

Chapter Five

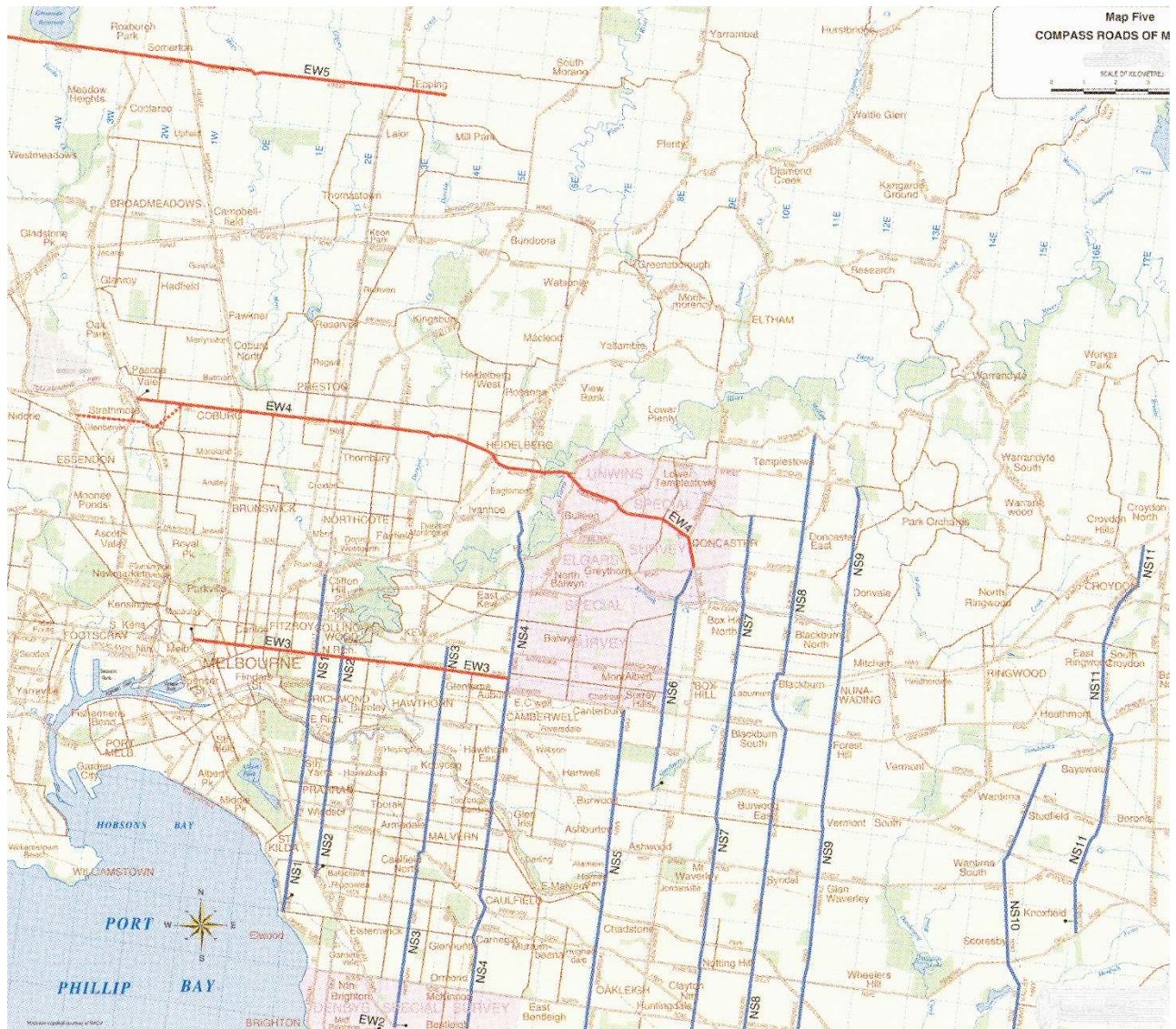
Compass roads

Chapter 4 discussed radial routes out of the original Melbourne settlement and grid routes resulting from the sectioning process. Circumferential routes do not occur naturally during urban development, unless there is a clear pre-existing need to bypass a town. In the pre-car days, in a journey in the countryside every village passed was an essential sub-destination and, in a city, its suburbs were mere dormitories serving the employers located around the city core. Thus, cities in general have no natural inheritance of non-radial routes.¹

No major natural need existed to bypass early Melbourne - it was the end of any journey. Travellers between the north and the west used existing radial routes such as routes MM5 and BT7, with Keilor / Melton as their route junction. Travellers between the north and Western Port followed the precedence of stock route OL7 and were served by the north - south routes discussed in Sub-chapter 5.2 below. There were no other bypass demands likely to influence growth. Furthermore, the presence of Port Phillip Bay made a southern bypass doubly difficult.²

Thus, Melbourne began as a typical post-industrial revolution but pre-car city and, again typically, developed outwards with radial rapidity under the unfettered influences of land speculation and, later, of the car. The dominant role of land speculation was alluded to in Chapters 2 and 3 and is well covered in Cannon 1966. Only a few circumferential routes were created and they were all fortuitous amalgams of east-west or north-south “compass” roads based – not on topography or travel need – but on the surveyors’ *section lines* (Sub-chapter 2.1). The remainder of the Chapter discusses these compass roads in cardinal order.

Key compass roads are shown on Map 4.1c.



Map 4.1c Melbourne's key compass roads

5.1 Routes EW – the east-west routes

EW1 South Rd

South Rd is located on the [7s] line. It was established as the southern boundary of Dendy's 1841 Special Survey (see route SK5) and, as discussed there, was essentially located two miles south of North Rd (route DN5). de Gruchy's mid-1850s Map 4.4 shows a road reservation along the section line from the coast to East Boundary Rd. Subsequently, South Rd has extended east to Warrigal Rd (route NS5).

In the 1950s and 60s, the CRB pursued a successful program for constructing South Rd as a divided highway. Duplication was completed between Beach Rd and New St in 1972, to Hampton St in 1965, to Bluff Rd in 1963, and to Warrigal Rd in 1967.

South Rd was declared a Main Road in 1951 and 1960 (Beach Rd to Nepean Hwy).³ It is Route 14 in the Metropolitan Route numbering system.

EW2 Centre Rd

Centre Rd is located on the [6s] *line* and was created by the primary subdivision of Dendy's Special Survey land (Sub-chapter 2.4). It was thus the road through the centre of the Survey. However, the presence of Foot's new town of Brighton (see discussion in route SK5) meant that in the west the road stopped at Hampton St, a couple of kilometres short of the coast.

To the east of Brighton, the subdividers' route along the [6s] *line* was preceded by a track from Brighton to the east and to Dandenong and the Emerald goldfields in particular. Many travellers found it more reliable in wet weather than the more northerly routes in the Gardiners Creek and Yarra River valleys. From Nepean Hwy (route SK3), the track was located about 300 m to the north of the [6s] *line*. It forked near East Boundary Rd with the southern branch becoming route DN7 along Old Dandenong Rd and leading to Dandenong. The northern branch crossed Dandenong Rd (route DN4) near the current line of McNaughton Rd and joined Wellington Rd (route DN5) en route to Emerald. The track before the fork was popularly known as "the track from Brown's Hotel". The hotel was in Brighton.

In Clayton, Centre Rd was originally known as Old Damper Rd. de Gruchy's Map 4.4 of 1855 shows it as a full and straight road reservation along the *section line*, from Hampton St to east of Dandenong Rd. The route extended to the east as Police Rd (originally Police Paddock Rd), which finally terminates at Churchill National Park. Police Rd was named after the large (16 sq km) police paddock that, from the earliest days of the Colony, existed on Dandenong Creek in the area southeast of the Police Rd / Gladstone Rd intersection. It primarily accommodated police horses and was moved to Bundoora in 1935.⁴ The route is shown as a road reservation in Ham's map of 1853, extending from Warrigal Rd (route NS5) to east of Dandenong Creek.

The western end of the road was paved with broken stone ("metalled") in 1857, so that no "five acre farmer" would be more than half a mile from a metalled road.⁵ The Public Works Department provided some funds for the road in 1883-4. The CRB began developing the road in 1953-55 when it widened it from Nepean Hwy to Warrigal Rd.

Centre Rd was proclaimed a Main Road in 1869 and in 1990 the proclamation was updated and extended to include Police Rd west of Jacksons Rd.⁶ Between Nepean Hwy and Gladstone Rd [15e] it is Route 16 in the Metropolitan Route numbering system.

EW3 Victoria St & Pde

The establishment of Victoria St and Victoria Pde in 1838 is discussed in Sub-chapter 2.1, which describes their original role as the northern boundary of a three square-mile Melbourne town reserve. As a direct consequence, they are located on the [1n] *line*.

The route was originally called Simpsons Rd. James Simpson was the settlement's first de facto magistrate and became the official magistrate in 1839. He was described as "the best-liked man in the Province."⁷ Simpson constructed a length of the road outside his and two neighbouring properties near Grosvenor St in 1843.⁸ Conditions remained appalling - "a continuous pool of water" - and in 1853 residents again embarked on their own roadmaking exercise.⁹ Simpsons Rd was renamed later in the 1850s to celebrate the new Colony and tollgates were installed soon after. However, for a time the old name stuck for the road east of Hoddle St. The length between Spring St and Hoddle St was provided with a 3-chain reservation during the generous and only partly fulfilled subdivision of East Melbourne (Sub-chapter 2.1). The large central treed reservation which now characterises this stretch of road was created in 1862 by the cooperation of the Fitzroy and Melbourne Councils. As it arose from the East Melbourne subdivision, 2.5 of the 3-chain reservation was within Melbourne's boundary.

