TROLLEY WIRE



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THE MANLY TRAMS - FINAL

TROLLEY WIRE

AUSTRALIA'S TRAMWAY MUSEUM MAGAZINE

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CONTENTS	
THE MANLY TRAMWAYS	
1903-1939 PART I	3
HERE AND THERE2	3
MUSEUM NEWS3	1

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Editor	Bob Merchant
Subscriptions & Distribution	Peter Hallan
Bulk Sales	Laurie Gordon



General Manager Tony Smith installs track bonds at the lower terminus of the Melbourne Tramcar Preservation Association's tramway at Haddon.

CRAIG TOOKE

FRONT COVER:

Modified Z1 class car 67 turns from William Street into Bourke Street on the afternoon of Sunday, 3 October 1993. Car 67 was running as a special car for the Australian Electric Traction Association during their 50th Anniversary celebrations.

RANDALL WILSON

BACK COVER - TOP:

At Whiteman Park, the cattle pay little attention as a well-loaded Fremantle 29 passes the lake at Stockmans Crossing on its way to Entrance, 10 October 1993.

ROBERT PEARCE

BACK COVER - BOTTOM;

The last night of operation at Melbourne's North Fitzroy Depot, 18 December 1993. The cars in the picture are (from left) B2 class 2044, 2024, 2034 and 2027.

RAY MARSH

THE MANLY TRAMWAYS - 1903-1939

PART I - 1936 TO 1939

TRAMWAY CLOSURE

By K.A. McCarthy

The previous parts of this series appeared in *Trolley Wire* for October 1979, December 1980, August 1981, June 1983, December 1984, February 1987, November 1990, August 1991 and February 1993. This final part deals with the last years of tramway operation in the Manly district and the conversion of the service to omnibus operation.

Goods Sidings

Details concerning the construction of goods sidings on the Manly tramway were presented in the fifth part of this history (TW December '84).

The planned tramway goods service between Manly cargo wharf and the Balgowlah, Brookvale and Narrabeen sidings did not develop. From time to time, proposals were considered to sell the real estate tied up in this unsuccessful enterprise.

Balgowlah Siding, Fisher Street

In November 1929, Commissioner O.W. Brain approved the sale of the Balgowlah goods siding which was expected to realise £2,000. The cost of track resumption, and to fence a small area to be retained for a permanent way siding at the Rickards Street boundary, was expected to amount to £460. An 18 feet easement along the Sydney Road boundary was also required for future road widening.

The Commissioner withdrew approval during March 1930 for this sale. The depressed economic conditions at that period would prevent a reasonable amount being raised through land disposal.

A further review of sales opportunities in December 1933 met with the same conclusion. The Government Real Estate Agent reported that it was not an opportune time to sell property and recommended that the sale be held over until a decision was reached on the future of the Manly tramway system.

Brookvale Goods Siding

During May 1924, plans were prepared for the sale of an area of land along the northern, or Federal Parade, boundary of the Brookvale goods siding. The eight building blocks covered an area of 132 feet by 380 feet. Later use of the entire goods siding area suggests that this sale did not proceed.

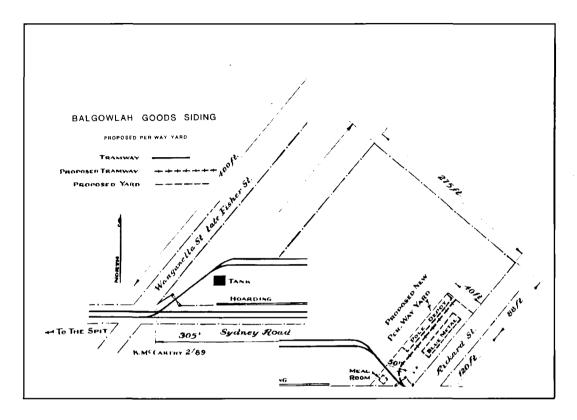
In September 1933, the Engineer for Way and Works proposed tha removal of material from the property. The track length amounted to 26 chains (excluding the crossover), consisting of 107 pound (lb), 100 lb, 80 lb and 60 lb rail, all suitable for use on the main lines.

Cost of recovery for track,	
poles and overhead	£ 400
Cost to restore roadway	£ 300
Value of recoverable material, gates,	
wire and poles	£ 500
Capital cost of depot and	
approach siding	£2524

It was suggested that the water tank installed in 1919 at a cost of £272 be held for fire fighting at a future depot.

The Tramway Accountant felt that the recovery cost of £700 to yield £500 worth of useable material could not be justified unless the land was sold at the same time.

During December 1933, the Engineer presented a more detailed account of the reusable material on the Brookvale goods siding site. He emphasised that the rails were in excellent order. The 100 lb girder



rail was in short supply and the recovered material would be suitable for crossing fabrication.

The revised value of the material was listed as:

Steel rail, 52-3/4 tons -	
75% of present value	£435
Fish plates - ditto	£ 26
Track bonds - ditto	£ 34
Points, 5 sets* - ditto	£150
Crossings, 2 x 1 in 5	£ 26
Sleepers, 840 at 1 shilling each	£ 42
Gates, 2 pairs of 24 feet opening	
Total	

* Note: The track plans of that period only show four pairs of points at the Brookvale goods siding complex, including the main line junction!

Narrabeen Goods Siding

The sale of five allotments of land vested in the Commissioner along the western side of Pittwater Road between Narrabeen Street and Waterloo Street, Narrabeen, was investigated during 1927. It

appears that one of the two allotments at the northern end of the goods siding at Albert Street was subject to sale in 1921 but this option was cancelled. Photographs reveal that the track into the northern end of the goods siding over these allotments was still in place as late as 1933.

On 13 July 1937, the Commissioner approved the sale by auction of the two allotments opposite Albert Street but the large area owned by the Tramways Department opposite King Street, which formed the southern approach to the goods yard, and the two further allotments near Waterloo Street, on which the waiting shed stood, were to be retained.

The Spit Punt Siding

The approach track to the tramway punt on the Manly side of The Spit formed an awkward facing connection to trams descending the 1 in 15 grade. This gradient, however, was eased to 1 in 23 at the actual junction.

On the morning of 6 May 1931, a descending tram bound for the passenger terminus was diverted at

speed onto the punt siding and came to rest overhanging the harbour. One woman passenger required hospital treatment when she jumped from the moving tram. Those who remained on the vehicle escaped injury. The *Sydney Morning Herald* for 7 May reported that a tram had been ferried across the harbour just before the accident and in all probability the points had remained set for the punt wharf.

The derailed tram was recovered by jacks mounted on a sleeper crib erected on the wharf. The North Sydney emergency gang worked from breakdown car 57s (ex C class 11) positioned on the punt while the Manly crew operated from car 125s (ex C class 22) on the Seaforth side. The retrieval was complicated by the possibility of the car toppling into the harbour if the jacks and cribbing were not carefully positioned.

As a result of this accident, a gauntlet or interlaced "set back" junction was planned for this location. This would require tramcars to leave the main line in the uphill direction. This proposal was not adopted but the writer recalls seeing the remains of a railway-style weighted point lever situated in a

trackside steel box at this location in the late 1940s, still in position long after the removal of the adjacent rails and sleepers. Perhaps the provision of the weighted lever was considered enough protection for the main line trams at the punt junction.

Illuminated Traffic Warning Sign

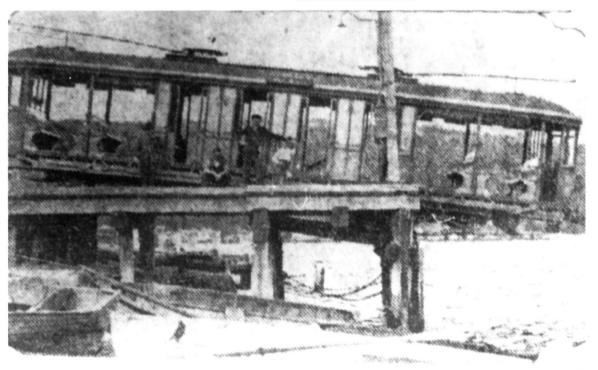
On Monday 26 August 1935, an illuminated "KEEP CLEAR TRAM COMING" sign came into use in Sydney Road at the Park Avenue corner where the ascending Spit-bound trams left the private right-of-way in Manly Park and entered the busy thoroughfare against the flow of motor traffic.

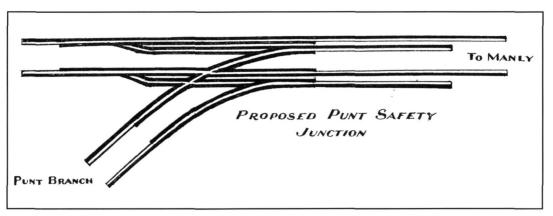
The sign was located on span pole 176 while a red repeater light, situated on pole 179, indicated to the tram driver that the sign was illuminated. A tram leaving Ivanhoe Loop would turn on the sign by passing through the trolley wire contactor and this same tram would extinguish the warning sign at span pole 177.

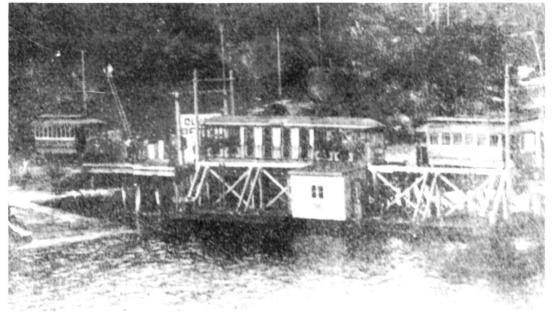
The key to the drawing of this illuminated sign is:

The O class car involved in the punt wharf accident on 6 May 1931. Below: Manly breakdown car 125s and North Sydney car 57s are seen at the tramway punt at The Spit after the runaway passenger car was retrieved.

THE SYDNEY MORNING HERALD







Manly breakdown car 125s and North Sydney car 57s are seen at the tramway punt at The Spit after the runaway passenger car was retrieved.

THE SYDNEY MORNING HERALD

A — Trolley contact to illuminate sign closed by tram as it leaves loop.

A1 - Trolley contact opened by tram at pole 177 extinguishes sign.

B — 600 volt front contactor to hold sign on.

C — 600 volt back contactor to break circuit b and extinguish sign.

D — Illuminated sign has three circuits of 5 x 120 volt lamps on pole 176.

E — Resistances.

B and C were housed in a receptacle on post 177.

Partial Conversion to Bus Operation

The tramway service outside the peak periods between The Spit and Manly was replaced by the existing parallel omnibus service on Mondays to Fridays from 3 November 1938. A full tram service continued to be provided on Saturdays and Sundays.

