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VICTORIA.

COUNTRY ROADS BOARD.

TWENTY-THIRD ANNUAL REPORT

FOR YEAR ENDED 30TH JUNE, 1936.

PRESENTED TO BOTH HOUSES OF PARLIAMENT PURSUANT TO ACT No. 3662.

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TWENTY-THIRD ANNUAL REPORT.

Exhibition Building,
Carlton, N.3,
16th November, 1936.

*The Honorable G. L. Goudie, M.L.C.,
Minister for Public Works,
Melbourne.*

SIR,

In accordance with the requirements of Section 96 of the Country Roads Act (No. 3662) the Board has the honour to submit to you for presentation to Parliament the Report of its proceedings for the year ended 30th June, 1936, together with the report of the Chief Engineer on matters of technical interest.

FINANCE.

From the amount of £155,743 in hand at the commencement of the year from the loan authorization passed by Parliament (which includes the balance of £100,000 for the reconstruction of outer metropolitan roads under Act No. 4188) the sum of £113,586 was expended during the year, £46,454 on declared developmental roads, £21,813 on country main roads, and £45,319 on outer metropolitan roads. The amount available at the 1st July, 1936, was £42,157, not allowing for commitments entered into prior to the 30th June last.

The gross revenue from motor registration fees paid into the Country Roads Board Fund was £1,457,828, representing an increase of £152,502 over that received from the same source during the previous year.

Owing to serious floods occurring in December and June, an unforeseen expenditure of £5,593 was incurred from the Country Roads Board Fund in repairing roads and bridges on State highways and main roads. With the ordinary maintenance expenditure, the total cost of maintenance, restoration, and repairs amounted to £985,280, compared with £879,040 for the year 1934-35, an increase of £106,240.

The amount received under the Federal Aid Roads Agreement was £485,737, of which £187,745 was expended on works of a developmental character, £89,010 on the construction of main roads, £1,481 on widening section of the Prince's Highway East, and the balance of £202,617 on the maintenance of roads previously constructed from Federal Aid funds, repairing damage caused by floods, restoring and rebuilding bridges and assisting municipalities in the maintenance of main and developmental roads constructed from loan funds.

The contribution of £386,280 from unemployment relief funds together with the sum of £48,027 brought forward on the 1st July, 1935, resulted in many important works being carried out. The total expenditure during the year was £333,499, the sum of £100,808 having been carried forward to next financial year.

STATE HIGHWAYS.

The works carried out on State highways during last year were on the lines adopted in previous years, progressive improvements having been effected in restoring worn-out surfaces, sealing of gravelled surfaces, widening of pavements where necessary to meet the increased demands of traffic, superelevating curves on dangerous bends, and replacing old and worn-out bridges and culverts. Whilst these works have added greatly to better riding qualities, they have done much in the direction of providing increased safety.

One of the striking developments of the past few years has been the added mileage of bitumen-surfaced highways. During the year under review, 203 miles were treated with bituminous materials including the resealing of 129 miles, and the initial sealing of 74 miles. The total mileage of bitumen-sealed highways is now 1,247 of the total length of 2,306 miles.

In designing and constructing new pavements, the Board has closely considered the question of safety of the highways. Where possible, sight distances have been lengthened, curves have been eased, and the provision of skid-proof surfaces has been given much attention as the next important step in building safety into the highway. The problem still concerning the Board is, however, that of making the old yet serviceable pavements safer, which year by year become more important by reason of the increase in the number of motor vehicles and the greater speeds at which they travel, thereby giving greater yearly mileage to the individual vehicle.

By the use of pneumatic-tired power graders in place of horse-drawn drags or small graders, to which reference was made in the last annual report of the Board, the maintenance of gravelled roads is being efficiently and economically carried out. By the preparation of a definite programme of work providing for the full employment of the plant and proper organization in handling same, excellent results have been achieved, fully justifying the purchase of these machines. In consequence of the good surfaces resulting from the use of this plant, the Board purchased three additional Diesel-engined units last year and placed orders for four more machines. Many municipal councils have been so impressed by their effectiveness and economy that they have also acquired or are negotiating for the purchase of kerosene engined units.

Many old timber bridges were replaced by suitable structures in concrete or timber. In all, 51 new bridges were erected, 35 in re-inforced concrete, and 16 in timber. The new structures have been built 2 feet wider than the highway pavement to ensure increased safety, except on sections of the highway where traffic is of a light nature.

Owing to the increased motor traffic, it has been necessary to construct footbridges for the use of pedestrians on several structures in or near important towns. In the town of Euroa, a footbridge was erected alongside the bridge over the Seven Creeks and in the Shire of Portland, a similar structure was erected on the western side of the road bridge over the railway at Dartmoor. The total expenditure was £250.

The work on State highways which is in general carried out under the direct supervision of the Board comes under two headings—

- (1) restoration or reconstruction of worn-out sections; and
- (2) maintenance of reconstructed lengths.

Methods of restoration were on the lines of those of previous years. By stage construction many miles of pavement consisting of a layer of 2 or 3 inches of gravel or crushed rock have been laid down, the expenditure being strictly confined to actual needs. Existing roadways have been strengthened by increasing the thickness of the wearing surface, and where the volume and density of traffic has justified the expenditure, a coat of bituminous material has been applied. Construction and maintenance costs are thus made proportionate to the importance of the traffic using the highway, and results have shown that cheaper types of road surfaces constructed with suitable local materials are well able to carry present-day traffic, whilst these surfaces can be speedily and economically repaired.

Work of this description completed on State highways during the year covered a distance of 370 miles, and cost £240,000. Other road work which was purely maintenance, including resealing and bridge maintenance, extended over a length of 2,306 miles at a cost of £140,755.

On account of the changing designs of the automobile, roads are subject to greater speeds, necessitating alterations in alignments and easing and superelevating curves on all important highways. Changing conditions demand the elimination as far as possible of all potential hazards along the highways, and to this end the Board is using every endeavour to still further improve alignments and curves where considered necessary.

The practice adopted by the Board of marking the centre of the pavement with a white line on the sharper horizontal curves and on vertical curves where visibility is bad was continued, and appreciative references have been made by drivers of motor vehicles to this means of introducing further safety into highways. The erection of white posts at the edge of embankments and at dangerous turns on the State highways is being carried on with a view to safeguarding traffic as far as is practicable.

In the last annual report of the Board references were made to the use of "speed values" in designing roads. As some misunderstanding of the factors involved appear to exist, further reference to the subject would seem to be necessary.

The principle involved is that on a length of road in an area with uniform topographical features, all the curves shall be so designed that they may be readily and safely traversed at the same speed, thus avoiding that sudden change in conditions which is generally held to be the cause of many road accidents. The speed value fixed may be, and frequently is, quite low. In open country, higher speed values are fixed, as these mean large radius curves, which under favorable conditions are readily traversable at quite high speeds. Of possibly greater importance, however, is the fact that these large radius curves bring a considerable section of road within the angle of vision of the driver and thus make for greater safety at all speeds, particularly under unfavorable conditions such as when meeting other traffic on wet nights, when small radius curves are frequently dangerous at quite low speeds.

Funds available do not permit of dealing with all hazardous curves, but those which accident statistics indicate as being particularly dangerous are being dealt with. Further, when sections of road are being strengthened or reconditioned, the opportunity is taken to bring the curves up to the desired standard.

This problem has now become one of utmost importance to the road constructing authority. It is not fully recognized that the motor car and the highway are component parts of the transportation system and for that reason the design of the motor car and the highway must be co-ordinated. The striking changes that have taken place during the past few years in the character of the motor vehicle have been conducive to less expensive road construction, low-pressure tires, improved springing, and balanced motor and body design, being important factors in this regard.

Experiments carried out by the Board during the past year included the use of common salt in the construction of roads. A number of sections laid down on the Calder Highway, the Murray Valley Highway, the Loddon Valley Road, and the Stawell-Grampians Road give promise of success, but no definite conclusions can yet be arrived at. The results to date, however, indicate that the surface materials, such as fine crushed rock or gravel are kept moist during construction with comparatively little water, and consolidation takes place more rapidly than under ordinary conditions. As the cost was comparatively small and the Board is hopeful that definite advantages will accrue, it is proposed to continue the experiments during the present year.

A census of traffic on State highways taken during the month of February, 1936, disclosed an increase of 8.5 per cent. in all types of motor vehicles excepting that of hire passenger cars. A comparison of figures recorded at certain stations which have remained at the same location for several consecutive counts, shows in the majority of cases a gradual increase over a period of years, but on many sections of the highways the traffic increase was 40 per cent. to 50 per cent. over February, 1935.

Owing to the fact that the relation between summer and winter traffic has now been fully established and an annual summer traffic census supplies most of the data required, no census was taken during August of the present year.

During the year under review, the number of motor trucks on State highways as recorded by the census of February last was 19,764, of which 11,480, or 58.08 per cent. were of the heavy type.

The number of solid-tired vehicles recorded was 182 per day. It was again noted that motor vehicles fitted with solid rubber tires are mainly used in the vicinity of the metropolitan area and provincial cities. Horse-drawn vehicles totalled 4,070.

On account of the extension of surfacing along the State highways, an extension of the truck patrol system was made possible and maintenance costs have been reduced considerably. Funds were thus available for reconstructing additional sections. The average length maintained by the truck patrol was 78 miles.

CALDER HIGHWAY.

Between Castlemaine and Bendigo the Calder Highway was widened, resheeted, re-aligned, superelevated, and sealed, bringing the road into a condition in keeping with modern requirements and safety. The widening of eight narrow culverts and two bridges was included in the work.



Plate No. 1.—Widened section of Calder Highway between Castlemaine and Bendigo.

Sealing was extended northerly from Dumosa to a point 1 mile north of Nullawil, a distance of 8.04 miles. Of the 357.49 miles between Melbourne and Mildura, the sealed road now extends northerly for 199 miles from Melbourne and southerly for $13\frac{3}{4}$ miles from Mildura. The Board proposes to extend the sealing of the limestone pavement during the current year, to overcome the present difficulties caused by the wet and slippery conditions experienced after rain and the ravelling of the pavement resulting in the formation of pot holes during the summer months.

A commencement was recently made with the programme for improving the rough surface between Nullawil and Ouyen, and a good riding surface should be provided in the near future between Melbourne and Ouyen and between Nowingi and Mildura.

Deviations at Nullawil and Berriwillock were put in hand during the year. When completed, eight curves of under 100-ft. radius and four level railway crossings will be eliminated.

NORTHERN HIGHWAY.

On the Northern Highway improvements were effected by laying a roadmix seal, and timber stops were provided between Rochester and Echuca in place of sand-bag stops to prevent scouring when the waters of the Campaspe River flow northerly along the highway.

MURRAY VALLEY HIGHWAY.

The above highway westerly from Echuca was generally improved to within 12 miles of the South Australian border.

With the exception of approaches to bridges recently erected, and a newly constructed length of one-half mile between Cohuna and Kerang, sealing was completed between Echuca and Lake Charm, in order to preserve the existing pavement, the reconstruction and resheeting of which would have been costly owing to the absence of suitable roadmaking materials in the vicinity. Preparations were made for sealing the narrow pavement south of Swan Hill during the present year.

Between Mildura and the South Australian border the limestone pavement was extended to within approximately 12 miles of the border, work having been economically and speedily carried out by the Mildura Shire Council with its own plant.

Easterly from Wodonga, a section of the highway near Jingellie, which was previously dangerously narrow and tortuous, was widened and re-aligned by an unemployment relief gang over a length of 1·32 miles.



Plate No. 2.—Showing Murray Valley Highway at Huon in the Shire of Towong.

Between Wodonga and Echuca extensive reconstruction was completed, 20·73 miles having been re-shaped with gravel. 3·11 miles east of Rutherglen were treated with a strip seal and west of Rutherglen, 4·50 miles were widened. Two sections of 1·70 miles, near Cobram, were sealed, and ·60 miles near Strathmerton, were bound with suitable sand.



Plate No. 3.—Murray Valley Highway—Resheeting east of Rutherglen.

Maintenance of the highway between Echuca and Towong was carried out with two power graders, and trucks and men for general maintenance were engaged when required. The section of Highway within the Shire of Upper Murray was maintained throughout by patrolmen under the supervision of the Shire Engineer.

HUME HIGHWAY.

The more important works done on the Hume Highway consisted of the general improvement of the pavement by premixed patching, and treating with a road-mix seal, 1·82 miles in the Borough of Wangaratta and 1·33 miles between Wodonga and the Murray River.

A section of 128 miles under the supervision of the District Engineer at Benalla, was maintained by two truck patrols, each having a small grader.

Short sections of sealing, widening of the roadway to allow the passage of stock along the Goulburn River south of Seymour and patrol maintenance was the only work carried out during the year on the Hume Highway between Melbourne and Seymour.

MIDLAND HIGHWAY.

The northern section of the Midland Highway was widened to 16 feet for a length of 3·06 miles east of Shepparton. Six new concrete box culverts, five of which replaced old timber structures were constructed. The road from Benalla to Shepparton is now in excellent order throughout.

On the Benalla to Mansfield section of this highway, considerable improvements were effected by resheeting 2 miles with sand, superelevating curves and constructing 2·4 miles of shouldering.

By the completion of the sealing between Buninyong and Ballarat and from Batesford Bridge to Bannockburn, a bituminous surface has now been provided on the Midland Highway between Geelong and Ballarat. General maintenance by patrolmen continued throughout the year.



Plate No. 4.—Recent work done on the Midland Highway between Buninyong and Ballarat.

OMEHO HIGHWAY.

By widening a narrow rock cutting near Lightning Creek for a distance of 1·20 miles, improved facilities for traffic have been provided. With the establishment of sawmills in the woolly-butt forests, traffic is expected to increase considerably in the near future.

In the Towong Shire, permanent improvements were effected to the section of the Highway near Tallandoon, by placing a road-mix seal.

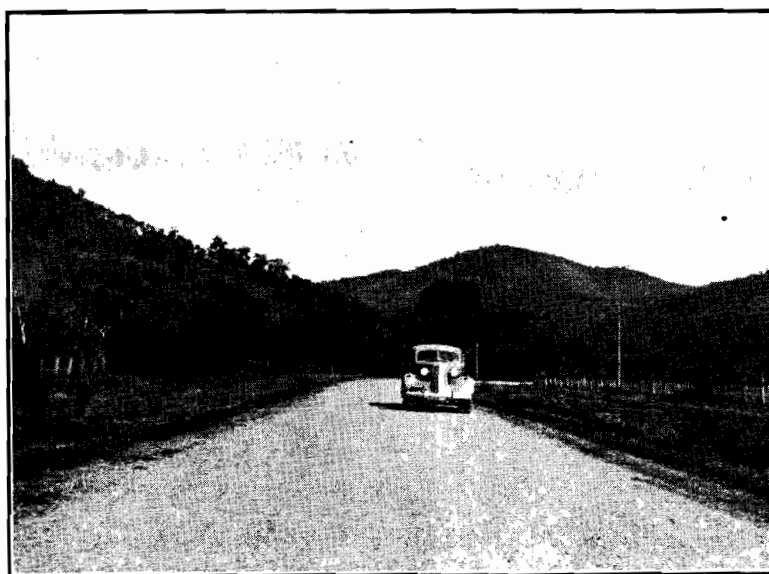


Plate No. 5.—Showing the section of Omeo Highway, near Tallandoon, constructed with roadmix seal under the supervision of the Shire Engineer.

Surfacing with bitumen a length of 3 miles between Lucknow and the Sand Hill has effected a marked improvement. The section of the Omeo Highway traversing the Omeo Shire was maintained by the Shire Council with patrolmen.

PRINCE'S HIGHWAY.

Widening and sealing the western portion of the Prince's Highway, between Footscray and Geelong, for a distance of 10·38 miles, has placed the road in good condition, which will require little attention other than patrol maintenance for some years so far as the pavement is concerned. The last traffic count indicated that the average number of vehicles on this section increased from 978 to 1,401 per 12-hour day between February, 1935, and February, 1936.

Between Geelong and Winchelsea the highway was resheeted with gravel and sealed, in order to strengthen the pavement where weakness in the old work on a bad subgrade caused excessive maintenance costs.

A distance of 3·5 miles immediately west of Winchelsea was resheeted with gravel preparatory to being sealed in the Spring. On completion the weak lengths which have existed for some time between Winchelsea and Colac Shire boundary will be eliminated.

Between Garvoc and Allansford the highway was considerably improved by re-alignment and casing many dangerous curves. The total length reconstructed was 7·61 miles, all of which, with the exception of 1·10 miles, was sealed.

12·16 miles of buckshot gravel between Yambuk and Tyrendarra were resealed with a road-mix seal, and between Bolwarra and Heywood, 2·39 miles were widened and surfaced with gravel. By the resealing of 3·73 miles, the whole of the pavement between the latter townships has been completed.

Major maintenance work done on the Prince's Highway East consisted of minor realignment and regrading at various points to remove the worst hazards to traffic, together with resheeting and resealing approximately 5·2 miles.

A road-mix seal surface was applied over the Haunted Hills section of the highway as part of normal seal coat maintenance. Three miles were sealed between the Little Moe River and the Moe River near Darnum, and 2 miles were similarly treated between Flynn's Creek Railway Station and Rosedale.

In the Bairnsdale district, 12·93 miles were treated with a road-mix seal as far as the railway crossing near Bairnsdale. A deviation of 1·28 miles in length which is now in course of construction, was formed along the foreshore at Lakes Entrance to eliminate dangerous turns in the existing road. When completed there will be a saving in distance of approximately ·2 miles.

Between Wombat Creek and Orbost, a bituminous surface on gravel was provided over a distance of 8·33 miles, and from Mt. Raymond to the Murrungower turn-off, a length of 4 miles was widened, superelevated and surfaced.

Similar works on other sections as far as the New South Wales border were completed, resulting in considerable improvements to that portion of the Highway traversing the Orbost Shire.

WESTERN HIGHWAY.

Besides patrol maintenance, work on the above highway between Melbourne and Ballarat was limited to the initiation of improvements to grade and alignment west of the Werribee River, near Ballan. Work of a similar nature was completed at Woodman's Hill, east of Ballarat.

Between Ballarat and Ararat, a commencement was made on the reconstruction of two rough sections near Mt. Mistake and the widening and reconstruction of a length extending easterly from Dobie towards Mt. Mistake. These sections totalling $4\frac{1}{2}$ miles will be sealed with bitumen during the present year.

Between Ararat and Horsham, $3\frac{3}{4}$ miles of the highway were resurfaced with a road-mix seal, several narrow embankments were widened and the bituminous pavement widened to 18-feet for a length of $7\frac{1}{2}$ miles.



Plate No. 6.—Western Highway near Ararat, resurfaced with road-mix seal.

Resurfacing with road-mix seal was completed for a length of approximately 10 miles between Pimpinio and Dimboola, whilst from Dimboola to Salisbury several sections of limestone totalling $10\frac{1}{2}$ miles were sealed, thereby completing a continuous bitumen surfaced road for a distance of 238 miles from Melbourne.

A length of $2\frac{1}{4}$ miles was resurfaced with a road-mix seal, together with sections totalling 5 miles between Nhill and Kaniva.

Westward from the end of the bituminous road towards Kaniva and easterly from the sealed section east of Kaniva, approximately $8\frac{1}{2}$ miles of gravelled roadway were reconditioned and resheeted in preparation for sealing during the current year.

Between Kaniva and the South Australian border, surface sealing was extended for a length of $4\frac{3}{4}$ miles and a section of nearly $2\frac{3}{4}$ miles of bitumen surfaced road was treated with a road-mix seal.

SOUTH GIPPSLAND HIGHWAY.

As this highway has only been declared for a short period, work is in a more backward state than any of the others. 5.08 miles were sheeted with granitic sand and the deviation near Lang Lang was similarly treated, with a view to these sections being sealed during the coming summer.



Plate No. 7.—Section of South Gippsland Highway between Cranbourne and Tooradin.

BONANG HIGHWAY.

Widening, surfacing and straightening of sharp bends were the principal works done during the year. Regular maintenance was carried out by the permanent patrolmen.

MAIN ROADS.

Owing to an amount of £22,988 only being available for expenditure out of loan funds authorized by Parliament under the provisions of the Country Roads Acts for country roads, of which £21,813 was expended, it was necessary to provide for a large proportion of construction works from Federal-aid funds. The amount expended from this latter source was £89,010. In addition, the sum of £70,580 was expended from funds provided under the *National Recovery Loan Act*, No. 4097, supplemented by an expenditure of £8,294 for materials, equipment, &c., from the Country Roads Board Fund, so that the total expenditure for the year was £189,697.