Victoria St had an inhibited development and now serves at less than its full potential due to the practical influence of difficult water crossings at either end. First, the western extension of Victoria St beyond Curzon St was blocked by the 10 acres of the Benevolent Asylum, established in the early 1840s on a linear extension of Spencer St,

and which straddled the road between Curzon St and Abbotsford St. This problem was solved when the Asylum closed in 1911 and the land was subdivided in 1913. However, little was gained as Victoria St's continuation west as Dynon Rd (route WT5) was seriously delayed by the presence of the Moonee Ponds Creek and then the Maribyrnong River.

At its eastern end, Victoria St in 1855 stopped at Burnley St,¹⁰ although there was a half chain road from Burnley St to the Yarra, displaced some 30 m to the north and serving the properties with river frontage (Map 2.5). Its displacement was probably a survey error, whose effect can still be seen at today's Burnley St intersection. Between 1855 and 1857 the Central Roads Board formed the road as far east as Burnley St.

By 1855, a service known as Simpsons ferry was operating across the Yarra at the eastern end of Victoria St.¹¹ The eastern extension of Victoria St could not fully occur until the Yarra was bridged in 1884 and was further inhibited by the high escarpment on the left bank of the Yarra. A suspension bridge was unsuccessfully proposed for the site in 1861.

A new campaign for a bridge had more success in 1879. The resulting Victoria St bridge was funded in part by the donation of land by a local land-owner¹² - he was possibly compensated by the subdivision that then occurred along Victoria St from Church St (Richmond) to the new bridge. The design of the bridge was technically interesting. A design competition was won by two Melbourne University students, L. Chase and J. Fraser, although Anderson describes them as Junior Engineers in the Victorian Railways.¹³ They had chosen a steel Warren truss bridge with 17 m spans and the deck on the upper chords. It was based on an A truss which had been recently proposed by Professor John Waddell in the U. S. A.¹⁴ The piers are rivetted steel cylinders. The students' design was checked in tests by Professor W. C. Kernot of Melbourne University.¹⁵ Before and during construction by P. Platt there was much controversy between the "theoretical" student / professorial designers and the "practical" professional engineers.¹⁶ During construction the design was modified by Charles Rowland. The bridge was completed in March 1884. It was 104 m long and 21 m above the river.

In December of that year, heavy rain caused the western abutment to sink by 75 mm and the bridge had to be jacked back to the correct level. The bridge was widened in 1890 by adding an additional line of trusses to permit it to carry horse-drawn trams, and in 1916-20 it was strengthened by replacing the centre line of trusses to permit the bridge to carry electric trams. It was extensively rebuilt under an unemployment relief scheme in 1932.¹⁷ Further strengthening was undertaken in 1933-4 to permit the bridge to carry faster vehicles and water mains.¹⁸

Across the Yarra on the left bank, to the east Victoria St becomes Barkers Rd located on the [1n] *section line* and not aligned to the kink in Victoria St mentioned above. The portion of Barkers Rd adjacent to the Yarra was originally called Upper Simpsons Rd. The Barkers Rd cutting on the river's left bank was not completed in its current form until 1914.

East of Church St (Hawthorn, route TW5), Barkers Rd's pre-subdivisional role as Barkers Track is discussed under route HV1. After subdivision, the road continues east along its *section line* until Burke Rd (route NS4). De Gruchy's Map 4.4 of 1855 only shows a road reservation as far east as Auburn Rd [5e]. The extension to Burke Rd came with further subdivision. The Barkers Rd / Mont Albert Rd discontinuity at the Burke Rd intersection is due to the boundary displacement caused by the late changes to Elgar's Survey (Sub-chapter 2.4) placing reliance on the whims of local subdivision. Thus, the Elgar land between Whitehorse Rd and Canterbury Rd - neither of which are on *section lines* - was quartered by Mont Albert Rd, guaranteeing its misalignment with Barkers Rd.

In 1855 Victoria St was a favoured option for the northern segment of a ring road around Melbourne.¹⁹ It and Dynon Rd were part of bypass route 5 in the 1929 Town Plan. Victoria St between King St and Nicholson St was part of a proposed inner city ring road (route 1) in the 1954 town plan. Cable trams operated over much of the route - including a link to inner Melbourne - from 1886 until 1930. Electric trams were operating after 1920.

Victoria St (Richmond, #5948) was declared a Main Road in 1991 and Victoria St (North Melbourne, #5082) and Victoria Pde (#5083) were declared in 1994. Barkers Rd was declared a Main Road from the Yarra to High St South in 1983, to Denmark St in 1966, and to Glenferrie Rd in 1960.²⁰ The portion east of Peel St [0ew] is part of Route 32 in the Metropolitan Route numbering system.

EW4 Bell St

(a) Moonee Ponds Creek to Darebin Creek

As discussed in Sub-chapters 2.2 and 3.2, subdivisions in 1839 and 1840 covered the land between the Moonee Ponds Creek to the west and Darebin Creek to the east, extending north from Fitzroy and Collingwood to Gaffney St / Murray Rd / Southern Rd on the [6n] *line*.²¹ Bell St was inside this activity, but was not on a *section line*. It emerged instead as an east-west quartering forming a key property boundary between the [5n] and [6n] *lines*. It only exists as a property boundary between Moonee Ponds Creek and Darebin Creek in Ham's map of 1853. However, the boundary had become a road reservation in de Gruchy's Map 4.4 of 1855. Bell St (originally Heidelberg and Pentridge Rd) may have been named after Francis Bell, a local pioneer who lived on a 30 Ha property called Bell Manor. However, he was not in Victoria at that the time (c1849).²² The road is marked as Bell St in Clarke's map of 1849d which shows a subdivided Pentridge Village Reserve on the northeast corner of Sydney Rd and Bell St.

The route's initial strength came from the fact that it was about five mile north of the centre of the original town, a controlling factor in many early regulations (Sub-chapters 2.2 & 2.4) that led to Pentridge (later Coburg) and Warringal (later Heidelberg) village reserves being located on this line. Two other five-mile roads were Burke Rd (route NS4 - see Sub-chapter 2.4) and North Rd (route DN5). In 1857 the Government formally moved to gazette²³ the land required for a one-chain road from Moonee Ponds Creek to Heidelberg. The one-chain strip of property was taken from just five large land holdings between Bell St and the [6n] *line*, and from the village reserves of Warringal and Pentridge.²⁴ Note that with the western face of Pentridge village reserve on the [0ew] *line* (Sydney Rd, route KS7) and the western face of Warringal village reserve on the [5e] *line* (Upper Heidelberg Rd, route PL6), these two reserves are properly and precisely 5 mile apart. As then proposed, the eastern end of the road used the line of James St and Brown St, rather than Burgundy St.

Bell St initially served little transport purpose, particularly at its western end, as - perched high on an escarpment - it did not even reach Moonee Ponds Creek until 1861 and the purchase of the necessary land from James Robertson. Even then, it had no western connection across the creek. This connection was under active discussion in 1950 and an embankment for a crossing of the Broadmeadows railway was built in 1954. Major work did not occur until 1960 when the CRB extended Bell St to Strathmore and Pascoe Vale Rd (route KS5). This addition was later built into the Tullamarine Freeway (route MM8).

To avoid the early lack of a westerly connection, a diagonal track developed southwest from the Bell St / Melville Rd intersection across to the Reynard St bridge over Moonee Ponds Creek. This led to Woodlands Rd and thence to the routes to Bendigo (MM5) and Ballarat (route BT7).²⁵ It was a popular east - west route. The Reynard St crossing was possible as the high escarpments at Bell St had disappeared prior to this location. There are no current traces of the diagonal track. By 1950 crossings were either to the north by Reynold St / Reynard St / Woodland St or the south by Cumberland Rd and Gaffney St.

Travelling from one end of Bell St to the other required two major creek crossings - at Merri Creek and at Darebin Creek. The first crossing of Merri Creek was a footbridge located a little upstream of the line of Bell St. It was built by Pentridge convicts in 1853 and destroyed by a flood in 1863. The bridge consisted of two parallel iron chains anchored to the basaltic rock on either side of the creek and suspended from the trunks of two eucalyptus trees on either side of the creek. The two chains carried transverse planks that formed a walking surface. It was modestly claimed that this was Australia's first suspension bridge.²⁶

A major 26 m single-span²⁷ wooden bridge over Merri Creek was completed in 1858, repaired in 1868, and replaced in 1880 by a more substantial wrought-iron girder bridge of the same span. The two 2.2 m deep girders were built by Tyne Foundry in Melbourne for Evander McIver as the engineer. They were placed 4.9 m apart providing a road width of 5.4 m and two 1.3 m footpaths (Figure 5.1). The CRB upgraded the crossing and approaches in 1947-54 by widening the bridge on each side using second-hand lattice girder beams from the Cremorne (or Hawthorn) Railway Bridge.²⁸ These girders only spanned 24 m. The deck was reinforced concrete carried on steel joists. The roadway width was now 12.9 m plus two 1.7 m footpaths. The CRB widened the bridge in 1991, leaving the lattice girders under the southern carriageway.



