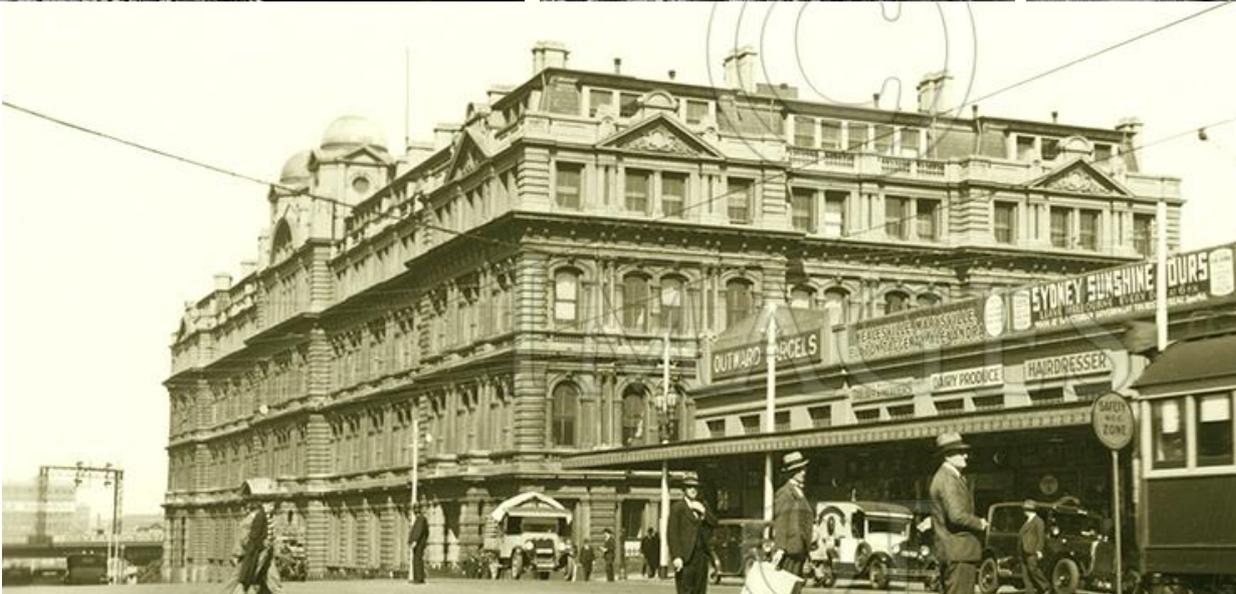


# The Times

March 2019

A journal of transport timetable history and analysis



Inside: By railcar and airship ...  
... from St Pancras to Spencer St  
Stopping at the Hospital

RRP \$4.95  
Incl. GST

# The Times

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**Editor** Geoff Lambert 179 Sydney Rd FAIRLIGHT 2094 NSW email: [thetimes@austta.org.au](mailto:thetimes@austta.org.au)

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Dreams turn to Nightmares



(e.g. Platform working), or when trains change tracks (e.g. Up Main to Up Suburban); the Signaller must ensure there is no Down Train on the Down Main at the same time).

The Australia Day STN 0522 was put together by two Train Planners (DL and TR). They would have started to work on this Event 12 weeks prior to Australia Day, working under the guidance of specifications which they needed to comply with or, otherwise, provide details as to non-compliance which Stakeholders, in turn, would need to agree to by 6 weeks prior to the STN operating.

The Database for Australia Day 2019 (which includes STN 0522), with altered and unaltered trips, would have been completed 6 weeks prior, when Crewing would receive a download of the data for their Op-Crew program to enable formulation of diagrams for drivers and guards. Crewing must have this complete some 3 weeks before the Event so rosters for drivers and guards can be posted up at the depots at least a fortnight before.

Continuing with the timeline, (which has always applied and still applies today): the Train Planners (DL and

TR), between 6 weeks and 2 weeks prior, would need to work on any freight train that may require to be worked clear, and also make adjustments as requested from the Area Controllers (Signallers) and Crewing Officers.

Train Planners would need to send off the Start/Stable Sheets to all depots to ensure that all consists balanced and each siding or road could accommodate the train.

At the same time, "Defects" need the rosters to ensure train sets rotate through the rosters to maintain the maintenance cycle.

The Train Planners (DL and TR) together with the Production Supervisor will, 2 Weeks prior, Sign-off on the Database as "Final", indicating that all checks and analyses have been completed and there are no errors. If so, the STN is sent to PRESS (or sent for printing).

Today, it is quite easy for a train planner to print up the applicable section and give no detail as to what has been altered. Hence, this is why we have a reprint of the SWTT on a daily basis, especially at weekends.

Also, in the above possession scenario, the Train Planner today can make the alterations in a database, and each trip altered is stamped with the STN number. The Train Planner, can use a program called "Prosemaker", to insert all the trips stamped with that STN number into a Word document, dispensing with the above paragraph (which specified the working and encompassed the time frame from first to last train).

This then means that customers or stakeholders, where they are not in a position to extract the data, have to read numerous lines of text.

Therefore, today, we either have too much detail that is just a copy of the SWTT, that we don't need, or not enough detail to determine what has in fact been altered.

Downstream users don't worry too much because they only extract certain required data and may not need to refer to a STN at all.

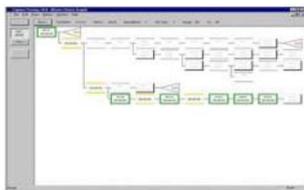
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## RAIL//TABLE

**RAIL//TABLE is a timetable entry and train flow modelling system which facilitates the production of robust timetables.**

**It can be used to model the operational impacts of proposed timetables or changes to a railway network.**

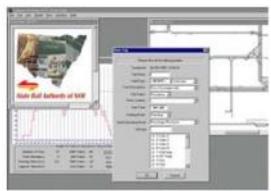



**RAIL//TABLE includes advanced techniques for editing timetables including filtering, bulk editing and copying of trains.**

**This allows schedulers to quickly develop prototype or final timetables to establish their feasibility or to output in a form suitable for publishing.**



**As well as a suite of text based reports there are a number of graphical outputs including trains in service by time of day, train diagrams or an animated display showing services operating on a schematic of the network.**



**All reports and graphs can be displayed consecutively so that the user can refer to these while performing timetable edits.**

[Return to view another Railsys component](#)

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## THE RAIL//SYS MANAGEMENT SYSTEM



**The Tried and Proven Train Simulation and Timetable Development System**

**Summary**  
RAIL//SYS is made up of three fully integrated software modules:

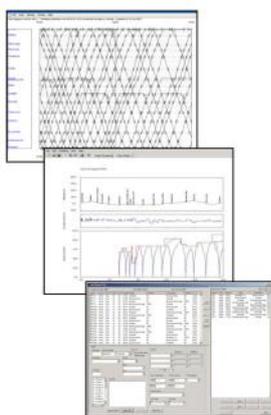
RAIL//TABLE	Timetable designer & modeller
RAIL//TRAIN	Train Performance Simulator
RAIL//NET	Railway Network Builder

Each of the Rail//Sys components are Corporate friendly – easy to use, runs on Microsoft Windows, increases user productivity and has context sensitive menus & controls.