This expenditure was confined to works of the most urgent nature, such as the completion of those already commenced, linking up unconstructed sections and extending roads designed to serve settlement. The expenditure was distributed amongst 108 municipalities, and 179 separate projects were put in hand.

With the expenditure of £22,988, referred to from loan funds authorized under the provisions of the Country Roads Acts, the total amount expended from that source on the construction of declared main roads in country districts, since the inception of the Board, is £4,860,326.

The work done during the year resulted in 304.1 miles of main roads being constructed in country districts outside the metropolitan area, but as the grants made to municipal councils from Federal funds were supplemented by them, the mileage of roads constructed includes the additional works completed with the municipal contributions.

For the maintenance of 6,364 miles of declared main roads, municipal councils which generally carry out the work, estimated an amount of £916,890 as necessary for the year. The amount available from the Country Roads Board Fund was, however, £625,593 only, so that it was necessary to supplement this allotment by an amount of £130,191 from Federal-aid road funds. The total sum available for this purpose was, therefore, £755,784, or £161,106 short of estimated requirements.

Appendix "E" sets out details of the works carried out on main roads during the period under review. 29·21 miles of new construction works, consisting of forming, gravelling or metalling, and erection of bridges were added to those completed in previous years. These works were carried out by municipal councils.

Particulars are also shown in Appendix "E" of main roads maintained. Those maintained by the Board were through roads carrying traffic not of local origin, previously restored or reconstructed on behalf of the councils, who were unable to carry out the work themselves owing to their not having the necessary plant.

In addition to these works, valuable projects were put in hand under unemployment relief conditions and financed with moneys provided under the *National Recovery Loan Act No. 4097*. The total length of roads thus completed or partially constructed was 134·1 miles, in addition to the mileage constructed from other sources.

By continuing close co-operation with municipalities, the Board has induced many councils to adopt the patrol system of maintenance, but several councils have not yet recognized the fact that systematic maintenance is less costly than making extensive repairs, which become necessary when the work is delayed. In the case of State highways, which are maintained by permanent patrolmen under the direct supervision of the Board, it has been proved beyond doubt that maintenance costs are lower and better road surfaces are secured by regular attention.

By reason of the fact that greater expenditure is necessary for the maintenance of longer lengths of constructed main roads to cope with the increase of traffic not of local origin, the Board under the powers conferred under the Country Roads Act, is assisting councils as far as funds will allow by reducing below one-third of the total cost, the municipal contribution towards maintenance. The extent of the assistance given to councils in this respect during last year was £39,252.

Maintenance of main roads subjected to heavy traffic is one of the Board's major problems in its maintenance organization, particularly on roads where the pavement is only of sufficient width to allow of the passage of two lines of traffic. During wet weather the shoulders of the road become soft and unstable, and during the summer dry conditions tend to loosen the shoulder materials, thereby causing depressions, which ultimately form into ruts. Constant attention is required by the patrolman to obviate danger to traffic, and prevent the water accumulating in the depressions and soaking under the edge of the pavement.

On sections of main roads where these conditions exist, it has been found more economical to widen the pavement to 16 feet, and this has already been done on many miles. As a result, increased safety has been given to these roads, and a considerable saving will be made in the cost of maintenance, thus continuing the development of the road system along sound, economic lines.

As in previous years, the low cost system of construction has been followed on country roads, resulting in suitable roads being laid down, and the work being economically carried out.

Besides the road constructional works and those of maintenance, 50 bridges were erected to replace structures which had reached the end of their useful life, many of these having been in existence for over 50 years. In dealing with the most urgent replacements, the Board is gradually effecting considerable improvements to the structural standard of its bridges. The more important of these works is described in detail under the heading of "Bridges" as well as in the appended report of the Chief Engineer. The total expenditure involved to the 30th June was £27,000.

Owing to severe floods taking place during the previous year, widespread damage was caused to main roads and bridges in the north-eastern, northern, western, and eastern districts of the State, necessitating repairs costing £92,630 during that year. During the year ended 30th June last, £4,739 was expended from the grants made by the Commonwealth Government to the State to assist in repairing the damage and this sum was supplemented by a similar expenditure provided from the Country Roads Board Fund.

Particulars of the principal works carried out by the Board in each of the districts under the supervision of its District Engineers are as follows:—

BAIRNSDALE DISTRICT.

The Cann Valley Road, in the Shire of Orbost, was widened and surfaced, and the curves superelevated for a length of 15,000 feet. The work done has resulted in many bad bends being eliminated and greater safety has been thereby given to traffic.

BENALLA DISTRICT.

Under the supervision of the District Engineer at Benalla, the Goulburn Valley Road was considerably improved. A commencement was made with the reconstruction of a section within the Seymour Shire, 1.65 miles having been completed, together with .35 miles of gravelling near Hughes' Creek. Owing to the improvement of this road, traffic is rapidly developing, particularly during the fruit season, as fresh fruit can now be transported expeditiously without damage.

The Murchison-Shepparton Road, which was sealed for a distance of 5 miles, will be of material benefit to the increasing traffic now traversing the Goulburn Valley Road.

By taking in hand the section of the Wangaratta-Yarrawonga Road in the Shire of Wangaratta, this road has been placed in good serviceable condition by the Board. An excellent surface, which has been provided by employing patrolmen on the work, meets all the needs of the present day traffic.

The Rutherglen-Springhurst Road which forms an important Interstate connexion between the Hume Highway and the Murray River bridge at Wahgunyah, was continuously maintained by patrolmen.

A rough section of 1.3 miles of the Seymour-Yea Road extending easterly from the railway at Seymour was reconstructed and 1.44 miles were subsequently sealed, resulting in an excellent road being provided to the military camp.

The rough section of 1½ miles of the Beechworth Road, in the Shire of Wangaratta, was constructed and a road-mix seal was placed on the Avenue section. This has successfully withstood flooding, which has periodically caused considerable damage to the pavement.

The Bright-Omeo Road between Harrietville and Hotham Heights was widened, and the bad curves improved for a distance of 5.34 miles. It is proposed to extend this work during the current financial year.

BENDIGO DISTRICT.

A first seal was applied to the limestone and swamp cement on the Loddon Valley Road, between Durham Ox and the Murray Valley Highway, resulting in a length of 35 miles of sealed road now being available south of Kerang.

On the Bendigo-Serpentine Road, forming and sanding was completed for 12 miles, southerly from Durham Ox. A noticeable development in traffic has already taken place on the all-weather road now provided between Bendigo and Serpentine, via Eaglehawk, which is 9 miles shorter than that via Bridgewater.

Besides a number of bridges erected by the Board on main roads, to which particular reference is made under the heading of "Bridges", three narrow culverts over the water supply channels on the Wyuna-Undera Road were widened, the road regraded and placed on a more suitable alignment.

In the area under the supervision of the District Engineer at Bendigo, road communications generally were greatly improved during the twelve months, particularly on a number of important cross country roads such as the Pyramid-Durham Ox Road, Durham Ox-Boort Road, the roads between Bendigo and Serpentine, from Wycheproof and Birchip, Boort to Charlton, Stanhope to Elmore and between Ultima and Sea Lake.

In general, the condition of constructed roads has been considerably improved by better maintenance methods, with the result that unsealed roads, which were previously in a rough condition, can now be traversed with a reasonable degree of comfort. The Ouyen-Pinaroo Road, which was formerly uneven and pot-holey, has been much improved at small cost by suitable maintenance.

On many roads where dangerous short radius curves existed, curves of larger radius have been substituted. This applies specially to the Ultima-Sea Lake Road, and public appreciation of the work done has since been expressed.

CENTRAL DISTRICT.

Within the Shire of Barrabool, the Anglesea Road was widened, realigned and gravelled over a distance of 5 miles beyond Jan Juc.

The Airey's Inlet Road between Anglesea and Airey's Inlet was widened and gravelled, whilst the section through the Anglesea Township was surfaced with bitumen. Two miles were also widened and bitumen sealed between Mogg's Creek and Spout Creek.

In the Bellarine Shire the Geelong-Portarlington Road, from Moolap to Portarlington, was completed by the reconstruction of three miles between Bellarine and Portarlington.

A further section of the Portarlington-St. Leonard's Road was gravelled for a length of 1.2 miles, and 1.7 miles were surfaced with bitumen.

In the Otway district the Birregurra-Forrest Road between Barwon Downs and Yaughar was gravelled, resulting in an all-weather road being made available between Forrest and the Prince's Highway, thus making a connexion with the Forrest-Apollo Bay Road.

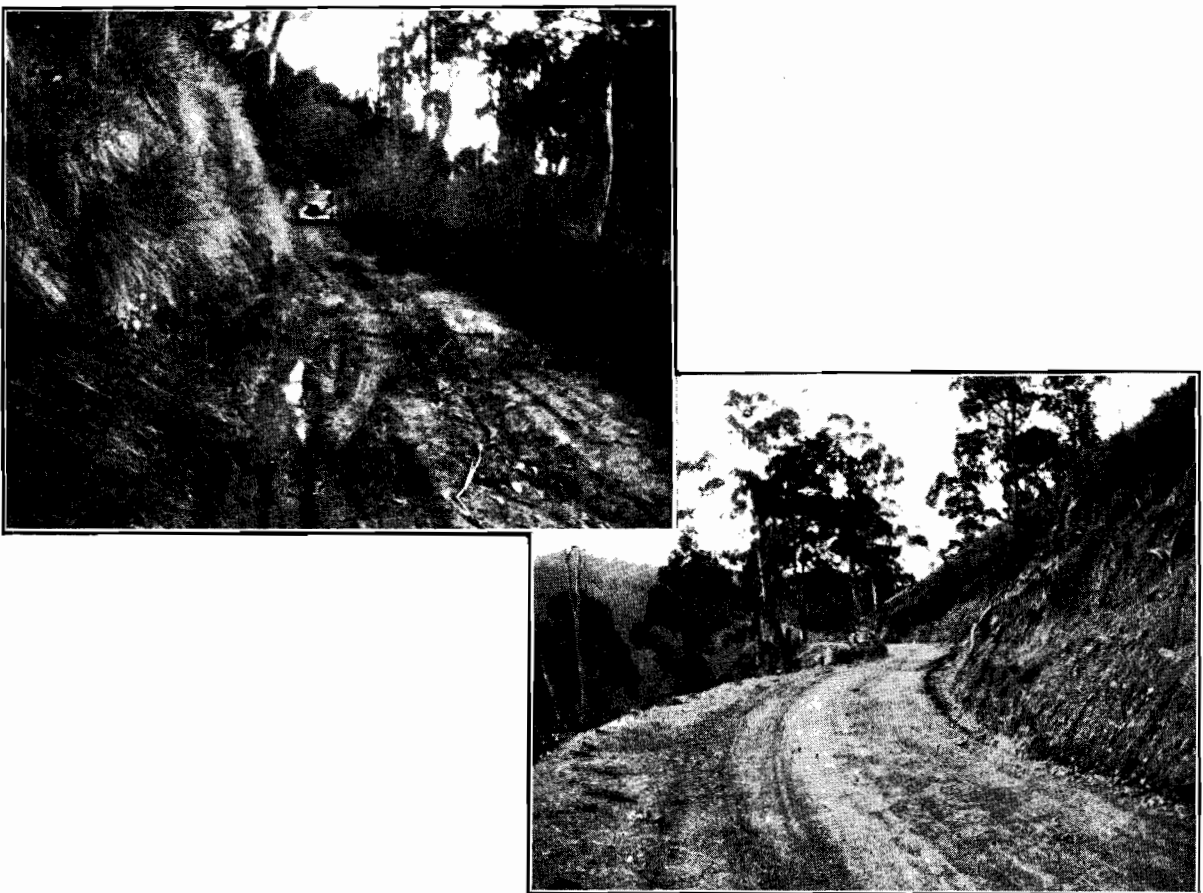
By completing the surfacing of the Sunnyside Road each settler on the road has now an all-weather road to his property.

The formation of the Lower Gellibrand Road was extended for a length of 3 miles. Of the 11 miles between Chapplevale and the Princetown Road, a total length of 7 miles has now been formed.

Access to a considerable area of valuable grazing country has been given by the clearing and forming of 2½ miles on the road from the Lovat Railway Station.

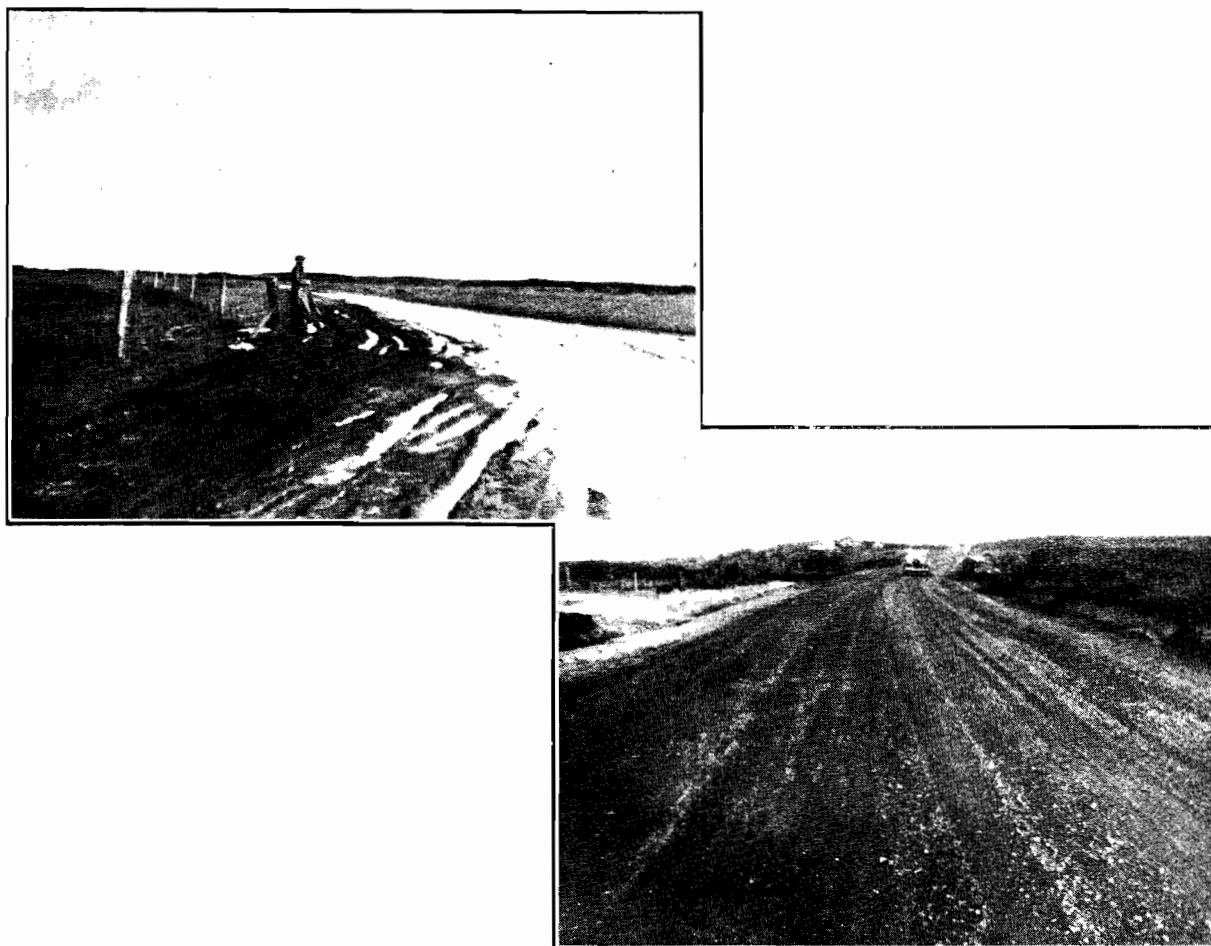
A length of Lardner's Track was surfaced with crushed rock for a distance of 3 miles, thereby extending the work to the last settler.

In the Shire of Traralgon, a narrow section of the Traralgon-Jeeralang Road, which was quite unsuitable for the traffic using it, was widened by a day labour gang, resulting in much-needed improvements being effected.



Plates Nos. 8 and 9.—Showing section of the Traralgon-Jeeralang Road in the Shire of Traralgon before and after widening.

In the Wonthaggi Borough, the Cape Patterson Road was surfaced with burnt sandstone for a length of 4 miles, thus providing means of communication between Wonthaggi town and the coast.



Plates Nos. 10 and 11.—Showing Cape Patterson Road in the Borough of Wonthaggi before and after construction.

The new formation of the Black's Spur deviation of the Healesville–Alexandra Road has been completed and lightly surfaced. The maximum grade is 1 in 13, as compared with 1 in 7 on the old road, and a saving in distance of 1 mile has been made. Besides shortening the distance, the road has attracted considerable increased motor traffic, on account of new vistas of magnificent mountain scenery having been opened up.



Plate No. 12.—Recently constructed Black's Spur deviation on the Healesville–Alexandra Road.

The Marysville Road was extended by resurfacing, as far as Wilk's Creek, over a length of approximately $2\frac{1}{2}$ miles.

STAWELL DISTRICT.

In the Shire of Arapiles, clearing, forming and gravelling for a further distance of 2·7 miles was completed on the Horsham–Natimuk–Edenhope Road between Horsham and Natimuk.

A $\frac{3}{4}$ -mile section on the Goroke–Natimuk Road, which is impassable to vehicular traffic after even a light shower of rain, is now under construction. When completed this road will form an important connexion between Goroke and Horsham.

That section of the Ararat–Warrnambool Road within the Shire of Ararat was sealed for a further $1\frac{1}{2}$ miles in continuation of the work done in previous years, leaving only 4 miles to complete a bitumen surface from Ararat to Lake Bolac.

To serve a number of deep lead gold mines between Caralulup and Bung Bong, a gravelled road $11\frac{1}{2}$ miles long was completed. This road junctions with the Avoca–Maryborough Road at the north end and with the Lexton–Talbot Road at the south.

A bitumen surface was applied to the Maryborough–Ballarat Road for a distance of 1 mile north of Ascot. A deviation of this road between Clunes and Talbot was completed by gravel surfacing over a length of $1\frac{1}{2}$ miles.

In the Shire of Borung, bitumen surfacing was extended on the Dimboola, Rainbow, Hopetoun and Minyip Roads, the total length being $7\frac{1}{4}$ miles.

On the Warracknabeal–Donald Road, 2·8 miles were formed and surfaced with fine crushed rock, and a further length of $1\frac{3}{4}$ miles were constructed on the Birchip Road.

Further improvements were effected on the Rainbow Road and the Pepper's Plains Road in the Shire of Dimboola. The latter road is now in good condition between the Rainbow Road and the eastern boundary of the Shire.

An extension of fine crushed rock surfacing on the St. Arnaud–Birchip Road in the Shire of Donald for a distance of $1\frac{3}{4}$ miles, and further bitumen surfacing over a short distance north from Donald, have considerably improved this section of road.

Two miles of surfacing on the Marnoo–Donald Road and $1\frac{3}{4}$ miles of similar work in the Shire of Dunmunkle have resulted in greatly improving this road.

In the Shire of Dunmunkle, the Marnoo–Rupanyup Road, which forms portion of an important east-west connexion between the Western Highway at Horsham and the Calder Highway, was practically completed by 7 miles of bitumen surfacing, leaving only two short sections near the Western Highway to be sealed.

The Marnoo–St. Arnaud Road, within the Shires of Stawell and Kara Kara, was completed, and, in the latter shire, 8 miles of the St. Arnaud–Moliagul Road were formed and gravelled, thus completing an excellent road from the eastern end of the work through to Horsham, and providing a most important and much-needed cross-country connexion.

In the Shire of Grenville, the important Ballarat–Hamilton Road was completed by surfacing with bitumen throughout.

A commencement was made with bitumen spraying three main roads radiating from Hopetoun in the Karkaroc Shire, the distance treated being 2·1 miles.

The surfacing of 2·9 miles of the Rainbow–Beulah–Birchip Road practically completed the construction of this important east-west road between Rainbow and the Birchip Shire boundary.

In the Shire of Lexton, surface sealing was extended a distance of 2·16 miles from Lexton towards Ballarat on the Avoca–Ballarat Road. Bitumen sealing was completed for a length of 5·65 miles on the Beaufort–Skipton Road, and this type of work was continued on the Ballarat–Hamilton Road for a further length of $4\frac{1}{2}$ miles.

