand 'Meadowbank' single-truck trams from the Melbourne and Metropolitan Tramways Board, in order to maintain services. They cost £50 each.



Former Melbourne car 189 at Ballarat depot after purchase in 1935.

— S.E.C.

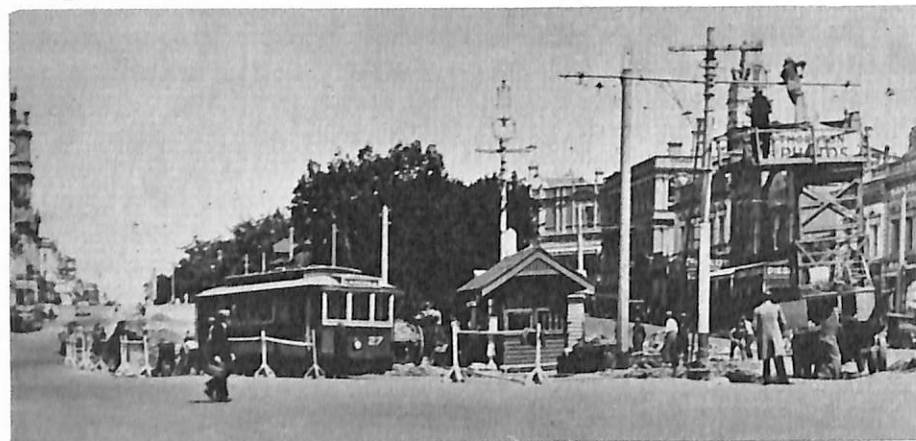
The tramway tracks generally were in a deplorable condition. Most of the track was carried on a concrete stringer (raft) which had subsided and broken over the years and the paving along side the rails only, was carried out in stone setts, so the condition of the track surface can be easily imagined. In those days, the motor men of trams in the two cities were generally addressed as "Skipper"; perhaps his duty at the front end of a bouncing, swaying single-truck tram had something in common with yachting. Traffic employees had to be expert in the use of short lengths of angle-iron to get tram wheels back on to the rails or get the tram to take points and another essential piece of equipment on the trams was a short length of V.I.R. covered cable. The dirty conditions of the depressed rails would frequently result in loss of rail/tram contact when the trams were halted to pick up passengers



Concrete raft over abandoned mine shaft at Long Gully, Bendigo, 1934. — S.E.C.

or to a lesser degree, other reasons for stopping. In this event, the driver would cut the first series notch and then step down with the cable to make the necessary circuit to set the tram in motion. Pieces of rope were carried on the trams, in order to effect temporary repairs to broken life-guards; these were broken when crashed against the ground, because the poor track condition caused the car to oscillate badly!

The overhead was also in poor condition and breakages were prevalent. At one stage, a check at Ballarat showed about 300 ears were not sweated to the trolley-wire, but simply bound with a few inches of copper wire. Such, then, was the condition of the Ballarat and Bendigo systems at the end of the company's term of operation.



Re-newing track and overhead in Sturt Street, Ballarat, at Grenville Street. — S.E.C.



Replacing overhead and rails at Urquhart Street, Ballarat, in 1934. — S.E.C.

RECONSTRUCTION WORK CARRIED OUT BY THE COMMISSION FROM ACQUISITION

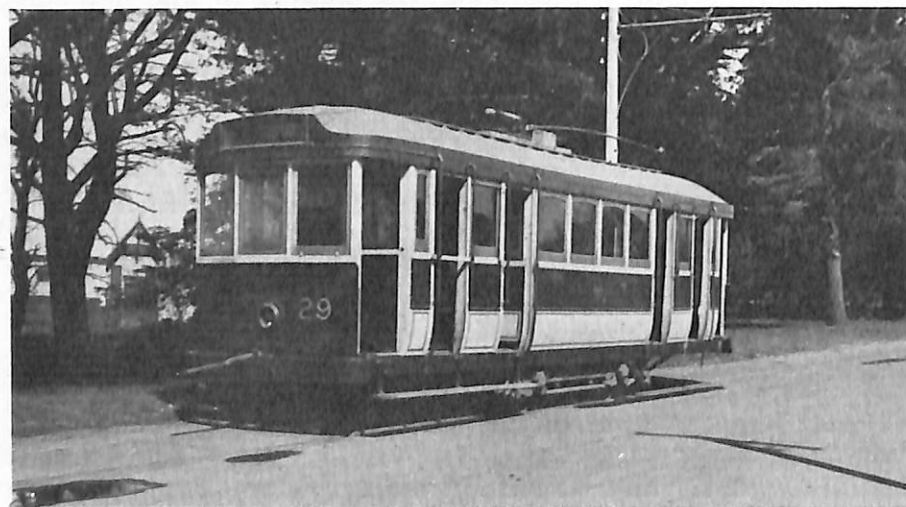
The reconstruction work was confined to the Ballarat and Bendigo systems and was obviously essential to the continuance of operations for any further period. It will be appreciated that the condition of these systems had created, in both municipal and public circles, considerable agitation for the scrapping of the tramways and no doubt, it was due to the absence of any municipal or other authority to provide an alternative service that the reconditioning of the systems was decided upon. It became clear to the Commission that a substantial outlay of expenditure would be involved and that the Commission could not find the necessary finance. As iterated previously, it was really the commitment entered into by the Hogan Government in 1927, that brought the State Government into the picture. Investigations were made into (a) the cost of modernising the two systems, (b) the substitution by trolley-buses and (c) the introduction of motor-buses; at that time, the trolley-bus had an estimated life of 15 years and a motor-bus about 8 years. The modernising of the tramways for an estimated life of about 25 years was, then, deemed to cost about £400,000: this amount of money could not be found and considered an unsound financial proposition in view of the losses in operation which must eventually be faced. It was then decided to