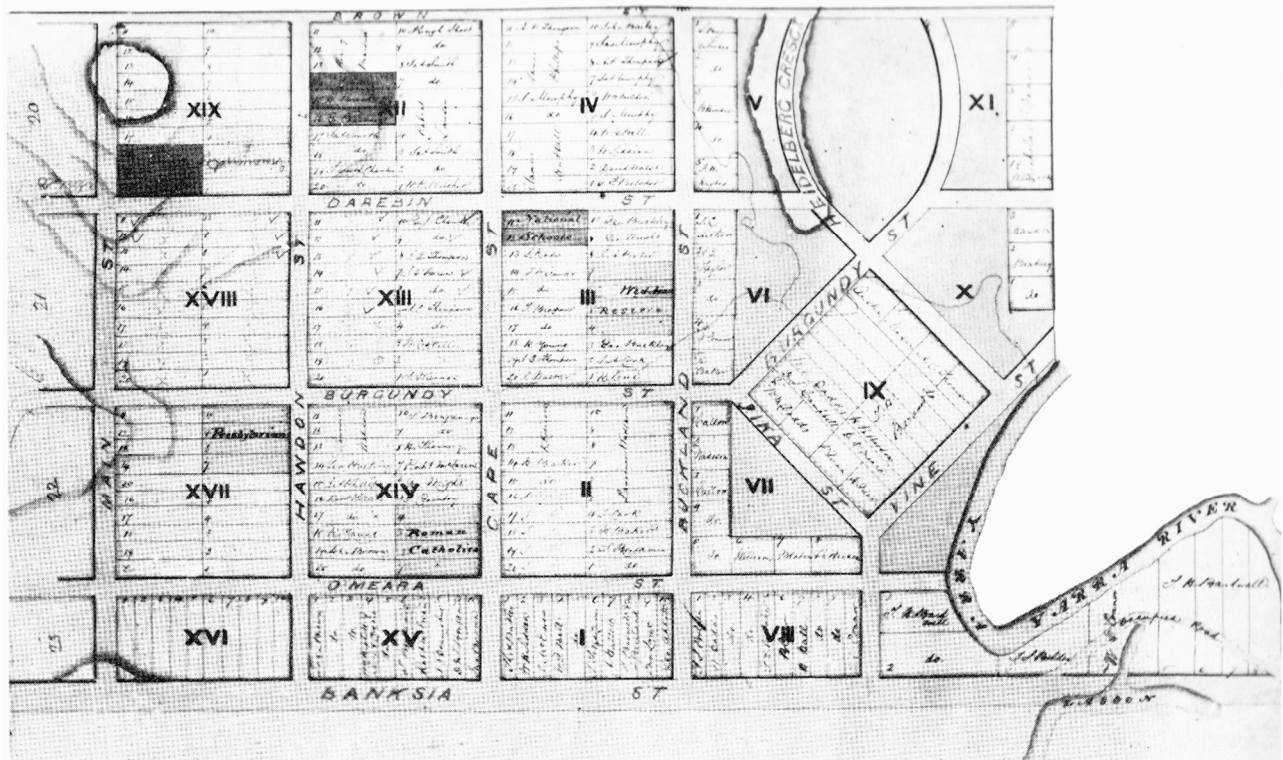
Figure 5.1 Formal opening of Merri Creek bridge in Coburg in 1880 *Coburg Historical Society*

In 1861²⁹ the route gained through status with the completion of a 12 m span timber bridge known as Farrells Bridge over Darebin Creek. It was replaced later in the decade by a more substantial timber bridge and then by a steel plate girder bridge that lasted until 1953 when the CRB opened the current bridge, after a lengthy construction period. The plate girder bridge, which was on a dog-leg alignment, spanned 12 m, was supported on masonry abutments and provided a 5.4 m roadway. The new reinforced concrete bridge also spans 12 m but is on a much-improved alignment and has a 13 m roadway and two 2 m footpaths. New approaches were also constructed.

In 1907 the route west of Darebin Creek was known as Preston and Coburg Rd.

(b) Darebin Creek to Doncaster

Bell St takes a kink to the south between Oriel Rd [4e] and Upper Heidelberg Rd (route PL6 and [5e]), to link with Burgundy St which is on a quartering *line* that runs through the old village of Heidelberg. The half square mile village reserve had been bounded by Banksia St [5n], Upper Heidelberg Rd [5e], James St / Brown St [5.5n, as is Bell St west] and the now-lost [6e] *line*. Burgundy St went through the centre of the reserve on the [5.25n] *line* to join Banksia St³⁰ via Jika St and Dora St.



Map 5.1 Map of Warringal village in the 1850s. From p9 of Cummins 1971 (*otherwise unsourced*)

The original intention appears to have been for a Yarra crossing on the [5.5n] line of Bell St and James St / Brown St extended to Templestowe Rd.³¹ The Argus, 26 Sept 1860, p4, indicates that various options were publicly debated. However, the existing appeal of Banksia St and its existing ferry (see discussion of route TW1) held sway. In 1992, VicRoads bypassed the Heidelberg town-centre when it provided a direct link from the Bell St / Linden Ave intersection to the Banksia St / Studley Rd intersection.

The major task for the route from Heidelberg to Doncaster was crossing the Yarra River at Banksia St. A ferry was in service there in 1839³², possibly to serve the three sheep stations that had been established in 1837 on the left bank. The stations are described in route TW1 and by Leaney³³. A more permanent ferry was installed by the Footscray ferry-operator and pastoralist Benjamin Levien in 1842 to serve the wider Heidelberg - Doncaster market (see route WT4-7 for Levien's other ferry).³⁴ The course of the river and its associated lagoon is shown in Map 5.1. The ferry was replaced by a timber beam and stone pier bridge constructed in 1860. It had spans of 12 m, 30 m and 12 m and a road width of 6.6 m. This bridge was subsequently upgraded to an iron arch. The current three-span steel beam bridge is 83 m long and dates from 1960 and was 8.4 m wide with two 2 m paths. It was duplicated in 1974.

Across the Yarra River, the route becomes Bridge St and Manningham Rd (originally Middle Rd). Manningham Rd heads up a hillside valley to the hilltop near its intersection with Thompsons Rd (route TW8) where a tollgate³⁵ was established in 1868. To the east of Thompsons Rd, Robert Bagot laid out Manningham Rd and the adjoining High St, Williamsons Rd and Ayr St in 1855. He was acting on instructions from R. Campbell, the then-current owner of Unwin's Special Survey (Sub-chapter 2.4). However, Manningham Rd is not shown on Bibbs' Map 4.11 of 1866 nor on some maps from the 1870s. It was probably a pre-existing track, as Manningham Rd's course from the Yarra to its intersection with Doncaster Rd (route TW10) at Whites Corner is a true ridge road.³⁶ This characteristic is nicely illustrated in Hodgkinson's map of 1855 (Map 4.19).

(c) Formalities

In 1950 the CRB was able to acquire predominantly vacant land from O'Keefe St to Darebin Creek to allow that portion of the route to be widened from 1.0 chain to 1.8 chain. The length from the creek to Waterdale Rd was

widened to 2.0 chain by the Housing Commission. The 1954 town plan provided for the enhancement of Bell St as an intermediate ring road (route 4). In the same year the CRB duplicated the route from Victoria St to Darebin Creek.

In 1857 the Central Roads Board constructed the length between Upper Heidelberg Rd and the Banksia St ferry, as a feeder to both Heidelberg village and Melbourne via Heidelberg Rd. The CRB duplicated the length near Coburg Cemetery in 1962 and 1987, from O'Keefe St to Darebin Creek in 1964, between Waterdale Rd (route PL8) and Oriel Rd in 1962, and between Lower Heidelberg Rd (route PL7) and the Yarra in 1977. The CRB duplicated Manningham Rd from Derreck Ave to Lillian St in 1979, and at the Thompsons Rd intersection in 1971. Major realignments of Manningham Rd at its intersections with Bulleen Rd and Thompsons Rd were also undertaken during the 1970s and 80s.

The route was still practically impassable in 1867 but was formally declared open from Coburg to Heidelberg in 1868.³⁷ Banksia St became a Main Road in 1914, 1947 and 1960. The whole route was declared a State Hwy in 1983 but today the classification (#2400) only applies to the route west of Bulleen Rd. Thus, Manningham Rd became a Main Road in 1960, a State Hwy in 1983 and reverted back to a Main Road in 1999.³⁸ Bell St was declared a Main Road in 1947. Bell St and Manningham Rd are Route 40 in the Metropolitan Route numbering system.

EW5 Twelve miles north

Although the [12n] *section line* was established during the original *sectioning* (Sub-chapter 2.1), the roads along it are far more recent. The route begins at Bulla Rd (route MM7) in Bulla and heads northeast. After about a kilometre it heads east along the *section line*, becoming Somerton Rd at Wildwood Rd [9w] and Cooper St east of the Hume Hwy (route KS7), and terminating as a main road at Dalton Rd in Epping, about 400 m east of High St (route PL4). The Public Works Department funded the construction of the Cooper St bridge over Merri Creek in 1884.

One old part of the route is the portion of Somerton Rd between Pascoe Vale Rd (route KS5) and the Hume Hwy. It appears on maps from the 1850s, although the mid-1850s de Gruchy's Map 4.4 shows it on the diagonal line discussed for route KS5. This latter map shows road reservations for Cooper St in Epping, and for the west end of Somerton Rd near Bulla. Broadbent's Map 4.12 of 1910 shows no operating road between the Hume Hwy and Plenty Rd.

Somerton Rd was declared a Main Road in 1983 and 1990.³⁹ In the Metropolitan Route numbering system it is Route 58 between Oaklands Rd [8w] and High St in Epping

5.2 Routes NS – North-south routes

NS1 Hoddle St and Punt Rd

As noted in Sub-chapter 2.1, Hoddle St [2e] was part of the 1837 survey taking Melbourne beyond its original boundaries and creating three new *sections* north of the Yarra. Thus, its role as a road from the Yarra north to Merri Creek [c3n] was assured. By the 1850s it was shown on maps as a road reservation as far north as Lalor [11n].