**RAIL//TABLE is a railway timetable editing program that allows users to create, maintain and report on railway and interconnecting bus timetables.**

**Features & Benefits**

- Enforces railway network rules - Railway network rules (such as: running times, junction movements and eligible rolling stock) are enforced during timetable creation thus ensuring the consistency and feasibility of the timetable.
- Advanced editing features - Editing features include bulk copying of a trip, bulk editing of many trips, trip splicing and editing of duty rosters including next day duties.
- Advanced reporting features – Reporting features include production ready timetable pages, train duty rosters, train graphs and various executive style reports. These reports can be published as working documents or used as the basis for strategic analysis.
- Advanced modelling features - The modelling capabilities assist in the creation of robust timetables.
- Creation of Master and/or Daily timetables - A Master timetable sets down the long term schedules. This can then be overlaid with a Daily timetable which takes into account short term network changes such as temporary speed restrictions and/or track closures.
- Multi User - Rail//Table is a multi user program.



**TTG**  
Transportation Technology Group

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# Changing at the Hospital

JAMES T WELLS

**A** STRANGE SITUATION commenced in Melbourne in September 2018 with the splitting of three bus routes—the 216, 219 and 220—into disconnected sections.

These routes ran from the Sunshine area in the West via the CBD to the Gardenvale/Brighton area in the South East. They all use Commercial Road / Malvern Road in Prahran, before turning south on either Williams Road (216, 219) or Orrong Road (220).

Before this “disconnect”, after leaving the CBD, these buses used that wonderful boulevard, St Kilda Road, to reach Commercial Road. The disconnect is the result of Metro construction at the Domain, which has reduced capacity for southbound traffic on St Kilda Road.

These routes now have two termini in the middle of the route. The northern arms of the routes now terminate in the CBD and the southern arms terminate at the Alfred Hospital in South Melbourne. There is no indication or information in the timetables about how to connect between the two mid-route termini for passengers wanting through travel.

The information leaflet announcing the changes to the route suggests that through travel can be made by using the trams along Commercial Road and St Kilda Road. This leaflet is no longer readily available.

For the southern terminus at the Alfred Hospital in Commercial Road, the buses do an counter-clockwise loop to

join Punt Road before making the right turn into Commercial Road. It is not clear which street the 220 uses to access Punt Road, but it doesn't matter if there are no stops in the area. The 216 and 219 go right down to Queens Way, about 1.2km from Commercial Road. Perhaps High Street is too congested to cope with buses as well as trams? It appears that there are no stops on the circuit.

The only reason, then, to show the circuits on the map is to indicate to outbound passengers at the Alfred Hospital that they must catch the bus at the inbound terminus stop, rather than on the opposite side of the road, as would be normal.

Bus stops and tram stops are not necessarily close together along Commercial Road. For example, there is no bus stop close to Prahran Market.

A quick word about Google Maps. Smaller scale maps do not show any public transport stops. Increasing the scale by pressing the + symbol (zooming in) results in railway stations being shown. Press + again (maybe several times) and symbols will appear along streets. However, they may only be tram stops. It is necessary to keep increasing the scale before bus stops also appear. It is a great pity that, for Melbourne, Google doesn't show Stop ID numbers, as happens in Sydney. In Sydney, these can be copied/pasted into the Trip (Journey) Planner app.

I have the impression that, in Melbourne, the system has not been updated for the truncation of these bus routes.



The alert above came up during a check. My attempts to find out which stops these are failed (they are probably the Alfred Hospital ones) but in the process a link to a very comprehensive list of bus stops in the City of Melbourne was found: <https://data.melbourne.vic.gov.au/Transport-Movement/Bus-stops/ss79-v558>. This link has a map, but data can be exported (downloaded) in CSV format. Sorry, but routes served are not shown.

For the northern arms, all the routes terminate at Queen and Collins Streets in the City. No turn around loop is shown.

Google Maps shows that the first stop in Queen Street for outbound services is just south of Collins Street, the next being right up near Bourke Street—indeed just outside the BookGrocery store. What a great place to have a bus stop!

For inbound services, Google Maps shows the stop just north of Bourke Street for these services, but almost certainly they use the one near Collins Street as the final one. There's no point in Google listing these services at this stop because there are no departures.

The PTV has “Stop Maps”, accessible from Journey Planner but these probably can't be relied on to show bus routes.

Wheelchair Accessible Services	Monday to Fri					
	am	am	am	am	am	am
Morning (am) / Afternoon (pm)						
Sunshine Station/Dickson St (Sunshine)	8:50	—	9:00	9:19	—	9:49
Ashley St/Essex St (West Footscray)	8:58	—	9:08	9:27	—	9:57
Footscray Station/Irving St (Footscray)	9:14	—	9:24	9:42	—	10:12
North Melbourne Railway Station/Dynon Rd (West Melbourne)	9:23	—	9:32	9:50	—	10:20
Dudley St/Spencer St (West Melbourne)	9:27	—	9:36	9:54	—	10:23
Collins St/Queen St (Melbourne City)	9:42	—	9:51	10:08	—	10:36
Alfred Hospital/Commercial Rd (Prahran)	—	9:00	—	—	9:30	—
Robinson St/Williams Rd (Prahran)	—	9:14	—	—	9:44	—
Elsterwick Railway Station/Horne St (Elsterwick)	—	9:27	—	—	9:57	—
Bay St/New St (Brighton)	—	9:34	—	—	10:03	—
Brighton Beach Railway Station/South Rd (Brighton)	—	9:42	—	—	10:11	—

A snippet from the current pdf timetable for the 216 service is shown on page 5. The timetable is in order of departure times, irrespective of terminal and so is not helpful for anyone wanting to make a through journey. It is a great pity that the stop list is not in two very clear sections, so

that users would be in no doubt that the service is running in sections. All that is needed is a blank row after Queen Street. Even better, the two halves of the routes could have been given different route numbers, or at least separate timetables could have been issued for each half.

The assistance of Len Regan is much appreciated.

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## Changes to routes 216, 219 and 220 starting Sunday 9 September, 2018

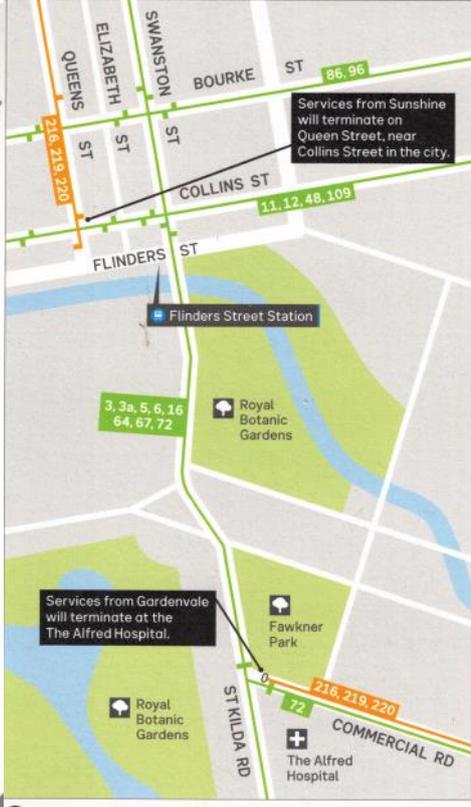
Due to works on St Kilda Road and Southbank Boulevard, routes 216, 219 and 220 will no longer run along St Kilda Road between the city and Commercial Road.