investigate the practicability of reconditioning the existing systems to enable them to carry on for 15 years, which was comparable with the life of an alternative service. These probes disclosed that about two-thirds of the old rails could be further used for about that period and that most of the special work could be reconditioned to carry over a similar period. The replacement of the rolling-stock could be accomplished by the purchase of used trams from the Melbourne Tramways Board, which were in better condition, both structurally and mechanically, than the rolling-stock of the old company. The major expenditure of this project would, therefore, be incurred in labour charges, both direct and indirect.

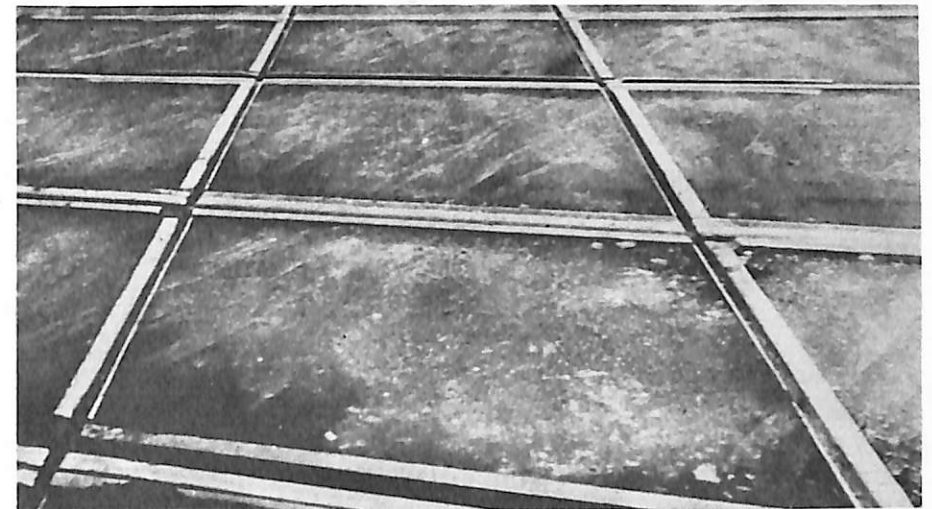


*Left -
In 1935 the S.E.C. placed into service several tramcars which were purchased from the Melbourne Tramways Board. Ballarat Car 30 was one of these trams and is shown on its first trip being driven by the Mayor of Ballarat, Cr. M. Martin. — S.E.C.*

*Below -
Ballarat car 29 and a sister car in Bendigo also came from Melbourne but their extreme step height caused their early demise. — S.E.C.*