With the exception of a short section, the Dimboola–Warracknabeal Road has now been completed, a total length of 7·8 miles having been constructed during the year in the Shire of Dimboola.

As already mentioned under the heading of "State Highways" experiments were carried out on the Stawell–Grampians Road in the Shire of Stawell by laying down a section of salt stabilized gravel. The length treated was 3,300 feet, divided into five sections of 10 chains each, the gravel treated in each case having a consolidated depth of 2 inches. The cost of the work varied from £40 to £55 per mile, according to the method adopted in mixing salt or brine with the gravel or clay. The Board feels that the results obtained justify the continuance of experiments during the present year, with a view to arriving at a definite decision as to the merits of salt stabilization of road materials in the manner described.

WARRNAMBOOL DISTRICT.

In the Shire of Heytesbury, the Peterborough-Port Campbell Road was resurfaced with buckshot gravel for its full length of 7·1 miles, and the Cobden-Port Campbell-Princetown Road was considerably improved by reconstruction in crushed rock for a length of 2·84 miles.

The Portland-Nelson Road between Nelson and the South Australian border was much improved by reconstructing 2·60 miles with limestone. The resurfacing of this road is now completed between Nelson and Mt. Gambier.

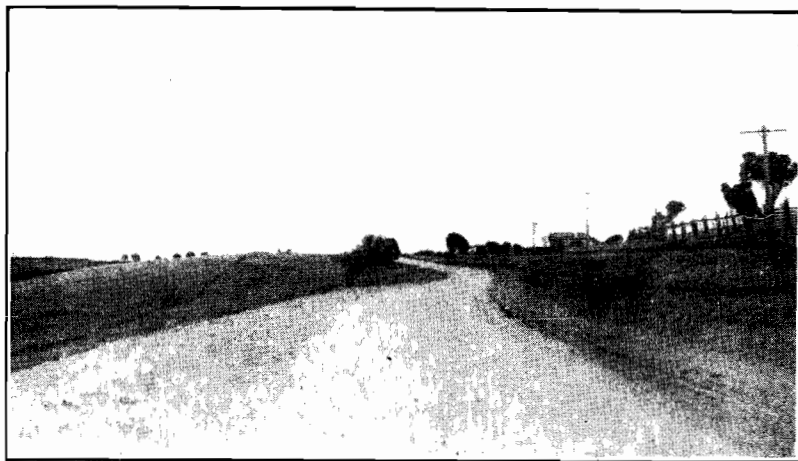


Plate No. 13.—Portland-Nelson Road between Nelson and South Australian Border, Portland Shire.

6·25 miles of rough waterbound limestone macadam on the Mt. Gambier Road near the South Australian border in the Shire of Glenelg were reshaped and sealed.

DEVELOPMENTAL ROADS.

A total amount of £424,694 was expended on the construction of developmental roads during last year, £46,454 of which was derived from loan, £187,745 from Federal-aid road funds, and £222,162 from the provision made under Act 4097 for the relief of unemployment, supplemented by £21,531 from the Country Roads Board Fund. The expenditure was distributed amongst 111 municipalities and 849 separate projects were put in hand. As the balance of the loan monies at the end of the year authorized under the provisions of the Country Roads Acts was £7,441 only, the Board must rely in future years on funds derived from Federal-aid sources for the construction of roads of a developmental character.

In previous reports the Board has stressed the vital necessity of continuing the work of constructing roads to serve settlement. Good progress has been made in this direction during the past 5 years, the expenditure of £502,912 incurred during last year, being the largest amount expended since this class of work was taken in hand by the Board. The most pressing needs have been kept in view, and with the gradual extension carried out from year to year as far as funds available would allow, a noticeable improvement has already taken place. To provide road access to the many areas of occupied land throughout the State, especially in cases where settlers are living at some distance from the constructed roads or the railway, involving heavy expenditure in earthworks and the acquisition of land, is a problem which can only be dealt with by stages.

A remarkable contrast is now presented to the conditions of less than 25 years ago, when settlers relied on sledges and horse-drawn vehicles, particularly in the hill country of the State. To-day much abandoned country is again being put to use, a greater demand for land has been created by the increase in the price of primary produce and the greatly improved facilities made available for the transport of produce to railway and market.

About 23 per cent. of the roads of the State are formed but unsurfaced, and 50 per cent. have been surveyed but not formed. On many of these roads the traffic does not justify any considerable expenditure beyond that required for drainage, filling of holes and bridging of streams. In this way roads have been made passable during the greater portion of the year. In other cases roads have been placed in excellent condition by running a grader over the surface and applying a thin coat of gravel or crushed rock of 1½-in. to 2-in. in thickness.

Following the established practice, the construction of developmental roads was carried out with gravel or crushed rock, generally obtained in the district in which the works were situated. The work done was of the low cost type.

A total mileage of 514·49 was added to that of previous years, including 69·49 miles of declared developmental roads and 445 miles of other roads of a developmental character. The work completed comprises the extension and connecting up of existing roads and the construction of new work.

In order to assist Councils in the maintenance of developmental roads previously constructed, a sum of £29,709 was allotted by the Board to municipalities from the Federal grant of which £23,797 was expended to the 30th June.

For the restoration of roads damaged by floods an expenditure of £23,514 was incurred, of which £11,757 was provided from a special grant from the Commonwealth Government, supplemented by a similar amount from the Federal-aid roads fund. On other roads of a developmental character, the sum of £16,774 was expended from the Commonwealth grant, and £11,084 from Federal funds, the Councils providing the balance required to supplement the Federal grant.

Sixty-three bridges were erected on roads of a developmental character to replace old and worn-out structures. The total cost for the year was approximately £28,560. Reference to the larger projects is made under the heading of "Bridges".

On declared roads, the mileage of which was 3,625 at the 30th June last, 69·49 miles constructed from loan funds were added to the works completed or partially completed in previous years. Details of this work are set out in Appendix "F."

During its inspection of roads in different parts of the State, it has come under the notice of the Board that a number of councils have neglected to properly maintain developmental roads previously constructed from loan funds or moneys provided under the Federal grant. As a result, serious deterioration of these roads has taken place, which necessitates the expenditure of a much greater amount in restoring them than would have been required had systematic attention been given to the surfaces throughout the year. Under the circumstances, the Board will be compelled to take into consideration in future the withholding of further grants for the construction of new roads, unless definite assurances are given that the works already carried out will be adequately maintained. Neglect of maintenance is both uneconomical and wasteful, and cannot be allowed to continue. Moreover, with the increasing relief granted to municipalities on account of interest and sinking fund payments on loan expenditure incurred in the past, they should now be in a position to adequately maintain these roads.

In striking contrast are the well-maintained roads in other municipal districts, where regular patrolmen are employed in keeping them in first-class condition at less cost than spasmodically effecting repairs or restoring the worn-out surfaces.

Numerous requests have been made to the Board for additional assistance in maintaining roads of a developmental nature by declaring them main roads under the provisions of the Country Roads Act on the ground that these roads are traversed by traffic not of local origin, or by concentrated heavy traffic, which has developed in the district during the past few years. Whilst the Board recognizes that these roads should now be rightly classified as main roads, it is not in a position to accede to the requests, as funds available for maintenance are insufficient to take over any further responsibilities for the present.

As only an amount of £53,895 was available for the carrying out of permanent works on developmental roads, supplementary funds were allotted to municipalities from monies available under the Federal-aid roads agreement. The amount allotted from this source was £208,806, which was supplemented by municipal contributions totalling £41,255. The total amount available for developmental roads was, therefore, £262,701, of which £202,532 was expended during the year, apart from municipal contributions.

By this expenditure much work was done in giving transport facilities to valuable areas of the State. A total mileage of 333·6 was constructed, of which 89·9 miles were completed from loan and 243·7 miles from Federal and municipal funds.

In addition to these works, a number of important roads designed for serving settlement in various parts of the State, apart from isolated settlers' roads, were constructed from moneys provided from unemployment relief funds, an amount of £222,162, having been expended during the twelve months ended 30th June, out of a total of £274,785 available. As these funds were provided for the employment of labour as well as for developmental purposes, considerable relief was given in easing unemployment by giving rationed employment to 7,310 men, and at the same time improving road communications in inaccessible parts of the State. By this means 201·3 miles of roads were completed or initially constructed.

Continuation of works in the Werribee Irrigation Settlement brought the total length of road works in this area, constructed under the jurisdiction of the Board, to 30¼ miles, provision having been made during the year for extending the work by 33,005 feet at a cost of £4,050. The work was carried out by the Shire council.

The necessity of extending the work has been due to the remarkable development of traffic which has taken place in the district and the progress made by the settlers. This progress is indicated by the fact that due to improved permanent pastures, the latest estimates of production prepared by the State Rivers and Water Supply Commission total £180,000. As a further progressive step, the directors of the local co-operative milk factory have recently completed a modern brick factory, built at a cost of over £16,000. The figures supplied by the management of the factory show that from 1st July, 1919, to the 30th June, 1936, the turnover increased from £8,000 to £68,609, and during last year an additional 400,000 gallons of milk from the irrigation area was sold to Melbourne milk retailers other than from the local factory.

It is interesting to observe that prior to closer settlement, the average production of the land which was solely devoted to sheep raising is said to have been 3s. 6d. per acre, but with market gardening and dairying, the average production now exceeds £20 per acre.

Of the developmental roads completed or partially constructed under the direct supervision of the Board, the more important were on the Benalla-Tocumwal Road, 7½ miles having been constructed in a contract length of 10 miles.



Plates Nos. 14 and 15.—Showing Benalla-Tocumwal Road before and after construction.

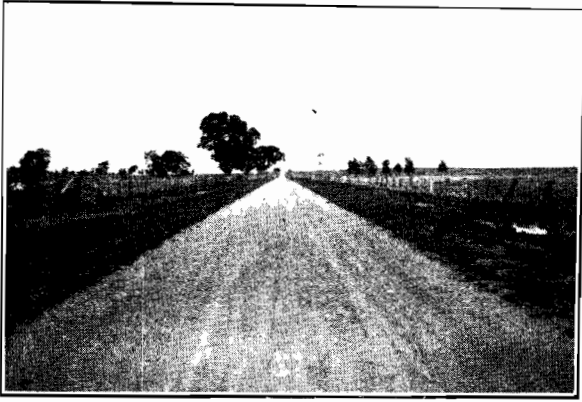


Plate No. 16.—Showing completed work on the Benalla-Yarrowonga Road.

The second link in the construction of the important road connecting Benalla and Yarrowonga was completed when 5·16 miles were formed and sanded between the Numurkah-Tungamah-Wilby Road and Lake Rowan. The new road has already proved of considerable advantage to settlers in reaching the railway at Tungamah and St. James.

In the Tolmie, Toombullup and Tolmie East districts, the truck patrol installed during the previous year carried out continuous maintenance on the newly-constructed roads in those areas. The progress of the district, since it was served with a satisfactory road system, has been most marked, many new settlers having taken up land during the past few years.

Between Cheshunt and Dondangadale, on the Rose River Road, a length of 1·98 miles was reformed and gravelled, and 1·16 miles were cleared and formed. In addition, 1·3 miles were formed between the Rose River bridge and the bridge over the Dondangadale River.



Plate No 17.—Showing work done on Rose River Road, Oxley Shire.

A rough side cutting on the Beechworth-Wodonga Road was widened and surfaced with gravel for a length of 1·57 miles, thereby enabling the settlers to reach the railway at Yackandandah.

In the Orbost Shire, a steep section of the Bonang-Gelantipy Road was relocated for a length of 1·93 miles, the new road being formed and gravelled. A deviation was also constructed by forming and gravelling at Jarrett's Hill, eliminating a grade of 1 in 4.

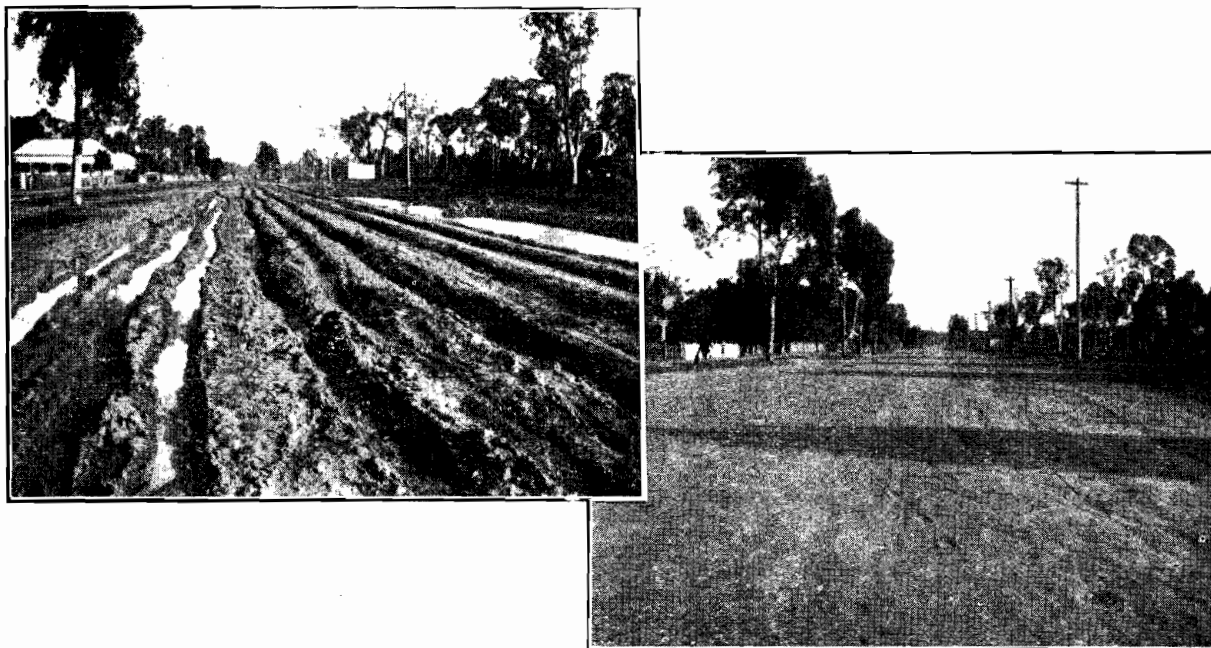
In order to serve the Timbarra Settlement, 1·42 miles of the Buchan-Ensay Road were constructed. The new road gives access to an extensive area of good land where farming and dairying are now being carried on. A section at the Sandy Creek was also completed for a distance of 1·21 miles on a new alignment.

The construction of the Bonang-Bendoc Road, commencing at the Little Bill Gap and extending towards Bendoc for a length of 4·45 miles, was put in hand. Reconstruction was also extended towards the Bonang Highway for a distance of 4,000 lineal feet.

In the Gippsland district a length of 1·7 miles of the Allambee Estate Road, which was cleared and formed along the valley of the Tarwin River, will provide a connexion between Darnum-Allambee Road and the Yarragon-Leongatha Road.

The construction of a new road between Barramunga and Gellibrand, in the Shire of Otway will, on completion, enable a number of settlers occupying excellent dairying land along the Gellibrand River, to transport their cream without further difficulties at all times of the year. Of the 2·6 miles required to complete the road, 1·5 miles were cleared and formed during the last year.

In the Shire of Kerang, a section of the Gannawarra-Koondrook Road was reformed and surfaced with gravel in continuation of the work previously done in the Shire of Cohuna.



Plates Nos. 18 and 19.—Showing section of the Gannawarra-Koondrook Road in the township of Koondrook, Shire of Kerang, before and after construction.

In the Karkaroc and Walpeup Shires, a number of short sections totalling 4·3 miles on the Woomelang-Ouyen Road was formed and limestoned. This work afforded great relief during the winter months, and with the extension of the work which will be put in hand when additional funds are available, considerable benefit will result.

In the Heytesbury settlement a further 11·84 miles of roads were formed and loamed and 38·71 miles lightly surfaced with gravel. Ninety-one miles of roads in this settlement previously constructed by the Board were maintained by patrolmen, but extension of surfacing is desirable in order to get the full benefit of the work done.

The Drik Drik-Nelson Road, in the Shire of Portland, was formed over a length of 8·01 miles, thus completing the formation between Drik Drik and the junction of the Portland-Nelson Road. 5·81 miles of the new formation were surfaced with limestone rubble.



Plate No. 20.—Drik Drik-Nelson Road between the Moleside and the Nine Mile Gate.

ROADS TO ISOLATED SETTLERS.

The necessity of constructing roads to give access to the farms of isolated settlers, and the importance of good roads in any land settlement scheme has been amply demonstrated to the Board during its inspections in various parts of the State.

Whilst the work already done has been of material benefit to farmers formerly cut off from the main road system, much remains to be done to cater for the needs of thousands of settlers not yet provided with the means of reaching the distributing centres with their goods throughout the year.

During last year marked headway was made in this work. With the expenditure of £39,259, many settlers were served with all-the-year roads, as the result of which considerable relief was given. Appreciation was freely expressed from all quarters, and the many appeals made to the Board for assistance from individual farmers cannot but impress the Board and municipal councils with the urgent necessity of accelerating the rate of construction of roads of this character.

The following letter from a settler expressing his appreciation of the work done in providing suitable access to his property, is typical of many received by the Board :—

DEAR SIR,

Just a note of appreciation for our road.

It has been finished a little while, and only those who have had to put up with a bad road know what a wonderful thing it is to be able to get out at any time.

It is a great worry off our minds. We intend to take great care of the road and guard it as a very precious thing, keeping the water off it, &c.

Thanking you very much,

Yours truly.

To meet the demand the Board is dealing with the most necessitous cases as funds become available. With a total amount of £10,000, made available from unemployment relief funds, together with the sum of £34,157 allotted from Federal-aid road funds, very appreciable progress was made in constructing isolated settlers roads during the past twelve months.

With the stipulation that the grant for each road was to be supplemented by a contribution from the council or the settlers, either in money or in work, the value of the completed work is far in excess of that represented by the expenditure. The contribution varied from 5 per cent. to 50 per cent. of the amount of the grant. Many serviceable roads were thus constructed to farmers' gates, and greater lengths than would have been possible with the actual funds allotted by the Board were completed.

In accordance with the practice of former years suitable local materials in the form of crushed rock or gravel were utilized in constructing these roads, local labour being engaged on the work. Plate No. 21 illustrates the type of road many settlers have to contend with in the hill country, whilst Plate No. 22 shows a new road recently constructed to serve a number of settlers in the Shire of Alberton formerly isolated from the main road.



Plate No. 21 shows typical road to isolated farms before construction, and Plate No. 22 typifies class of road constructed to serve farms isolated from main road.

As traffic on these roads is relatively of a light nature, there is no justification for the erection of bridges to the standard required for the more important roads. In many cases, the settlers themselves have contributed the materials and assisted in the erection of the structures, which are of a light pioneering type.

As a result of last year's work of constructing these farm to market roads, 506 roads, serving 935 farms, were added to the list of similar roads constructed or put in hand during the previous years.

FEDERAL-AID ROADS.

Under the terms of the Federal-aid roads agreement with the Commonwealth Government, the sum of £485,737 was paid to the State during the year ended 30th June, 1936. Supplemented by an amount of £1,482 brought forward from the previous year, the total expenditure was £480,853.

As loan moneys for the construction of developmental roads were considerably curtailed owing to the balance of the amount available at the beginning of the year being only £53,895 from the total authorization under the provisions of the Country Roads Act, the Board followed the practice of the previous year in devoting the greater proportion of Federal-aid funds to the completion of roads of that character, especially in remote portions of the State, where little revenue in the way of rates is derived by municipal councils.

A total allotment of £208,806 from the Federal-aid Roads Fund for the construction of roads of a developmental nature was made by the Board to municipal councils, which carried out the work, and this was supplemented by them to the extent of £41,255. The total expenditure for the year was £156,078 from the Federal grant. Added to this amount was an expenditure of £31,667 for isolated settlers' roads, which was also supplemented by contributions in money or kind, valued at approximately £3,000, so that the total value of the work done for the twelve months on isolated settlers roads was £34,667.

By these means sections of previously constructed roads were linked up or extended, resulting in valuable areas of land being served. The total length of roads of this type completed or put in hand was 243·7 miles.

Several main traffic roads carrying traffic from developmental and other roads to the distributing centres were improved by constructing or reconstructing them for a length of 111·2 miles. £89,010 was expended on this work.

In order to assist necessitous shires in maintaining main and developmental roads previously constructed from loan funds or from moneys provided under the Federal grant, the sum of £84,847 was allotted. An expenditure of £69,916 was incurred, £46,119 on main roads, and £23,797 on developmental roads.