- Services from Gardenvale will terminate at The Alfred Hospital.
- Services from Sunshine will terminate on Queen Street, near Collins Street in the city.

To continue your journey along St Kilda Road connect with tram routes 3, 3a, 5, 6, 16, 64, 67 or 72 on Swanston Street or St Kilda Road.

Your journey time may increase. To view your new timetable visit [ptv.vic.gov.au](http://ptv.vic.gov.au)





Services from Sunshine will terminate on Queen Street, near Collins Street in the city.

Services from Gardenvale will terminate at The Alfred Hospital.

MAP NOT TO SCALE

Key	
	Bus route
	Bus stop
	Tram route
	216 Bus route number
	86 Tram route number
	Tram stop



216	Sunshine Station > City	219	Sunshine South > City
216	Alfred Hospital > Brighton Beach		
219	Alfred Hospital > Gardenvale		

Zone 2



Ticketing zones: Single zone, Zone overlap

For more information visit [ptv.vic.gov.au](http://ptv.vic.gov.au) or call 1800 800 007

MAP NOT TO SCALE  
© Public Transport Victoria 2018

# Changes to routes 216, 219 and 220



# Oats, Rexine, Dynamite, Manure, Basalt—and Dirigibles

**GEOFF LAMBERT** looks at some interesting sidings around Deer Park and the planned St Pancras to Spencer St railcar—airship—rail motor timetable for it.

**J**ACK MACLEAN, ATA founder, always liked Deer Park—a station a mere 11 miles from Melbourne but which “*can still give the impression of Pimpino ... and the trains look for all the world as if they are still up in the Mallee or Wimmera.*”

Deer Park was opened in 1884 as “Kororoit” when the Melbourne to Melton line was opened. Its “Wimmera-like isolation” on the outskirts of Melbourne made it the ideal location for a number of what we would now call “noxious industries”, including quarries, fertilizer works, plastics factories, explosive factories and munitions storage. All of these were connected to the VR network by sidings at various times, the peak being the 1920s and 1930s, when most of my story took place. Their residues

can be seen from the air along with still-existing and newly-created lines. They make an interesting “stick-insect” pattern of tracks, as shown on our rear cover.

## Ardeer/ Federal Manure Siding (9M70C)

This siding was opened as the Australian Explosives and Chemical Company Siding in 1903. By 1910 it had been renamed as the Federal Manure Siding and, later again (1926), as Nobel P/L Chemical Siding. The unifying element—literally an Element—of the siding and the industries it served, was nitrogen. Inorganic and organic nitrates are either explosives or fertilizers; one of them, ammonium nitrate, is both. Glycerol trinitrate (Nitroglycerine), discovered by Ascanio Sobrero in 1847, was the active principle of

Alfred Nobel’s invention of Dynamite, which was made on the Ardeer site. Nobel’s factory was later acquired by Imperial Chemical Industries (ICI). Ken Moorehead, my Sunday School Preacher, was an Industrial Chemist at ICI and always had entrancing chemical demonstrations of scripture—usually involving fire and brimstone. I still have the handbook he used for these and, for a while, made my own gunpowder in an old explosives magazine in our backyard (every word of this is true).

It is unclear which fertilisers were made at Ardeer, the choice seems to be between ammonium nitrate and some stuff called Super-Nitro, which was, I think, a calcium-based “nitrogen equivalent” of Superphosphate.

In my VR Traffic Returns book of the Western Line for the 1923-1935 period, total annual traffic in and out of Ardeer ranged from a high of 30,000 tons per annum (TPA) prior to the Depression, down to 8,000 TPA in the early 1930s.

For many decades, commencing in 1923, Ardeer and Deer Park had specially-timetabled passenger and goods trains, the passenger service being mainly for employees at the Explosive Works (see left, for an entry in the 1929 WTT). In addition to these local services, a morning Down and an afternoon Up train stopped at Ardeer. In later years, until at least the 1980s, a daily “Pilot” train ran to Ardeer and Deer Park to do “*put and takes*” around the explosives factory.

## Leather Cloth Siding

This siding was worked out of Deer Park station yard, rather than being worked off the Main Line. It opened in 1929 for “Nobel Chemical Finishes (Aust) P/L”.

“Leather Cloth” was artificial leather fabric. It was made of cloth surfaced with a mixture of cellulose nitrate (a low-power explosive known as gun-cotton), camphor oil, pigment and

MELBOURNE—DEER PARK LOCAL SERVICE (GUARANTEED).						
DOWN.			Electric Daily.	Electric Sats.	Electric Sats. Exc.	
Flinders Street	...	...	A. M. 6 49	A. M. 11 7	P. M. 4 15	
		dep.	7 10	11 30	4 38	
Sunshine	...	...	C	C	C	
		arr.				
		dep.	Steam. 7 12	Steam. 11 34	4 52	
Ardeer N C	...	...	7 18	11 40	4 58	
Deer Park	...	...	7 20	11 42	5 0	
		arr.				
UP.			Steam Daily.	Steam Sats.	Steam Sats. Exc.	
Deer Park	...	...	A. M. 7 25	A. M. 11 48	P. M. 5 7	
Ardeer N C	...	...	7 27	11 50	5 0	
		arr.	7 33	11 56	5 15	
Sunshine	...	...	C	C	C	
		dep.	Electric. 7 41	Electric. 11 59	5 18	
Flinders Street	...	...	8 4	P. M. 12 21	5 41	
		arr.				

C. Passengers change.



alcohol, embossed to look like leather. Again, the link was the element nitrogen.

One trademarked version was Rexine, produced in the United Kingdom by Rexine Ltd of Hyde, near Manchester. Used as a bookbinding material and upholstery covering, Rexine was also widely used in trimming and upholstery the interiors of motor vehicles produced by British car manufacturers beginning in the 1920s, and the interiors of railway carriages, its cost being around a quarter that of leather. The use of Rexine in a railway carriage contributed to the rapid spread of fire on the 15:48 West Riding express from King's Cross, near Huntingdon on 14 July 1951 [See Rolt's "Red for Danger" history of

railway accidents].

Rexine was used by the British Motor Corporation in the 1960s and '70s, particularly as a surface for 'crash padding' on dashboards and doors. It was also used for British Teddy Bear paw and foot pads from the late 1930s to early 1960s. The author George Orwell, writing in his wartime diary on April 29 1942, reported on his visit to the British House of Lords: "*Everything had a somewhat mangy look. Red Rexine cushions on the benches - I could swear they used to be red plush at one time.*" The caravan that my father built in the late 1950s was upholstered in the same Rexine that George Orwell saw in the House of Lords. We boys thought it was fantastic.