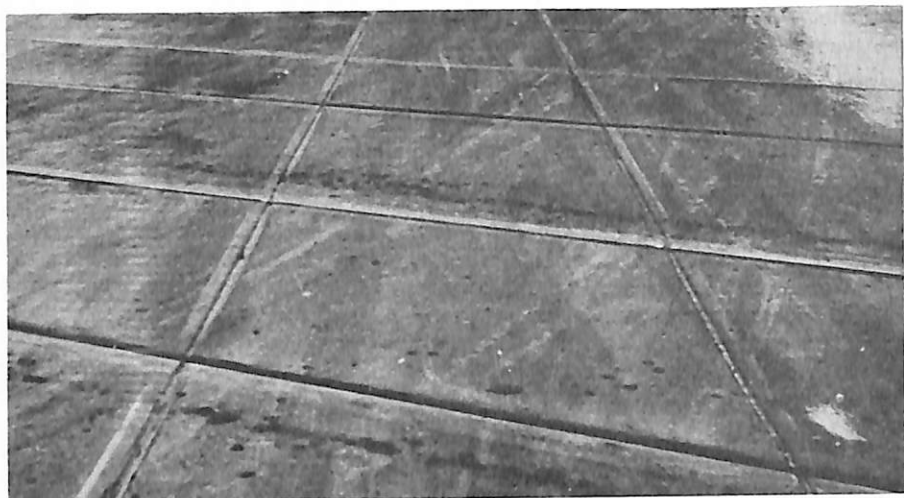


Suitable rails were available from B.H.P. and although not of tramway grooved rail type, a detachable check was available to enable them to be used in paved tracks. A special committee examined the alternatives and recommended the reconditioning programme and eventually this was adopted; the finance being found by the Commission and the State Government, with a further £100,000 loaned from the Unemployed Relief Fund. The work was carried out by the S.E.C. and comprised a complete renewal of overhead equipment, the removal of the old concrete stringer and replacement by sleepers track on a drained ballast bed, together with a complete reinstatement of the road surface to 18" outside the rails. New rails were placed into sections of



In 1934 the S.E.C. relayed the tramway / railway crossing in Lydiard Street North at Ballarat Station. The top photo shows the original crossing whilst the bottom photo shows workmen excavating this crossing. — Both photos S.E.C.





The new tramway / railway crossing at Ballarat station.

— S.E.C.

badly worn track where the old rails were unsuitable for further use and also in other sections in order to effect the transfer of good rail to other locations such as curves, which were also worn out. Considerable welding was necessary on the old rails in order to obtain a straight gauge line in view of the uneven wear to which they had been subjected. Some second-hand point castings were purchased from the Melbourne Tramways Board and these, together with the best of the old castings, were repaired to meet loop requirements. The presence of right hand or left hand points installed at the ends of equilateral loops is indicative of the shortage of tramway special work in Australia at that time.

Eventually, the whole of the then existing routes were reconstructed and the sections of paved track on concrete raft foundation, with blue-stone paving, were reconditioned.

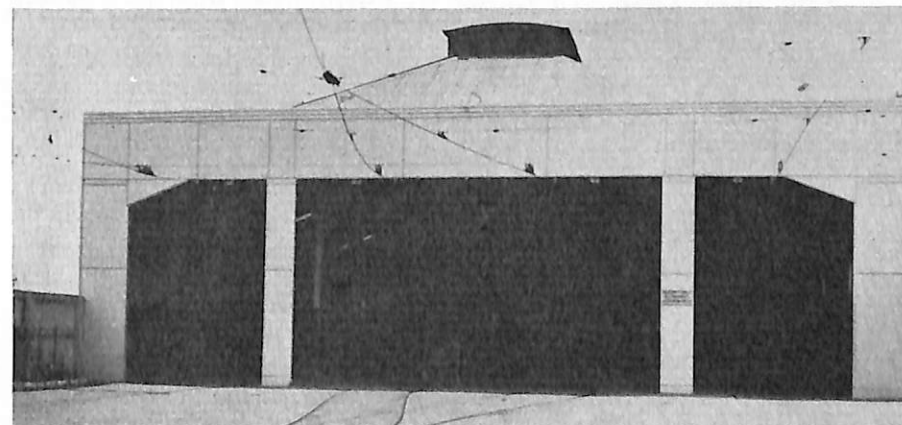
In the original estimate, the Commission provided for the abandonment of several uneconomic sections of several routes and also in one instance, succedaneum a deviation, but these were opposed by the municipalities, so that eventually the systems remained, with regard to routes, at their original length. In this respect, it is noted that $1\frac{1}{4}$ miles of track in Sebastopol Borough, which was a section the Commission did not wish to retain, still used the rails of the original horse tram system to the S.E.C. acquisition. These were 60 lbs. "T" rails and were turned by the Commission when the track was relaid to provide a further 15 years of operation; obviously they were, more or less, worn out! In addition to these reconditioning works, the Commission

installed "Forest City" signals for single track working in place of the old staff system; redesigned the overhead feeder system for more efficient isolation of fault areas and installed test circuits for rails (potential drop testing) which had not previously existed in the tramways. The depot at Bendigo was in quite good condition, but the question of a new depot at Ballarat, either on the existing site or elsewhere, was investigated. However, in view of the fact that the added life of the tramway system had been determined at 15 years, it was more economical to recondition the old car barn and this was carried out with considerable improvement in its appearance and new pits and wheel-grinder machinery were installed. To enable the retirement of several old trams