A notice was erected at the Seaforth side of The Spit to inform passengers of the change.

Request for R Type Tramcars

The Manly Council Town Clerk addressed the Minister for Transport during August 1935 with the

request that new R type saloon tramcars be provided for off-peak operation on the Manly system.

The Minister replied that this request would require two tram fleets at Manly Depot, the new R cars for off-peak operation and the high capacity O type for peak and weekend services. He pointed out the greater need for the new vehicles on the Watsons Bay, Bellevue Hill and North Sydney lines where obsolete rolling stock needed to be replaced.

Although not officially recorded, it seems that an R car was transferred from North Sydney to Manly for a few days during the 1934/5 period to conduct clearance trials.

Improvement Proposals

On 20 January 1937, the Minister for Transport replied to A. Reid MLA concerning requested improvements to the transport operation in the Manly district.

1. Covered terminus at Manly Wharf.

A plan to extend the tramway terminus at Manly onto the wharf was first presented in September 1929. This envisaged the extension of the Belgrave Street double track right onto the ferry wharf where it would junction into six parallel sidings. A

scissors crossover was to be situated outside the Manly Hotel just north of The Corso intersection. The terminus would accommodate 14 transcars.

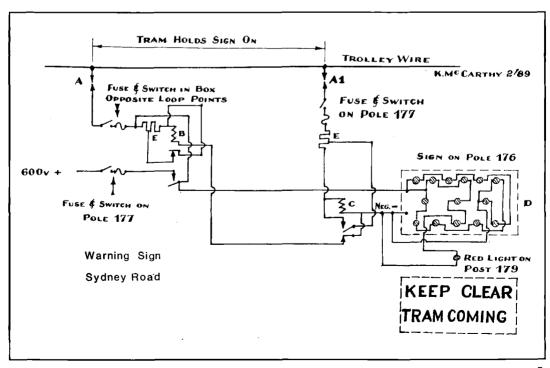
This proposal was rejected in 1929 due to the considerable amount of money which had been spent on terminal relocations at Manly just three years previously. The Tramways Outdoor Superintendent felt that the use of the scissors crossover would require too much wrong road working.

The matter was revived by Manly Council in *The Sun* of 8 June 1935.

The final 1937 request was dismissed with the comment that the trams had been diverted to the existing terminus at the request of Manly Council at a considerable cost to the Tramway Department.

2. Trolley Buses as a Substitute for Trams.

The Minister remarked that more vehicles and greater depot space would be required if trolley buses were substituted for trams. This would be reconsidered when financial conditions permitted.



3. Track Duplications.

Single track sections were:

The Spit to Ethel Street61chains

Thornton Street to Belgrave Street46 chains

Brookvale to Narrabeen4 miles 48 chains

Harbord Junction to Harbord Beach 60 chains.

The Minister replied that late running was due to ferry schedules and not to single track sections.

4. Reduction in Fares.

The income from fares on the Manly tramways did not cover running costs. Concession fares with a maximum charge of fourpence between 10.00am and 4.00pm were available while the combined ferry-tram season ticket provided savings for regular passengers.

5. Reduction in Journey Times.

The Manly to Narrabeen service extended over a distance of 7 miles 63 chains. This originally required 49 minutes but had been reduced to 37 minutes with the introduction of conditional stops. This journey time compared favourably with:

Erskine Street to Watsons Bay
7 miles 45 chains - 45 minutes

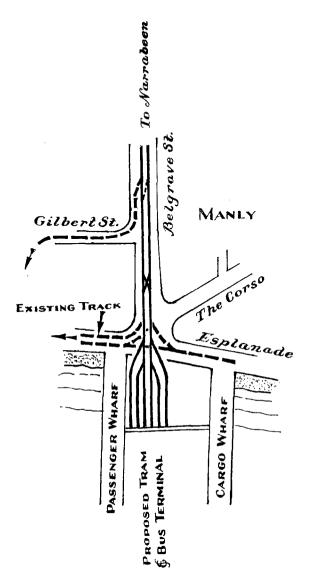
Circular Quay to Earlwood 7 miles 62 chains - 47 minutes

Circular Quay to Maroubra 7 miles 37 chains - 41 minutes

Closure of Manly Tramways

The preceding material reveals that from the early 1930s the possibility of replacing the Manly trams with buses was an ever-present threat.

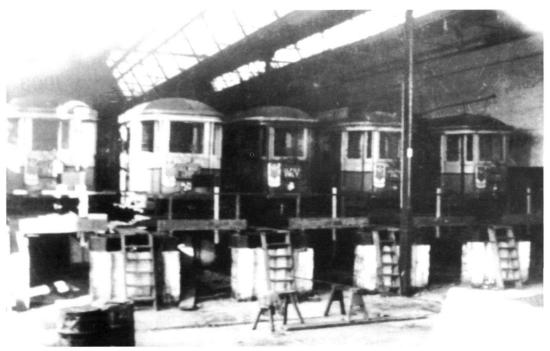
The Greenhills Improvement League of North Narrabeen held a meeting during September 1932 where local residents expressed their alarm at the



possibility of the tramway closing. The League's secretary, Mr J. Ferguson, passed on this fear to the local Member of Parliament, A. Reid MLA. The matter was referred to the Transport Advisory Board which, in reply, stated that all transport services in the Sydney metropolitan area were currently under review.

The Transport Advisory committee, appointed in July 1932, lodged its report during the following November. Amongst its recommendations were the replacement of the isolated tram services at Kogarah, Manly and Ashfield with buses.

Although these suggestions were subject to vacillations during the 1930s, the Kogarah steam

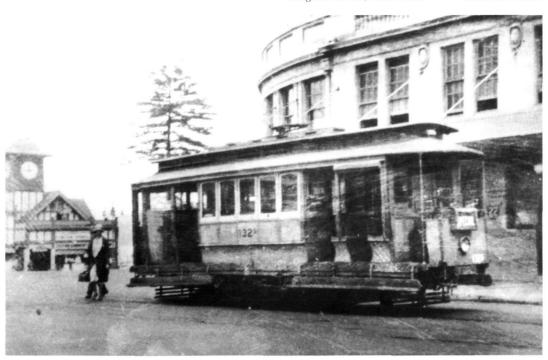


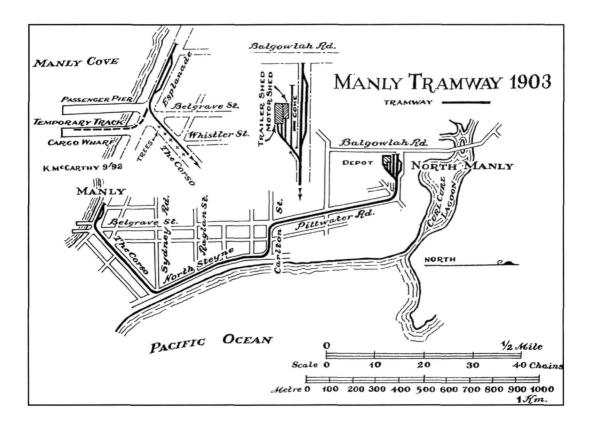
Prior to the closure of the Manly tramways the last (or western) bay of the depot was cleared of tram tracks and converted to a bus maintenance area.

About 1938, one tram still retains the olive, fawn and grey colour scheme.

Possibly L.TORR

Rail scrubber car 132s (ex D class 105) opposite Manly Wharf and outside the Manly Hotel in Belgrave Street, circa 1938. The Late LANCE TORR





trams were replaced by trolley buses in July 1937, The Manly system by omnibuses in October 1939 and, after a delay caused by World War II, the Ashfield lines by diesel buses in August 1948.

Trams Attached to Manly Depot

After 1918, when O type tramcars were approved for operation on several North Sydney routes, this type of vehicle was frequently transferred between the Manly and North Sydney systems as traffic demanded.

Rolling Stock at Manly Depot, 25 May 1922:

O class cars:.. 816, 1090, 1094, 1095, 1096, 1099, 1101, 1103, 1105, 1106, 1107, 1108, 1109, 1110, 1111, 1208, 1227, 1251, 1265, 1266, 1273, 1331, 1343, 1346, 1214.

Service stock: 116s (ex C class 291), 28W, 99U, 77V, 110V, 111V.

Rolling Stock at Manly Depot, January 1935:

O class cars:.. 816., 889., 903, 1090, 1096, 1099, 1101, 1102, 1103, 1105, 1108, 1109, 1110, 1111, 1208, 1214, 1227, 1251, 1265, 1266, 1273, 1331, 1343, 1346, 1348.

Service stock: 125s (ex C class 22).

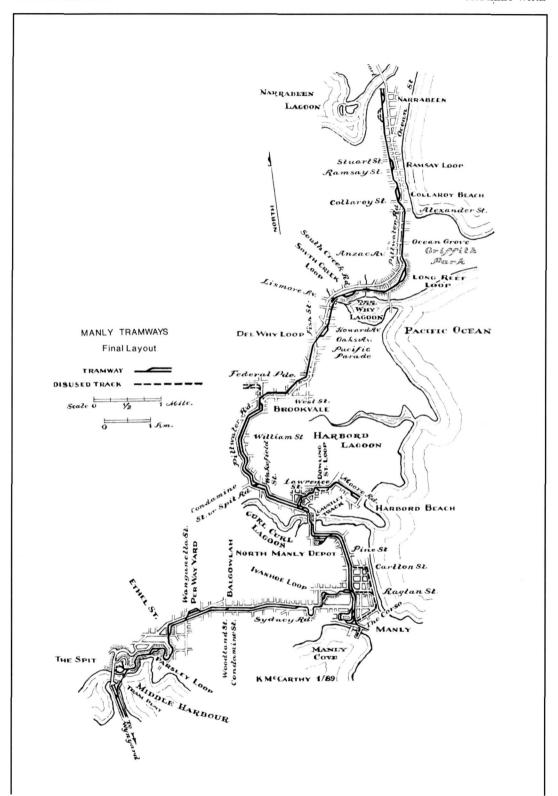
Rolling Stock Allocated to the Manly system, 1937:

O class cars:. 1090, 1096, 1101, 1102, 1103, 1105, 1108, 1109, 1111, 1128, 1208, 1214, 1227, 1251, 1263, 1265, 1266, 1331, 1343, 1346, 1350.

On loan to North Sydney: 816, 835, 840, 883, 889, 1348, 1352.

At Randwick Workshops: 1110.

Service stock: 125s (ex C class 22).