The subdivision of the lands immediately south of the Yarra occurred in 1840. The key north-south roads such as Punt Rd were also *section* boundaries and thus aligned with their counterparts on the northside.⁴⁰ Hoddle took some pleasure in the fact that - with Barkly St (St Kilda), Punt Rd, Hoddle St and High St (Northcote, route PL4) - he had created a 25 km length of straight north-south road from Epping in the north to the Bay at Point Ormond.⁴¹ Melbourne's first quarantine station was located where this [2e] *section line* meets Port Phillip Bay. Any accurate map will show that the 28 km long sequence of roads along the [2e] *line* is far from perfectly aligned - another indication of the problems that early surveyors were having with accuracy. Hoddle St gained its name when La Trobe pointed out to Hoddle that no street had yet been named in his honour. He chose Hoddle St, as it was then the longest street in the town.⁴²

Punt Rd and Hoddle St were not physically joined across the Yarra until a narrow three-span steel-truss footbridge⁴³ on cylindrical iron piers was built in 1894. After being dismantled, the bridge was reassembled to serve as a stock bridge over Racecourse Rd (route WT2) linking the Newmarket cattle sales yard with the Angliss meat works. Wheeled traffic was then required to make a difficult U-shaped detour to cross the Yarra on Morell Bridge⁴⁴ at the foot of Anderson St. The three-span concrete arch bridge was designed by Carlo Catani and built by John Monash and J Noble Anderson between 1898 and 1899 (Figure 5.2). Its relatively flat arches span 29 m each, with span-to-rise ratios of about 8. It was the first reinforced concrete bridge built in Victoria. During the construction of the CityLink project in 1998 it was converted to a footbridge. The bridge was initially called the Botanical Bridge and was later renamed as the Morell Bridge. Morell was Lord Mayor of Melbourne from 1926 to 1928.

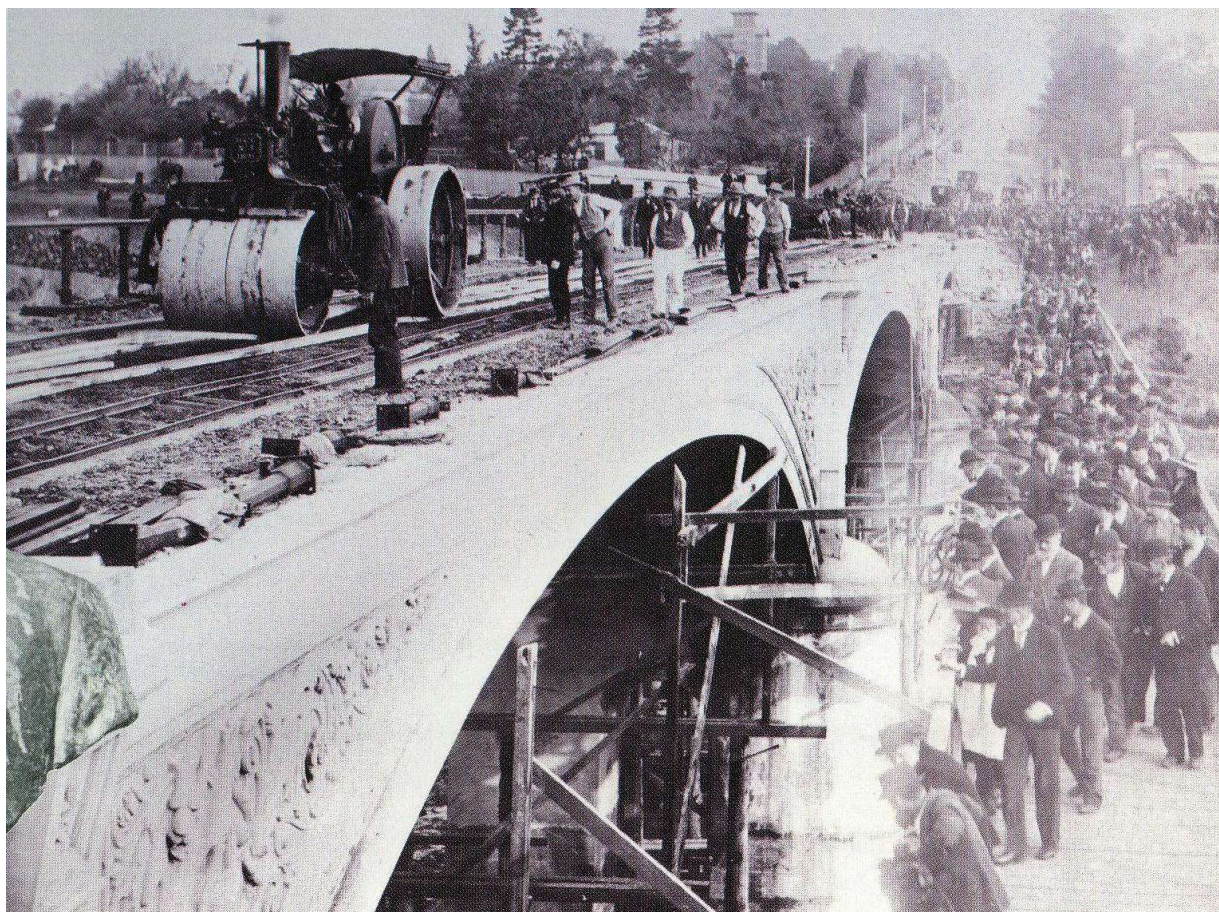


Figure 5.2 Load-testing of the Morell Bridge in 1899 (looking south). *National Trust*

The name Punt Rd refers, of course, to the ferry (or punt) that had previously operated across the Yarra, connecting the two parts of the [2e] *section line* (Figure 5.3). The service began in 1838 and was initially operated by Thomas Watts who also operated ferries at Swanston St (route SK2) and across the Maribyrnong River (route WT2). The road between High St and Commercial Rd was once called Prince St. A detailed history of Punt Rd and its environs is available.⁴⁵

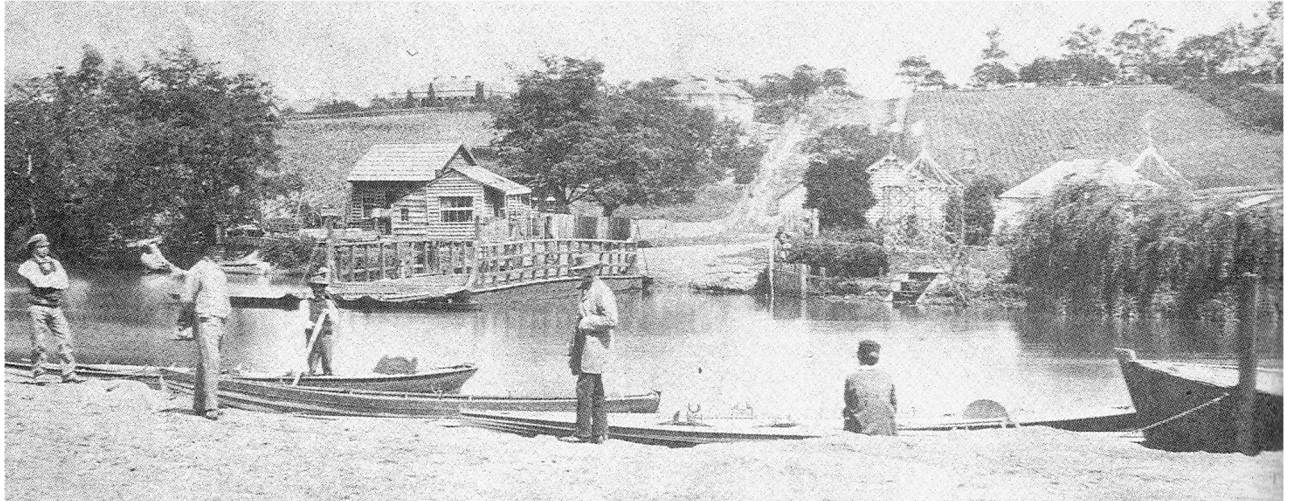


Figure 5.3 1840s punt across the Yarra linking Hoddle St and Punt Rd⁴⁶ SLV. SLV also has a Liardet painting of the ferry.

The name change occurs, not at the Yarra, but at Swan St (route CT5). This probably reflects the minor role of the area south of Swan St at the time of Hoddle's choice. However, a road reservation then existed as far south as Toorak Rd (Map 3.6 of 1853), so the split is surprising.

Punt Rd was in a very poor state during its initial years. The Central Roads Board formed a couple of kilometres between 1854 and 1857, but the route did not become trafficable until the mid-1860s.⁴⁷ The current Punt Rd bridge is a CRB design built in 1936-8 to replace the existing footbridge and "to relieve traffic congestion in Melbourne". It was named Hoddle Bridge.⁴⁸ It is a continuously-reinforced concrete bridge with three 26 m central spans and two 20 m side spans. At the time, the 26 m span was the longest of its type in Australia. The roadway is 15 m wide with two 2.4 m footpaths. The bridge crosses the Yarra at a 45° angle to accommodate a survey misalignment of the [2e] *section line* on either side of the river.

Hoddle St between Victoria Pde [1n] and Alexandra Pde [2n] was initially a one-chain road, but a program of widening and duplication saw this length duplicated in 1975, and north to Clifton Hill Railway Station in 1987. The locals felt that this work had "split the Municipality down the middle from south to north."⁴⁹ The road between Brunton Ave and Bridge Rd (route TW5) was widened and the Swan St intersection was remodelled in 1988-90.

The route featured as part of route 2 – a city ring road proposed in the 1954 town plan. The 1969 Plan had a major freeway – the F2 – paralleling the route but slightly to the east. This route would have been particularly destructive and was abandoned by Premier Hamer in 1973.⁵⁰ In 1969 Punt Rd was the State's busiest road, carrying 60,000 vehicles per day on the stretch between Swan St and the Yarra River. Despite heavy usage, Punt Rd south of the Yarra has remained a one-chain road, although some road-widening reservations do exist.