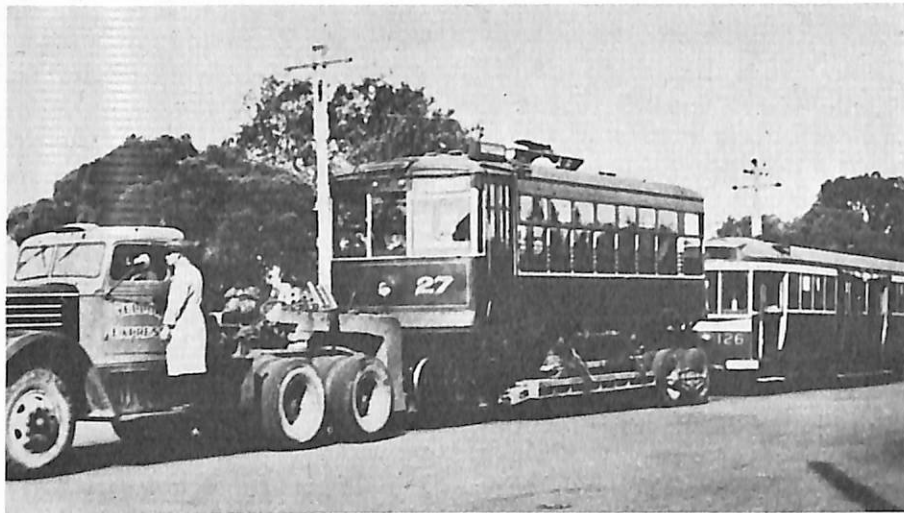


The photo above shows the Ballarat depot as acquired from the original owners and the photo below illustrates improvements to the front of this structure as undertaken by the S.E.C. Doors (and an additional track) were later additions.

— Both photos S.E.C.



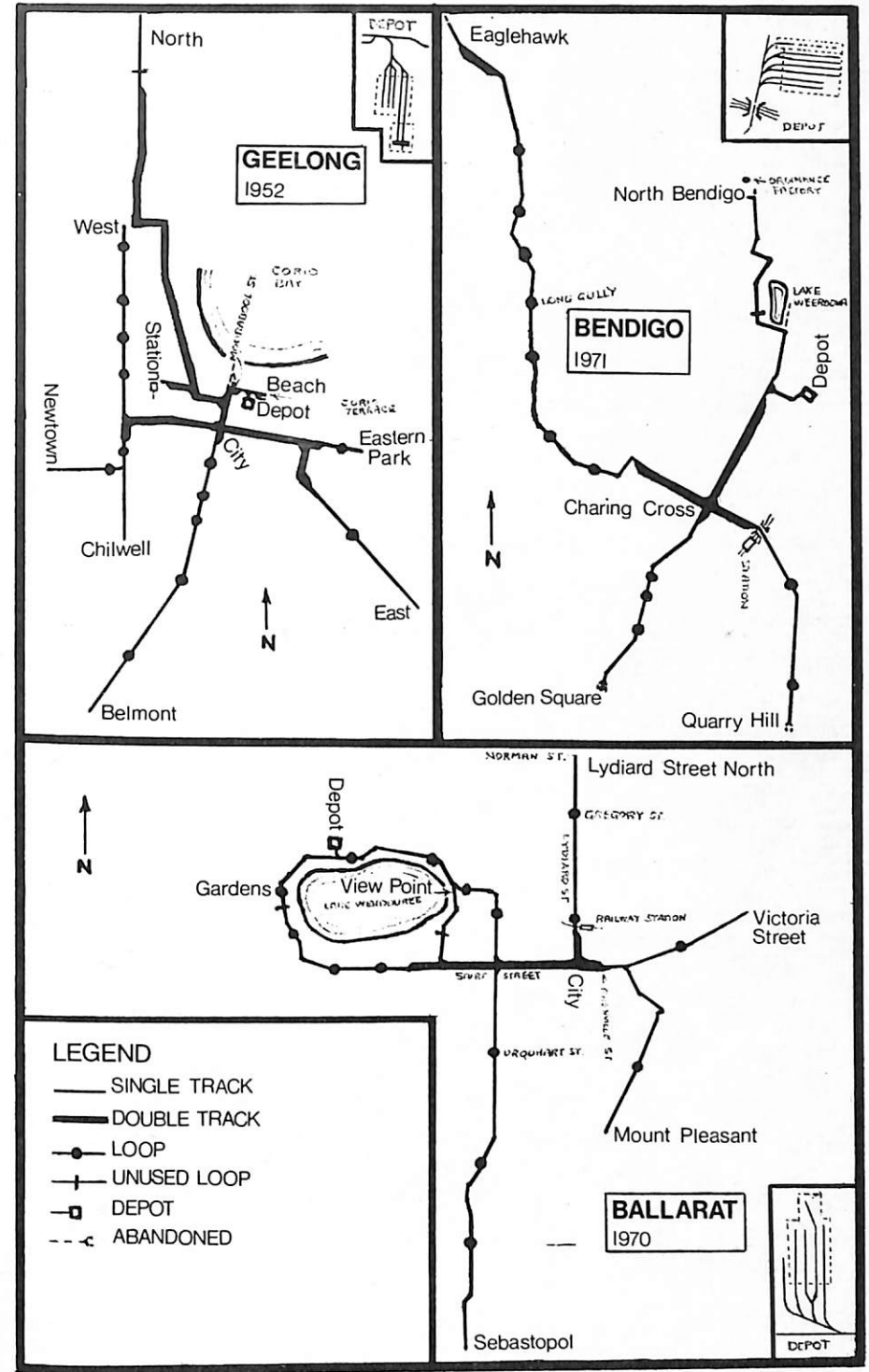
which were beyond economic repair and several which, as a result of accidents, were beyond reconditioning, the Commission purchased a number of double-bogie trams of the maximum traction type from the Melbourne Tramways Board in later years. Some of these cars were placed, for traffic, in each of the three cities.