Last Public Timetable

With the issue of the last public tramway timetable on 4 May 1939, the number of daily trips over the three routes were:

Manly - Narrabeen	
Monday to Friday	54
Saturday	58
Sunday	55
Manly - Harbord	
Monday to Friday	51
Saturday	
Sunday	29
Manly - The Spit	
Monday to FridayTra	am 28 - Bus 39
Saturday	
Sunday	

Waiting Sheds and Ancillary Buildings

The following is a list providing relevant information about ancillary buildings on the Manly tramways:

9- 1-1911 Waiting shed and starter's office at The Spit.

3-8-1912	Waiting	shed at	Collaroy
----------	---------	---------	----------

8-12-1913	Waiting shed a	and starter's office at
	Narrabeen.	

27- 7-1914 New meal room and starter's office at Manly.

18- 1-1916 Waiting shed at Condamine Street (Kentwell Road), Brookvale.

18- 1-1916 Waiting shed at Queenscliff Road, Narrabeen line.

18-9-1916 Waiting shed at Manly Wharf.

20- 2-1917 Waiting shed at Condamine Street, Balgowlah.

21-2-1917 Waiting shed at Sydney Road.

31- 5-1920 Waiting shed at Long Reef Loop.

18- 9-1923 Waiting shed at Manly Wharf abolished.

30- 5-1935 Waiting shed at Sydney Road moved from down to up stop.

School Children

The volume of school children travelling to and from school by tram presented a problem during the

A coupled set of O class cars with car 1208 leading, descending the grade from Parsley Loop to The Spit on 30 September 1939.

H. CHAMBERS





1930s. During 1936, the rear car of the 8.00am tram from Narrabeen was reserved for the use of school children.

Bundy Time Recorders

Until World War II, bundy time recorders were placed at strategic locations on the tramway system to regulate tram running frequencies. Conductors were provided with numbered keys and on reaching a bundy recorder, inserted and turned the key. This registered the key number against a time on a paper roll. Early or late running could be easily detected by this method.

The bundy time recorders used on the Manly tramways are shown in the table below.

Allocation of bundy register keys to the Manly system:

By March 1911 1 to 4.

By September 1912.1 to 4, 10 to 13.

By December 1913 .. 1 to 4, 10 to 17.

By January 1922 ... 1 to 6, 10 to 17, W10.

By May 1930 1 to 17, W10.

Parcel Checks

The gradual development of direct road access with the city, coupled with the changing character of many outlying suburbs served by the Manly trams from semi-rural to suburban, virtually eliminated

Machine No.	Installed at.	From	Time allowance at time of installation.
38	Belgrave Street Junction Manly Up stop Sydney Road. Manly.	9-1-1911 24-7-1934	2 minute or 5 minute from Manly termininus depending on inwards or outwards trip. 1 minute from Manly.
42	Steyne Junction Withdrawn.	30-5-1912 20-8-1914	2 minutes from Manly terminus. Transferred to Watsons Bay line.
46	Long Reef Loop Collaroy. Pacific Loop Collaroy Renamed Ramsay Loop.	20-8-1912 18-12-1913	5 minutes from Collaroy Terminus. 6 minutes from Narrabeen terminus.
49	Condamine Street. Balgowlah Dudley Street. Parsley Loop The Spit. Seaforth terminus.	11-11-1913 22-1-1930 by 8-1934 1-9-1937	13 minutes up, 12 minutes down from Manly. 15 minutes from Manly terminus. 3 minutes from The Spit.
64	Albert Street & Moore Road Harbord.	21-12-1925	1 minute from Harbord terminus.

the need for passenger trams to provide a parcel delivery service. The parcel checks carried by conductors were discontinued from 26 July 1937.

Last Day of Tramway Operation

Prior to 1939, closures of electric tram routes had been limited to those subject to chronic financial losses or branches with awkward physical features of operation.

The closure of the entire Manly electric tramway system after the last trips on 30 September 1939, and replacement by omnibuses, was the first major conversion undertaken in New South Wales.

The last tram trips operated during the early hours of Sunday 1 October 1939. Car 831 bound for Narrabeen, 840 for Harbord and 816 for The Spit departed from Manly Wharf at 12.44am, following the arrival of the steamer from Circular Quay. Under the care of Driver Walker and Conductor Mills, car 816 departed from The Spit at 1.06am, being the last tram to leave Manly Wharf for the depot at 1.27am.

Press reports indicate that the last trip concluded on a spectacular note. Tramway employees and the public turned the occasion into a burlesque funeral through Manly, complete with undertaker, pall bearers and appropriate music provided by a drummer and piper. The tram, draped in black, was packed to capacity. Many more people followed in motor cars sounding fanfares with their horns.

Car 831, the last from Narrabeen, departed from that northern outpost at 1.23am and arrived at the depot at North Manly at 1.54am, where it was formally put away to the accompaniment of "Auld Lang Syne". Thus ended public tram operation in the Manly district after 36 years of service.

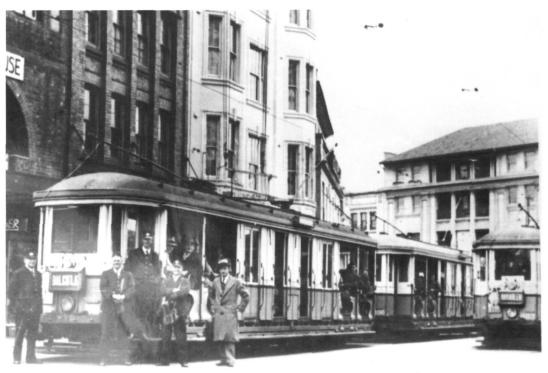
Trams Leave the system

The ferrying of all the rolling stock across The Spit to North Sydney took just on three weeks to complete. During the last day of operation, trams 1096, 1103, 1107, 1108, 1109, 1273 and 1348 left Manly Depot for The Spit. On 3 October 1939, these seven cars were ferried over Middle Harbour. On 5

O class 831 bound for Harbord Beach and 1265 bound for Narrabeen in The Esplanade outside Manly Wharf on 30 September 1939.

H. CHAMBERS





Above: The crew pose with coupled O cars 1111 and 1096 bound for Balgowlah as car 883 turns into The Esplanade from Belgrave Street. Below: Another view of cars 1111 and 883. Car 883 is bound for Narrabeen and displays the supplementary sign "First Stop Dee Why". Midday peak period, Saturday 30 September 1939.

Both: DEPT OF ROAD TRANSPORT & TRAMWAYS





The last evening of tram operation at Manly, Saturday 30 September 1939. The Harbord and Narrabeen trams are in the foreground while the red-and-cream liveried double deck buses (one of which is a short chassis model) serve routes away from the tram lines.

Photographer Unknown

October, trams 831, 1102 and 1111 left Manly Depot and were transferred to North Sydney on the same day. On 9 October, cars 846, 883, 1090, 1101, 1208, 1331 and 1343 left the depot but only 883 and 1208 made the water crossing.

The last batch of trams left Manly Depot on 12 October 1939. These were 816, 840, 1128, 1214, 1265, 1266 and 125s. Car 1128 was the last to depart. During the day five trams, numbers 816, 846, 1090, 1101 and 1343, were shipped over to the North Sydney system while five days later, on 17 October, 840, 125s and 1265 followed.

Only four trams remained, awaiting transfer at the north side of The Spit, when an unexpected event occurred. The Transport Department granted the Manly Historical Society permission to photograph the last tram. Accordingly, on 20 October car 1331 journeyed up the hill towards Manly to Parsley Loop in the care of Inspector Goodwin and Conductor McKenzie. Earlier that morning trams 1128, 1214 and 1266 had been ferried across Middle harbour

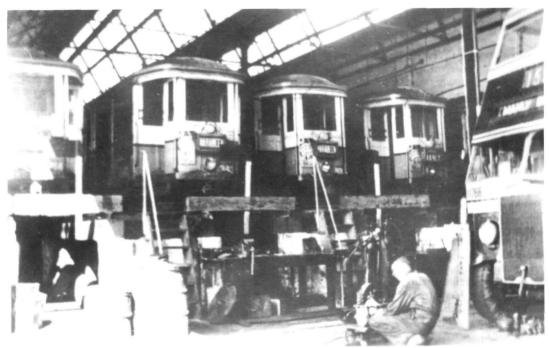
and, on returning from its historic jaunt, car 1331 followed, leaving the Manly side at 11.10am. This was the last tramcar to leave the Manly system, arriving at the North Sydney shore at 11.20am.

The tramway punt lingered at its moorings, just off shore from the Mosman side of The spit, for a further year. On 17 October 1940, it was disconnected from its cables and towed to the Hawkesbury River for use in connection with the replacement railway bridge construction.

Epilogue

Overhead Wire Removal

The overhead trolley wire on the Manly system was removed with some haste, while the reserved track portions of the tramway were lifted in the early 1940s. Although World War II had broken out a month before the closure, hostilities at that time were limited to Europe, while industrial trouble on the coalfields, which resulted in gas and electricity

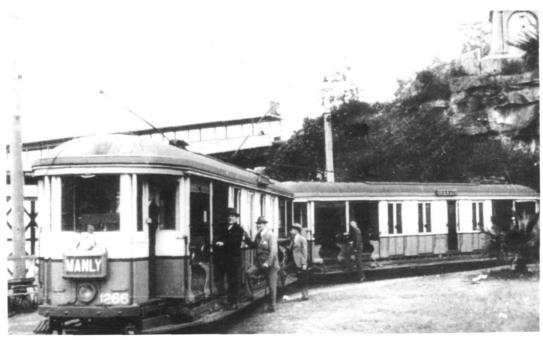


Manly Historical Society members join O class coupled set 1266 and 1331 at The Spit as if they intend making a trip to Manly.

The Late P. GLEDHILL

"O" cars 1214, 1343, 1101 and two others at the bus maintenance area in the western end of Manly depot, 3rd October 1939, three days after the tramway closure.

Late C.R.G. FEILD



rationing, saw the now all-bus system spared these problems.

When war threatened Australian shores in 1942, after the entry of Japan on the side of the Axis block, liquid fuel rationing reversed the situation with many bus frequencies being curtailed and routes truncated as tramway feeders.

Some sources suggest that consideration was given to the reintroduction of tramway operation during this period on the Manly to Brookvale and Balgowlah routes. There are no official references to support this proposal and by 1942 trolley wire, high voltage feeders, substation equipment and reserved track sections had been removed.

By 1945, tram tracks were still largely complete in the road sections between Manly and Brookvale, and Manly and Seaforth-Balgowlah. At that time main road reconstruction commenced which resulted in the Manly terminal layout being lifted during 1946 and the Pittwater and Sydney Roads sections soon after.