The route was declared a Main Road north of Princes Hwy East (route DN3&4) in 1960 and to the south in 1990. By 1982 Hoddle St was a State Hwy. In 1994 and 1995 the route was proclaimed a State Hwy (#2080) from Princes Hwy East to Eastern Freeway (route TW13).⁵¹ It is Route 29 in the Metropolitan Route numbering system.

NS2 Church St and Chapel St

Church St and Chapel St were respectively parts of the 1837 and 1840 surveys discussed in Chapter 2. They were created by quartering *sections* lying between the [2e] and [3e] *section lines*.

From the left bank of the Yarra, Chapel St continued south until defeated by the irregular alignment of Nepean Hwy (route SK3) and subdivisions based on that Highway rather than on the compass. Malone suggests⁵² that south of Toorak Rd (route CT6), Chapel St had been preceded by a bush track linking to the stock routes that became Dandenong Rd (route DN3) and Nepean Hwy.

A creek from Toorak Park in Armadale became much wider as it crossed Toorak Rd to the east of Chapel St and then created a major crossing of Chapel St between Toorak Rd and the Yarra, before it emptied into a swamp at the current site of the Melbourne High School oval. In addition, a large escarpment crossed Chapel St on the right bank of the creek, providing a steep hill called Forest Hill that was penetrated in the 1840s by a cutting. Later the escarpment was largely removed by the brickworks on the east side of the road. These natural restraints delayed the development of this sector of Chapel St.⁵³ The road was levelled, surfaced and drained between 1850 and 1858. Footpaths were provided by 1860.⁵⁴ By the end of the 1860s, it was clear that the one-chain reservation was inadequate, and the first of many unsuccessful moves was initiated to widen the road.⁵⁵ The creek from Toorak Park was enclosed by a drain in 1912.

Chapel St was first called Fitzroy St and then Chapel Rd. The Chapel referred to was the Independent Church on the east side, opposite Elizabeth St.⁵⁶ The social development of Chapel St has been described in some detail in Malone 1983 & 1984. Chapel St was first gazetted as a Main Road in 1858.⁵⁷ From 1888 till 1926 a cable tram operated on Chapel St south of Toorak Rd.

The creation of Church St to the north of the Yarra was discussed in Sub-chapter 2.2. A link between the two roads was initially inhibited by a large lagoon on the right bank of the Yarra. Initially a ferry operated across the river at a site served by the two roads. However, between 1853 and 1857, the Central Roads Board formed 1.7 km of Church St and constructed the approaches to the future Yarra bridge through the lagoon.

The common *section* alignment of the two roads then made it possible for a private company to build a toll bridge to connect Church St directly to Chapel St. The original iron structure was one of three box-girder military bridges developed by William Fairbairn in Manchester and diverted to Victoria from the Crimean war. The other two imported bridges were the Maribyrnong railway bridge and the Barwon River bridge in Geelong. The Church St bridge had a single span of 61 m. It was erected in 1859 under the supervision of a Mr Shakespeare and used convict labour.⁵⁸ The bridge was the government's largest road funding commitment in the period 1856-61. It was intended to give travellers from the Brighton to Oakleigh an alternative to St Kilda Rd for gaining City access. The deck began causing major problems in 1865. By 1909 the bridge had become dangerous and created a dispute between the two adjoining councils, to such an extent that in 1914 Prahran fenced off its approaches.

The bridge was replaced in 1924 by the current Monier⁵⁹-built reinforced concrete arch-rib bridge, with its two 30 m and one 32 m span. Designed by Harold Desbrowe-Anneer and John Laing, it was the largest span of its type in Australia for two years.⁶⁰ During construction, the foundations had caused major problems and the works were damaged by a major flood in 1923. This led to the bridge being subjected to a full load test before it was opened for public use. As an aside, Monash had left Monier - then the Reinforced Concrete Co - in 1919 and formally in 1923. In 2000, the south span was reconstructed and raised slightly to accommodate the widening of the old South Eastern Freeway to become part of the Southern Link (route DN11). The bridge is now on the Victorian Heritage Register as H1917.

At the other end of Church St and before the adoption of the Johnston St bridge crossing of the Yarra (route TW3), the intention had been to connect Church St to Studley Park Rd by using the road to Hodgson's ferry (route TW4a) to lead to a new crossing of the Yarra. The scheme did not eventuate, although a full road bridge and a road known as Studley Park Bridge Rd (see route TW3) is shown in many maps.⁶¹ The reality is suggested by an official map of 1859 that shows the bridge area as a "land grant to the Studley Park Bridge Company".⁶² The Company's plans apparently never became a reality. Instead, a footbridge was provided in 1891 at Walmer St (route TW4).

Melbourne's first motor bus began operating along Chapel St in 1905. The route was proclaimed a Main Road in 1854,⁶³ but no longer has that status. In 1855 it was a favoured option for the eastern segment of a ring road around Melbourne.⁶⁴

NS3 Glenferrie Rd

Glenferrie Rd results from a quartering of *sections* between the [4e], [2n], [5e] and [1s] *lines* and originally served as the western boundary of an 1843 subdivision of Hawthorn with river frontages, south of Riversdale Rd.⁶⁵ A road reservation as far north as High St, Kew (route TW7), is shown in Ham's Map 3.6 of 1853 and extends further north to the Yarra in de Gruchy's Map 4.4 of 1855 and (at least as a property boundary) in Mason's map of 1858. However, all trace of the road north of Cotham Road (route HV1) has since been lost within newer subdivisions.

The road extended south to Malvern Rd, then the limits of subdivision (Map 3.6), whereas it runs further south through subdivided land to the diagonal incumbrance of Dandenong Rd (route DN3) in de Gruchy's Map 4.4 of the mid-1850s. Hawthorn Rd, south of Dandenong Rd (route DN3), is displaced to the west of the Glenferrie Rd alignment, probably because of the quartering of a *section* ([3s], [5e], [4s], [4e]) diminished in size by the swamps prevalent in the area (see discussion of route DN3).

The road was originally called Barkly Rd (after Sir Henry Barkly,⁶⁶ a Colonial Governor in the late 1850s) and south of Burwood Rd as Hawthorn Rd, which is still used for its southern extension. The initial proposal had been to call it Sir Henrys Rd. It was also known as the Richmond - Brighton Rd or Brighton Rd as Hawthorn Rd did indeed lead south to Brighton and the Nepean Hwy (route SK3). The name Glenferrie came from a property located at the corner of Glenferrie Rd and Toorak Rd (route CT6). The owner, Peter Ferrie, was a Scottish settler who followed the practice of his native land in calling his home Glen Ferrie⁶⁷. (Another explanation has been suggested.⁶⁸) In 1857 the *Gazette*⁶⁹ was referring to it as Glen Ferry Rd and in 1861 the press was referring to Glenferry Rd.⁷⁰ In 1857 the government built a timber bridge with five spans of 6 m over Gardiners Creek.

The Prahran and Malvern Tramways Trust began operating an electric tram along the route from High St to Wattletree Rd in 1911. The service was extended to Kew Junction in 1913 and the full route along Glenferrie Rd and Hawthorn Rd was in operation in 1922. Glenferrie Rd and Hawthorn Rd were both declared Main Roads in 1990.⁷¹ Glenferrie Rd is Route 19 in the Metropolitan Route numbering system.

NS4 Burke Rd

The northern end of Burke Rd possibly began as an aboriginal track serving Wurundjeri people heading to the Bolin Bolin billabong site in Bulleen (Melway, 32C8). This may then have led to a bush track, serving the overlanders described in the discussion of stock routes OL4 and OL5.

More prosaically, under the Special Survey regulations described in Sub-chapter 2.4, the northern end of the track that became Burke Rd began its formal life in 1843 as the western boundary of Elgar's resurveyed Special Survey purchase⁷² located – not on a *section line* – but a disputed five mile from the centre of the township.⁷³ Burke Rd is shown as a continuous road reservation from Kilby Rd (route TW6) south to Toorak Rd [1s] in Ham's Map 3.6 of 1853. de Gruchy's Map 4.4 of the mid-1850s does not show a road reservation between Canterbury Rd and Burwood Rd. Within a few years the reservation had extended south to Gardiners Creek; further south, the swampy land to Glenhantly Rd [4s] remained unsubdivided. The surveyors turned the track and the reservation into Burke Rd and the road was further defined and formalised by surrounding land subdivisions in 1853. The road runs as far north as Kilby Rd in Map 4.5 of 1876, although there is no road shown north of Belmore Rd (route TW9) in the 1892 Directory map.

The road carried many names – working from the north it was Glass Creek Rd, Boundary Rd, West Boundary Rd, Charleville Rd and New Cross Rd – until named in its entirety in honour of Burke of Burke and Wills.⁷⁴ It also had northerly and southerly geometric extensions to the north where the end of Burke Rd is defined by the intersection of Burke Rd North and Lower Heidelberg Rd (route PL7) and to the south where the end is defined by its junction with Dandenong Rd (route DN3) and then in the non-*sectional* alignment Grange Rd and Jasper Rd further to the south. The embankment across the Yarra riverside flat land at its northern end was first worked on for unemployment relief following the First World War.