This 1947 scene at Geelong shows the arrival of former Melbourne car 126 (maximum traction) and the transfer of Geelong car 27 (Birney) to Bendigo. — S.E.C.

EXTENSIONS TO PROVINCIAL TRAMWAYS SINCE ACQUISITION

- 1937 - Ballarat: Lydiard Street North route from Gregory Street to Norman Street.
- 1940 - Geelong: Along Corio Terrace from Moorabool Street to Eastern Beach.
- 1942 - Bendigo: Lake Weeroona to Ordinance Factory, North Bendigo.



1990

A GUIDE TO VICTORIA'S TRAMWAY MUSEUMS



HADDON TRAMWAY WORKSHOPS

The Haddon Tramway Workshops was formed in 1974 to preserve and restore various types of Victorian tramcars. The museum site is located at Haddon, 12 kilometres south west of Ballarat. Construction of a workshop building and running shed is presently being undertaken so that tramcars acquired can be restored and housed. It is eventually proposed to construct an operating museum open to the general public. The workshops at present is not open to the public; inspection may be arranged by writing to:

*The Secretary, Haddon Tramway Workshops,
P.O. Box 324, Prahran, Vic. 3181.*

THE BENDIGO TRUST

"The Golden City of the North," Bendigo, invites one and all to see the outstanding historic exhibits of the district. After inspecting the Central Deborah Mine, travel by a world famous "Talking Tram" to the Joss House at Emu Point, Bendigo North; a building highly recommended for inspection, too. The Tourist Information Centre at Charing Cross is always prepared to answer questions and supply details relating to Bendigo's tourist and historic environs. Try Bendigo for your next vacation! The Bendigo Trust warmly welcomes new members; particulars are available from:

*The General Manager, Bendigo Trust,
P.O. Box 333, Bendigo, Vic. 3550.*

THE TRAMWAY MUSEUM SOCIETY OF VICTORIA LIMITED

The Tramway Museum Society of Victoria Limited is establishing an operating tramway museum at Bylands (6.50 km. south of Kilmore) where several electric trams are at present on display, as well as a horse tram which is operated over approximately half a kilometre of track. The museum site is open to the public from 11 a.m. to 5 p.m. every Sunday, the horse tram operates half hourly within these hours. In addition the Society holds regular social meetings and conducts outings/tram tours at least four times a year.

Further details about the Society can be obtained from:

*The Secretary, Tramway Museum Society of Victoria Limited,
Box 4916, Mail Exchange, Melbourne, Vic. 3001.*

THE BALLARAT TRAMWAY PRESERVATION SOCIETY LIMITED

The Ballarat Tramway Preservation Society Limited operate a tourist tramway in the gardens area beside Lake Wendouree, Ballarat. Passenger services are operated every weekend, public holidays, school holidays and from the 24th of December through to the 1st of February every year between 11 a.m. and 5 p.m.; depending upon the traffic offering, services begin earlier and run later, if need be.

Further details about the Society can be obtained from:

*The Secretary, Ballarat Tramway Preservation Society Limited,
P.O. Box 632, Ballarat, Vic. 3350.*

Proceeds from the sale of this publication are devoted solely to the furtherance of the aims and objectives of the Haddon Tramway Workshops.