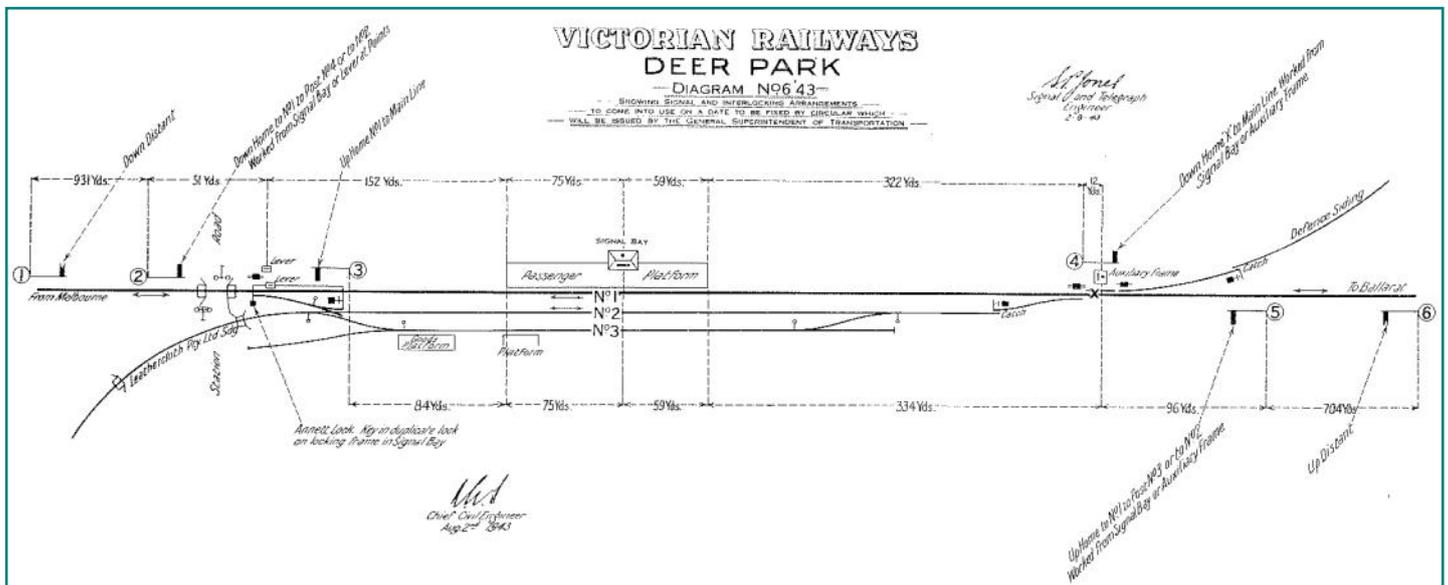
The Traffic Book shows Inward traffic of a few thousand tons per annum commencing in 1931/32. When I first started commuting to school in 1963, the siding was still in place but with a stop-block installed in 1955 which prevented access. The air around Deer Park was brown with nitrogen dioxide. Whether or not this was associated with the production of Leathercloth or explosives was never clear to me—not that I knew then what Leathercloth really was.

### Deer Park (11M)

That Deer Park was rural and agricultural was evident even to me from the early 1950s. The main traffic then seemed to be oats, which were bagged (bag sewing was a common schoolboy holiday job along the line) and stored in stacks in the yard, to be taken away by the Roadside Goods—principally a Coal Train. In the 1920s/1930s, there was a modest coming and going of livestock trucks—mostly sheep—about two trucks per week on average. There was a great surge in goods tonnage to about 28,000 TPA between 1925 and 1929, when the Sandringham Council was operating a basalt quarry in the area (see below).

### Defence Siding (Ravenhall)

This siding, at the Down end of Deer Park yard, 25 chains from the station, was opened in 1943. It ran in a southwesterly direction for 4,600 feet, through Ravenhall loop of 500 feet,



thence to a dead end 700 feet further on. Ravenhall appears to have been a munitions store—a natural fit with the nearby Nobel Explosives Factory, perhaps? The distance of “Ravenhall” was commonly given as 12½ miles. The siding was in use for some 46 years until well after the line through Deer Park had been “duplicated”.

**Sandringham Quarry Trust Siding (11.5 miles, according to the March 1928 “Index to the Working Time Tables” book).**

In my many journeys over the line, I was always intrigued by what appeared to be a long-abandoned roadbed trending through low scrub in a northwesterly direction towards the Western Highway. Opinion among the railfan fraternity was that my eyes were probably deceiving me. In later years, when the Russian KGB briefly made its version of Google Earth available, I was able to see this roadbed. This, I am now pretty much convinced, was the Sandringham Quarry Trust Siding. Histories of the line assert that this was a siding on the south side of the line, but there is no on-ground or aerial photo evidence to

support this.

The Public Record Office has a 1927 (“approx”) record for a “[Proposed Long Siding](#)” at Deer Park. At any rate, a siding was opened in 1925 to serve a 50 acre quarry property owned and operated by the Sandringham Council, which was in a phase of rapid expansion of its roads and other infrastructure. The Council operated a small tramway system inside the quarry—probably to transport rock to the loading bins, which were about 1,500 feet (a little more than a quarter of a mile) from the end of the siding.

The quarry operated until 1928, when the Council either ran out of money or the need for it lapsed. It advertised in the Melbourne papers at the end of that year in the following terms: *TENDERS are Invited, returnable up to 4 p.m. on Monday, the 10th day of December next (1928) for the undermentioned:—*

1. *Sale of the above mentioned Trust Quarry as a going concern.*
2. *Sale of the Land as a factory site, and sale of the Plant Complete for Removal:*
3. *Sale of the Land as a subdivision*

*site, and sale of the Plant Complete for Removal.*

*The land is situate adjacent to the Deer Park railway station, on the main Melbourne-Ballarat line. The area comprises approximately 50 acres. A railway siding is laid from the site on to the main line.*

In 1927, land around Deer Park was undergoing rapid development or, to be more accurate, was entering a speculative boom ahead of the Wall St Crash. As we shall see later, the Prime Minister’s Department was trying to keep secret its interest in purchase of land in the area. At any rate, no-one appears to have taken the bait and the siding was closed in March 1931. It seems that the tracks were not taken up until later.

It is worth mentioning here that another Quarry Siding (Albion Road Siding, later Boral Resources siding) opened at 13M4C some 40 years after Sandringham Council had abandoned its quarry. This quarry (now a waste disposal site) later attracted the name Ravenhall—which name is also applied to an Industrial Estate to the north.

The Stick-insect acquired its sixth leg with the Regional Fast Rail track, which branches off to the south at Deer Park Junction, about midway between Ravenhall (old) and Ravenhall (new).