In 1865 a 3 m deep cavern is said to have crossed the road north of Whitehorse Rd - presumably as part of Glass Creek near Belmore Rd. Gardiners Creek was bridged in 1874, but Burke Rd's link across the Yarra to Heidelberg and Lower Heidelberg Rd did not open until 1926. The material for the embankment that forms the approaches to this bridge was taken from the well-known cutting on Lower Heidelberg Rd in East Ivanhoe. The Yarra bridge was duplicated in 1966 and original bridge replaced in 1978. The 1966 bridge consists of ten spans of 13.5 m prestressed concrete beams. The carriageway is 7.8 m wide with a 2.1 m footpath. The 1978 replacement bridge used eleven spans of 12.6 m prestressed concrete beams with a 10.6 m carriageway. Alternative locations that had been considered for the river crossing were at the southern ends of Waterdale Rd and Marshall St.⁷⁵

The railway at Camberwell Station was lowered to pass under Burke Rd during the First World War. The current chaos of Camberwell Junction stems from the imposition in the 1850s of the diagonally-oriented, market-driven Camberwell Rd on the orderly subdivision of early Camberwell (see further discussion in route CT3).⁷⁶ In particular,

it crossed through the otherwise orthogonally neat intersection of Burke Rd and Riversdale Rd [0n]. Riversdale Rd had geometric rights as it was the east-west-datum *section line*.

It was declared a Main Road north of Gardiners Creek in 1983 and from Gardiners Creek to Princes Hwy East in 1990.⁷⁷ Burke Rd is Route 17 in the Metropolitan Route numbering system.

NS5 Warrigal Rd

Warrigal Rd is based on the [8e] *section line*. Beginning in the north at Elgar's southern boundary along Canterbury Rd, it was the first major north-south road to restore the one-mile spacing destroyed by Elgar's relocation of Burke Rd and Balwyn Rd in 1841 (see discussion of Special Surveys in Sub-chapter 2.4). Thus, Union Rd north of Canterbury Rd is offset about 250 m east of Warrigal Rd. Warrigal Rd today continues south until it meets Port Phillip Bay at Mentone. At its northern end from Canterbury Rd to Burwood Hwy [2s], the road contained a major disincentive for horse-drawn travel due to its almost perverse alignment up and down the sides of a series of rolling hills as it crosses the valleys of Surrey Hills and Wattle Park branches of Back Creek. However, between Burwood Hwy and High St Rd [3s], the surveyors with some ingenuity and a little good fortune were usefully able to create Warrigal Rd as both a *section line* and a ridge road.

Warrigal Rd was originally called West Boundary Rd in Box Hill and Oakleigh, Boundary Rd in Boroondara, Boundary Rd North in Ashburton, Chapman St⁷⁸ near Toorak Rd and Moorabbin Rd in the south. It was a parish boundary as well as a municipal boundary. In 1919 maps⁷⁹ referred to parts of the road as Warragul Rd, and Warrigal would appear to be no more than an alternative spelling of the aboriginal name, Warragul. In 1937 the names of the northern and central portions were changed to align with the name of the southern portion. In the north, the route disappeared as a consequence of the 1840s adjustments to Elgar's Special Survey (Sub-chapter 2.4), although it is still shown north of Canterbury Rd (route CT3) in Ham's Map 3.6 of 1853.

South of Canterbury Rd and Elgar's land, Warrigal Rd in the early 1850s served largely as a border for subdivided land (Map 3.6). For example, in 1854 it provided a boundary between Boroondara and Mulgrave⁸⁰ and in the mid-1850s there was a continuous road reservation from Canterbury Rd south to North Rd [5s] (Map 4.4). Given its initial role as a *section* boundary, much of the route is within a one-chain reservation.

Tollgates operated on the Burwood Hwy, Highbury Rd, Waverley Rd and Dandenong Rd corners.⁸¹ The link across Gardiners Creek was not developed until the three Councils – Malvern, Oakleigh and Boroondara – purchased the required land in 1878. Gardiners Creek was crossed with a timber bridge first built with Public Works Department support in 1888. The bridge was narrow, on a poor alignment and often over-topped by floods. It was replaced by the CRB in 1938 with a new reinforced concrete bridge that had a 15 m centre span using T girders and two 5 m cantilever side-spans. The roadway was 9 m wide with two 2 m footpaths. It was designed by W. Ozanne and had an art deco appearance. It was widened in 1958.

The CRB began widening and surfacing the road between Centre Rd and Centre Dandenong Rd in 1937. In 1937-40 the length between Riversdale Rd and Centre Rd was surfaced. Major work was undertaken between the beach and North Rd in 1952-54 and the road was widened between Princes Hwy East and High St, Ashburton, in the period 1953-58. The railway overpass in Oakleigh was opened in 1968. The steel beam bridge was built by the CRB under the auspices of the Level Crossings Fund (Sub-chapter 3.5). Warrigal Rd was duplicated between Old Dandenong Rd and South Rd in 1987.

Warrigal Rd was declared a Main Road in parts in 1936 (Nepean Hwy to Princes Hwy East), 1937 (Princes Hwy East to Gardiners Creek) and 1946 (Beach Rd to Nepean Hwy). The length from Nepean Hwy to Monash Freeway was proclaimed a State Hwy in 1990 and to Burwood Hwy in 1993.⁸² As such it is known as Warrigal Hwy (#2070) and runs between Nepean Hwy and Burwood Hwy. Warrigal Rd is Route 15 in the Metropolitan Route numbering system.

NS6 Elgar Rd

As discussed in Sub-chapter 2.4, the original intention had been that Elgar Rd (originally Crossmans Rd) would have been located on the [9e] *line* occupied today in part by Nelson Rd. Its current location was formally

defined in 1841 as the eastern boundary of Elgar's land purchase under the Special Survey regulations (Sub-chapter 2.4).⁸³ With three boundaries given as Burke Rd (route NS4), Koonung Creek and Canterbury Rd (route CT1), the location of Elgar Rd was mathematically defined as the north-south road completing the enclosure of 8 square miles, although Sub-chapter 2.4 shows that its final location was only settled after three years of argument and negotiation. An outcome of these negotiations was that Elgar Rd was not based on a conventional *section line*. However, there had been a clever juggling of the location of Elgar and Canterbury Rds to ensure that Elgar's eastern boundary - although dragged west - at least encompassed some of the good land between Koonung and Bushy Creeks on which the unfortunate Arundel Wrighte had squatted in 1837.⁸⁴

Elgar Rd is shown as a road reservation running from the Koonung Creek south to Canterbury Rd in Ham's Map 3.6 of 1853 and to Burwood Hwy (route CT3) in de Gruchys Maps 4.5 from the mid-1850s. These were the limits of the Elgar variations. At its northern end, Elgar Rd was later taken to Whites Corner on Doncaster Rd (route TW10 & route EW4), a path which would have originally arisen from foot traffic on the early Belmore Rd / Woodhouse Gv track (route TW9).

The rail-over-road bridge at Box Hill was opened in 1972. It was built by the CRB under the under the auspices of the Level Crossings Fund (Sub-chapter 3.5). Elgar Rd was declared a Main Road from Doncaster Rd to Maroondah Hwy (route HV1) in 1995 and on to Burwood Hwy in 1983.⁸⁵

NS7 Middleborough Rd & Clayton Rd

A number of once-independent roads were located on or very near the [10e] *line*. At its far northern end, the road reservation was established during the subdivision of Unwin's Survey (Sub-chapter 2.4) between 1841 and 1844 and gave rise to Wetherby Rd and then Victoria St. South of Koonung Creek the line became today's Middleborough Rd which was formerly known as Boardmans Rd north of Maroondah Hwy (route HV1),⁸⁶ Brittnells Rd between the Highway and Eley Rd, and Fultons Rd between Eley Rd and Highbury Rd (route CT5).⁸⁷ At Highbury Rd a classic survey kink occurs where the road moves east to avoid the uncharacteristically steep sides of the headwaters of the Damper Creek valley, 200 m south of the Highbury Rd / Stephensions Rd intersection. It is not clear why the road was not then allowed to recover its *sectional* alignment.

The southern counterparts on the [10e] *line* - given some further surveying mismatches (Sub-Chapter 2.1c) - are Stephensions Rd, Clayton Rd and Boundary Rd. Clayton Rd, for example, was close to an earlier track known as Mr Claytons Rd.⁸⁸ John Clayton owned "Clayton Vale" on the southeast corner of the Clayton Rd / Centre Rd (route EW2) intersection. At the northern end of Clayton Rd the route originally followed Forster Rd between Ferntree Gully Rd (route CT10) and Waverley Rd [3s], avoiding part of Scotchmans Creek and a quarry that operated near the current intersection of Stephensions Rd and Monash Freeway. A road reservation is not shown on Ham's map of 1853. However, it is shown from Koonung Creek south to Centre Rd on de Gruchy's mid-1850s Map 4.4 but the Forster Rd detour is shown in maps of the 1870s. Forster Rd was then called McCruddens Lane.

The road runs north-south for some 28 km between Victoria St, Doncaster, and the Mordialloc Main Drain. VicRoads prefers to call it the Doncaster - Mordialloc Rd. Victoria St was declared a Main Road in 1990.⁸⁹ Middleborough Rd from Maroondah Hwy to Highbury Rd and Stephensions Rd, Clayton Rd and Boundary Rd were declared Main Roads in 1960, when the Doncaster - Mordialloc name for the road was formally introduced. It is Route 23 in the Metropolitan Route numbering system.

NS8 Blackburn Rd

Stock route OL7 left the Yarra and proceeded along Mullum Mullum Creek to Ringwood, crossed a small watershed to Dandenong Creek, and followed down the creek to Dandenong. An alternative stock route to Dandenong, suggested in Thomas' map of 1840, began at the same confluence but left Mullum Mullum Creek earlier and headed south along the line of today's Blackburn Rd, turning southeast near Blackburn village on a direct line to Dandenong. Another route continued south to Dandenong Rd, on a line just a little east of today's Blackburn Rd.⁹⁰ The line would have provided relatively firm ground, being near the watershed between Dandenong Creek and Gardiners Creek. The routes were apparently well used, and an 1843 survey map attributed to Darke shows a southeast "track to Dandenong" leaving from the current corner of Doncaster Rd and Elgar Rd.