In 1950, rails were sill in position in Sydney Road between Crescent Street and Park Avenue, and northwards from Manly Depot to Curl Curl (North Manly) Lagoon bridge.

By the close of 1988, the two siding tracks on the Manly terminal balloon loop were the last relics remaining after 49 years. At that time these tracks were under threat as the area was about to be redeveloped.

Tramway Museum Site Option

During 1954, the reserved track right-of-way from The Spit to a point beyond Parsley Loop was offered under reasonable leasing arrangements as a short term location for the Sydney Tramway Museum. The length of the lease was subject to the

construction of the new Spit bridge and approach roads which would intersect the site.

The new bridge construction commenced at this stage and it is now a matter of history that the museum was established at Loftus.

Manly Trams and Television

On the evening of 14 January 1975, preserved O class car 1111 in the Sydney Tramway Museum fleet was filmed by ABC television in the first colour episode of "Beyond the Legend". This historical series presented unusual or tragic aspects of what would have been successful careers based on the lives of engineers, academics, business people, etc.

The episode filmed at the Sydney Tramway Museum dealt with Christopher Brennan who, as a very young man, was an outstanding student of classics at Sydney University. By the 1920s he occupied the position of Associate Professor of Classics at the University. Brennan's bohemian



O class 1214 at The Spit awaiting transfer to North Sydney on the tram punt, 20 October 1939.

E.A. LAW



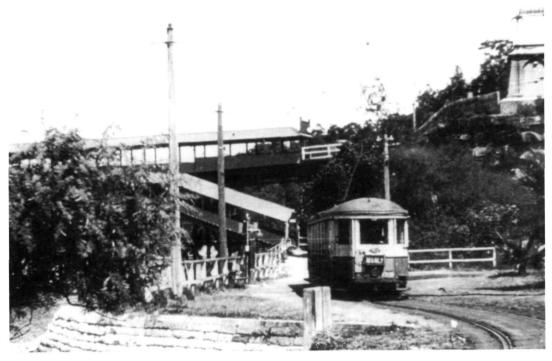
O car 1331 near Parsley Loop during the special trip arrnaged by the Manly Historical Society on 20 October 1939.

The Late P. GLEDHILL

O class 1331 bound for The Spit from Parsley Loop on the Manly Historical Society special trip on 20 October 1939.

The Late P. GLEDHILL

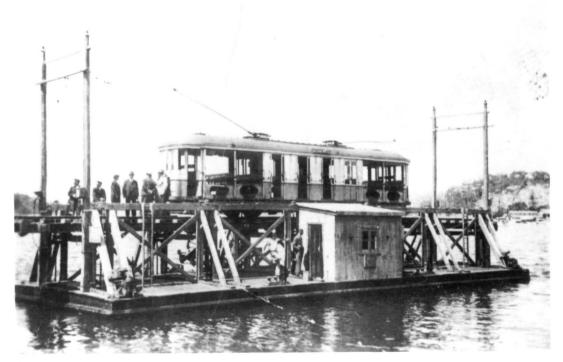




O car 1331 returns to The Spit at 11.00am on 20 October 1939 after the special trip to Parsley Loop. The Late P. GLEDHILL

11.10am on 20 October 1939. O car 1331, the last tram to leave the Manly system, has been driven onto the tram punt.

D. O'BRIEN Collection





habits and political beliefs did not please the University Senate and he was dismissed during 1925.

His German wife had entirely different values to Brennan which finally resulted in his marriage breakdown in the early 1920s. At this stage he took up residence with Violette Cornwallis. This was a torrid relationship which fluctuated between extreme happiness and depression.

At 1.00am on Sunday morning, 8 March 1925, Violette was killed by a tram at Amourin Street, Brookvale. Brennan owned a holiday home at Newport where both spent considerable time. The *Sydney Morning Herald* for 9 March identified the victim as Violette Cornwallis, aged 34, of no fixed address. By this time Brennan was aged 55. The report concluded that she was unaware of the approaching tram.

At that stage Amourin Street was an unmade thoroughfare which did not even appear in street directories. Its western extension was William Street which intersected with Pittwater Road and the tram route. At that location the track was doubled and situated in the centre of the relatively busy main road. It is difficult to understand how Vi Cornwallis was not saved by the gate and life shield under the tram.

At 1.00am on Sunday morning, 8 March 1925, Violette Cornwallis was killed by a Manly tram at Brookvale. The event was re-enacted for ABC television at the Sydney Tramway Museum at Loftus 50 years later.

The Late K.A. McCARTHY Collection

With the writer as driver and museum member Wayne Armitage as conductor, O class tram 1111 killed Vi Cornwallis many times on the evening of the filming before the film crew were satisfied with the results. The episode went to air in March 1975 - the Manly tramways had been brought to the tramway museum instead of the reverse!

O Car 1111 Returns to Manly

On Saturday 17 and Sunday 18 January 1981, the reverse process occurred when O car 1111 returned to Manly on static display for the local Summer Festival. The occasion marked 70 years since the first electric trams entered Manly on the new Spit tramway. The tramcar was positioned on a siding tack still extant at the Manly Wharf terminus. A range of 14 buses, spanning the 1937 to 1980 period were provided by preservation societies, private owners and the Urban Transit Authority to operate a free shuttle service from Manly Wharf to Brookvale

Bus Depot where an interesting transport exhibition was displayed. After an absence of 45 years, a tram returned to Manly for two days!

Preserved Relics

Three items of Manly tramway rolling stock are preserved. The Powerhouse Museum has restored horse car 292 but this item has not been placed on display whilst in the care of that museum.

The Sydney Tramway Museum at Loftus has O car 1111 and ballast motor 99U in its working collection. Both these vehicles spent considerable time on the Manly system.

* * * * *

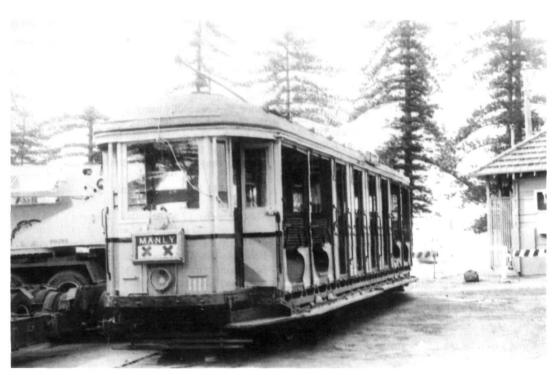
The writer thanks Messrs D. Keenan, R. Willson, D. O'Brien, V. Solomons, K. Magor, C. Woodside, N. Chinn, L. Gordon, E. Law, J. Shoebridge, D. Greenwald, I. Manfred, as well as the late Rev. C. Thomas, P. Gledhill, A. Renwick and C.C. Singleton for assistance given in the preparation of this Manly Tramway series.

O class 1111 returns to Manly Wharf tram terminus on 17 January 1981 for the Manly Summer Festival. The Late K.A. McCARTHY



O car 1111 standing on the last of the terminus tracks at Manly on 17 January 1981.

The Late K.A. McCARTHY



HERE AND THERE

NEWS ITEMS OF INTEREST FROM ALL OVER

Melbourne News

1993 was a year of considerable change on the Melbourne tramway system. Much of the change resulted from the introduction of one person operation (OPO) on about half the routes operated from each of Melbourne's depots. By the time of the OPO introduction most depots had an adequate supply of suitable rolling stock to operate the OPO services but, as mentioned in our last issue, Brunswick and South Melbourne depots were assigned Z class trams for this duty. However, insufficient Z class were available for the intensive Saturday service with its twelve minute headways, so it was often necessary to borrow Z class cars from Camberwell or Essendon depots. These borrowed cars were usually returned from their originating

depots late on Saturday night or on Sunday. The difficulty was then to locate these borrowed trams, as late running usually resulted in these cars being on runs other than those to which they were originally assigned. Cars at Brunswick and South Melbourne depots had to be checked to locate the borrowed cars and it was often found they were still in service.

B2 class cars used in OPO service had to be fitted with a TV camera over the rear door steps. The camera was connected to a monitor in the front driver's cab. This installation involved five men and took five hours to complete. A minimum number of B2 class cars were thus converted and these were



Port Melbourne trams are now operated as an extension of the Mont Albert service. The route change commenced from 19 December 1993 and car 276 is seen in Collins Street on this service a few days later.



North Fitzroy tram depot on the last night of operation, 18 December 1993. The car on the right is B2 class 2024.

chosen at random from those in the depot at the time. With the passage of time, some of these converted B2 cars became unavailable for traffic, usually due to spare parts not being available for minor repairs, or from collision damage.

From 13 November, up to four A class cars were borrowed from Kew depot each weekend for use on the Port Melbourne light rail line to receive the shortage of OPO B class cars. Occasionally, some A class were retained for weekday services. South Melbourne depot thus became the first depot in modern times to operate all classes of tram at the same time, but only for five weeks.

With four months of one person operation on the last routes converted, services are operating more smoothly than at first. This is partly due to many passengers having fares or tickets ready when the tram arrives. However, a noticeable drop in patronage could also be helping to streamline services. One South Melbourne driver operated an OPO service on the first day of its introduction on Route 1. Despite considerable late running, he collected over \$300 in fares. On the Saturday before Christmas this driver worked exactly the same shift, suffered minimal delays and collected only \$90. Observations of routes 42 and 48 operated from

Kew depot indicate that the former, still operated with conductors, has seen a slight increase in patronage, while there has been a noticeable drop in patronage on the latter. Other OPO routes seem to have been similarly affected although no figures have been released.

Closure of North Fitzroy Tram Depot

North Fitzroy depot closed at the end of service on Saturday, 18 December 1993 after a life of just 37 years. The depot was closed to enable the handing over a week later of the larger adjacent bus depot to the National Bus Company as part of the State Government's plan to privatise public transport. Some thirty employees and former employees of the depot had joined the last tram, the 12.40pm St Kilda Beach to East Brunswick, by the time it reached the depot. A photo line formed at the depot entrance to record the final run-in at 12.40am on Sunday morning. Driver Do was in charge of this last tram, the very new 2125, while Conductor Dickinson set the points for the last time.

Earlier, car 2038 was the last tram into the depot from the Port Melbourne line. At this time the depot contained cars 2044 and 2024 on Road 1, 2125 on road 2, 2034 and 2031 on Road 3 and 2027 and 2038

on Road 4. By 2.00am car 2125 had bee transferred away, and by 7.00am the depot was empty and has thus remained since. The electric operated points leading from Nicholson Street into the depot were still functional three weeks later. North Fitzroy trams equipped for OPO were transferred to South Melbourne, while the remainder are believed to have gone to Camberwell.