**Proposed sale yards and railway connections.**

In 1928, a number of surveys were made for rail sidings to connect a (proposed?) Deer Park livestock sale-yard to the North East line, to the Ballarat Line and to Sunshine.

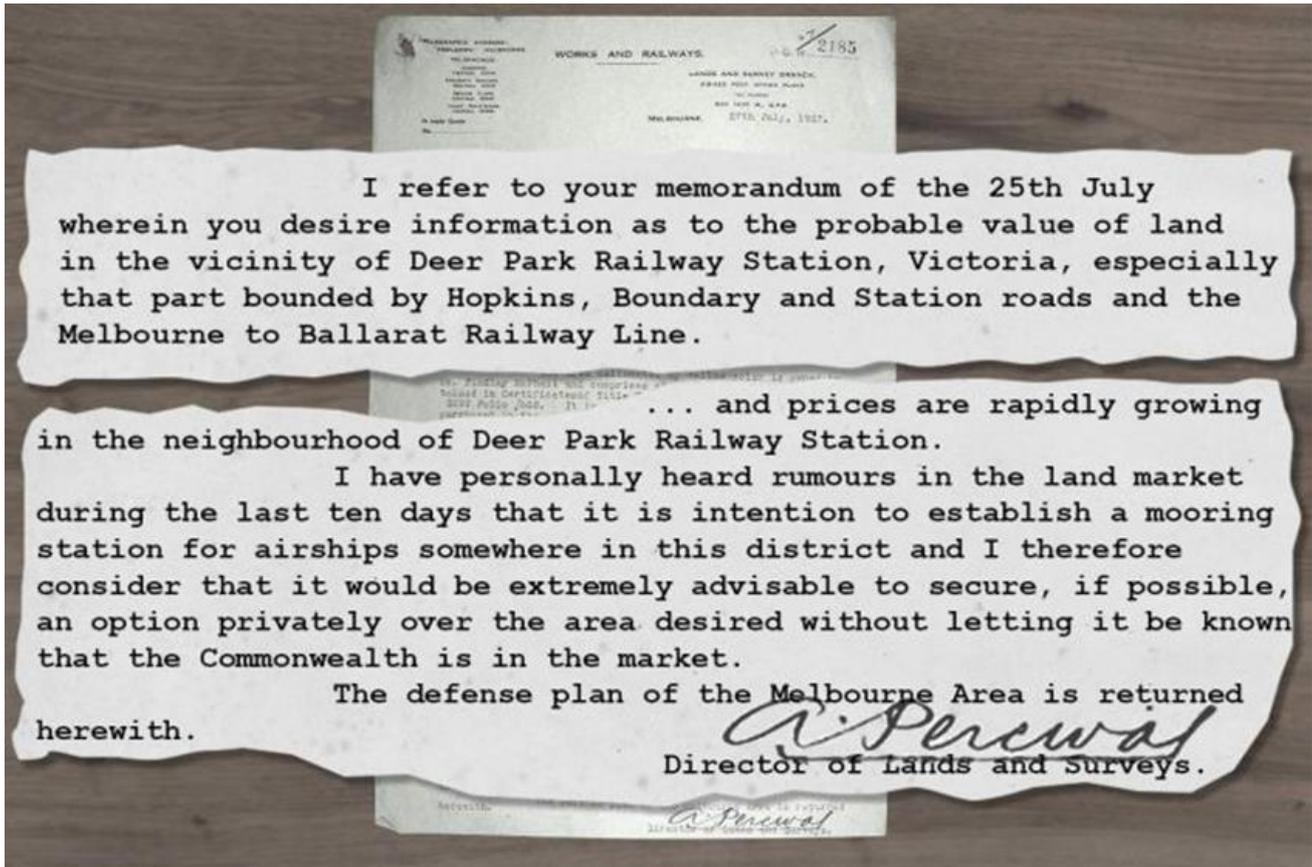
**The Dirigible station**

If there ever was a *never-was* railway station—this is it. As near as I can determine it would have been at the end of a branch line that would run from Sunshine to somewhere near the present Ravenhall waste-disposal site.

We need to go back to the London newspapers of early 1922, when the notion of an international airship service (the Burney Scheme) first seems to have emerged, as a result of discussions at the 1922 Imperial Conference (the forerunner of



The King and his Prime Ministers at the Imperial Conference of 1926. Stanley Melbourne Bruce, Australian PM and a reluctant airship enthusiast, is the middle gentleman standing. Fantastic pants, eh?



CHOGM). At the time, it was estimated that the elapsed time to Australia would be 11½ days, including 6 hours spent at each of six intermediate mooring masts.

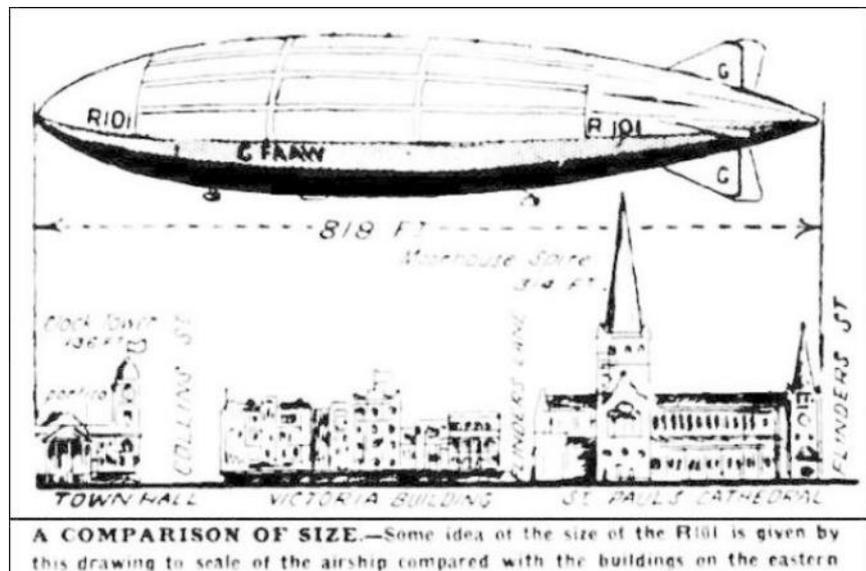
The matter rumbled around the traps until the next Imperial Conference in October/November 1926, when a subcommittee made a long and detailed report on the feasibility of such a scheme—by now renamed “The Imperial Airship Scheme”. This was part of a wider forum on Imperial Air Services, of which the following interesting discussion on air communications took place at the tenth meeting of the Conference on the 28th October. Statements were made regarding the progress achieved in civil aviation in the various parts of the British Empire. The Conference was deeply impressed with the great possibilities offered by the development of Imperial air communications and their importance from the political as well as the economic point of view.