An approximate amount of £42,200 was expended from the Federal-aid Roads Fund on the construction of 59 bridges.

In restoring damage caused by floods, £11,757 was expended on developmental roads. To assist municipal councils in making good the devastation caused to roads under their jurisdiction, £11,084 was expended to the 30th June.

The total number of projects put in hand from Federal funds was 636, 532 on developmental roads, apart from isolated settlers' roads, and 104 on main roads.

UNEMPLOYMENT RELIEF FUNDS.

A total amount of £434,307, which included a balance of £48,027 carried forward from the previous year, was made available to the Board under Act No. 4097, of which £333,499 was expended to the 30th June on the employment of labour. Supplemented by £30,348 from the Country Roads Board Fund in the purchase of materials such as pipes, camp equipment, making of surveys, &c., the total amount expended during the year was £363,847.

For the construction of roads in forest areas, an expenditure of £17,428 was incurred from the grant of £25,000 made available from unemployment relief funds. These works were carried out by the municipalities which have undertaken to maintain them on completion. In addition to giving facilities for the cartage of forest produce, these roads will serve a very useful purpose in supplying the means of transporting the primary produce of a number of settlers whose farms adjoin or are situated in the vicinity.

From the amount of £21,950, granted for the construction of roads to serve closer settlement areas, an amount of £16,459 was expended during the year under review. Of a further sum of £11,380, made available in March last, £5,008 was expended to the 30th June, making a total expenditure on roads of this character £21,467.

A further grant of £3,000 for the surfacing of roads used by fruitgrowers in the Shepparton district, supplemented by an amount of £750 by the Shire council, was made in December last. A total length of $10\frac{1}{2}$ miles of roads were made, the growers themselves having assisted in the work by carting gravel to the road free of cost. The expenditure was £1,277.

An analysis of expenditure is shown in the following statement:—

| | Relief Grant. | Country Roads Board Fund. | Total. |
|------------------------------------|---------------|---------------------------|---------|
| | £ | £ | £ |
| State Highways | 15,738 | 522 | 16,260 |
| Developmental roads | 222,162 | 21,532 | 243,694 |
| Main roads | 70,579 | 8,294 | 78,873 |
| Forest roads | 17,428 | .. | 17,428 |
| Roads to isolated settlers | 7,592 | .. | 7,592 |
| Totals | 333,499 | 30,348 | 363,847 |

The expenditure was distributed over 492 roads and 93 separate municipal districts participated.

This sum, which is the largest amount expended by the Board on unemployment relief in any one year since its inception, constituted a very valuable addition to the normal programme of works. Besides providing rationed employment for 11,022 men, municipalities and the Board were enabled to put in hand works of a developmental character in remote and inaccessible areas, towards the cost of which the councils would have been unable to contribute on account of the small revenue derived from rates. The work, being of a reproductive nature, will be of material advantage to settlers by connecting their holdings with the main system, and will also assist in the development of the State.

The work done, which was widely distributed over the State, comprised mainly grubbing, clearing and earthworks, providing the maximum employment without sacrificing any advantages from the use of such plant as was used on the work.

The provision of £7,428 made for widening, improving curves, and top-dressing with gravel the section of the Prince's Highway east of Orbost, from the foot of Mount Raymond to the Murrungower turnoff, for a distance of 4 miles, together with similar work on the length of 7.1 miles between Newton's Creek and Cabbage Tree, formed a very valuable contribution in this area by making safer these narrow sections of the highway and in assisting the settlers to reach the railway and the market town at Orbost more expeditiously.

Works done on the Bonang-Gelantipy and the Buchan-Ensay Roads, in the Shire of Tambo, particulars of which are given under the heading of developmental roads, were also carried out from unemployment relief funds.

By the employment of a relief gang on the Omeo Highway, near Lightning Creek, a narrow rock cutting was widened, thus effecting a great improvement between Tallangatta and Omeo.

In the Mansfield Shire 3 miles of formation were completed for a length of 2.4 miles. Seven and a half miles of forming were carried out under contract on the Benalla-Tocumwal Road in the Shire of Tungamah. When completed, this road will form an important cross-country connexion between these towns.

On the Beechworth-Wodonga Road, in the Shires of Chiltern, Wodonga, and Yackandandah, 1.57 miles of rough side-cutting were widened and surfaced with gravel, thereby affording settlers the opportunity of reaching the railway at Yackandandah.

A complete list of the works put in hand is given in Appendix "H."

BRIDGES.

In the erection of bridges and culverts, the Board is always endeavouring to base the work on sound economical lines and at the same time to proportion the structures in such a manner as to harmonize with the surrounding countryside, so that they will make a pleasing feature on the road.

During the year, plans and specifications were prepared for 188 bridges, of which 121 were prepared by Shire councils and the remainder by the Board's staff. The estimated cost of these bridges is £175,000, including £30,000 for the bridge at Rosedale, £28,000 for Lynch's bridge over the Maribyrnong River on the boundary of the cities of Melbourne and Footscray, £11,000 for the bridge over the Goulburn River at Murchison, and £6,000 for the bridge over the Glenelg River at Casterton. The estimated cost of bridges for which plans were prepared by the councils is £48,000.

Among the more important works was the widening of the bridge over the Werribee River on the western section of the Prince's Highway near the Werribee township. Owing to the structure being too narrow for the increasing traffic, the width being insufficient to allow two vehicles to pass, and as in addition the renewal of the decking became a matter of urgent necessity, the Board decided to put in hand the work of widening the structure, and this was completed during the year, at a cost of £1,900.

Details of the work are given in the appended report of the Chief Engineer.

A reinforced concrete bridge over the Kananook Creek on the Point Nepean Road, in the Shire of Frankston and Hastings, was completed during the year at a cost of £6,645, including

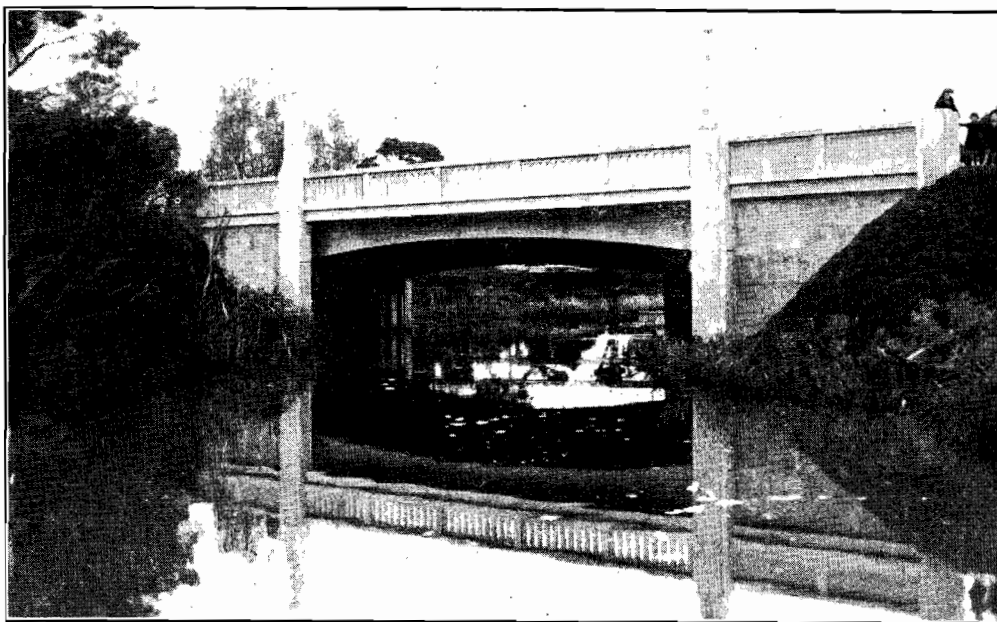


Plate No. 23.—Showing concrete bridge erected over the Kananook Creek on the Point Nepean Road at Frankston.

£2,004 for approaches. The new structure, which has a width of 40 feet roadway, and two 6 feet footways, takes the place of a wooden bridge erected 40 years ago, which had become dilapidated and unsafe to carry the present day traffic.

Several bridges over the River Yarra, in the Upper Yarra shire, which were destroyed by floods, were reconstructed under the Board's direct supervision.

In the township of Warburton, a substantial bridge was constructed in place of an old wooden structure known as Brisbane's bridge, to give access to the railway station for residents on the northern side of the river and to the main road which passes through Warburton, south of the river.

The work, particulars of which are given in the report of the Chief Engineer, cost £3,200.

Other bridges over the Yarra which were also washed away by floods included one on the Hazelwood Road, another on the Cement Creek Road, and the structures known as the Station Road bridge, Dee bridge, and Parbury's bridge. These were replaced by new structures of the type set out in the Chief Engineer's report at a total cost of £3,800.

To replace an old timber bridge over the Goulburn River at Murchison, which had been in use for 70 years, and was unsafe for loads in excess of 5 tons, it became necessary to erect a new structure to cope with the increasing traffic. A contract was let directly by the Board for the erection of a riveted truss bridge for the sum of £11,250, and the work is now in hand; the design provides for a span of 175 feet over the river, with approach spans of 40 feet, the piers and abutments to be of reinforced concrete. The Chief Engineer's report gives particulars of the work.

Reconstruction of the McKillop bridge at the junction of the Snowy and Deddick Rivers, in the Shire of Orbost, which was partially destroyed by floods in June, 1934, was completed during the year. The structure, which is 840 feet long and cost £14,000, forms an important link between the settlements to the west and east of the Snowy River and carries a large number of stock travelling between New South Wales and Victoria.



Plate No. 24.—Showing punt in operation for many years prior to the erection of the bridge shown in Plate No. 25.

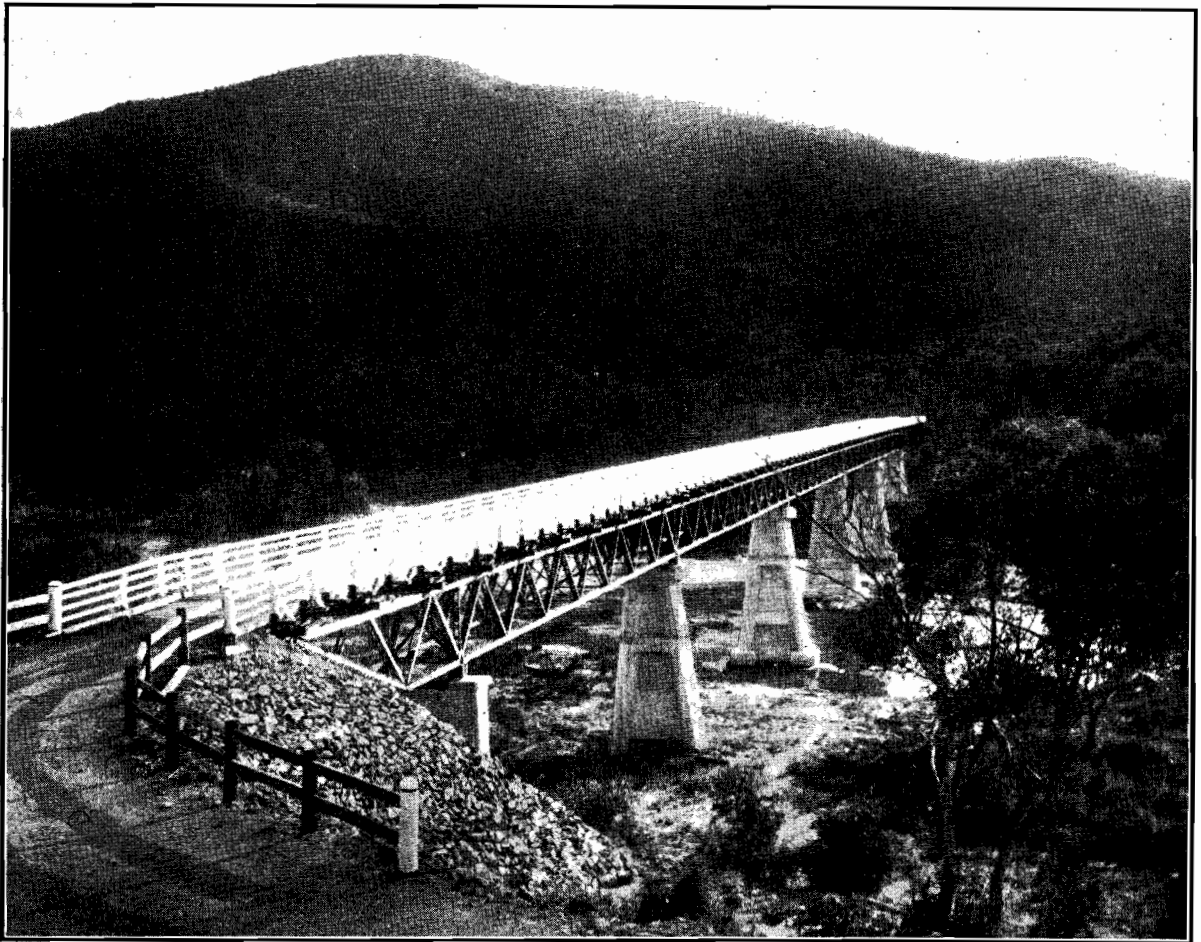


Plate No. 25.—Showing McKillop bridge at the junction of the Snowy and Deddick Rivers recently erected by the Board.

On the Prince's Highway east, between Lakes Entrance and Nowa Nowa, a new bridge was erected over the Bunga Creek on an improved alignment, and the existing bridge over the

Wombat Creek east of Nowa Nowa was reconditioned and widened with a new superstructure constructed to the Board's standard. These bridges replaced old structures which were seriously damaged by floods.

The old bridge over Jones' Creek, between Orbost and the Brodribb River, was also replaced by a new one, constructed to the Board's standard design.

A new bridge over Mount Raymond Creek, on the same highway, was built on an improved alignment in place of the old dilapidated and dangerous structure.

At 28 miles beyond Orbost, two new bridges were erected at the Bell Bird Creek, one on an improved alignment of the road and the other on the existing roadway. Both these bridges replaced worn-out structures.

In the Cohuna and Kerang Shires the old dilapidated and narrow bridges on the Murray Valley Highway over Barr Creek, Nine Mile Creek, Loddon River, and Kangaroo Lake overflow were replaced by concrete structures as a first stage of replacing many old bridges which existed when the road was declared a State highway.

The new Barr Creek bridge, which is 50 feet long on a new alignment, is in place of a narrow timber bridge 200 feet in length, the reduction in length being made possible by alterations in and improvements to the natural drainage. This bridge, which is situated near the Cohuna township, was erected by day labour under the Board's direct supervision, and has effected a striking improvement in the appearance and utility of this section of the Murray Valley Highway. The cost was £563.

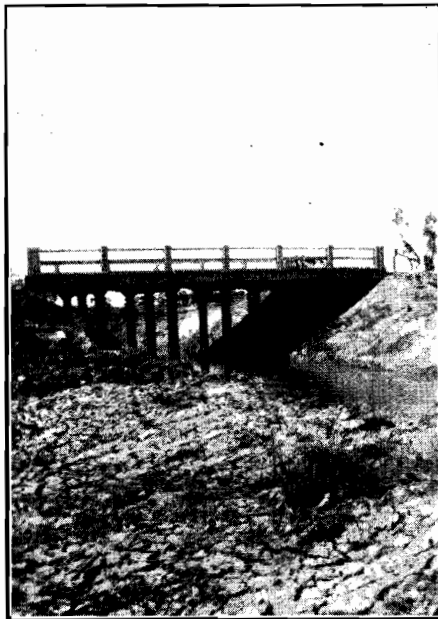


Plate No. 26.—New bridge over Barr Creek on Murray Valley Highway, near Cohuna Township.

Immediately west of Kerang, where the Loddon River crosses the Murray Valley Highway, two new concrete bridges were completed, one by contract and the other by day labour, under the Board's direct supervision. Each structure is 200 feet in length, and the total cost of their erection was £4,800. Plate No. 27 depicts the more western of the two structures.

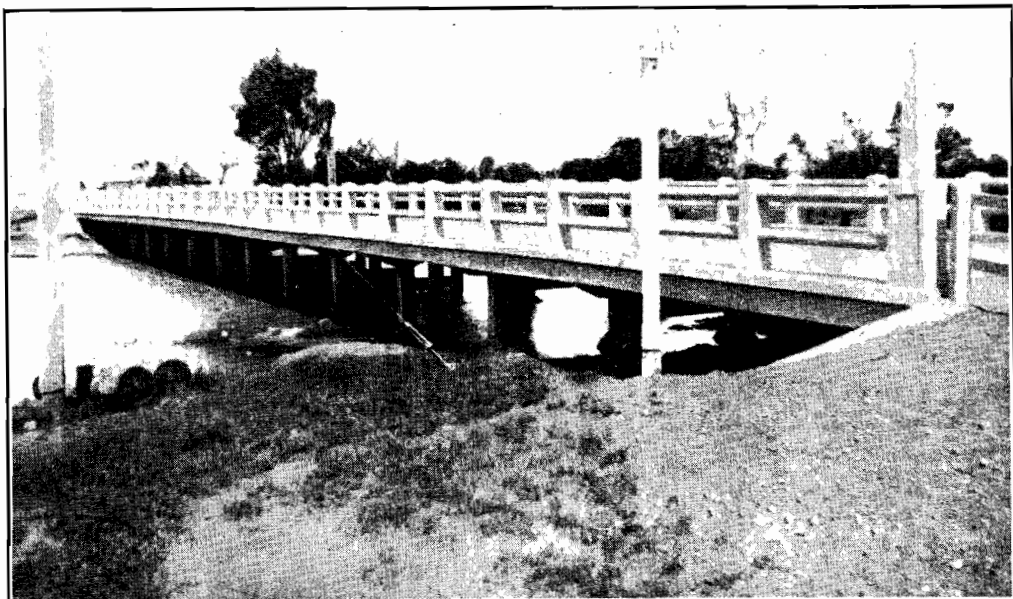


Plate No. 27.—New bridge on Murray Valley Highway, west of Kerang.

On the Castlemaine–Maryborough Road the bridge over the Loddon River at Newstead was completed, together with a small bridge over the Loddon River floodway at a cost of £408. Construction of a concrete structure to replace the old timber bridge over the Muckleford Creek was commenced.

Two of the four timber bridges over the Campaspe River floodway on the Echuca–Cohuna Road were replaced by concrete structures at a cost of £1,600. The others will be put in hand at an early date.

A concrete bridge 77 feet long on the Murray Valley Highway, east of Yarrawonga, of the economical flat slab type, was constructed by day labour, together with approaches. The total cost of this work was £900.

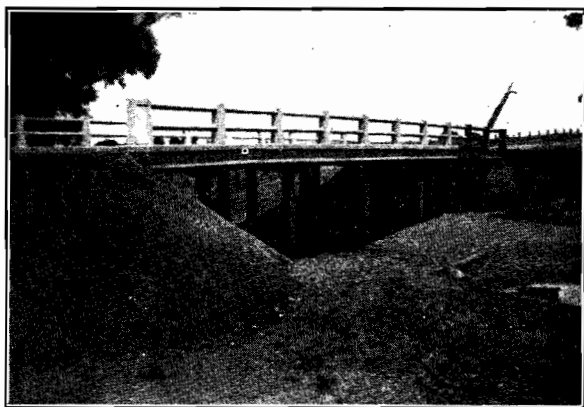


Plate No. 28.—New concrete bridge on Murray Valley Highway, east of Yarrawonga.

Further progress was made with the concrete bridge over the Ovens River known as Parolo's, four of the fifteen spans having been completed. When erected, the total length of this structure will be 730 feet. The progress made to the 30th June last is shown in Plate No. 29. The contract price for this, including supply of materials, will be £12,000.

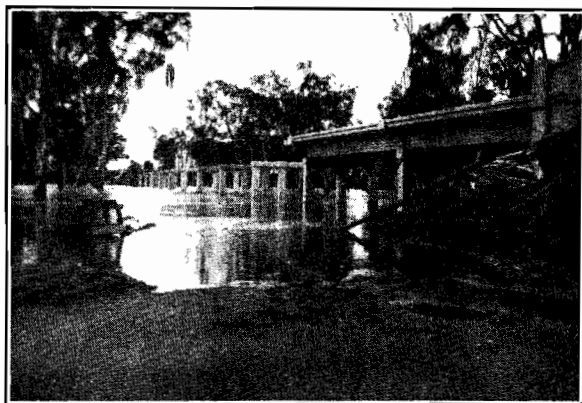


Plate No. 29.—Showing bridge in course of erection over the Ovens River at Parolo's.