The following day, Kew depot took over the Port Melbourne services, operating the line as an extension of the Mont Albert to City services. Mont Albert to Port Melbourne is now Route 109 and Port Melbourne to Kew Depot is Route 111. While the smaller A class trams are adequate in most circumstances, the Port Melbourne line now enjoys a level of service previously unknown. In recent years it enjoyed a 12 minute service during the day and at peak hours, and a 20 minute service at night. The daytime frequency is now every eight minutes, with only some peak hour Mont Albert services terminating in the city. Conductors are used at all times and the only problem seems to be the bunching of trams which have come all the way from Mont Albert.

A new weekday roster for light rail Route 96 was

introduced at the same time as the Port Melbourne changes. Running times were reduced and have resulted in trams being unable to complete the journey and terminating short of their terminus, even in peak hours.

The former Victorian Railways tram depot at Elwood was closed as a Met bus depot on 27 December 1993 as part of the State Government's move towards privatisation. The buses based at Elwood have been transferred to Footscray or Sandringham bus depots. Sandringham is now a satellite depot of Footscray depot. Route 600 buses which meet the light rail services at St Kilda station have been re-routed to terminate at Southland shopping centre, traversing most of the former VR St Kilda to Brighton and Sandringham to Black Rock tramlines.

About 70% of the PTC's bus routes have been handed over to the National Bus Company (a division of the West Bus Group in Sydney) and is the first major move to privatise Melbourne's public transport. The State Government is watching with a view to selling off TRAM and train services (according to a report in the *Herald Sun*) if successful.



Installing the new crossing in Spring Street at Collins Street on 2 October 1993.

The National Bus Company is issuing its own oneride tickets as well as the existing Met tickets. It is expected that the latter will eventually be phased out on private services, thus destroying the comprehensive fare structure Melbourne presently enjoys.

Melbourne Track and Overhead Work

Overhead wiring was installed on 26 October over the new Spring Street track from Collins Street to Flinders Street. This work completes the new City Circle construction in Spring Street. Several trams were tested on the new track on 10 November, much to the annoyance of the Transport Minister who did not know about it until he emerged from Parliament House and saw trams running over the new track.

Work commenced on the Spencer Street terminus extension on 3 November, with the construction continuing into December. For two weeks, Kew depot services, which usually enter the City via Flinders Street and leave via Latrobe Street (and vice versa) in the peak hours, were not able to do so during this period. The new terminus appears to only partly serve its intended purpose, which is to take terminating trams out of the path of City Circle

services. If Route 48 (City-North Balwyn) and Route 75 (City-East Burwood) trams arrive at the terminus in the same order as they are to depart, the layout is such that the second tram will have to wait on the main line until the first tram leaves. The new terminus, although ready for over a month, has not yet been used. This is due partly to the new City Circle service not expected to commence before March and also to tram crews requesting an additional two minutes layover in each direction which will, if agreed, require new rosters. An earlier start to City Circle services had been expected but it now appears that all track modifications will be completed first. The missing link is the right turn from Victoria Parade (westbound) into Nicholson Street (southbound) to complete the circle. Much of the existing track in this area is overdue for replacement. Also new curves are to be installed from Latrobe Street (eastbound) into Swanston Street (southbound) and vice versa.

The replacement of track in Domain Road (Route 8) was carried out in December. Buses operated the tram services after 6.00pm. There has also been a concerted effort to repair many of the broken rail joints on the system.



The new terminus for Routes 75 and 48 under construction in November 1993. The work is being carried out in Spencer Street at the Latrobe Street corner as part of the City Circle project.

RAY MARSH



W6 class 927 testing the overhead in Spring Street on the new tram loop on 10 November 1993.

RAY MARSH

Since light rail services replaced trains on the St Kilda rail line, trams have been shaken by badly corrugated rail on the Up track between the Fraser Street and Albert Park stops. In June, a large rail planing machine was hired and treated the section from Middle Park to Wright Street with good results. The work was carried out at night after services had ceased. The remaining portion has not been treated, presumably because of cost.

Melbourne - Trams

On 8 October, upgraded Z class tram 67 commenced working the night and weekend shuttle along Moreland Road. This was shortlived as by 14 October it had been sent to Preston Workshops. One report indicated that it was considered that its overhauled and upgraded bogies were "too good" for use on such a sedentary service and they would be replaced by standard bogies. Car 67's bogies are now under Z1 car 39 and 67 is still awaiting replacement trucks. 67 was fitted with a pantograph and was strictly limited to Moreland Road running. This removed its ability to run to East Coburg, when required, to fill in for a tram running late from the city.

W6 class 971 was reported early October to be at ABB's Dandenong plant for overhaul and upgrading. A second W is rumoured to be there also.

Transport Minister Alan Brown announced on 18 November that 51 W type trams are to be overhauled and retained in service indefinitely. They will be used on Routes 8 (City-Toorak), 16 (City-St Kilda Beach) and the City Circle. The remaining 150 cars are to be stored, although 50 of these are to be available for standby service.

Under the Government's three-year plan, about \$30 million will be spent upgrading the 51 W cars and 114 Z1 and Z2 class cars. Up to \$200,000 will be spent on each W class car to rectify mechanical faults, repainting the body and fitting heaters and airconditioning. It is expected \$150,000 will be needed to upgrade each Z class car. These cars have a history of major mechanical and electrical problems.

B2 class trams were introduced on Route 75 (City-East Burwood) services on 20 November. Some weeks previously Camberwell depot had received a



The new Elizabeth Street terminus was completed in December 1993. There is no change to the track layout.

number of this class for training purposes and occasional use on sporting extras in the vicinity of the Melbourne Cricket Ground. The overhead wiring at Camberwell Junction has once again been adjusted for pantograph operation. Eleven B2 cars are in the initial allocation although four are thought to be long-term defectives from South Melbourne depot. The transfer of the B2 cars released a number of Z series cars to South Melbourne and the weekly borrowing of trams now appears to be no longer necessary.

In December, vintage W1 class car 431 was seen in the city carrying Christmas music entertainment and W7 class 1026 was externally decorated with tinsel and bells.

During the year all modern trams were modified to allow the turn indicator lights to operate in "hazard" mode whenever the tram doors are open. The driver can over-ride this arrangement if required. The problem of motor vehicles passing stationary trams at tram stops appears to have diminished slightly. However, motorists are justified in becoming impatient when they have to

wait while an OPO tram driver is collecting fares.

Tram 728 has been overhauled for the City Circle service and W6 class 1000 is expected to be the next car completed.

The oldest standard W, SW5 class 681 has been withdrawn from traffic with a defective motor.

W7 class 1039 has been returned to traffic following its collision with 1018 twelve months ago. It had not been long overhauled at the time of the accident. Recently overhauled SW6 class 909 was seriously damaged when hit amidships by a class 239 at Prahran terminus. It will be repaired. Consecutively numbered B2 class cars 2020 and 2021 were seriously damaged in almost identical collisions with Z series trams. The first incident occurred in Kingsway, South Melbourne at Sturt Street. The second accident happened a few weeks later in Spencer Street at Collins.

A number of trams including W7 class 1003 were seen on 5 January being transported south along St Georges Road. The likely destination is storage on railway property in the Newport area. New B2 class cars from 2124 upwards carry no fleet number on

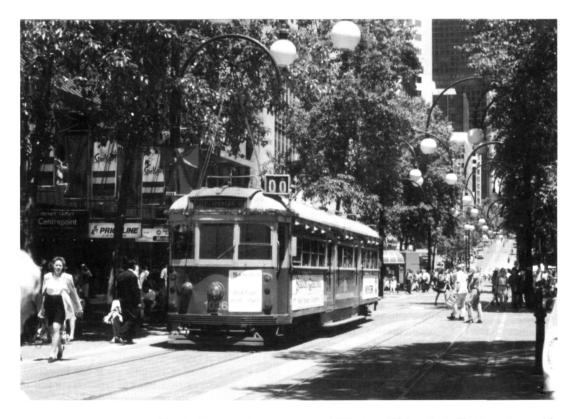
the front apron. The fleet number is being applied to the adjacent side panels ahead of the entrance door and below the drivers side window.

Z1 class 10 has been transferred from Camberwell to Hawthorn depot and fitted with a prototype ticket vending machine. A full range of tickets is available from the machine and four seats have been removed near the centre of the tram to provide space for the machine and its users. It has been seen running on different parts of the system, apparently with staff from the machine's suppliers testing it in simulated traffic conditions. Two separate reporters have stated the machine issues multiple tickets when the trams traverses rough track. It is possible that car 10 was chosen for this trial due to its poor suspension. Whilst at Camberwell 10 was restricted where possible to school and sporting specials. Another report indicates that the company operating these ticket vending machines will be financially liable for loss of revenue should a machine become defective.

Visitors to Melbourne will be seeking out the W class cars. The situation in January is as follows: All W cars on routes 10 (St Kilda Beach-West Preston), 11 (City-West Preston) and 12 (St Kilda Beach-City) along Collins Street (apparently at the direction of the Transport Minister under pressure from the National Trust); Routes 8 (City-Toorak) and 16 (City-St Kilda Beach) are mostly W class, especially at night and weekends. W class can be seen on other Swanston Street services in reasonable numbers during daylight hours on weekdays, but are not common at night or on weekends.

San Francisco Double-ended PCCs Return to Service

When the Sydney Tramway Museum chose car 1054 for preservation from a line-up of stored PCCs in San Francisco, it seemed that none of its sisters would ever be likely to run again. When PCC operation ended in San Francisco, 45 cars were



Myer's department store sponsored W7 class 1026 as their Christmas tram with Santa Claus on board. 1026 operated a shuttle service on Bourke Street between Spencer and Spring Streets each weekday between noon and 3.00pm.

RAY MARSH



W6 class 990 displays its new (mainly green) advertising colours for The Smith Family's Christmas Appeal at Thornbury on 3 December 1993.

retained for possible future use. However over the years they deteriorated to such an extent that, when the city decided to use renovated PCCs on the new F line service along Market Street, it proved cheaper to buy cars from Philadelphia.

Fourteen single-ended cars from Philadelphia have been overhauled by Morrison-Knudson and shipped to San Francisco. Twelve of the fourteen have been painted in a variety of colour schemes, representing US cities where PCCs once operated. The newly-restored cars make a major impact in displaying some of the spectacular colour schemes of the 1930s and 1940s. (The remaining two ex-Philadelphia cars are painted in San Francisco PCC colours.)