The ultimate objective of this policy was to bring the most distant parts of the Empire within a fortnight's journey of London and, in the first instance, the Convenor of the sub-committee

suggested that it would be advisable to concentrate on two main routes—England to Australia and South Africa. In summing up, the Committee made four recommendations, of which the third was: (3) *In view of*

- (a) *The great potentialities of the airship and;*
- (b) *The present lack of constructional and other facilities which must prove a serious obstacle to the early development of regular airship services recommends that the Governments of the Dominions*

*concerned and of India should examine the possibility of erecting nucleus mooring-mast bases to be available for demonstration flights in 1928-29 by the two airships now under construction, and of instituting such preliminary meteorological investigations as may be necessary to facilitate these demonstration flights and; that His Majesty's Government in Great Britain should consider the erection of a second shed at the Royal*



ESTIMATE OF COST OF AIRSHIP MOORING TOWER & SIDING BASE

MELBOURNE.

	Demonstration Flight.	Additional cost developmental operations.	Additional cost commercial operations.
	£	£	£
Land	30,000		
Clearing site 500 acres ) Road - ¼ mile )	4,500		
Water Supply - 2 miles 6" pipe	4,500		
Permanent Supply - 4½ miles			9,000
Temporary electric power station 125kw.	6,000		
Cable - ½ mile or 4½ miles from Town Supply	1,100		
	<u>46,000</u>		14,000
Airship Tower Structure	20,000		
do Road	11,000		
Winches 2-75 h.p. each-Boilers & Motors	7,000		
Remote Control and Lift		9,000	
Snatch Block Anchorage and Sundries	<u>3,000</u>		
	<u>41,000</u>		
Hydrogen Plant, silicol 30,000 cubic feet per hour	16,000		
do additional units		14,000	
do Water, Gas output 3,000,000 cub.ft. per week 1,000,000 cubic ft. storage			80,000
Accommodation Personnel, Office Buildings etc.	Tents on loan	4,000	20,000
	103,000	27,000	123,000
		103,000	130,000
		130,000	253,000
Airship Shed 850' x 180' x 170'			200,000
Railway Siding - 5 miles			40,000
			<u>493,000</u>
<b>SAY:</b>	<b>£105,000</b>	<b>£135,000</b>	<b>£500,000</b>

Airship works at Cardington.

Australian PM, Stanley Melbourne Bruce, in his own address to the Conference, ventured: *I must frankly say my knowledge in regard to airships is so limited and my views are so undefined that I could not say how*

*far we would be prepared to go. However, the matter is one of such extraordinary importance to us that I think I can go so far as to say that, if it can be shown that there are reasonable possibilities of airships being perfected sufficiently to do the journey with safety, we would take the*

*risk of a mooring-mast and certainly take the necessary steps to get the meteorological information that is desired. I certainly hope that all that is contemplated can be achieved by means of the airship, because, while the aeroplane will be a practical means of communication, it cannot*

possibly be so comfortable or so attractive to the ordinary traveler desiring to get from Australia to Britain or from Britain to Australia rapidly as the modern airship is going to be with all the luxuries the Secretary of State suggests will be provided in it.

The Conference agreed to set in motion all that was necessary to investigate the feasibility of bringing the scheme into operations in each country and, in particular, to evaluate potential sites for mooring stations in each country. This, mind you, was just a proposal to set up an initial demonstration flight (note the allowance for tent accommodation), but with an option for later permanency.

The announcement caused a great flurry of excitement in Australia and New Zealand. The NZ Parliament went so far as to publish the entire Conference Proceedings as a Parliamentary paper.

Bruce took a while to get up steam—well he didn't arrive back in Australia for some weeks—didn't have an airship, did he? ... although he did fly across the Nullarbor—and boasted about it at the Conference. He was roused from this torpor by the arrival in Australia in mid-July 1927 of Mr. Sydney Nixon of the Royal Airship Works in Cardington Bedfordshire, with a Commission from the Royal Air Minister, inquiring into the local particulars affecting possible establishment of mooring stations in Australia.

A recent ABC feature story said of this, "It was something local politicians and newspapers were only too happy to help them achieve. The



Cardington station—Then



Cardington station—Now

preferred route from Britain to Australia was across the Indian Ocean, via India or South Africa, arriving in Western Australia. The Australian government began investigating, buying up land at Jandakot, in Perth, to establish a mooring site.

But why would you go to the trouble

and expense of setting up an airship service to the other side of the world if you were just going to deposit people in Perth? A second base on the east coast was a must.

In an early victory in the ongoing intercity war, Melbourne was chosen ahead of Sydney thanks to the unchallenging terrain on the western

BEDFORD and HITCHIN.—Midland.																	
		Week Days only.								Week Days only.							
Miles from Bedford.		m		A		S		Miles		m		A		T		S	
		mn	rn	mn	rn	aft	aft			mn	rn	mn	rn	aft	aft	aft	aft
642	London (St. Pan.) dep.	4	25	6	25	9	25	12	30	4	30	6	30	8	00	8	30
617	Leicester † dep.	6	35	9	43	11	28	4	15	4	55	7	42	9	10	11	15
	Bedford dep.	6	20	8	54	11	15	1	42	5	50	7	42	9	10	11	15
3	Cardington dep.	6	29	9	21	12	31	1	49	5	59	7	50	9	10	11	15
7	Southill dep.	6	38	9	11	13	21	1	58	6	37	9	59	11	15	16	20
9	Shefford dep.	6	46	9	17	11	38	2	36	15	8	5	13	16	20	21	25
12	Henlow dep.	3	50	6	53	9	24	11	45	2	106	2	48	12	15	16	20
16	Hitchin 332, 346, arr.	7	1	9	32	11	53	2	186	33	8	20	15	16	20	21	25
48	London (K.C.) arr.	8	41	11	25	1	25	3	40	8	5	9	15	16	20	21	25
	Hitchin dep.	7	25	9	55	12	15	2	42	4	25	7	0	9	10	11	15
4	Henlow dep.	7	34	10	3	12	24	2	53	4	34	7	12	9	18	20	24
6	Shefford dep.	7	40	10	9	12	30	2	59	4	40	7	18	9	24	25	29
9	Southill dep.	7	47	10	15	12	37	3	6	4	47	7	26	10	14	18	22
13	Cardington 644, arr.	7	56	10	23	12	46	3	15	4	56	7	36	10	14	18	22
16	Bedford 435, 606, arr.	8	2	10	28	12	53	3	21	5	27	42	9	43	47	51	55
65	London 435, 606, arr.	10	33	12	23	2	40	6	47	30	11	15	11	15	16	20	24
66	London (St. Pan.) arr.	9	30	12	5	3	25	5	20	7	0	10	5	10	14	18	22

A Tuesdays and Saturdays. H Arrives at 11 15 mn. on Tuesdays. S Saturdays only.  
 † Tuesdays only. ‡ Over 1 mile to L. & N. W. Station. ¶ London Road.



boundary of the site would be the requisite 4½ miles; a direct railway line to Sunshine would be the requisite 5 miles. That settles it then ... doesn't it?

## Cardington Railway Station

The Mooring Mast at the other end, was to be in a cow paddock at the Cardington Airship works, where the construction and storage sheds were located. These were adjacent to Cardington LMS station on the rather unimportant Hitchin-Bedford line, with a meagre train service (photos and timetables on page 12).