For vehicular traffic, it has been found that a width of 22 feet is quite sufficient for the traffic traversing the State highways. On many of these highways, however, traffic has been much inconvenienced and endangered by the presence of travelling stock. To overcome this, the Board has erected low-level stock bridges where such conditions exist, with consequent relief to both drivers of vehicles and the drovers of stock. It is proposed to gradually provide for stock on other sections of the highways from time to time as funds become available. During the year under review, ten bridges of this type were erected by the Board on State highways, at a total cost of approximately £3,000.

It may be mentioned that appreciative references have been made by users of the roads to the resultant improvement

In the Shire of Upper Murray, a five-span timber bridge with steel joists was erected by contract over the Jeremal Creek on the Murray Valley Highway. The cost of the work was £1,250.

In the same shire the timber pile bridge of three spans with steel joists over the Thowgla Creek was nearly completed by contract, the total cost of the work being £1,400.

At the Glenelg River at Dartmoor, on the western section of the Prince's Highway, a timber stock bridge 164 feet long and 12 feet wide was constructed. This structure will permit of the diversion of stock from the road bridge, and will be of much advantage to drovers of stock and motor drivers. The cost was £650.

DAMAGE BY FLOODS.

In December and June last, exceptional floods again caused considerable damage to roads and bridges in the eastern part of the State, particularly in the Shires of Bairnsdale, Maffra, Tambo and Orbost.

To repair the damage, an amount of £5,593 was expended on the Prince's Highway and main roads, whilst the repairs to roads and bridges under the jurisdiction of municipalities were effected by them from their own funds, and where they were unable to meet the cost, assistance was subsequently given to them from Federal-aid road funds.

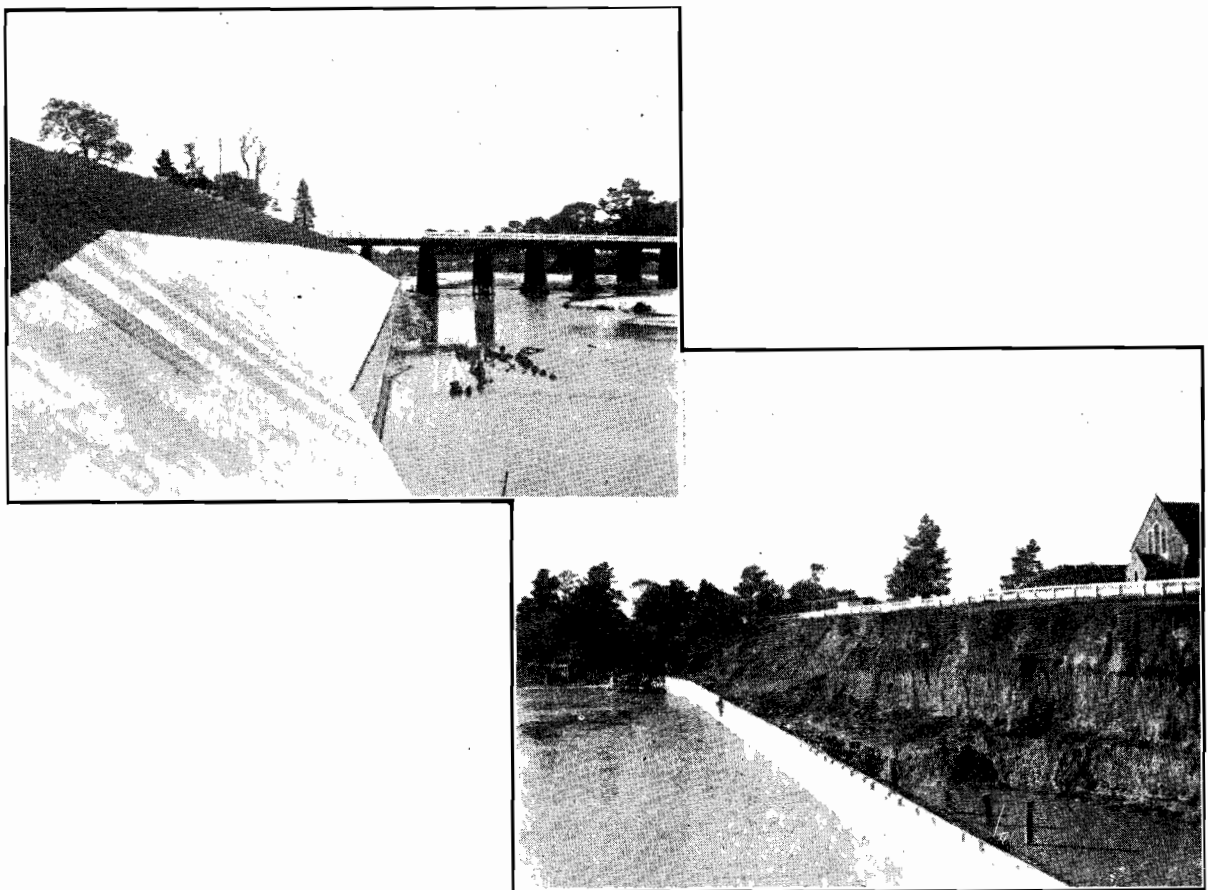
It has been observed by the Board that when floods occur, it is generally the old structures that are seriously damaged or destroyed. Whilst the loss to the public is serious, and the replacement costly, bridges of modern design, capable of withstanding extreme floods, have been erected in place of the old structures.

In the case of many roads, it was noticeable that where the surfaces had been treated with bitumen, little or no damage had been caused by flood waters, due to the fact that the protected surfaces are quite capable of withstanding the action of the flood waters during the short period that the roadway is affected.

On account of an unprecedented flood in the Avon River, the protective work on the north side of the bank near the bridge at Stratford was severely damaged. The flood waters rose above the level of the protective beaching, washing away the filling behind the concrete wall on the slope of the bank. The vertical wall remained intact, together with approximately 40 per cent. of the filling.

The work was, therefore, redesigned to withstand greater floods, involving extensions of the work down-stream and repairing the damage done, the total cost being £4,250.

During this flood the river bank down-stream was washed away over a width of 126 feet, whereas due to the protective work near the bridge the maximum erosion was less than 30 feet.



Plates Nos. 30 and 31.—Showing effect of floods on retaining wall on the north bank of the Avon River at Stratford.

OUTER METROPOLITAN ROADS AND BRIDGES.

The sum of £45,319 was expended during the year on the construction of outer metropolitan roads situated between declared main country roads leading to the metropolis and tramway termini, or connecting with through metropolitan roads. The total expenditure on these roads since the *Country Roads (Borrowing) Act 1933* No. 4188 came into force was £67,831 to the 30th June last, leaving an amount of £32,169 available under the existing authorization.

The work carried out during the twelve months comprised the completion of a section of Napier Street, Footscray, near the boundary of the City of Melbourne. A rolled concrete base was laid down and surfaced with different types of materials by way of experiment, with a view to testing the behaviour of these materials under heavy industrial traffic. The results to date are referred to in the Chief Engineer's report. The total expenditure was £2,457.

Within the City of Sandringham work was commenced under contract on the Beach Road, from the Brighton City boundary to a point known as Quiet Corner, omitting the section constructed by the council in penetration concrete some years ago. The new work consists of rolled concrete covered with a bituminous top. Approximately a 2-mile length between Quiet Corner and the Mordialloc City boundary was reconstructed in modified macadam from maintenance funds. The expenditure to the 30th June was £13,584 from loan, and £7,000 from maintenance funds, supplemented by £708 from Federal-aid road funds.

Work on the same road, which was extended within the City of Brighton over a distance of approximately half a mile, consisted of widening the existing road with fine crushed rock, and surfacing with a drag-spread seal coat. The expenditure incurred was £335.

A contract was let for widening the arch bridge over the Merri Creek on the Main Heidelberg Road on the boundary of the Cities of Collingwood and Heidelberg. The work, in which provision has been made for preserving the main features of the original structure, is almost completed. The re-alignment of the road at the eastern approach to the widened bridge will be of material benefit to heavy traffic using the road. The cost of the completed bridge will be £17,250, and of the road works £2,600. Details of the bridge construction are given in the appended report of the Chief Engineer.

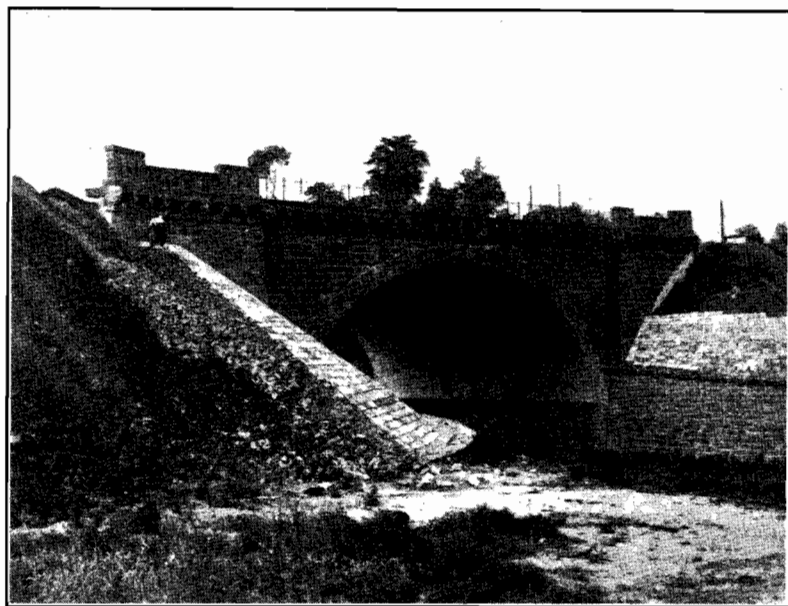


Plate No. 32.—Merri Creek bridge under reconstruction on Main Heidelberg Road.

The important river crossing over the Maribyrnong River on the boundary of the Cities of Melbourne and Footscray on the Main Ballarat Road, carrying industrial, stock and highway traffic, which had become inadequate for present day requirements, is now being replaced by the erection of an up-to-date structure. Contracts have been entered into by the Board for a new structure, together with approaches on a new alignment, the total estimated cost being £30,000.

The new bridge provides for a width of 40 feet of roadway, together with two footpaths each 6 feet wide over a length of 410 feet. The work, which will be completed during the current year, will effect a much needed improvement to this part of the outer metropolitan area.

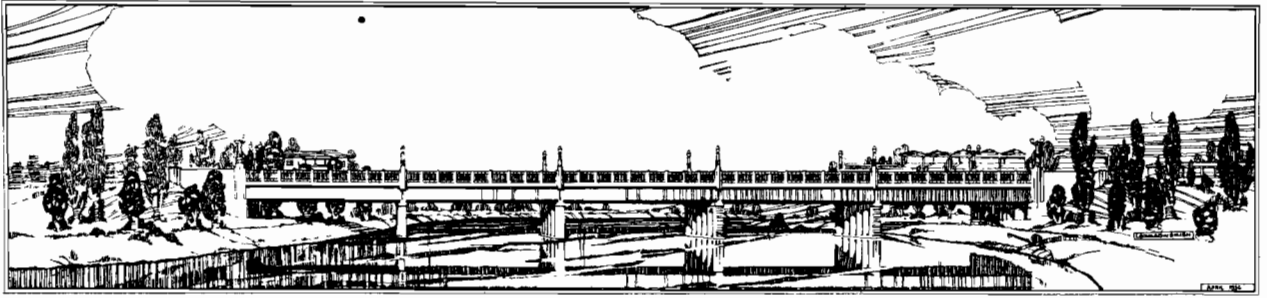


Plate 33.—Perspective drawing of bridge now in course of erection over Maribyrnong River on boundary of Melbourne and Footscray Cities.

On the Burwood Road in the City of Box Hill a number of bad sections was reconstructed between Boundary Road and Elgar Road by day labour, the work consisting of surfacing with modified macadam and fine crushed rock. This has since been extended under a grant from unemployment relief funds made during the current year. Widening of the narrow sections to 30 feet was also commenced. The cost of the work completed to the 30th June was £1,948.

A section of the Main Healesville Road situated in the City of Box Hill was also put in hand during the year from loan funds. The work comprised complete reconstruction in rolled concrete with a bituminous top for a length of $\cdot 6$ of a mile. The expenditure for the financial year was £8,500.

In the City of Camberwell the Main Doncaster Road was surfaced with a drag-spread seal coat for a length of $\cdot 5$ of a mile between Agnes Street and Koonung Koonung Creek at a cost of £340, as a charge to maintenance. In addition to the above work the erection of a bridge over the Koonung Koonung Creek was completed at a cost of £580 provided out of loan funds.

In the City of Coburg the existing Sydney Road was completely reconstructed over a section of $\cdot 6$ miles with rolled concrete to serve as a base for a bituminous top which is being laid during the current year. The amount reimbursed to the council to the 30th June was £4,400.

The section of the Main Bendigo Road within the City of Essendon was widened with modified macadam for a length of $\cdot 7$ miles. The amount reimbursed to the council, which carried out the work by day labour, was £669 to the 30th June.

On the Main Ballarat Road, within the City of Footscray, a stormwater drain was constructed over a section of $\cdot 9$ miles between Maribyrnong River and Droop Street. The existing road was subsequently widened with modified macadam to the full width between channels. This will serve as a base for a drag-seal coat, which will be applied during the present year. The work was carried out by the council, the amount reimbursed to the end of the year being £4,358 as a charge against loan funds.

On the Epping Road in the City of Preston, also known as High Street, a commencement was made by the council with widening in modified macadam between Murray Street and Edgar Street, with a view to a drag-spread seal coat being applied at a later date. The amount reimbursed to the 30th June was £670 from maintenance funds.

TREE PLANTING AND HIGHWAY IMPROVEMENTS.

For many years the Board has interested itself in the beautification of the roadsides by the planting of trees, being of opinion that the improvement of the carriageways should be accompanied by the improvement of the roadsides, and that the natural beauty of many of the tree-lined highways of the State must be preserved at all costs. With the elimination of advertisements and advertising hoardings from lands adjacent to State highways, there now exists a wide scope for treatment by the planting of appropriate trees, which will, in the near future, harmonize with the rural surroundings.

The inconsistency between advertisement hoardings and road beautification on many of the principal main roads can only be removed by enacting legislation to prohibit the erection of advertisements of this character on lands in the vicinity of main roads, as has been done in the case of the State highways.

Owing, however, to funds not being available for the purpose, the Board has used its endeavours with Municipal Councils, Progress Associations, the Tree Planters' Association, and other bodies to carry on this work. It may be said that the planting of the Prince's Highway between Footscray and Geelong which was completed last year, is an outstanding example of what can be accomplished by concerted action and mutual assistance, for to-day there exists an avenue of trees for a length of 34 miles over wind-swept plains, where trees are thriving in spite of the adverse conditions.

Due to the hearty co-operation of the bodies mentioned, much has been done in improving the appearance of the State highways and main roads, and widespread interest is now being taken in this work.

The *Sun* News Pictorial, in co-operation with the Education Department, the Forests Commission, and the Country Roads Board has also evinced a keen interest by launching a scheme for the planting of trees by pupils of the State schools throughout the State, prizes having been offered for the best planted and maintained trees in each of the Education Department districts. This scheme has been enthusiastically taken up and the various municipalities have actively co-operated. It is intended to continue the plan from year to year until all the State highways have been treated, when the main and other roads will be similarly dealt with.

The scheme has been so designed that the trees will not interfere with the pavements should it be found necessary to widen them in the future, and the trees are being planted in such positions that they will not interfere with the existing power or communication lines of the Postal Department or Electricity Commission. Trees suitable for the particular locality are being selected and supplied by the Forests Commission. The Board's patrolmen have been instructed to take over the care and maintenance of the trees as soon as they have been planted.

By the provision of £10,000 by the Government from unemployment relief funds during the current year for the extension of tree planting on roads, very material assistance will be given to the municipalities and the Board, which will enable the work to be taken up in a comprehensive way. The conditions imposed provide that the Forests Commission is to supply such trees as are considered suitable for the particular district, and the Country Roads Board is to supply the guards and fencing for their protection, whilst the amount provided is to be expended on labour only. Thereafter the Board is to care for such trees as have been planted on roads under its jurisdiction.

Considerable difficulty has been experienced by the Board in preventing destruction or lopping of native timber along the roadsides, to enable telephone wires and electric power cables to be erected. In every case where this has been necessary, the Board's District Engineer has conferred with the Engineers of the Electricity Commission and Postal Department with a view to minimizing the destruction of the trees, but in spite of these efforts many trees have been destroyed. The Board is, therefore, definitely of opinion that the present system of erecting wires on poles along the highway is most unsatisfactory both to municipal councils and the Board, and is using every endeavour to prevent any interference with trees growing on public roads. It is considered that by acquiring easements over adjoining lands for the erection of the pole lines, much destruction could be obviated.

During last year, 4,030 trees were planted on State highways over a length of 53 miles, and in addition 3,630 trees were planted by pupils of 76 State Schools under the *Sun* News Pictorial scheme, over a distance of 40 miles. Forty miles of main roads were planted by municipalities, which required 3,500 trees. The expenditure incurred by the Board in protecting the trees was £797.

PROTECTION OF ROADS.

For the protection of lightly constructed roads, it was necessary for the Board, in co-operation with the municipalities, to again take action under the provisions of the Motor Car Act to limit the gross loads carried over these roads to six tons.

However, in view of the fact that the stresses in the road surfacing and foundation depend on the number of tires and the number of driving wheels, the Board decided that permits should be issued to allow a gross load in excess of six tons generally in accordance with the following limits:—

| | | | |
|---|---------|----|----------------|
| 4-wheeled vehicles, 4 tires in all | .. .. . | .. | 6 tons |
| 4-wheeled vehicles with dual tires on rear wheels, 6 tires in all | .. .. . | .. | 7 tons |
| 6-wheeled vehicles, with single tires, 6 wheels in all | .. .. . | .. | 8 tons |
| 6-wheeled vehicles, with dual tires on driving axle, 8 tires in all | .. .. . | .. | 8 tons 10 cwt. |
| 6-wheeled vehicles, with dual tires on driving axle and on trailer, 10 tires in all | .. .. . | .. | 9 tons |
| 6-wheeled vehicles, with double axle drive (rigid type) 10 tires | .. .. . | .. | 10 tons. |

These limits apply generally to certain roads of light construction, but for unsurfaced roads and where the road surfacing or foundation requires special protection, lower limits are adopted. In the case of the Calder Highway between Sea Lake and Mildura, which is surfaced with a thin layer of limestone only, an important factor which had to be taken into consideration was the tractive effort transferred through the driving wheels, apart from the actual wheel load. It has been necessary, therefore, to restrict the gross weights to 7 tons for vehicles fitted with dual pneumatic tires and having one driving axle, and 9 tons in respect of trucks with the drive on two axles.

On account of the light nature of the surface on that section of the above highway, between Mittyack and Mildura, action was also taken to prohibit the use of trailers, as experience has shown that the lateral swing of the trailers causes ravelling of the thin limestone surface, which during the dry season, rapidly forms potholes and longitudinal ruts in the roadway. In addition, extra tractive effort is transmitted by the driving wheels of the motor vehicle to the road crust.

Similar action was taken in respect of the Prince's Highway, east of Orbost, where the road is tortuous, with small radius curves and lightly surfaced narrow formations.

As soon as the traffic justifies it, and funds are available, the Board intends to strengthen these roads and when this has been done, the restrictions at present imposed will be removed.

In spite of the fact that conspicuous notices of the load limitations imposed on various roads have been erected on the roads affected, a number of drivers persisted in carrying loads exceeding the weight allowed, with the result that the Board was compelled to institute proceedings in 93 cases.

For carrying loads in excess of those fixed under the provisions of the Motor Car Act, it was necessary to take action against 129 drivers, and fines and costs amounting to £532 were inflicted.

RESEARCH WORK.

In the Board's laboratory good progress has been made in the solution of many problems relating to design and construction of roads. This has been a material factor in reducing costs and has also contributed generally in supplying improved road surfaces on an economical basis.

In addition to routine laboratory tests of various classes of roadmaking materials, close observance of their behaviour under practical conditions was made. The use of unsuitable materials has thereby been avoided, resulting in improved and more lasting road surfaces being laid down. With its central control, the Board has also been enabled to check the quality of materials used by the municipal authorities in the construction and maintenance of roads.

It has been found from an investigation in the Board's laboratory of the moisture present in the sub-grade under a road surfaced with a traffic bound pavement, such as fine crushed rock or gravel, that a thin pavement of these materials is effective in preventing the penetration of water into the sub-grade. This prevents the sub-grade from softening, and is probably the reason why pavements one or two inches thick constructed from this material are capable of carrying a considerable amount of traffic.