A surprise addition to the renovation programme has been three of the San Francisco double-enders - D class "torpedos" - which are sisters to 1014. The first three cars to be rehabilitated are 1009, 1010 and 1011. Of these, 1009 will be painted in Muni blue-

and-yellow, the original colours of the Magic Carpet cars, and 1010 will be painted in Illinois Terminal green. The colour scheme for 1011 has yet to be decided.

Possible additions, if funds can be found, will be 1007, 1015 and 1006 - the latter already retained in the historic fleet, but in need of renovation for full time service. The only other double-ender, of the ten original D class cars, still in existence is 1008, which is retained, in modified form, as a works car.

Thus 1014 at Loftus will soon have a new role - not as a representative of a bygone era in San Francisco, but as a member of a tramcar type very much in active service on the other side of the Pacific.

-With acknowledgment to *Inside Track*, Newsletter of the Market Street Railway Company. From Executive Officer Bill Kingsley

Lost Caption

The caption missing from page 43 of the November 1993 *Trolley Wire* should read as follows:

An early view of Company car 17, which entered service in 1905, after conversion by Duncan and Fraser Ltd., from a North Sydney cable car trailer Ballarat Tramway Preservation Society Archives

C.O.T.M.A.

Council of Tramway Museums of Australasia

50th Anniversary - A.E.T.A.

Congratulations to the Australian Electric Transport Association on achieving fifty years of dedicated service to the promotion and advancement of modern electric powered transport in Australia. It must be remembered that the SPer, AETM and TMSV all had their beginnings within the AETA

from which they branched to become independent

entities. The AETA had recognised that in their support for the provision and upgrading of electric transport, there could have been some conflict with a simultaneous operation of museums. Never-theless, there has continued a great co-operation between the AETA and the tramway museum movement with a very considerable overlap of membership.

In Melbourne there were suitable activities to celebrate this milestone and The Met provided



Advertising A class cars 237 and 246 at Kew Depot on 13 September 1993. 237 is carrying its new radio station livery for Triple M (previously advertising Fox FM) and 237 has changed from advertising the RAN to saving energy for Energy Victoria.

RAY MARSH

chocolate and cream A1 class 231 suitably labelled "Australian Electric Traction Association 50th Anniversary 1943-1993" along the cream band. It was great to see so many museum members from interstate in Melbourne to participate in the festivities.

COTMA Conference - Bendigo - December 2 to 7

Information has been sent out to the Museums and I have been compiling a list of relevant individuals (mainly our regular Conference Delegates) so that we can also keep those folk updated on developments. There are going to be some very, very important guests and I would like to tell you more, but let me leave that privilege to Bendigo in due course.

Your Executive Officer's Travels

Sydney

October saw me in Sydney for three reasons:

- 1. For a last nostalgic ride on the Melbourne-Sydney Express, to feast in a real travelling railway dining car, and enjoy the comfort and individuality of a roomette sleeper.
- 2. To attend the SPER Annual Dinner, a fabulous night and well organised by Peter Kahn. It is just great to be amongst distant friends, relaxing in a beaut social setting. I also spent a day at Loftus where I continue to be uplifted by the professionalism, the dedication, and the inspiration of those who operate the Sydney Tramway Museum. The service into the Royal National Park has been a great motivator, and there are moves towards an extension northwards into Sutherland. While the wave is rolling, fellows ride it!
- 3. To catch up with the agony and the future for the STRPS at Parramatta. I was able to view the remains of the depot site in Parramatta Park and walk amongst the ashes. I was able to talk with STRPS Directors at the site, over lunch at Old Government House, and in a relaxed home atmosphere. The most important thing was to realise how great is the resolve, how real the determination, how high the motivation, to rebuild and start anew. Stay with it chaps, for you will make it happen, and know that all the members of all the COTMA museums are behind you all the way. The location of the new museum is unknown, but SPER have made some very real propositions to STRPS to assist. It is my own belief that, at least for the short term, that is the path to follow, and in a way wherein the STRPS can still maintain its own identity. It is in times like this that COTMA museums must support each other,

and SPER are showing a lead. To those museums and members who are more distant, your tax deductable donations to the "Parramatta Tram Phoenix Fund", PO Box 3179, Parramatta, NSW 2124, are still very acceptable.

It was also great to find David Cawood (MOTAT) and Trevor Burling (WTM) also sharing with SPER in Sydney for this is also very much the spirit of COTMA.

My very great thanks to Dick Jones, Peter Kahn and Frank Moag for their special help and hospitality to me, and to Laurie McCulloch, Bruce Irwin and Frank Moag for making their time available to share their frustrations and hopes for the STRPS.

Hobart

In November, I flew down to Hobart for a week to catch up with the members of the TTMS and to view and photograph the restored body of double-decker 46. TTMS activities included a visit to a helicopter base and steam operation at Glenorchy. I was also able to visit two bus depots, the Bush Mill Railway, and Bruny Island. Thanks to all the Lange family for their tremendous hospitality.

PTC Appointments

COTMA is happy to let you know that in the recent reorganisation and distribution of senior appointments within the PTC, Mr Russell Nathan remains in charge of "the tramways" with the new title of "Managing Director - Met Trams". Mr Les Jean remains, too, as Manager - Tram Fleet.

Tower Wagons

Do you remember the old rail-mounted steps which the Victorian Railways used to use for overhead work, with little flanged steel wheels, and which were pushed and pulled along the rails by human power? Well, they are for sale. \$35 for the base and wheels with the tower, or \$25 for just the oregon tower. You will need to regauge from 5ft 3in to your gauge. Contact Kerry Barr at the Spotswood Reclamation Depot of the PTC. Thanks to Noel Gipps for the information.

ST KILDA

Australian Electric Transport Museum

From Colin Seymour Toastrack 42

The main focus over the last few months has been the reconstruction of toastrack tram no. 42. In fact, car 42 will continue to be the focus for the next few months as its restoration/reconstruction draws to a finish. All going well, the tram will be launched in April 1994.

All clerestory veneers are now installed and the surrounding beading fitted. Wiring of the car is continuing. Steel capping pieces for the outside of the seat pillars have been shaped and fitted. New step brackets have been manufactured using step brackets from C 173 and extending them. The new aprons have been reinstalled after priming.

Preliminary work has been carried out on the fitting of the new crossbench seats. hand rails (ex A and C type) have been selected and heat treated to remove the brass fittings. New steel piping has also been purchased and cut for the handrails. Work has commenced on refitting the lifeguards. The car has been undercoated and is steadily being repainted.

The bodies of A1 type cars 46, 51 and 59 at Hindmarsh Valley have been raided for parts to assist with 42's rebuild (the A1 cars were originally constructed as B type toastrack trams). Parts include beadings and minor brass fittings. These trams had previously spent many years at Kingston Park on Adelaide's southern metropolitan coast.



C 186 heads along the concrete track to the Playground tram stop 200 metres away.

PAUL SHILLABEER



Museum visitors enjoy their refreshments under the pergola of the "Bouncing Billy" tea room. C 186 stands on road 2 of the depot fan. The horsebox trailer can be seen in the middle distance.

Other News

D type tram 192 has returned to service for the summer months in place of Ballarat 34.

The no. 1A motorless trucks and the chassis from W2 class 434 at Springton in the Adelaide hills are now on site at St Kilda.



H1 type 381 waits at Mangrove Loop for W2 class 294 to pass on its trip to the Playground. Car 381 is returning to the Museum. The photo is taken from Mangrove Street looking across the lake to St Kilda Road.

PAUL SHILLABEER

LOFTUS

South Pacific Electric Railway

From Dick Jones

Works Report

Welding of the relaid road 1 track in the depot was carried out during October. On the 16th of that month concrete was poured between the rails on portion of roads 1 and 2 and on 6 November concrete was poured at the side entrance of the building adjacent to road 1 and again between roads 1 and 2.

Further work on 20 November saw the completion of concreting road 1 and part of road 2. Some additional tracklaying is required to complete road 2 and excavation work is required in the area near the entrance where extension of the pit is to be carried out. Road 1 still requires about four metres of track to be laid, this will be carried out when the wheel lathe is relocated to its permanent position.

Troughing for the overhead wiring was installed over the remainder of road 2 on 9 October and the

wire was erected on 16 October. This completed the wiring of the three roads used for traffic cars (the "depot" portion of the building). Road 1 now only requires connection to the depot fan wiring. Extension of the wiring into road 4 (the first of the display roads) is to be carried out in the near future. This will not require troughing as the roof height is sufficient for normal wiring. The completion of this work will certainly make life easier when moving cars in and out of the four roads.

The improvements made over the last three months have made a considerable difference and additional covered storage for a number of the cars now parked in the open will soon be available. It is intended to place Brisbane 548 under cover in order to carry out minor body repairs and repainting. The bogies will also be reversed to improve the riding quality of this car.



R1 class 1979 ran a special photographic trip on the National Park line on 21 October 1993. The photo above is taken on the curve just north of the Park terminus and is the location where most of the bushfire damage occurred in January 1994. The bushland to the right of the tram has been completely burnt out and the pole behind the tram was damaged in the fire.

In the restoration building, work has continued on O/P class 1089 and much visible progress has been made. The left hand cant rail was fitted on 9 October and the last corner post was fitted to the No.2 end, left hand side, on 16 October. Work on the No.1 end cab fascia recommenced on 31 October and on 20 November the reconstructed destination box was installed. The fitting of windows on the right hand side is also in progress and installation of glass commenced on 13 November. This was completed and most of the "lazy tong" mechanisms installed by 20 November. Welding of the rusted portions of the underframe is being carried out and is progressing well.

Some work is being carried out on Freight Car 24s after a long period of inactivity. The rusted metal canopy from over one of the extended driver's cabs is being restored in a very professional manner.

Work commenced on 2 October on removal of the Colorflek paint from the ceiling of W5 class 792 to reveal the original long-hidden varnish.

Alex and David Canini were in attendance on 20 November with their earthmoving equipment. Additional earthworks are being carried out at the

north-eastern corner of the display building and on road 2 in preparation for the final extension of the track.

Secondary Operations Building

Another important stage in the development of our museum site commenced on 20 November. Work on the secondary operations building, part of the original plan for development of the museum, has commenced with some preliminary earthworks along the northern boundary, the Pitt Street fence.

This building will house an additional six cars on three tracks and will be situated parallel to the railway boundary fence, at the Pitt Street end of the site and at an angle to the existing building. It will enable the remainder of our tramcar fleet to be stored under cover, as well as accommodating some additional tramcars which we expect to add to our collection in the next few years.

It has been necessary to move much of the accumulated equipment, rail, sleepers and other items from this location before further progress can be made. However, the building itself will be relatively simple to erect once the foundations are completed.