The ultimate termini were **St Pancras** and **Spencer St** stations.

## The airship

By 1929, Britain had built two massive airships — the R100 and the R101 — which were housed in enormous side-by-side hangars at Cardington.

In 1930, the R100 completed a transatlantic flight to Canada in 78 hours and the return journey in less than 58 hours. The airship moored in Montreal for 12 days and attracted more than 100,000 visitors. It was a huge public relations success.

Britain pushed on with plans for another test flight to India, this time with the bigger of its airships — the R101. The R101 was, at the time it was built, the largest flying aircraft ever made, at a length of more than 220 metres. The British press, prophetically, called it "the Titanic of the skies". The R101 was luxurious compared to other aircraft at the time, with 50 passenger cabins, a dining room for 60 people and two promenade decks. Passengers could move about freely and the journey was comparatively silent. Worried about safety while you have a smoke? Have no fear: the smoking room is lined with asbestos for your protection.

With the airship built and a mooring station set up in India, the British now only needed someone to fly the thing. Lieutenant Commander Noel Grabowsky Atherstone had the rare distinction of being the only British airman to sink a German submarine from an airship in World War I — effectively leaning over the side of a

gondola to drop a mine on it in a typically low-tech Great War endeavour. After the war, Atherstone sought a quieter life and moved overseas to Victoria. He was able to secure land at Fish Creek, east of Melbourne, under the Discharged Soldiers Settlement Act.

The decorated soldier and daring airman became a pig farmer. But an extraordinary offer to be part of the new Imperial Airship scheme was enough to lure Atherstone out of retirement and back to Britain in 1927. He was appointed First Officer — effectively second-in-command — of the R101 in 1929. He had a chance to be part of history onboard the world's biggest flying craft on its maiden intercontinental voyage. Pig farming could wait.

Melburnian William Palstra had been awarded the Military Cross during World War I, later joining the Australian Flying Corps, where he was credited with shooting down six enemy planes. Palstra rose through the ranks of the Royal Australian Air Force (RAAF) to Squadron Leader by 1928, when he was nominated for a course at the Royal Air Force College, travelling to Britain with his young family. A rising star in the RAAF, Palstra stayed on as a liaison officer in London. The young airman was due to return to Australia in 1930 when fate intervened. The Australian officer who was to be onboard the R101 for its historic flight — Flight-Lieutenant Charles Harman — retired and Palstra was chosen at short notice to take his place and report back to the Australian government on the voyage. Harman had been on test flights with the R101, which he described as "successful and wholly enjoyable", although he would later admit he thought everything about the airship "looked dreadfully inflammable". Palstra was said to have had reservations too. The Associated Press reported that he told a fellow officer he "didn't like the idea of that 5 million cubic feet of gas above me".

## The timetables

An unspoken assumption in the scheme is that a passenger (a RICH passenger) would catch a First Class train from St Pancras to Cardington, transfer to the airship and reverse this

process at Deer Park, catching a rickety old VR rail motor to Spencer St station.

The Prime Ministers attending the 1926 Imperial Conference were shown a scale model of a proposed 200-metre-long airship that could make the journey to Australia in just 12 days. Because the airship (presumably the ill-fated R101) had yet to be built, everything about it was pure surmise.

The R101, cruising at 63 mph had a range of 4,000 miles. The map on page 13 suggests that the airship route would follow the Clipper Ship route to catch the Roaring Forties from the Cape to Perth or direct to Melbourne. Either was an impossible ask for the R101, the distances being 5,400 and 6,400 miles, respectively. The route map further stretches credulity by suggesting a Cardington-Cape Town route entirely over water—a distance of some 7,400 miles. This would make the length of the trip 13,800 miles, which could be done in 9 days flying time. But the airship would have run out of fuel well before it reached the equator.

A more sensible routing would be London-Cairo-Karachi-Colombo-Perth-Melbourne ... 10,200 miles for 6.7 days flying time. Total elapsed time, after allowing for 6 hours stay at each mooring post would be about 8 days. The dickiest leg would have been Colombo-Perth at 3,600 miles. The first part of this route (as far as Karachi) was chosen for the R101's maiden flight in October 1930.

Only the train timetables could be predicted. In keeping with the Art Deco tenor of the times, rail travel would presumably be by streamlined diesel railcars. The LMS had some (see front cover). VR did not (q.v.) ... but surely Harold Clapp would have risen to the challenge?

On the assumption that airship travel time did in fact turn out to be 12 days each way, there could really only be one return service per month—at least until further airships (R102 and R103) were built.

## Titanic of the Skies

Emulating the famous ship, the "Titanic of the Skies" set out on its

maiden voyage on 5-Oct-1930. It did not get past Allone in Northern France, 390 air miles from Cardington, after about 8 hours of troubled flight at 49 mph. Forty eight of those on board, including Palstra and Atherstone, were killed.

Back in Australia, Stanley Bruce had lost the general election in 1929, and it was left to the acting prime minister James Fenton to pay tribute to Palstra. "To know him was to know his worth, and we grieve for his sorrowing widow and family," he told parliament. Then-member for Kooyong, John Latham, lamented the loss of the airship and its crew, but told his fellow MPs that "this calamity, however, will be but a temporary setback; others of our race will press on to secure the mastery of the air".

The Imperial Airship Scheme was abandoned the following year. The proposed Dirigible Station at Deer Park naturally also fell from grace as a garbage tip (lower right), but Deer Park now sees almost 160 daily trains (timetable, below). At Cardington, the railway has gone but the airship sheds were used by Warner Bros for making films. One was rejuvenated for a 21st Century airship project. "Airlander 10". Guess what? - it crashed.