Nevertheless, Blackburn Rd is now located on the [11e] *line* and is thus largely the creation of surveyors. A road reservation in Templestowe from the Yarra south to Mullum Mullum Creek is shown in Ham's 4.27 Map of 1853 and by the mid-1850s it had reached further south to Maroondah Hwy (route HV1) and reoccurred between Highbury Rd and North Rd (see de Gruchy's Map 4.4 of 1855).

As it developed, Blackburn Rd did not utilise its full northern reservation but still extended further north than most of its counterparts, reaching Mullum Mullum Creek. Remarkably, traces of road using the same *section line* can be found as Reynolds Rd extending north of the Yarra as far as the village of Wattle Glen and the [12n] *line*.

Southern development was very slow and the road is only shown north of Maroondah Hwy in 1861 subdivision plans where it appears to have been located - probably due to survey error - some 60 m west of the *section line*. South of the highway, only property boundaries are shown on the *section line* and these were more accurately surveyed, aligning with Cottage St and the east boundary of Morton Park and not with Blackburn Rd to the north of Maroondah Hwy. Bibbs' 1866 Map 4.11 confirms that the road was largely created in the early 1860s.

In the late 1880s Thomas Morton was behind an ambitious but financially unsuccessful scheme to establish a "model" (i. e. showpiece) village at Blackburn. The plans had no provision for north - south through traffic. Maps in 1892⁹¹ continue to show no connection between Maroondah Hwy and Canterbury Rd. Indeed, a map of 1919 shows no road on the alignment south of Springfield Rd.⁹² However, in 1887 the Public Works Department had funded a road link to Blackburn Station. A later deviation of Blackburn Rd at Blackburn Station accommodates the railway crossing at a key road in the old village.

The portion of the route between Canterbury Rd and Burwood Hwy originally followed Holland Rd, rather than the current alignment. In 1870 Blackburn Rd was developed further south to provide the eastern suburbs with better access to Dandenong via the rapidly improving Dandenong Rd (route DN4).⁹³ However, Victorian's 1892 map shows no connection between Burwood Rd and Highbury Rd. An extension south of Dandenong Rd never developed and the relevant traffic is largely accommodated on Westall Rd.

The CRB duplicated the road between Burwood Hwy and Highbury Rd in 1973, from Waverley Rd to Monash Freeway in 1974, and from Duerdin St to Princes Hwy East in 1976. In the 1990s, the route was extended south of Princes Hwy East. The Springvale Bypass / Westall Rd development to the west of Springvale Rd is a remnant of the planned F7 freeway in the 1969 Plan. The first stage of the bypass from Princes Hwy to Centre Rd was opened in 1992, and from Heatherton Rd to Springvale Rd in 1994.

Blackburn Rd was named after Blackburn village, but the origin of the village name is a matter of some dispute.⁹⁴ The portion between Koonung Creek and Maroondah Hwy is now called Surrey Rd. Parts of the northern portion were once called Andersons Creek Rd, a name now used for a north-westerly extension of Blackburn Rd. The southern portion was originally called Mays Rd.

Blackburn Rd and Reynolds Rd were declared Main Roads in 1990.⁹⁵ Blackburn Rd is Route 13 in the Metropolitan Route numbering system.

NS9 Springvale Rd

Springvale Rd was located on the [12e] *section line*. It begins in the south as Edithvale Rd at Nepean Hwy (route SK3) along the bayside. Its 30 km of straightness from Mordialloc Main Drain to Mullum Mullum Creek is a lasting monument to the surveyors' unswerving domination over nature and topography.

The route is only shown as a road reservation between Highbury Rd [1s] and Wellington Rd [5s] in Ham's Map 3.6 of 1853, and the reservation extends north to Springfield Rd [2n] in de Gruchy's mid-1850s Map 4.4. Despite its initial role more as a property boundary, the 1864 survey of the Parish of Nunawading⁹⁶ shows a generous reservation width for that part of Springvale Rd between Koonung Creek and Canterbury Rd.

Springvale Rd was named after a hotel built in 1858 at the intersection of the road with Dandenong Rd.⁹⁷ There were small springs in the area. The springs were partly fed by a creek which came from the north on a line a little to the east of the line of Springvale Rd. The road initially deviated locally to avoid these springs and, as discussed under route DN4 included a major kink requiring traffic to pass to the east of the Springvale Hotel.⁹⁸ The portion of

Springvale Rd north of Maroondah Hwy was once called Patton Walkers Rd and from Canterbury Rd to Maroondah Hwy was called Hunts Lane.⁹⁹

In 1937 the CRB began improvement works at the southern end of Springvale Rd, widening the roadway and applying a sand surface between Cheltenham Rd and Nepean Hwy. Much of this portion had to be reconstructed in 1952. The CRB duplicated the road near Mitcham Rd in 1985, from Mitcham Rd to the Koonung Creek in 1986, to Efron St in 1985, from there to Springfield Rd in 1982, between Highbury Rd and High Street Rd in 1972, to Waverley Rd in 1973, around Waverley Rd in 1970, to Ferntree Gully Rd in 1971, to Princes Hwy East in 1964, remodelled the intersection in 1985, from Lenore St to the railway crossing at Springvale Railway Station in 1965, to south of Springvale Station in 1968, to south of Heatherton Rd in 1970, at Heatherton Rd in 1971 and Cheltenham Rd in 1972. Mile Creek in Springvale was initially crossed by a 46 m long timber bridge. In 1945 this was replaced by reinforced concrete slab bridge with six 4 m spans. The slab was 250 mm thick and the bridge was 6.6 m wide.

Springvale Rd was declared a Main Road in the south in 1937, to Princes Hwy East in 1936, to Maroondah Hwy in 1941, to Mitcham Rd in 1979, and to Reynolds Rd in 1990.¹⁰⁰ Springvale Rd was declared a State Hwy from Mitcham Rd south in 1983.¹⁰¹ Some of the road was already a State Hwy in 1982. It is now a State Hwy (#2400) from Eastern Freeway to Mornington Peninsula Freeway. Springvale Rd is Route 11 in the Metropolitan Route numbering system.

NS10 Stud Rd

Recall from the discussion of stock route OL7 that there were indications¹⁰² of a north-south stock route centred on Dandenong and to the east of Springvale Rd (route NS9). Dandenong was an important market centre. The stock route was probably closer to Dandenong Creek than to the current Stud Rd.

By the 1850s the route was recognised as a road rather than a stock track and is shown as such in Foot's map of 1852a. Stud Rd was first known as Mornington Rd, as it was near the northern boundary of Mornington County.¹⁰³ (Mornington County was a creature of the early land subdivision process). The surveys and subdivisions that codified it are those east of Dandenong Creek and occurred in the early 1860s.¹⁰⁴ At that time there was still a gap in the road between Police Rd [6s] and Heatherton Rd [8s]. The track developed rapidly and in 1873 was named Stud Rd as it serviced a police horse stud that operated at the south-east corner of the Stud Rd / Police Rd intersection between 1853 and 1935.¹⁰⁵ Dandenong Creek in Dandenong North was bridged with a "rough log crossing" in 1873.¹⁰⁶

In the north, Stud Rd now begins at Mountain Hwy (route CT4) at the [16e] *line*, although initially a property boundary existed which would have permitted its link to Maroondah Hwy (route HV1) via Dublin Rd.¹⁰⁷ Instead, a common link was to Maroondah Hwy (route HV1) at Birts Hill via Bayswater Rd and Croydon Rd (route NS11).¹⁰⁸

Stud Rd's initial direction south from Mountain Hwy was dictated by the need to be orthogonal to the origin-oriented lines of Boronia Rd (route CT1) and Burwood Hwy (route CT3). South of Burwood Hwy the route continues as a "map-oriented" version of the [16e] *line*. It is thus aligned to map north (Sub-chapter 2.1) until it reaches Ferntree Gully Rd (route CT10). The crossing of Corhanwarrabul Creek allowed the surveyors to pick up the real [16e] *line* and – give or take some survey errors – the road then adopts the magnetic north alignment used for most of Melbourne's roads. Those errors are corrected south of Police Rd and the [6s] *line*. The road ends at Clow St [9s].

However, to the south of Dandenong the southern line of Stud Rd continues along the [16e] *line* as Frankston - Dandenong Rd. This route was first noted in 1854 and probably also replicates an early stock route running along the eastern edge of the Carrum swamp. The road leaves the [16e] *line* and heads directly to Frankston at the [14s] *line*. The CRB built the bridge across the Eumemmerring Creek in 1933. A tollgate was installed on Stud Rd in the 1860s.¹⁰⁹

In 1927 the CRB began spray and chip seal treatment of 6 km of Frankston - Dandenong Rd. It widened 2 km of the pavement in 1954. It duplicated the road between Boronia Rd and Burwood Hwy in 1973, to High Street Rd in 1978, to Ferntree Gully Rd in 1980, to Tampe Rd in 1984, to Lakeview Ave in 1982, from Police Rd to Dandenong Creek in 1986, and from Leonard St to David St in 1979. The Frankston - Dandenong Rd portion of the route had had some duplication work done prior to 1962, between Kirkham Rd and Greens Rd in 1979, to Elliot Rd in 1982, between Eumemmerring Creek and Colemans Rd in 1987, between Eastern Contour Drain and Glasscocks Rd in 1984, between Thompson Rd and Boundary Rd in 1982, to Seaford Rd in 1974, and to Frankston Freeway in 1967. The entire route

was not duplicated until 1988. The overpass of the Gippsland railway line was built by the CRB under the under the auspices of the Level Crossings Fund (Sub-chapter 3.5) and opened in 1958.