PARKLINK

Sutherland Tourist Tramway (SPER)

From Dick Jones

Accreditation

Advice was received from the Secretary of the State Rail Authority of NSW on 8 October that our Society has met the requirements for accreditation as operator of a disused railway line. However, Act No. 50, the new Rail Safety Act 1993, was assented to 21 September 1993 and became law on 24 September 1993. It will be necessary for the Society to be re-accredited by the Director-General of the Department of Transport in due course.

General News

Further clearing of encroaching weeds and shrubbery has been undertaken along the Royal National Park line from time to time under the terms of our lease. This has resulted in a neater appearance and improved visibility for our drivers.

Like the State Rail system, we have suffered at the hands of graffitists along the line, mainly at the level crossing and at Royal National Park station. Traces of this vandalism are removed at the first possible opportunity.

Trams used on the Parklink service are now showing more appropriate destination signs. The cars are being progressively fitted with new signs added to their destination rolls. These include ROYAL NATIONAL PARK, LOFTUS STATION and, in anticipation of a northerly extension to the



This scene, located north of the former level crossing site is unchanged except where some back burning was carried out along the edges of the bush and scrub lining the tramway. The tram line is situated in the 2% of the park not completely destroyed by the fires.

BOB MERCHANT

service, SUTHERLAND.

Nagasaki 1054 and Brisbane dropcentre 295 were tested on the Royal National Park line on 13 November. They were approved for service on the line, if required.

Bushfire!

The horrific bushfires during the first two weeks of January 1994 destroyed 98% of the Royal National Park. The worst of the fires missed the tramway but a back-burning operation near the southern end of the line was affected by a sudden wind change. About forty sleepers were destroyed and one pole damaged by this fire. The small (emergency - one WC) toilet block off the northern end of the Royal National Park platform was destroyed in a blaze which swept up from the Grays Point area to the east. This was the most westerly point that fire reached.

The clearing of undergrowth from around the track

and embankments by Greg Sutherland and his gang of CSO workers during the last months of 1993, as mentioned above, prevented much more extensive damage.

Services on the line have been suspended until repairs can be carried out. Three sleepers were replaced on 8 January but we were asked to leave the Park as further back-burning operations were expected to be carried out.

The Park has been closed to all public access, including trams, except for residents of the small settlements of Bundeena and Mainbar on the south shore of Port Hacking, whose only means of access is through the Park. It is expected that a decision will be made on the public's access to the Park during the week ending 22 January.

Late Note: Trams will recommence services into the National Park on 23 January. Park management has requested that passengers not leave the immediate terminus area.

FERNY GROVE

Brisbane Tramway Museum Society

From John Lambert

New Display and Archives Building

Peter Hyde continues to prepare the new display room prior to transferring the displays from the old bookshop located at the rear of the museum workshop. John Lambert is concurrently preparing the new archives room to receive the museum archives which are presently stored in several locations on the museum site. It is anticipated that the relocation of the archives will take place during late February 1994, followed by the displays and bookshop in early March.

Restoration

There has been much progress on dropcentre 341 due mainly to the efforts of Troy Thomas, Peter Hyde, Murray Lawrence and Nicholas Clark. Most of the interior of the tram has been spray painted in final colour and now awaits the final fitting out and replacement of all the fiddley bits that seem to take

hours to sand and spray paint. Troy has been doing all of the spray painting, with preparation being performed by all four workers.

Several small items from 341 that have been lost over the years have been replaced from our stores stock while some items are being manufactured copied from samples supplied -by Brisbane Transport workshops under the watchful eye of Alan Marment.

Alan has also suggested some ideas regarding the straightening of the frame of Dreadnought 136 as the end platforms have sagged with age resulting in flattening of the roof and bowing of the tram sides. This project is expected to take several years as it will require careful placement of stands, jacking and packing to bring a return to the correct shape.

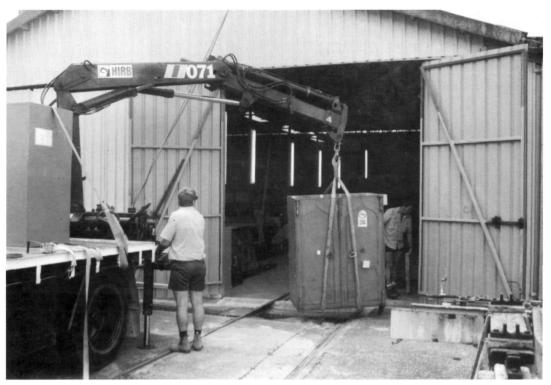
Acquisitions

The Museum has purchased from the SEQEB an additional city electric light link pillar box for the



Archie Gould with the city electric light link pillar box obtained from the South-East Queensland Electricity Board.

John Lambert



"Hector the Erector" unloads the safe from the Toowong Bus Depot into the museum workshops. Dropcentre 341 was moved out to allow easier access to the rear of the workshops.

JOHN LAMBERT

sum of \$1.00 to complement our stock of existing street hardware. We give special thanks to Russell Steer and staff at the Greenslopes SEQEB depot.

During November, John Lambert received a telephone call from Ralph Orton, Supervisor at Toowong Bus Depot, offering to donate to the Museum an old safe that was no longer required. Transport and delivery arrangements were made and the safe now resides in the rear of the workshops building. It is the only area with a concrete floor strong enough to support its 1.8 tonne weight.

The safe has two large double doors and was fully overhauled, including replacement hinges, in late 1992. It is believed to date from the turn of the century and is possibly the old cash safe from Milton Workshops and may have come from the Brisbane Tramway Company.

A clean-out of the Transport Department storage area at Abbotsford Road Depot brought to light a number of complete window frames complete with glass, plus additional spare glass. These items have been forwarded to the Museum by the Brisbane City Council. These items are being retained as suitable spares for use in Leyland Panther buses of which the Museum holds three on trust for the City Council.

Compressed Air System

Our compressed air system has seen much use during the spray painting of dropcentre 341. In order to increase the capacity of the existing system to allow two spray guns to be used simultaneously, additional air tanks and an additional Westinghouse DH16 compressor are being installed by the Museum's engineering division.

The DH16 compressor required a full overhaul including a replacement head gasket. This work is being carried out by john Lambert and Wayne Chaseling, with advice and some assistance from Alan Marment. It is anticipated that the additional compressor will be in service during late February 1994.



Cars 36 and 20 on the Carlton Street loop in December 1967, and just south of what is now the Ballarat Village Tramway terminus. CHRISTOPHER D. PHILLIPS

BALLARAT

Ballarat Tramway Preservation Society

From Dave Macartney

The Electric Supply Company of Victoria power station in Wendouree Parade, Ballarat is no more. Built in 1904 for the pending electrification of Ballarat's trams, it had been in decline for some years as the State Electricity Commission transferred little by little to its new premises in Norman Street. Parts of the building had been used as a mill in the 19th century, while the SEC had added a variety of outbuildings in various styles over the decades. Accordingly, when the complex was assessed for possible preservation by the National Trust/Historic Buildings Council, it was decided that it was such an architectural mess as to be not worth saving.

The granite foundation stone, with its interesting inscription, has been carefully removed by the SEC for preservation. The BTPS has applied to acquire this stone for display at our depot, and are hopeful of success, as the local branch of the SEC have always been sympathetic in the past where obsolete

electrical equipment has become available.

In a job that has dragged on almost as long as SPER's infamous scissors crossover, the BTPS finally erected their rebuilt tram shelter at the Loop on January 8th. Five of these shelters were removed from the SEC system in the late 'eighties, the best of which were acquired by the BTPS. Various people have started the rebuild over the years, only to be diverted to more immediate tasks, but in the end it was probably the amount of valuable depot space taken up which spurred on a final effort to get it out of the place.

Four of the old shelters were located on the outer end of the Victoria Street line, with the fifth at Bradshaw Street on the Mount Pleasant line. Subsequent to their removal, the Council designed a steel-framed version of much the same thing, and these have appeared around the town in some numbers in recent years.

Our rebuilt version will shortly have some

interpretive signage incorporated into it to explain to visitors what the tramway is all about. In particular, it will advise visitors on non-operating days when they can return for a tram ride.

A grant of \$1800 has been received from Arts Victoria for the provision of a cataloguing kit. This will enable some progress to be made on an area of weakness; namely the care and presentation of archival material. This is a long overdue development, which has had very little work done on it over the past twenty years. Much archival material is held at members' residences and is better located at the depot under properly controlled conditions.

During November, the depot's pit pump failed after twelve years service, which resulted in a period of time during which the pits were unavailable due to flooding, and routine maintenance fell behind. While attempts were being made to revive the pump, a possum crawled into the drainage system and expired. It took no less than a week of excavation to locate the remains and remove them, but once the drains were cleared and a new pump acquired, business quickly returned to normal.

A recent acquisition from a local antiques dealer was seven sheets of etched saloon door glass from the SEC tram fleet. These comprised four MTT Adelaide, two P&MTT and one sheet of HTT glass. These had been removed from the fleet by a glazier contracted by the SEC before the war, shortly after

the Adelaide cars arrived. He had held them for fifty years, always planning to use them some day, but in the end they look like ending up where they started - on the trams!

Further to Dean Filgate's item in the November *Trolley Wire* on the configuration of the Hawthorn and Footscray variations of the M&MTB's M class cars, Dave Macartney can confirm Dean's observations that the only dimensional difference between the two types is the distance between the drop-end seats. In fact, Dave one took a saloon window rail out of car 32 (Footscray) and installed it in car 26 (Hawthorn). It not only fitted exactly but even the screw holes all lined up!

Another discrepancy, which has not been corrected in all five editions of *Destination City*, is the length of the H class cars. These are a short wheelbase, short saloon car dimensionally identical to the J class, but are shown in "official figures" as being one foot longer, similar to the M class. Five minutes with a tape measure will put the lie to the official figures. It should be remembered that the M&MTB have not had a H, J or M class car on the premises for over sixty years. If their records are wrong, there is no way they can be verified or challenged in Melbourne. Official records are probably the most reliable source of information, but they should always be double checked wherever possible.

WHITEMAN PARK

Perth Electric Tramway Society

From Michael Stukely

The pace of activity at the Museum increased considerably towards the end of 1993, with significant progress being made on new developments in two area - the new engineering shed, and the re-configuration of the triangular junction at Stockmans Crossing.

Engineering Shed

Previously, one bay of the floor in this shed had been concreted (photo, *TW* August 93). Compacting of the remainder of the floor area was carried out on 23-24 October in preparation for concreting.