With the non-skid type of surfacing which is necessary for modern fast traffic, the toughness and resistance to abrasion of the aggregate used for surfacing is of great importance, and research work has been carried on in connexion with the application of a new abrasion test which has been developed in the United States of America. This investigation has already been of value in assessing the quality of local materials.

In research generally, and in controlling the uniformity of bituminous materials, it has been found that the rapid and accurate determination of viscosity is essential, and new apparatus has been installed during the year for this work. Details of the apparatus are given in the Chief Engineer's Report.

Laboratory work undertaken in conjunction with field experiments on different types of hot and cold bituminous plant mixes was continued during the year, and has given much valuable information.

Apart from special investigations, routine tests were carried out as indicated in the following summary :—

SUMMARY OF NUMBER OF TESTS CARRIED OUT FOR TWELVE MONTHS ENDED 30TH JUNE, 1936.

| | Number of Samples. | Number of Tests. |
|---|--------------------|------------------|
| Soil, gravel, concrete aggregates | 1,035 | 1,600 approx. |
| Bituminous and tarry materials | 806 | 1,214 |
| Lubricating Oils | 41 | 128 |
| Traffic marking lacquer | 25 | 58 |
| Miscellaneous | 92 | 152 |
| Total | 1,999 | 3,152 |

In accordance with a decision arrived at at the last Annual Conference of State Road Authorities, the results obtained from the work done in each State laboratory are now forwarded to each road authority and in this way valuable information is passed on for the benefit of all concerned. In addition, matters of interest are published in the journal of the Main Roads Department of New South Wales, which journal is distributed amongst the road authorities of the several States.

THE SAFETY OF THE ROADS.

In another part of this report, reference was made to the necessity of improving curves, widening of the roadway and re-alignment, in order to introduce increased safety in the roads. When it is realized that during the past 2 or 3 years the average speed of automobiles has increased by 10 to 20 miles per hour, that many of these vehicles are capable of attaining very high speeds, and that the total number of motor cars and trucks in Victoria at the 30th June was twice as great as 10 years before, the need for developing a road system capable of safely carrying the traffic is apparent.

With the increase in the number of motor vehicles, the number of accidents continues to grow. These are due to many factors such as bad or reckless driving, faulty vehicles, and speeding. The Board's records and observations show that carelessness and faulty driving, and, in particular, excessive speed are the most common causes of accidents on country roads.

Following the passing of Act No. 4332 in November, 1935, by which power was given to officers of the Board to impound cattle grazing or wandering on State highways without the consent in writing of the Board and without some person in attendance, the danger to traffic has been diminished.

The appointment of a ranger who continually traverses the highways and warns the owners of wandering cattle of their obligation to keep them off the roads, has resulted in greatly reducing the menace to traffic, but owing to a proportion of owners persisting in grazing or allowing their cattle to wander over the highways, it was necessary to take action by impounding them. The ready co-operation which was extended by municipal councils is greatly appreciated by the Board. Municipal officers spare no effort in supplying information and give their services when necessary, with the result that the Board's officer has been materially assisted in his work.

Since the appointment of a ranger in April to the 30th June last, 313 cattle, 5 horses, and 158 sheep were impounded.

Owing to the fact that a number of shire pounds are considerable distances apart, much inconvenience has been experienced in having to drive cattle over many miles. This difficulty is, however, being gradually overcome, many Councils having arranged to erect pounds where same are required.

The records kept by the Board during the past year show that 390 accidents occurred on State highways of which 50 were fatal. Information obtained from the Police Department indicates that during the calendar year ended 31st December, 1935, there were 3,201 accidents on all roads outside the city and suburban radius, of which 165 were fatal.

CONFERENCE OF STATE ROAD AUTHORITIES.

The Third Annual Conference of Representatives of State Road Authorities was held in Adelaide in March last, at which discussions took place on subjects of common interest affecting the construction and maintenance of roads. Resolutions were adopted concerning administrative, technical and financial matters in relation to the road problem.

Amongst the subjects discussed was the question of adopting uniform colors for direction signs, and the publication of the results of research and experimental work carried out in each State.

The Conference also agreed that the greatest benefit by road improvement is secured as the result of the preparation of plans conceived to cover requirements over a period of years. The Board has previously had experience of the economical advantages of planning its general programme for a definite system of roads over a period of several years, and is continuing this practice, particularly in the case of roads under its direct control, such as the State highways.

As the prerequisite of any such programme is finance, the Conference recommended that as far as practicable the provision of funds for improvement of the principal roads in each State should be determined over a period of years, preferably so as to coincide with the Federal Aid Roads Agreement. In anticipation of the extension of the agreement for a term of ten years the Board's Engineers have commenced the necessary detailed investigation of the financial requirements for that period for the State highways.

The Conference agreed that the interstate route from Sydney to Adelaide should include in Victoria the Murray Valley Highway between the South Australian border and Mildura, but it is not proposed to alter the existing names of the route in the several States.

Several technical problems were referred to the Conference of Senior Technical Officers which was held in Adelaide in October, 1936.

CONFERENCE OF ENGINEERS.

A Conference of the Board's District Engineers was held towards the end of the financial year, when works for the year were practically completed, and plans for the ensuing financial year were under consideration. This Conference again showed the advantages of the interchange of experience and ideas, and afforded an opportunity for introducing to the District Engineers and through them to Municipal Engineers throughout the State, details developed in the technique of road construction and maintenance.

Experimental work in the field near Melbourne and improved methods of testing materials in the laboratory were examined by the Engineers.

A large proportion of road work is carried out under the supervision of Municipal Engineers, who, however, work under some disadvantages since their facilities for testing materials, developing new types of plant, and attempting experimental work are generally limited. The Board's Engineers have ready access to the steadily increasing volume of technical literature, in which the results of experience and experiments of similar bodies in other States and other lands are set forth.

The Board's District Engineers through occasional conferences and through their continuous contact with the Board's Senior Engineers, are generally enabled to keep pace with the latest developments. They can therefore render great assistance to Municipal Engineers, who have generally shown themselves very appreciative of the services thus rendered to Municipal engineering. In return, Municipal Engineers are able to transmit through District Engineers results of experience with local materials and suggestions that facilitate the joint work of the Board and the Municipalities.

OFFENCES UNDER ACTS AFFECTING THE BOARD.

Under the Motor Car Act proceedings were instituted against a number of offenders for exceeding the weight and speed of motor cars carrying goods for hire or in course of trade on State highways and declared main roads. Fines were inflicted in 297 cases for travelling at speeds in excess of the limits allowed, and against 165 persons for carrying excessive weights. The total fines and costs amounted to £2,185.

For carrying loads in excess of the carrying capacity of the motor vehicle, as shown by the certificate of registration, 57 cases came before the courts, and fines and costs were imposed totalling £166.

Seven drivers of motor cars were also convicted for carrying on their vehicles loads in excess of the regulation width and height, for which offences fines amounting to £12 were inflicted.

For operating motor trucks with defective tires, four convictions were recorded with fines and costs totalling £16.

For breaches of the Country Roads Act and the Local Government Act, seventeen prosecutions were launched, and fines and costs amounting to £29 were inflicted.

The total number of successful prosecutions instituted for offences against the Motor Car Act was 537, the total fines amounting to £2,223 and costs £176.

The total number of prosecutions under all Acts affecting the Board was 565, in respect of which fines and costs totalling £2,465 were imposed.

AMENDING LEGISLATION.

During last financial year the following Acts affecting the Board were passed by Parliament—

MOTOR CAR (AMENDMENT) ACT 1935 No. 4285.

This Act grants additional concessions to the primary producer by providing that if the Chief Commissioner of Police is satisfied by Statutory Declaration or such other evidence as he requires that any motor car is owned by one or more primary producers engaged solely or substantially in agricultural, horticultural, viticultural, dairying, pastoral, or other like pursuits, and the motor car is used solely in connexion with the business of the producers as such, or solely in connexion with the business for the carriage (otherwise than for hire or reward) of passengers or goods or both passengers and goods, the registration fees at the concessional rates provided for under Act No. 4170 shall apply.

COUNTRY ROADS BOARD FUND ACT 1935, No. 4313.

This Act provides that :—

- (1) Fees for licenses to drive motor cars paid under the Motor Car Act during the year commencing 1st July, 1935, were not to be paid into Country Roads Board Fund. Similar provision was made in previous enactments in respect of the years 1933-34, and 1934-35.
- (2) Annual payment of £50,000 from consolidated revenue into the Country Roads Board Fund be suspended for the year 1935-36, £10,000 of which under the original Act was to be used for the maintenance of main roads and State highways, and £40,000 for distribution among certain municipalities towards the construction, renewal, maintenance, &c., of streets or roads.

COUNTRY ROADS (IMPOUNDING OF CATTLE) ACT 1935, No. 4332.

This Act gives power to officers of the Country Roads Board to impound cattle grazing or wandering on State highways without the consent in writing of the Board and without some person in attendance.

Provision is also made where the proceeds of any sale under the *Pounds Act* 1928 of cattle impounded are insufficient to discharge all costs attending the sale and sustenance fees payable, the municipal council is to be paid by the Board the amount falling short of the total costs, charges, and fees.

The owner of any cattle found grazing or wandering on any State highway without the consent of the Board and without some person in attendance is liable to a penalty of not more than £10. Travelling cattle driven by a drover are exempt.

Power is also given to members of the Police Force and certain officers of the Board to prosecute for any offences against the provisions of the Act.

COUNTRY ROADS (MURRAY DIVERSION) ACT 1935, No. 4344.

This Act authorizes the Country Roads Board to construct works for the diversion of the course of the River Murray near Howlong, through land in the Parish of Howlong, N.S.W., for the purpose of preventing destruction of a section of the Chiltern-Howlong Road within the State of Victoria.

On completion, the works, the cost of which is to be charged against the Country Roads Board Fund, are to be handed over to the New South Wales Conservation and Irrigation Commission.

STATEMENTS OF ACCOUNTS.

Statement of accounts for the year ended 30th June, 1935, of the Country Roads Board Fund and balance-sheets as at that date appear in Appendix "A."

The statement of the Country Roads Board Fund shows that motor registration fees amounted to £1,457,828, and fines imposed under the Motor Car Act to £18,660, making a total gross revenue of £1,476,488 for the year.

The cost of collection, amounting to £67,094, was made up as follows:—

| | | | | |
|---|----|----|----|------------|
| Motor Registration Branch— | | | | |
| Salaries and wages | .. | .. | .. | £26,650 |
| Police Patrol— | | | | |
| Wages | .. | .. | .. | 17,078 |
| Motor expenses | .. | .. | .. | 5,394 |
| Allowances | .. | .. | .. | 2,863 |
| | | | | £51,985 |
| Postage, printing, and stationery | .. | .. | .. | 11,013 |
| Number plates, &c. | .. | .. | .. | 2,277 |
| Miscellaneous | .. | .. | .. | 1,819 |
| | | | | £67,094 |
| The net revenue under the Motor Car Act was, therefore |  |  |  | .. .. .. |
| | | | | £1,409,394 |
| Add amount contributed by municipalities towards maintenance, and sundry receipts |  |  |  | .. .. |
| | | | | 184,312 |
| | | | | £1,593,706 |

From this amount the following payments were required to be made:—

| | | | | |
|---|----|----|----|------------|
| Interest and Sinking Fund payments on loan moneys expended on main and developmental roads | .. | .. | .. | £310,846 |
| Relief to municipalities on account of Interest and Sinking Fund under Act No. 4140 | .. | .. | .. | 150,000 |
| Plant, administration and other expenses | .. | .. | .. | 125,820 |
| | | | | £586,666 |
| Leaving a balance available from the Country Roads Board Fund for the maintenance, improvement and restoration of main roads and State highways |  |  |  | .. .. .. |
| | | | | £1,007,040 |

The amount actually expended to the 30th June was £985,280, the balance representing commitments carried forward to the current financial year.

In addition the sum of £202,617 was expended from the Federal-aid roads grant for the maintenance and reconstruction of roads, making the total expenditure on maintenance, &c., £1,187,897.

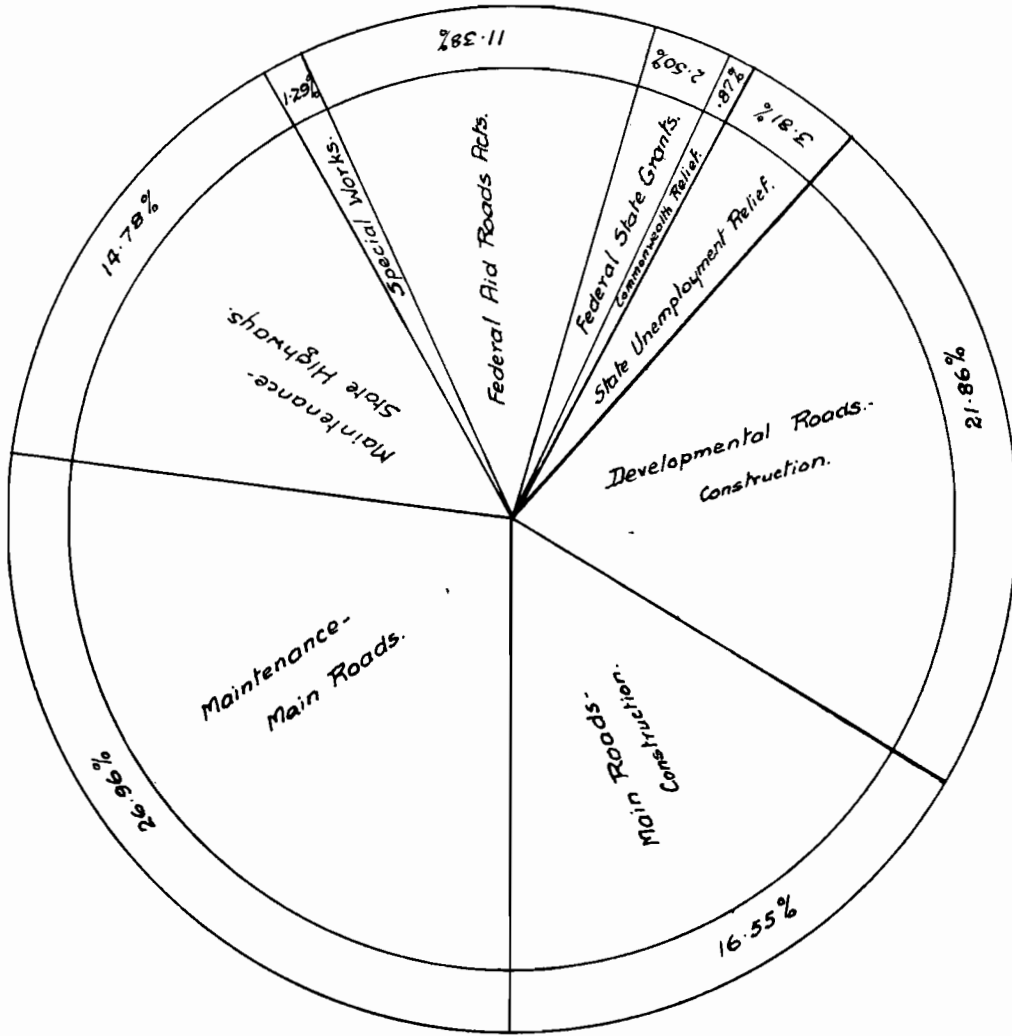
The total amount estimated for the maintenance improvement and restoration of main roads and State highways was £1,585,895, but as many Councils under-estimate maintenance requirements, as their contribution is governed by the amount they expend, the estimate was below requirements. Even on that basis the funds were short of estimated requirements by £578,855.

The total expenditure from loan was £113,585, of which £67,132 was spent on declared main roads and £46,454 on developmental roads. The total loan liability of the Board at the 30th June last was £11,277,467. The proportion of Interest and Sinking Fund payments on this expenditure made from the Country Roads Board Fund was £310,846. Municipal Councils contributed £114,620 from their Municipal Fund.

Owing to additional relief to the extent of £50,000 having been given during the year to municipalities on account of their proportion of Interest and Sinking Fund payments on loan expenditure under the provisions of Act No. 4140, the total municipal payment on this account amounted to £114,620 as against £165,132 paid during last year.

Diagrams showing comparative sectional total expenditure on Road Works.

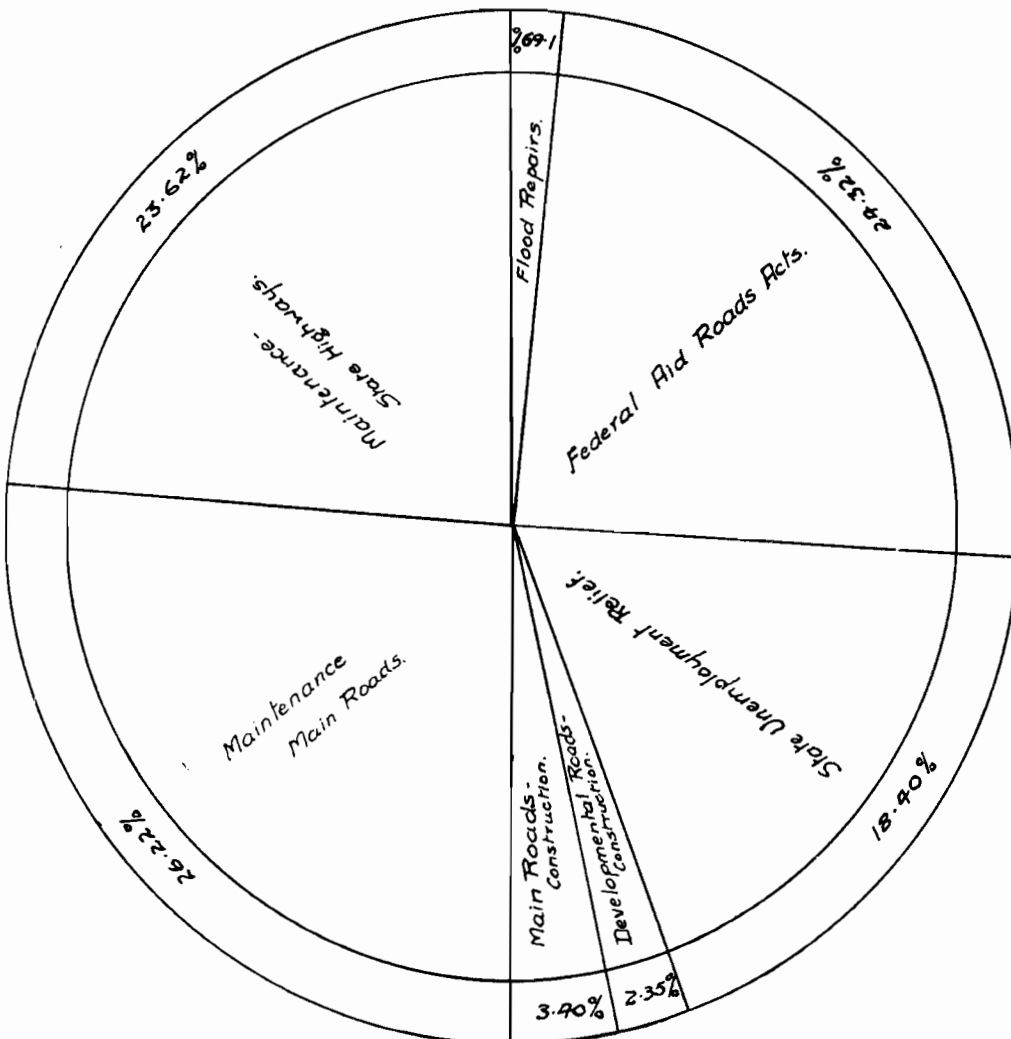
No. 2.



Percentages of

Total Expenditure since inception of Board to 30.6.1936.

No. 1.



Percentages of

Expenditure for Financial Year 1935-36.