The route's development was foreshadowed as Route 8 in the MMBW 1954 Town Plan. Stud Rd was declared a Main Road in 1941 (south of Burwood Hwy) and 1947 (north of Burwood Hwy). The route from Frankston to Burwood Hwy was proclaimed a State Hwy in 1990.¹¹⁰ It is now known as Dandenong Valley Hwy (#2090). It is Route 9 in the Metropolitan Route numbering system.

NS11 Croydon Rd to Scoresby Rd

In 1875 the route was referred to as the “road leading from Dandenong to Birts Hill.”¹¹¹ At its northern end, Croydon Rd (originally Gippsland Rd) and Main St (Croydon) comprised an early cross-country link¹¹² between Birts Hill on Maroondah Hwy (route HV1) and Croydon township on Mt Dandenong Rd (route HV5). They appear to have been first located in Nutt's 1842 survey of a route from Box Hill to Lilydale which lay well south of today's Maroondah Hwy. The route is not a *section line* and is not shown in Map 4.11 of 1866. It was complicated and divided by the coming of the railway in 1882.

There is some evidence that this route illustrates the surveying errors that had accumulated in the metropolitan section system, compounded by the magnetic north / map north discrepancy (sub-chapter 2.1). In Croydon, Yarra Rd is on the [17e] *section line*, and Dorset Rd on the [18e] *line*. Croydon Rd is an accurate quartering (i. e. [17.5e] *line*) of a *section* that becomes lost in the survey confusion south of Mt Dandenong Rd. The original subdivisional intent had been to carry the line of Croydon Rd / Main Road south of Mt Dandenong Rd and a right-of-way as far as Vinter Ave is shown in Australian Army's Map 4.23 of 1922 (1935). Further south, Blazey Rd and Branch Rd are other probable remnants.

The first route between Mt Dandenong Rd and Canterbury Rd (route CT2) probably followed firm ground beside the Croydon Main Drain. The present portion of the route south of Mt Dandenong Rd is known as Bayswater Rd. It took that name in 1895 when the former Macaulay Railway Station was renamed the Bayswater Railway Station. Although Bayswater Rd was established formally in land grants from 1856 onwards, the east - west property boundaries are aligned to the *section lines*, whereas the Bayswater Rd frontages between Mt Dandenong Rd and Eastfield Rd [3n] were originally kinked and not orthogonal, suggesting that the road was based on a pre-existing track.¹¹³ South of Eastfield Rd, the next portion of the route follows the local map-north version of the [17e] *section line*.

Further south in Bayswater, the initial stock route would have followed Dandenong Creek to join the northern end of Stud Rd (route NS10). However, this route continues south, becoming Scoresby Rd south of Mountain Hwy (route CT4). Bayswater was originally Scoresby North, the name change occurring around 1879. Probably by intent, between Mountain Hwy and Boronia Rd the route is close to the [17.5e] *line* of Croydon Rd. Whatever, subdivisional pressures have left its form distorted but nevertheless roughly parallel with the adjacent portion of Stud Rd (route NS10). Scoresby Rd is shown on 1854 maps, serving Hugh Rourke's cattle run.¹¹⁴ It was named after Scoresby Parish, through which it ran. The Parish – a creature of the land subdivision process - in turn was named after a distinguished visitor to the Colony in 1856.¹¹⁵ The route was surveyed in 1861. South of Burwood Hwy (route CT3), the route was surveyed in 1857 and located on a map north alignment.¹¹⁶ The route ends at Ferntree Gully Rd (route CT10).

Construction work was undertaken on Bayswater Rd in 1875 and 1883. A key part of the route was the bridge over Dandenong Creek at Bayswater. This was a steel girder bridge built by John Monash in 1907.¹¹⁷

Croydon Rd, Scoresby Rd and Bayswater Rd were declared Main Roads in 1990.¹¹⁸ The route is part of Route 7 in the Metropolitan route numbering system.

¹ Notes for Chapter 5

and see Lay 1992, Chapter 1

² MTC 1969, p25

³ VGG, p1773 & p2978

⁴ Brennan 1973, p29

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- ⁵ Bate 1962, p164
⁶ VGG, p1518 & 1730
⁷ McCrae 1934, p88, see also Barrett 1979, p5
⁸ loc cit, p126
⁹ Argus, 19 May 1853, p5
¹⁰ Peel et al 1993, p13
¹¹ Argus, 11 sep 1855, p4
¹² Hibbins 1997, p26
¹³ Victoria 1984, Anderson 1934, p359
¹⁴ Anderson 1934, p359 & Kernot 1906, p16
¹⁵ Kernot 1906, p65
¹⁶ Moon undated
¹⁷ Rogers, p174
¹⁸ Moon undated
¹⁹ Barrett 1971, p41
²⁰ VGG, p168, p2413, p1978, p3121 & p2977
²¹ Broome 1987, p34
²² Burchell, 1994
²³ VGG, p518
²⁴ See Plan 1860.
²⁵ e. g. see Sands and McDougals' maps of 1881.
²⁶ Argus, 15 April 1879, p4-5
²⁷ Brooke 1861, Table III
²⁸ Reminiscences 1995, p62
²⁹ Brooke 1861, Table III, gives the date as 1858
³⁰ Garden 1972, p7
³¹ See map in Plan 1860
³² See Hoddle's map of 1839b.
³³ Leaney 1991, p6
³⁴ loc cit, p9
³⁵ Poulter 1985, p24
³⁶ Lay 1992, p9.
³⁷ Argus, 25 Jan 1868, p5
³⁸ VGG, p1544 (20 Aug), p2977, p1969 (some portions were already a State Hwy in 1982), p2977, p1969 & p2391
³⁹ loc cit, p1983 & p1798
⁴⁰ Greig 1912
⁴¹ Lemon 1983, p36
⁴² Selby 1929, p53
⁴³ Anderson 1934, p360.
⁴⁴ See Holgate & Serle 1982, p134-5
⁴⁵ Malone 1998, p10&28
⁴⁶ Anderson 1994, p16-17
⁴⁷ Malone 1982, p18
⁴⁸ CRB 1937 Annual Report
⁴⁹ Hibbins 1997, p60
⁵⁰ Hamer 1973, p2
⁵¹ VGG, p2977, p3139, p2412 & p181.
⁵² Malone 1983, p5
⁵³ loc cit
⁵⁴ Malone 1982, p16
⁵⁵ Malone 1983, p7
⁵⁶ loc cit, p5
⁵⁷ loc cit, p9
⁵⁸ Yarra 1913
⁵⁹ Serle 1982, p485
⁶⁰ O'Connor 1997, p14
⁶¹ e. g. Slater's map of 1857, Blundell's map of the early 1860's and Whitehead's map of 1892.
⁶² See Surveyor General's map of 1859.

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- ⁶³ VGG, p2894 & 3095
⁶⁴ Barrett 1971, p40
⁶⁵ Peel et al 1993, p21
⁶⁶ Cooper 1935, p67
⁶⁷ Lyell 1936
⁶⁸ Cooper 1935, p67
⁶⁹ VGG, p21
⁷⁰ Argus, 26 Dec 1861, p6
⁷¹ VGG, p3140 & p1729
⁷² Blainey 1980, p4
⁷³ loc cit, p9
⁷⁴ Blainey 1980, p40
⁷⁵ Cummins 1971, p57
⁷⁶ Blainey 1980, p9
⁷⁷ VGG, p1976 & p1729
⁷⁸ Tuxens' map of 1904.
⁷⁹ Melbourne's map of 1919.
⁸⁰ Blainey 1980, p5
⁸¹ VGG 1869, p1027
⁸² VGG p2596, p2620, p1325, p3786 & p2903
⁸³ Blainey 1980, p4
⁸⁴ Lemon 1978, p3
⁸⁵ VGG, p3968 & p1979
⁸⁶ See Tuxens' map of 1904.
⁸⁷ Williams 1985, p5 & Southall 1957, p28
⁸⁸ Keeley 1980, p18
⁸⁹ VGG, p1732
⁹⁰ Priestley 1979, p10
⁹¹ Victorian's map of 1892
⁹² Melbourne's map of 1919.
⁹³ Brennan 1972, p46
⁹⁴ loc cit, p111-113
⁹⁵ VGG, p1732 & p3702; p1732
⁹⁶ Brennan 1972, face sheet
⁹⁷ Hibbins 1984, p38
⁹⁸ Hibbins 1984, p147 has an aerial photograph from c1926.
⁹⁹ Southall 1957, p29
¹⁰⁰ VGG, p1244, p2596, p297, p2707 & p1732
¹⁰¹ loc cit, p1969.
¹⁰² Brennan 1972, p7
¹⁰³ Coulson 1959, p94.
¹⁰⁴ Compare Bibbs' maps of 1856 and 1866 (Map 4.11).
¹⁰⁵ Harding 1993, p3
¹⁰⁶ Coulson 1959, p95
¹⁰⁷ See Map 4.11
¹⁰⁸ McGivern 1968, p25
¹⁰⁹ Hibbins 1984, p55
¹¹⁰ VGG, p907, p975, p3354 & p3791
¹¹¹ McGivern 1968, p25
¹¹² McGivern 1961, p12
¹¹³ loc cit, endpiece
¹¹⁴ Coulson 1959, p94
¹¹⁵ loc cit, p171
¹¹⁶ loc cit, p171
¹¹⁷ loc cit, p194
¹¹⁸ VGG, p1733