An access road, from the driveway to the rear

(south) of the shed, and a turning area were constructed on 27-28 October. This facility is required to give heavy vehicles access to the shed, and was also necessary for the concrete trucks involved in the planned concrete pour. A total of 45 tonnes of limestone base and 12 tonnes of roadbase topping were used. The opportunity was also taken to use the bobcat to remove an embankment behind the engineering shed.

Following completion of the laying out and welding of the 45lb rails for the wheelset transfer system, final levelling of these tracks was done on 14 November. The layout consists of an "H" pattern to be based on the pit, with the central track extending to the right to give direct access to the wheel lathe (still to be installed).



Noel Blackmore using the ex-WAGT theodolite (on permanent loan to PETS from Transperth) to level the rail system in the engineering shed on 14 November 1993.

MICHAEL STUKELY

The concrete pours for the next three bays of the floor were done on 20 and 22 November, and "finishing" around the rail system was then carried out.

A large team of members was involved in the various stages and preparation of this work, under the supervision of Lindsay Richardson and Noel Blackmore.

After some bracing of uprights is completed, it is expected that the excavation of the pit will be done in the coming summer months.

Grooved rail has been laid on the pit road approach, from the turnout on no. 4 road to the gate between the Oketon Geddes Carbarn and the perway shed. Clearances were tested successfully using both W2 class 393 and Fremantle 29, and the track has been fully ballasted with roadbase to railhead level.

Stockmans Crossing

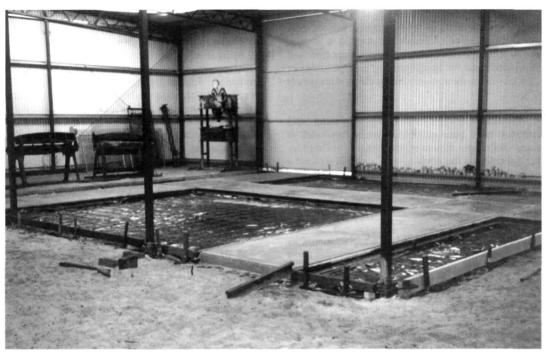
For many years, it has been our intention to make some major changes to the rather awkward track layout of the triangular junction located here. The aim is to give the junction a rather more "tramwaystyle" appearance, and to simplify the overall layout (thereby reducing its ongoing maintenance needs).

On 14 November, surveying was carried out so that accurate detailed plans could be prepared. The first stage of the work involves the provision of a new alignment for the southern leg of the triangle. This leg originally had two "kinks" due to the arrangement of the turnouts at its eastern and western ends. The new configuration will give a straighter run, with only one gentle curve at the centre of the leg to match the alignments of the sections to Entrance (eastward) and Mussel Pool (westward).



Duncan McVicar trims rail intersections on the newly-concreted floor in the engineering shed on 28 November 1993. The area to the right will be occupied by the wheel lathe.

LINDSAY RICHARDSON



Newly-laid concrete in the rail layout in the engineering shed after the first pour on 20 November 1993. The "H" layout is clearly visible. The pit will be constructed in the foreground.

LINDSAY RICHARDSON



Stockmans Crossing on 12 December 1993 looking west towards Bennett Brook along the newly aligned southern leg of the triangle. The former track-bed is on the left; the western turnout (middle distance) has been

Andy McCutcheon's team began work in early December on this leg. The trackbed for the new alignment was constructed and the track slewed across to it; the east and west points were removed and transferred for installation at new positions at opposite ends, their spaces being filled with panels of track.

Services between Stockmans Crossing and entrance have been suspended while this work is done. Trams can, however, still operate to Entrance for Specials via the north-to-east leg. When two-car operations were needed in December, cars shunted at Stockmans North to cross, as the passing loop is not yet wired. Otherwise, services have continued without disruption.

Steel poles have been prepared as replacements for the wooden poles in the rewiring of Stockmans Crossing. New span wires have been strung to support the running wire so that three poles could be removed - this was necessary for the completion of the new track-bed for the southern leg. On 18 December, trees were pruned to clear the new alignments, and further preparation of track-bed was in progress at the end of December.

Operations

Patronage during Spring was good, with Fremantle 29 being used regularly as second car each Sunday. This car has performed well since its truck exchange. School holidays (5-15 October) were very busy, with good loadings on all days. The trial weekday operations (Wednesday-Friday) between Village and Stockmans Crossing have produced excellent results, which is encouraging both to the Society and to the Village operators.

A special day was held in the park on Sunday 10 October for the ABC Royal Flying doctor Appeal This was a great success, with 1300 cars entering. Tram operations were based on Stockmans Crossing, with up to five cars in service as required.

At 10.00am, W4 class 674 began services from Stockmans to the Village, while W2 class 329 ran between the Entrance and Mussel Pool. SW2 class 426, W2 class 393 and Fremantle 29 were worked to Stockmans at this time also: 426 was stowed in the loop at Stockmans north using the wandering lead; 29 was held on the north-to-east leg, and 393 on the north-to-west leg.



Stockmans Crossing on 12 December 1993 from the east. Earthworks for the new eastern turnout to the Village are visible near the pole to left of centre; beyond is the newly-aligned southern leg. A section of the original southern leg remains at left. W2 class 329 can be seen on the north-to-west leg.

As loadings increased, extra cars could be brought into traffic immediately - 393 joined 674 on the Stockmans-Village section, and 29 took over the Stockmans-Entrance run while 329 now ran Stockmans-Mussel Pool. At 2.15pm, 426 entered traffic as the third car to the Village, and five trams continued operating until 4.00pm. On most trips, all five trams could be seen arriving at Stockmans Crossing almost simultaneously - a very impressive sight.

Other News

A further 17 Westrail-style concrete poles have been purchased - they were delivered to the Park on 20-21 October.

The refurbishment of W5 class 766 continues. The "negative" (grey) coat has been applied over the black sealant on the roof, prior to its repainting with Boston Tan. Work will soon start on the re-motoring of the trucks.

The restoration of WAGT E class 67 is progressing slowly. The interior side panels have been sanded, and the exterior tongue-and-groove timbers below the windows are receiving similar treatment. Fittings have been removed from the roof for refurbishment and in preparation for the fitting of new canvas.

Sunbeam trolleybus 889 has arrived back in the Museum compound from temporary storage at Whiteman Village junction. A shelter is to be built alongside the workshop to house the two trolleybuses.

Craig Winslow and Paul Edwards have fitted axlebearings and wheels to the frame of a steel railtrolley acquired several years ago. This will be useful in transporting heavy equipment and sleepers on the track.

The refurbishment of the Albion tip-truck is continuing. The radiator has been completely dismantled for repairs, and work is being carried out on the axle drive spline.

John Shaw continues his welcome efforts to beautify the grounds of the Museum. The conifer border along the Lindsay Richardson Carbarn has recently been extended, and additional sleepers added to the retaining wall between the leisure garden and the fan. The garden is an ideal setting for some of our social events - a most successful Christmas barbecue, attended by about 80 people, was held there on 27 November. As usual, Martin Grant and his helpers did an outstanding job with the catering.



SW2 class 426 stands in the new loop at Stockmans North, awaiting its turn in traffic on ABC Royal Flying doctor Appeal day, 10 October 1993. Access to the loop was achieved using the wandering lead. This was the first occasion on which the loop was used.

ROBERT PEARCE

HADDON

Melbourne Tramcar Preservation Association

From Craig Tooke

The return to warmer weather has at last meant that we can once again venture outdoors at Haddon and continue construction work in the two main areas we are currently concentrating on - trackwork and signalling.

Trackwork

Ninety percent of our trackwork is now complete following completion of the laying of no. 1 road and partial completion of no. 2 road at the terminus.

All track as far as the lower terminus turnout has been levelled and packed. Final levelling and packing of the two terminus roads will not be undertaken until other work, such as the erection of the overhead poles within the lower terminus area, has been completed.

Suitable steel rods for use with the automatic point motor to be used at the lower terminus have been obtained and await installation once the point motor has been positioned.

Craig Tooke has made the cable bonds used to provide a low electrical resistance path around the terminus turnout and Craig has been assisted by Tony Smith with the installation of these bonds. At the same time, Craig and Tony have completed the installation of rail bonds on both the terminus tracks.

Signalling System

This is the area in which the greatest results have been achieved over the past few months.

Noel Gipps has completed in Melbourne the manufacture of the lower terminus signal panel and has installed it in the signal cabinet adjacent to the start of the south-west curve. Termination of the incoming and outgoing cables has still to be completed. Work is well advanced by Noel on the



The lower terminus track in position. The upper terminus can be seen in the background.

CRAIG TOOKE



The lower terminus signal relay cabinet showing the newly installed relay panel. CRAIG TOOKE

construction of the upper terminus signal relay panel.

John Withers was assisted by Tony Smith and Arthur Ireland in completing the installation of push buttons in the former metal track telephone box. The box is now mounted on a specially designed and constructed pipe mast situated on the west side of no. 2 road. Actuating these push buttons will will change the points should they be set for the wrong road when departing the terminus. The turnout is exrailway and not designed to be hand-operated or driven through in the trailing direction.

The 240 volt submains to the lower terminus relay cabinet has been connected into service at both the former bus shed and lower terminus ends. John Withers has designed and constructed two power supplies (240V to 110V AC and 110V AC to 24V DC) for the signalling system and they have both been installed in the lower terminus signal cabinet.

Metal fabrication work on the lower terminus approach turnout indicator mast is complete and awaits installation. Work is well under way on the fabrication of the two lower terminus signal

departure masts.

Large value dropping resistors have been installed in former metal telephone boxes for use in dropping the 600V overhead supply, obtained when trams pass the overhead skates, down to a more manageable voltage for use with the signalling system.

The signal light to be used when trams depart the depot building has been overhauled and modified. It awaits installation. Among the modifications required was the construction of a special mounting plate to allow the new light sockets to be mounted inside the light fitting correctly to ensure correct optical projection through the colour lenses.

Site News

Fine crushed gravel has been spread over the depot fan area over the red soil filling and it has brought the whole area up very well. This completes the earth works in the depot fan area.

With most of the major construction work now complete, a site beautification programme has commenced. This includes planting a number of trees and sowing proper lawn areas.

General

W3 class 663 has had a new set of brake shoes fitted following general operational wear and tear around the museum.

John Withers has carried out routine maintenance on the substation equipment which has performed without problems.

Overhaul of the Museum's weed spraying poison cart has commenced now that the current round of poisoning has been completed.

Wedding Bells

It very pleasing to record the engagement to our General Manager Tony Smith to Heather Hunter on 26 November 1993. Heather has been very active at the museum over the past few months and it was a surprise to us all when the engagement was announced.

Best wishes to you both for the future.





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