Statement of expenditure on road construction and maintenance including expenditure under special appropriations, is submitted below in summarized form, from which it will be noted that the total for the year was £1,976,837 15s.

| | | | Under direct supervision of Board. | | Under supervision of Municipalities. | | Total. | |
|--------------------------------------|---------|-------|---------------------------------------|-------|---|-------|-----------|-------|
| | £ | s. d. | £ | s. d. | £ | s. d. | £ | s. d. |
| 1. State Highways— | | | | | | | | |
| Maintenance and reconditioning .. | | | 383,208 | 4 8 | 85,204 | 19 6 | 468,413 | 4 2 |
| 2. Main Roads— | | | | | | | | |
| Construction and restoration .. | 156,141 | 19 9 | | | | | | |
| Maintenance and reconditioning .. | 679,065 | 13 9 | 166,038 | 8 8 | 669,169 | 4 10 | 835,207 | 13 6 |
| 3. Developmental Roads— | | | | | | | | |
| Construction, &c. .. | 277,701 | 11 1 | | | | | | |
| Roads for Isolated Settlers .. | 31,667 | 7 6 | 43,329 | 15 8 | 266,039 | 2 11 | 309,368 | 18 7 |
| 4. State Unemployment Relief— | | | | | | | | |
| Main and developmental roads, &c. .. | | | 210,383 | 0 9 | 153,464 | 18 0 | 363,847 | 18 9 |
| Totals .. | | | 802,959 | 9 9 | 1,173,878 | 5 3 | 1,976,837 | 15 0 |

Towards the expenditure on the construction, reconstruction and maintenance, &c., of main and developmental roads, and the erection of new bridges, &c., on State highways, an amount of £480,853 was expended under the provisions of the *Federal-aid Roads Act 1931*. £33,269 was also expended from a special grant from the Commonwealth Government towards the cost of repairing roads and bridges damaged by floods.

As unemployment relief funds can be utilized for labour only, it was necessary for the Board to contribute the sum of £30,348 from the Country Roads Board Fund for the supply of equipment, pipes, surveys, &c., in order to make the work effective.

The expenditure by the Board of funds from various sources is indicated by percentages in the diagrams on the preceding page.

Diagram No. 1 shows the percentage of expenditure under the several headings for the year ended 30th June last, and diagram No. 2 gives similar information since the inception of the Board to the end of last financial year.

APPORTIONMENT OF COSTS.

In accordance with the provisions of Section 287 of the *Country Roads Act 1928*, the cost of permanent works and maintenance was apportioned for the year ended 30th June, 1935. £36,639 was apportioned to municipalities in respect of permanent works and £144,166 on account of maintenance.

On the 1st July last, municipal contributions were in arrears to the extent of £20,437, but payments made and relief granted under Act No. 4140 during the year reduces the amount outstanding by £13,581. The total sum due as at the 30th June last was, therefore, £6,856.

The position is considered satisfactory, as the only Councils now in arrears are the Shires of Otway and Walpeup.

MOTOR REGISTRATION.

During the year, 219,925 motor cars were registered, the following classes of vehicles being included in the total:—

| | |
|-------------------------------------|---------|
| Private cars | 141,205 |
| Commercial motor vehicles | 36,956 |
| Primary producers' vehicles | 13,220 |
| Hire cars | 2,125 |
| Licensed under Omnibus Act | 324 |
| | 193,830 |
| Motor cycles | 26,095 |
| Total | 219,925 |

In comparison with the previous year, registrations increased by 19,166, equivalent to 9.54 per cent., as against 6.6 per cent. during the previous year.

Private cars increased in number by 723, commercial vehicles by 4,175, hire cars decreased by 178, motor cycles increased by 1,127, and licensed vehicles under the Omnibus Act by 100.

These figures indicate that the greatest increase occurred in the number of commercial vehicles, namely, 12·73 per cent., whilst the increase in private vehicles was ·51 per cent., and in motor cycles 4·51 per cent.

The small increase in the number of private cars as compared with the previous year's figure is due to the fact that Act No. 4285 passed in July, 1935, amended the principal Act, by providing that, if the Chief Commissioner of Police is satisfied by statutory declaration, or such other evidence as he requires, that any motor car is owned by one or more primary producer, and the motor car is used solely in connexion with the business of any such primary producers as such, or solely in connexion with such business, and for the carriage (otherwise than for hire or reward) of passengers or goods, or both passengers and goods, the concessional rates of registration fees set out in Act No. 4170 shall apply.

For this reason a number of motor cars previously registered as private cars have now been registered as primary producers' cars, and recorded separately under the heading of "Primary Producers' Vehicles."

The net revenue from motor registrations during the year, was £1,409,394, as compared with £1,252,272 for the previous year.

Under Act No. 4313 an amount of £72,388 received during last year for fees for licences to drive motor cars, was paid into consolidated revenue instead of being credited to the Country Roads Board Fund, as was done prior to July, 1932, for use in maintaining main roads and State highways.

APPENDICES.

The following statements appear in the Appendices :—

- (a) The amounts received and expended during the year under the provisions of the Country Roads Act.
- (b) Apportionment of expenditure in connexion with the construction and maintenance of main roads for the year ended 30th June, 1935.
- (c) Expenditure on the construction and maintenance of main roads during the year ended 30th June, 1936.
- (d) Expenditure in connexion with the construction of developmental roads for the same period.
- (e) Mileage, locality, &c., of main roads constructed and maintained during last year.
- (f) The mileage, locality, &c., of developmental roads constructed.
- (g) Mileages, locality, &c., of State highways reconstructed and maintained.
- (h) List of Unemployment Relief Works put in hand during year ended 30th June, 1936.

We have the honor to be, Sir,

Your Obedient Servants,

W. T. B. McCORMACK, Chairman.

F. W. FRICKE, Member.

W. L. DALE, Member.

R. JANSEN, Secretary.

CHIEF ENGINEER'S REPORT.

Country Roads Board,
Exhibition Buildings,
Carlton, N.3,
20th October, 1936.

The Chairman,
SIR,

I have the honour to submit herewith a discussion on points of technical interest arising in the work carried out by the Board during the year ended 30th June, 1936.

ROAD ALIGNMENT.

In the last report the considerations governing the design of transition curves and the constants to be adopted, were set out in some detail, and during the past year transition curves based on those constants have been used on works carried out directly by the Board. The constants adopted for critical speeds were those recommended by Professor Moyer, of the Iowa State College of Agriculture, but it was felt that as a result of experience it might be desirable to modify them for Victorian conditions. The constants for design speeds were somewhat lower than Moyer's and were as follows:—

| | | | |
|---|----|----|-----------------------------|
| Coefficient of friction | .. | .. | .15. |
| Rate of increase of acceleration towards the centre | .. | .. | 1.5 ft./sec. ³ . |
| Maximum superelevation | .. | .. | 1 in 10. |

Were curves designed and used so that the superelevation provided the only restraint against skidding, and friction were neglected, and the superelevation was increased from zero at the tangent point to the maximum at the end of the transition length, there would be no sensation of traversing a curve at any stage. With higher speeds and the introduction of friction as a restraining influence, conditions are altered, and on the transition length the restraint due to friction, and hence the sensation due to curvature, is less on the early stages than towards the end of the transition, reaching the maximum on the circular portion of the curve. This is readily seen from the following example:—

Assuming a coefficient of friction of .15 and a maximum superelevation of 1 in 10, we have, for the stage where these limits are reached,

$$\frac{MV^2}{RG} = .15M + .10M \text{ hence } V = \sqrt{.25RG}.$$

At a point on the transition length where the radius is $2R$ superelevation would be 1 in 20, and for similar conditions we would have

$$\frac{MV_1^2}{2RG} = .15M + .05M \text{ hence } V_1 = \sqrt{.4RG}.$$

It is therefore seen that a considerably greater velocity is allowable on the early stages of a transition length than on the circular curve, and a criticism has been made that drivers are encouraged by the lack of sensation to increase their speed along the transition length and enter the later stages of the curve or the circular arc at excessive speeds. While this is possibly quite true of the passenger's sensation, the driver has to turn his steering wheel at a sufficient rate, and with the necessary control to follow accurately the path of the curve. In order, however, to see if the shortening of the transition length and the consequent increase in the rate of change of acceleration towards the centre would tend towards greater safety, some curves were laid out with shorter transition lengths than given by the constants mentioned above. Experience in driving over these curves, however, showed that they were rather too "difficult" to drive round at the design speeds, while the curves laid out with the correct constants were no more than readily negotiable at these speeds. In view of this it is felt that

the constants previously adopted are quite suitable for Victorian conditions, and their use will be continued in the future.

Tables have now been prepared to supplement the alignment charts given in the last annual report, and the setting out of transition curves, using this series of tables, should present no difficulty to surveyors.

In designing given lengths of road in an area with generally the same topographical character, the general theory is that each curve should for safety have the same speed value. In practice this mostly involves using maximum superelevation. For small deflection angles where it is quite easy to get in a curve with a very large radius, there does not appear to be any object in reducing the speed value (the minimum superelevation is of course the normal pavement crossfall) and in such cases it is general to design the curves to give a high speed value, and to treat it as virtually part of a "straight." In the case where it is quite economical to put in a curve of much larger radius than is required with the maximum superelevation, it is usual to put in the large radius curves and reduce the superelevation to keep the speed value down to the adopted value.

In changing from one speed value to another with a change in topography, it is usual to reduce the speed values in steps of 5 or 10 miles per hour, to gradually accustom the driver to the changing conditions. Where an odd curve has to be reduced below the speed value of the rest of the road, the practice has been to provide a warning triangle if the change in speed value is very great, say over 20 miles per hour. Where the speed value change is below this figure, the use of white lines around the curves appears to be adequate, as the white line does give a very definite idea of the radius of the curve to the approaching driver.

ROAD MAINTENANCE.

An analysis of the patrol maintenance costs indicates more clearly than ever the very considerable reduction in maintenance costs obtained by raised formations, that is, where the *edge* of the formation is raised above the natural surface—usually about 3 inches. This applies not only to flat country but also to undulating country where side cut is not necessary. In these cases no table drains need attention, and all shoulder maintenance can readily be done by means of a grader. Again, these formations give excellent drainage of the road bed, and often allow the use of very light pavements even under moderately heavy traffic.

It is recognized that these raised formations, which necessitate "borrow" for construction, frequently cost two or three times as much per mile as the old type of balanced cross-section where the ploughing up and grading in of the edges of the formation gave sufficient earth for the crown. When these formations are paved, however, the saving in total cost is comparatively small for the same thickness of paving; but it has been found that the pavement can invariably be much reduced in thickness by having a raised, well-drained formation, and the total cost is in fact less. Even where the formations are not destined to be surfaced for some years, the lower maintenance costs and greater "traffic efficiency" of the raised formation well-justifies this type of construction.

Following the successful trials of power-grader operated patrol systems with the medium weight type of grader previously available, several compression ignition-engined graders with power-operated controls were put into service on this type of work during the year. The high speeds at which these machines are able to operate, and their fuel economy, show promise of still further reduction in maintenance costs on unsealed roads.

TRUCK PATROLS.

A further eight truck patrols have been organized during the year, giving a saving of £3,250 annually over the previous system of individual patrolmen. The efficiency of these truck patrols has been greatly enhanced by the use of pneumatic-tired 6ft. graders, which can be towed by the truck, and have been found extremely useful both for pavement and shoulder maintenance.

STRIP SEALS.

In the last report reference was made to the successful trials of narrow strip seals in the Rutherglen district, and the decision to use 8-ft. strips with 15-ft. or 16-ft. gravelled pavements was reported. These strip seals are of course, only intended for roads of light traffic density; $3\frac{1}{2}$ miles were constructed on the Murray Valley Highway between Barnawartha and Rutherglen, and the comments of local motorists were quite favorable.

On the Calder Highway, near Mildura, a strip seal was laid for 1 mile on a limestone pavement. The difficulty of getting limestone into good shape in this dry area led to a trial of a road-mix seal for first seal, contrary to general practice. The necessity for thorough waterproofing of the pavement in this very dry area did not exist and, on the other hand, limestone sets so hard that the mixing and dragging on the primed surface caused no scaling of the seal, and the result has been a considerable improvement in riding qualities with a non-skid, and to date, a perfectly sound seal coat.

TAPERED CROSS-SECTIONS.

Following the successful use of tapered cross-sections on many roads carried out under the Board's direct control over the past five years, the Board decided during the year to make this type of cross-section the general type for use on roads which normally would not be sealed for many years. Some engineers felt that the steeper outside crossfall of this type of section represented a retrograde step. However, it is pointed out that by making a comparatively wide total pavement this crossfall is not objectionable, and the amount of material used is not great, seldom reaching the amount involved in the older type 13 feet in width by constant depth. In any case, on these types of roads traffic invariably drives down the centre, as passing traffic is very limited, and consequently the discomfort of steeper side slopes is seldom apparent. Also, it is not desirable to encourage traffic to normally use the very thin outside edge of the pavement section. This type of section provides, cheaply, sufficient width of pavement to permit passing without going on to the shoulders, often dangerously greasy in winter, with consequent increased edge maintenance costs. It is also cheaper in unit construction costs and, owing to there being no "boxing" to trap water, provides excellent drainage for the pavement, and allows a relatively thin pavement to function efficiently.

MOISTURE CONTENTS OF PAVEMENTS AND SUB-GRADES.

In the Twenty-first Annual Report a table was given showing the result of moisture content determinations made in the Kerang area in order to ascertain whether there was any tendency towards the building up of moisture in a pavement or sub-grade when sealed. Tests were taken over a period including two winters, both on sealed and unsealed sections, and in that area, which is a rather dry portion of the State, it was found that not only was there no building up of moisture under the sealed sections, but that a 2-in. consolidated crushed rock layer acted virtually as effectively as a sealed section in preventing increase of sub-grade moisture during the winter. In order to pursue this investigation in another part of the State, a number of determinations were made in the Heytesbury district, which is a wet, cold portion of the State, with an average annual rainfall of approximately 40 inches. Samples were taken from a number of sites in September and October, 1935,

towards the end of one of the wettest winters known in this locality, and again in March, 1936, at the end of a particularly dry spell. Space does not permit giving the results in detail, but generally the tests confirmed the experience at Kerang. There was very little change in moisture content between summer and winter of the sealed pavement or subgrade. The unsealed pavements consisted of either scoria or buckshot gravel, generally on 4 inches to 5 inches of loam overlying the very poor yellow clay sub-grade which has a lower liquid limit of 100, field moisture equivalent of 45, and plasticity index of 65. Obviously a very poor sub-grade material.

These gravel and scoria pavements were 3 inches to 4 inches consolidated thickness, in some cases being of uniform thickness throughout the width of the pavement, but in most cases being spread to a tapered cross-section. All pavements were consolidated by traffic and continual dragging, and even the outside of thin-tapered cross-sections were found to have a very high waterproofing value. The maximum moisture content of the loam and clay sub-grades seldom exceeded those of the sealed sections, and while there was somewhat more drying out in the summer, the change was not great except in the top inch or two of the pavements themselves, where there was of course a considerable loss of moisture in the summer.

The density obtained in these traffic-bound pavements and the consequent high waterproofing value doubtless explains the considerable load-carrying capacity exhibited by these relatively thin pavements.

ROLLED CONCRETE.

During the financial year approximately 67,000 square yards of rolled concrete pavement were laid, and a large number of cores taken and tested. As a result it is felt that this type of construction can be definitely recommended as a base at least for all but the heaviest urban traffic.

For normal use it can be said with confidence that using a 1 : 2 $\frac{1}{2}$: 12 mix (sand volume based on dry-rodded measurement) concrete giving 3,000 per square inch in compression at 28 days can be readily produced, using a water cement ratio by volume of .7. The density obtained by manipulation by rolling, combined with the low water-cement ratio practicable with this method, undoubtedly contributes to the high strengths obtained with these lean mixes. In fact it is found that the use of excess water, contrary to early expectations, makes the construction of the pavement rather more difficult in that the mortar tends to leave the stone in the spreading process, and takes much more rolling to bring it to the surface. As previously pointed out, the difficulty of getting good shape into these very harsh mixes in the past has led the Board to use this type of construction entirely as a base for some type of drag-spread asphaltic top. However, the introduction of the three-wheeled roller has provided a tool that appears to have considerable possibilities. The Board purchased a roller of this type weighing approximately 8 tons during the year, and it is being used on the construction of rolled concrete base on the Ballarat Road in the Shire of Braybrook, adjacent to the City of Footscray.

The work done to date has produced a riding quality in the base that is quite equal to the bulk of the normally-constructed cement concrete pavements at present in Victoria, and the possibility of using this base for some time at least as a concrete pavement (carrying traffic on the concrete surface) is now under consideration.

USE OF SALT IN ROAD CONSTRUCTION.

There has recently been a considerable revival of interest in America in the use of salts, mainly calcium chloride and sodium chloride (common salt) in road construction. Most work seems to have been done with calcium chloride, which is expensive in this country, but recently it has been noted that the use of common salt has been found effective, and as this is available here fairly cheaply, a

number of experimental sections on the Murray Valley Highway, the Loddon Valley Road, the Calder Highway and the Grampians Road were put down. It is too early as yet to arrive at definite conclusions. Results obtained to date, however, confirm the generally accepted conclusions of American experimenters that the nature of the gravels or stabilized soils is an important factor, and the underlying reasons for the variations are not yet fully understood. For construction work, however, there does seem to be a definite advantage in the use of salt, in that it keeps the gravels or fine crushed rock moist with comparatively little watering during construction, and allows maximum consolidation to take place fairly rapidly. It also considerably reduces dust troubles. Some sections of limestone were found to withstand ravelling for very much longer when treated with salt than when untreated, although the very long, dry summer was too severe for most of the sections laid in the north of the State.

On the Grampians Road the salted sections are undoubtedly much superior in dry weather, showing a minimum of corrugations and very little muleh and dust compared with the unsalted sections. In wet weather, however, there does not seem to be any advantage noted to date. It is proposed to continue the experiments during this financial year.

At present the most important possibilities seem to be in construction purposes, where watering is necessary for traffic-bound pavements and to reduce maintenance and loss of material prior to sealing on these types.

EXPERIMENTAL CONCRETE ROAD AT OAKLEIGH.

In 1922 the Board constructed an experimental concrete road on the Prince's Highway, in the then Borough of Oakleigh, in order to gain experience with modern types of road construction. This was described in detail in the Board's Twelfth Annual Report. Before the road was opened, arrangements were made to measure the actual

amount of wear which was caused by traffic so as to compare, if possible, the relative merits of the different classes of concrete used. Details of this were given in the report also.

In brief, the method consisted in measuring ordinates from the surface of the concrete to a piano wire which was stretched over two brass datum plugs to a known tension. The height of the wire above these plugs was also measured and, by difference, any variation in the height of the surface above the join of the two plugs could be obtained. Measurements have been made at intervals since July, 1922, and the average wear over thirteen cross-sections (208 measuring points) is given on Fig. A. It will be seen that the total average wear amounts to .65 inch along the centre of the road, the average over the whole width being .58 inch. The rates of wear have decreased considerably from about .071 inch per year between 1923 and 1926 to .017 inch per year between 1930 and 1936. This, no doubt, is very largely due to the decrease in the number of steel-tired vehicles using the road. Increase in hardness of concrete with age and exposure of aggregate would probably also account for part of it. The original intention of the measurements was to compare the different classes of concrete, and from results it would seem that there was very little difference between the mix 1 : 1½ : 3 of Section C, which has worn an average of .51 inch, and Section B, where the mix was 1 : 2 : 3, which has worn the same amount, although the rate of wear has been slightly greater of recent years in Section B than Section C. Section D, where the mix was the same as Section C, has worn considerably more, a total of .74 inch, and the rate of wear is still about 25 per cent greater than Section C. The main difference between these two sections is that Section D was 1 inch thinner originally than Section C, being only 5 inches : 7 inches : 5 inches thick. Sections B and C were 6 inches : 8 inches : 6 inches thick. The wear on all the individual sections has been plotted and results indicate surprising uniformity of wear through the whole experimental section.