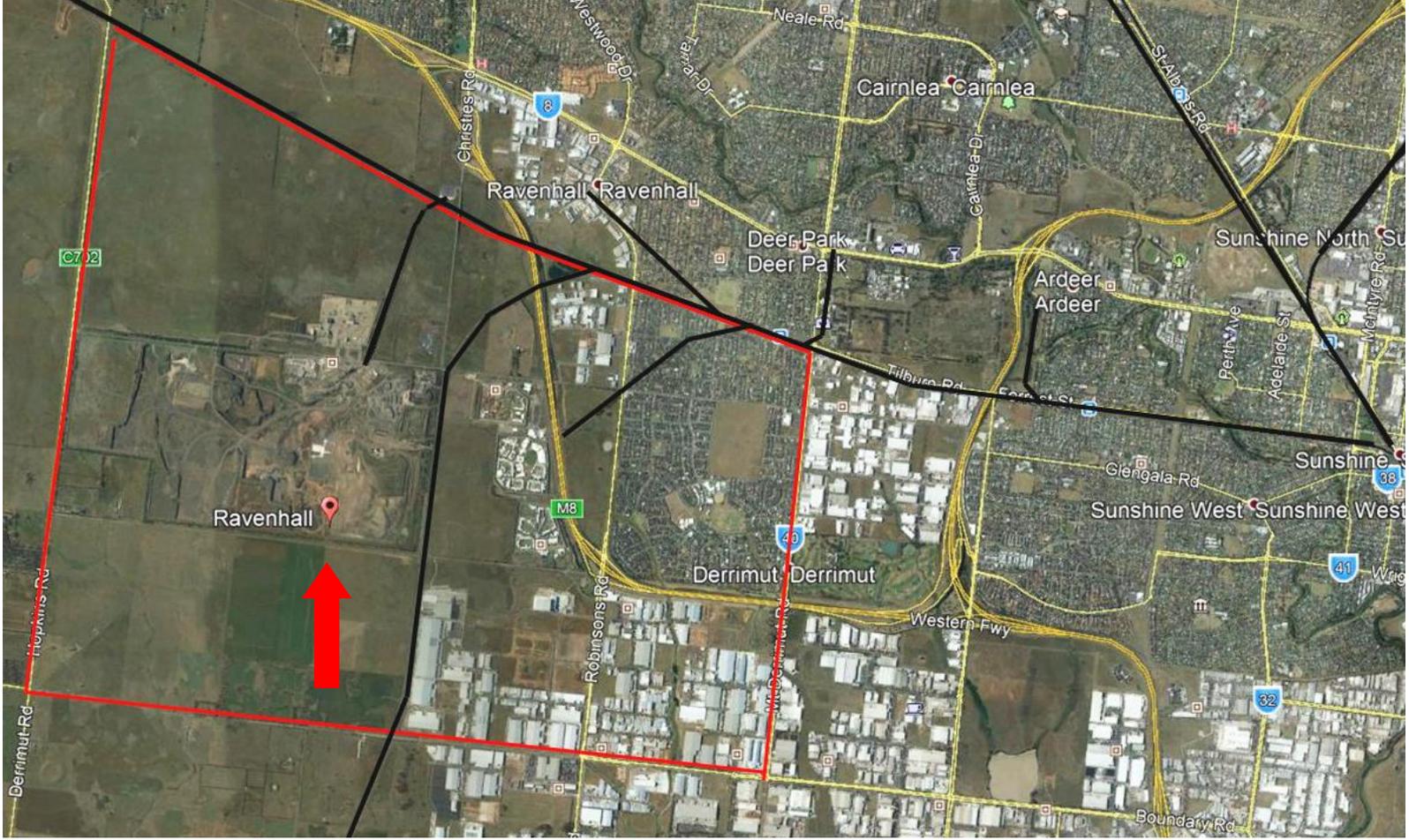


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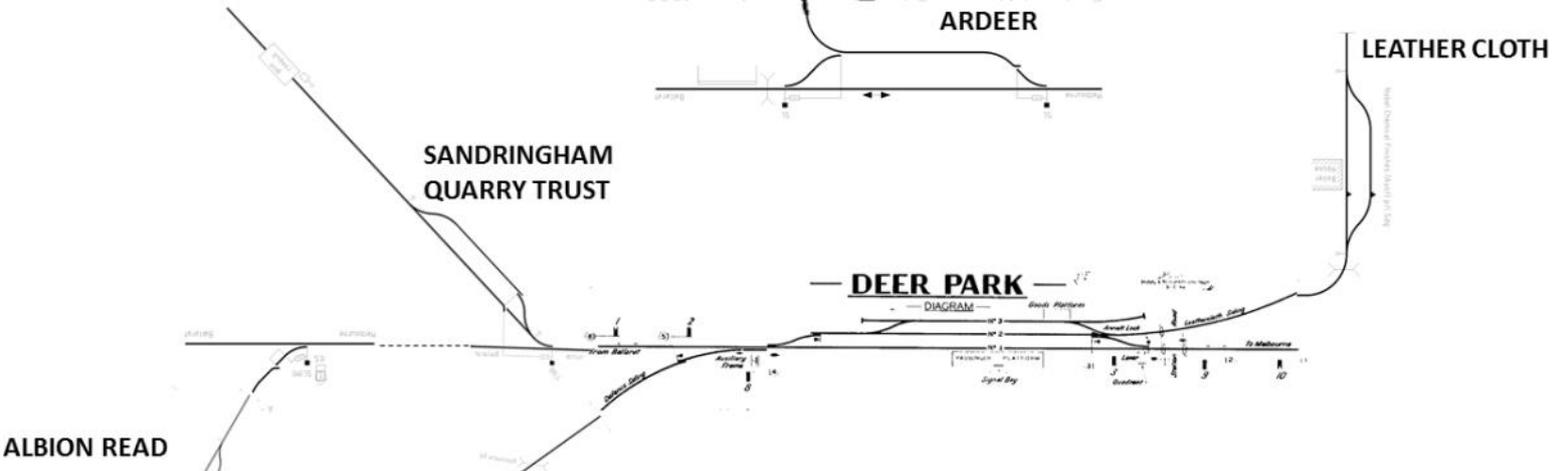
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Deer Park to Melbourne													
Monday to Friday													
Service	TRAIN												
Service information	G	B	G	B	G	B	G	B	G	B	G	B	G
ELKA PARK	05:43	06:20	07:02	07:49	08:40	09:34	10:31	11:31	12:34	13:40	14:49	15:52	16:59
Alton	06:24	06:56	07:42	08:33	09:29	10:28	11:29	12:32	13:37	14:44	15:53	17:04	18:18
Footscray	07:09	07:46	08:36	09:30	10:28	11:28	12:29	13:32	14:37	15:44	16:53	18:04	19:19
South Yarra	07:56	08:36	09:29	10:25	11:24	12:24	13:25	14:27	15:30	16:35	17:42	18:51	20:02
South Yarra	08:36	09:18	10:13	11:11	12:10	13:10	14:11	15:12	16:15	17:20	18:27	19:36	20:47
SOUTHERN CROSS STATION	09:24	10:07	11:04	12:03	13:03	14:04	15:05	16:07	17:10	18:15	19:22	20:31	21:42

Melbourne to Deer Park													
Monday to Friday													
Service	TRAIN												
Service information	G	B	G	B	G	B	G	B	G	B	G	B	G
SOUTHERN CROSS STATION	05:42	06:25	07:10	07:58	08:51	09:47	10:46	11:47	12:48	13:51	14:54	15:59	17:04
Footscray	06:27	07:14	08:09	09:00	09:54	10:51	11:51	12:52	13:55	14:58	16:03	17:08	18:14
South Yarra	07:14	08:04	09:00	09:54	10:51	11:51	12:52	13:55	14:58	16:03	17:08	18:14	19:21
Alton	08:04	08:54	09:51	10:44	11:41	12:41	13:42	14:45	15:48	16:53	17:58	19:04	20:11
Elka Park	08:51	09:44	10:41	11:34	12:31	13:31	14:32	15:35	16:38	17:43	18:48	19:54	21:01
SOUTHERN CROSS STATION	09:39	10:34	11:31	12:24	13:21	14:21	15:22	16:25	17:28	18:33	19:38	20:44	21:51



**Early to mid—20th Century**



**Early 21st Century**