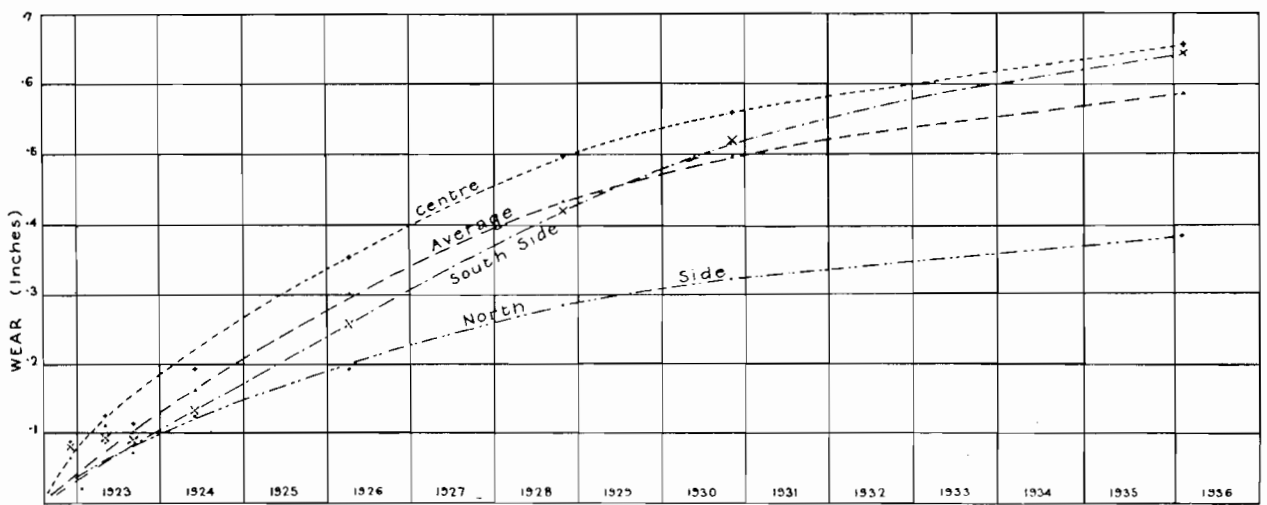


Fig. A.—Wear on Experimental Concrete Road, Oakleigh. Portland Cement Section.

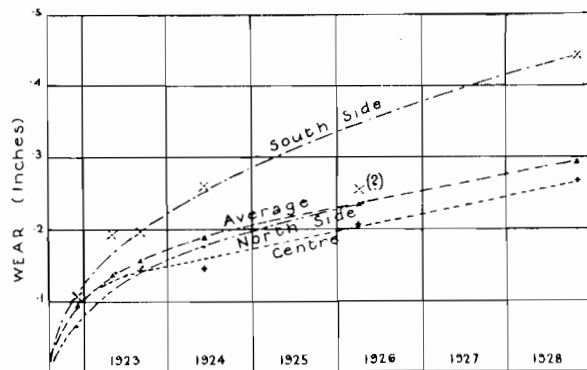


Fig. B.—Wear on Experimental Road, Oakleigh. Section with Asphaltic Concrete Wearing Surface.

At the same time that the concrete sections were laid down, an asphaltic concrete section was laid on a concrete base, and wear measurements were taken up till October, 1928, a period of six years and three months. Unfortunately the results are slightly more erratic than those on the cement concrete, due no doubt to slight local shoving, but it is clear from the curves which are plotted on Fig. B that the rate of wear after May, 1924, when consolidation appears to have been completed, is roughly a third of that of the cement concrete. The total average wear, including consolidation, in six years was .3 inch, the average of 64 measuring points. The asphaltic concrete wearing surface was removed in 1929 in order to examine the concrete base. (See Annual Report for 1928-29.)

In all these results any curling of the slab due to temperature change has been neglected, but it is not thought that the error introduced on this account over the total period is of any consequence because readings were, in general, taken at similar times of the day under similar conditions. In order to check the amount of curling, tests were made at one point on the 11th July, 1924, a special bronze plug being grouted into the concrete along the centre line, and its elevation compared to the elevations of the two edge plugs. Between 8 a.m. and 2 p.m. the air temperature increased 16 degrees, and the centre of the slab rose .0248 inch compared with the edges. The average rate was .0018 inch degree Fahr. rise of temperature. Whenever readings were taken after this, the elevation of the centre plug was checked and found to be within the limits determined in 1924.

NAPIER-STREET EXPERIMENTAL SECTION.

Early in the year Napier-street, Footscray, was declared a Main Road at the request of the Footscray City Council, in order to make a connexion between the end of the Footscray-road across the West Melbourne swamp in the City of Melbourne and Moreland-street, the route to the industrial area at Yarraville, and also via Whitehall-street and Somerville-road to Geelong. The total length is only about 550 feet.

As this section carries very heavy industrial traffic (including dock traffic) and included both motor trucks and horse-drawn vehicles with steel tires, it was decided to utilize it as an experimental section for testing various types of bituminous surfacings on a rolled concrete base. The base was constructed by the Council 40 feet wide in three strips each 10 : 6½ : 10 inches thick, the mix being 1 : 2½ : 12. Actually considerable variations were made in the mix for test purposes and it was found possible to successfully consolidate in the central strip a concrete of 1 : 2½ : 14½ mix where the base was very hard (being the old road-bed) and the side strips gave perfect lateral support. The cement content of that section was 2.6 bags per cubic yard. On the whole job the cement used amounted to 0.603 bag per square yard or 3.1 bags per cubic yard for an average normal thickness of 7 inches. The concrete was cured by mixing 2 lb. of calcium chloride per bag of cement at the mixer, and test cores taken out showed that almost perfect consolidation was obtained.

The surfacing was constructed in November, 1935, and consisted of approximately 25 different mixes. It is yet too early to present conclusions in any detail, but judging by the behaviour through one summer and a winter it appears that partly-graded mixes, i.e., from 1-in. to 100-mesh material, with about 20 per cent. passing a No. 8 sieve are stable with from 3 per cent. to 1½ per cent. of 55 penetration bitumen.

With higher percentages of soft binder some failures occurred, but this was mainly due either to excess binder or to water getting through the surface on to the base.

Open mixes, i.e., from 1 inch down to a No. 18 material (no sand) appeared stable if the surface were waterproof, even when very soft binders were used. In the extreme case 3½ per cent. of binder of viscosity of 34 poises at 122 degrees Fahr. (100 of 85,100 bitumen, plus 36 parts of asphaltic oil) was used without failure. The extreme of open grading was a mix with 95 per cent. passing through 1 inch and 1 per cent. through ½ inch. This appears to be quite stable under heavy steel-tired traffic with 2½ per cent. of 55 penetration bitumen. The surfaces were in most cases waterproofed, and to some extent bound, by spreading and rolling in a small amount of sand pre-mixed with bituminous mixing emulsion (about 5 lb. per square yard.)

DRAG SPREADERS AND ROAD MIX MACHINES.

One of the advances made in the technique of road construction of recent years has been the adoption of mechanical devices for spreading surfacing material. These have their genesis in the old split log-drag which proved very effective on dirt roads. This was improved and various types of planers were introduced, the principal difference being that whereas the effective length of the drag was only 3 or 4 feet, planers could be made in lengths up to 15 or more feet. These machines were used essentially for keeping a true surface on roads that had been constructed by other methods.

The next step was the introduction of machines working under a similar principle to spread final surfacing material, and the Board has been using for some time road-mix seal machines which not only mixed the binder with the screenings to form the surfacing material but, after mixing, spread it in a surface that was appreciably truer than the original road surface. (See Plate 34.) It was then found economical in some cases to mix the aggregate and binder at central depots and use the spreader for distribution only, following the methods that have been highly developed by the New South Wales Department of Main Roads. This type of spreading-drag runs on longitudinal runners sliding on the surface of the existing road, whereas in the road-mix seal machines the blade is supported by a frame carried on pairs of wheels at each end.

It was at first felt that the spreader with a blade in the centre of long runners, used for pre-mixed materials, would give better results, but observation of riding qualities on roads constructed by the two methods seemed to indicate that the road-mix machine was giving at least equal, and possibly better, surfaces. In order to compare the two methods comparisons have been made in the office by graphical methods, using small scale templates working on a longitudinal section of an actual road plotted to a distorted scale. The results are shown on Fig. C. The longitudinal section of part of the Geelong Road was used, this having been obtained by taking levels at 5 feet intervals and interpolating with a straight-edge; the exaggeration is 120 to 1. It will be seen that the surface left by both sizes of road-mix seal machine is appreciably better than that left by the spreading-drag. This is firstly because the rear wheels of the road-mix seal machines travel on spread material, i.e., on a surface very much better than the existing road on which the spreading-drag has to travel and, further, because the mixing process necessitates more than one stroke, so that the final surface may be regarded as a second degree approximation. The plate also shows the surface left by the grader fitted with an attachment for road-mix seal work. This machine does not show up as well as the others because the spreading blade is near to the mid-point between the front and back wheels, and consequently the effect of the front wheels which run on the existing road surface is much greater than those of the road-mix seal machines where the blade is relatively much closer to the rear wheels.

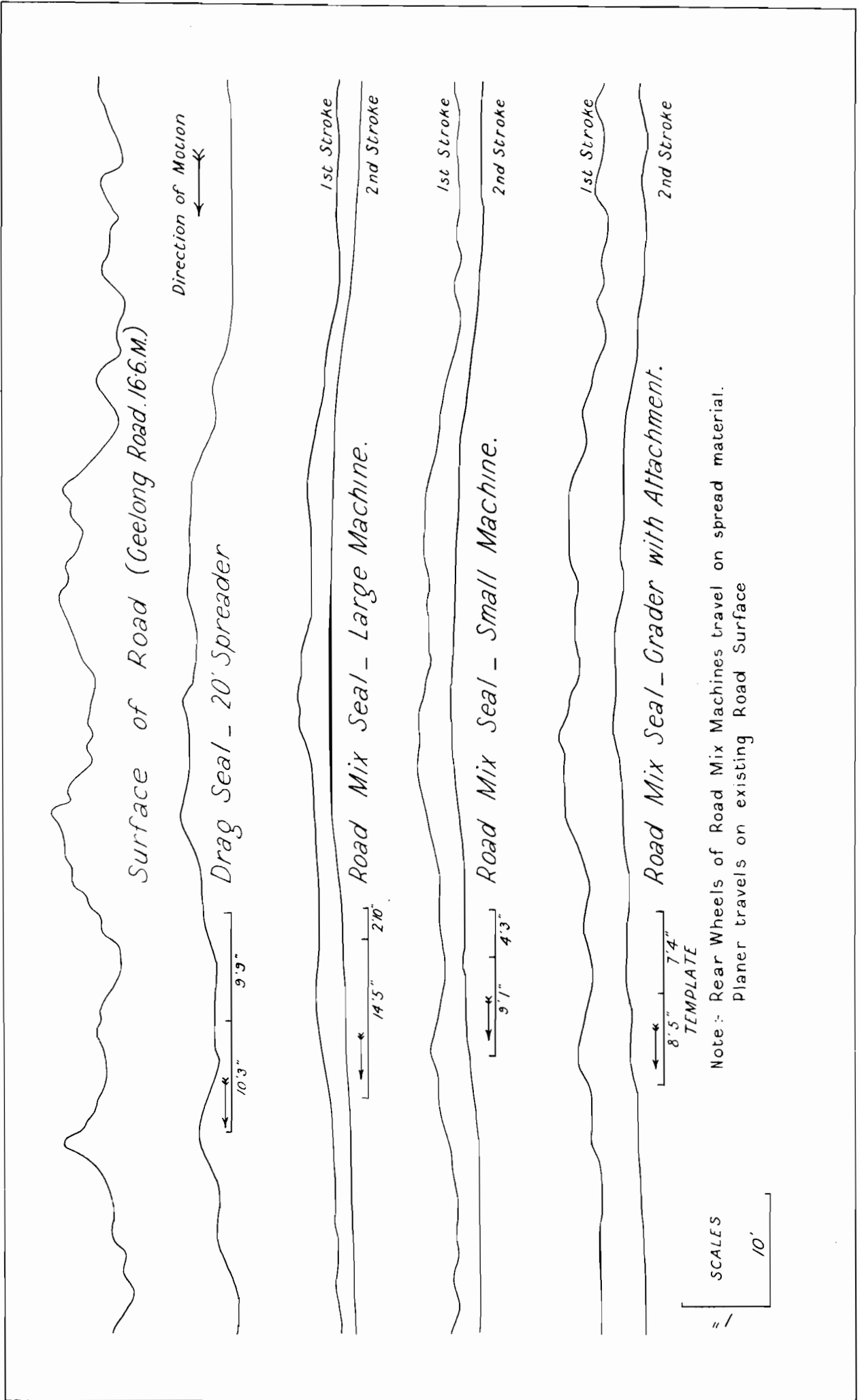
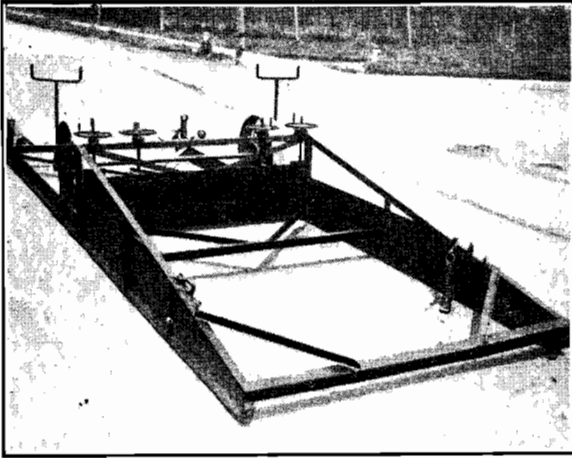
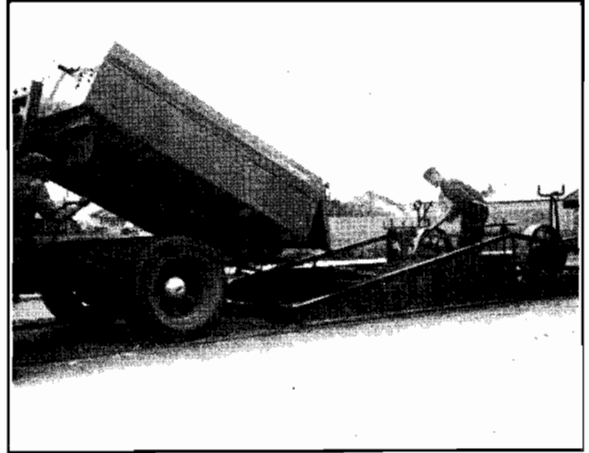


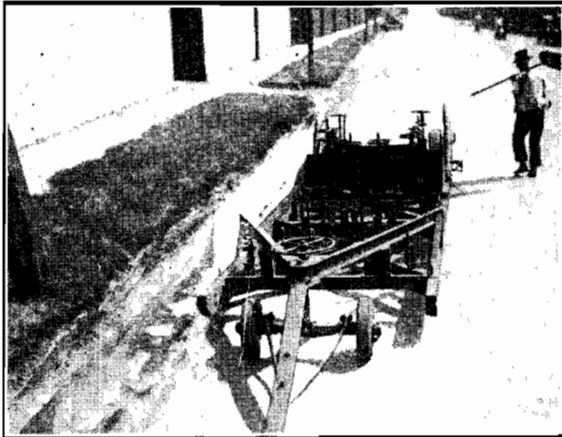
Fig. C.—Comparison of Improvement to Road Surfaces by Drag Seal and Road Mix Seal Machines.



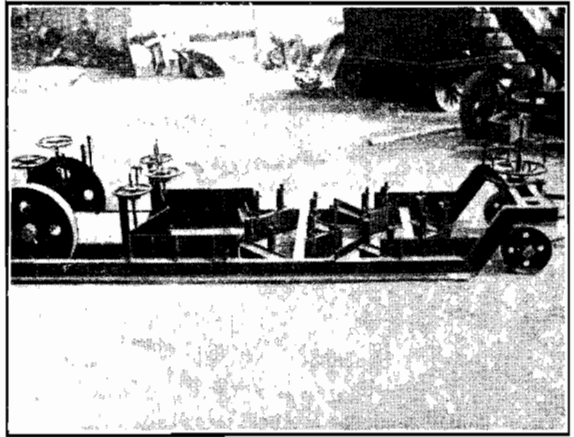
Drag Spreader, 6 ft. 6 in. wide x 21 ft. long.



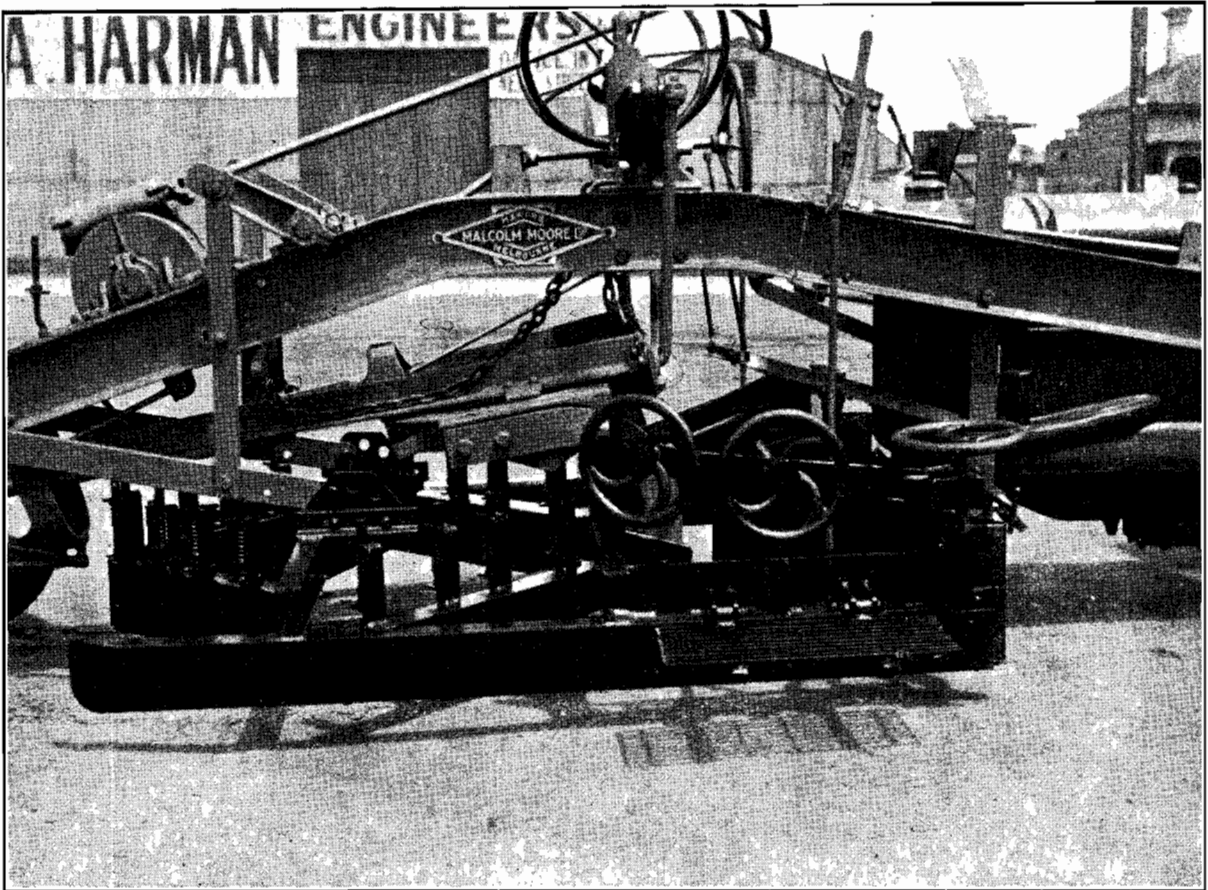
Drag Spreader at Work.



Large Road Mix Machine, 5 ft. 6 in. wide, Wheelbase, 18 ft.



Small Road Mix Machine, 4 ft. wide, Wheelbase, 13 ft. 4 in.



Road Mix Attachment, 6 ft. wide (shown attached to old model grader).

Plate 34.—Drag Spreaders and Road Mix Seal Machines.

BITUMINOUS SURFACE TREATMENT.

ROAD MIX SEALS.

A further 350 miles of road were surfaced with a road-mix seal during the year, making a total of 667 miles of of this type of surface treatment carried out to date. Occasion was taken during the year to make a survey of the work done, in order to see whether any amendments to the specification were necessary. Practically the only trouble found, and that was negligible in extent, was a tendency to raveling in patches on certain jobs, although failure to hold a high percentage of toppings was noted in some cases, so far without any deleterious effect on the pavement. An investigation of the job records of those sections which had ravelled patches, showed that in carrying out the work less binder than specified had been sprayed, while an excess of aggregate had been put on. For the type of sealing where the bitumen is sprayed on the road, and the aggregate then spread and rolled in, any excess of aggregate is swept away by traffic, the binder taking up just that amount which it can hold under the conditions existing. In the road-mix seal, however, excess of aggregate, which is all mixed with the binder, means too low a percentage of binder, and while road-mix seals have been found to be not at all sensitive to considerable variations in percentage of binder, closer control is obviously necessary than in the older type of sealing. Again, the grading of the aggregate has some effect, as also does the surface texture of the stone. The necessity for particular care in applying the right quantities of binder and aggregate will be stressed to all Engineers and spraying Overseers in the coming season. In addition, it has been decided to slightly increase the quantities of bitumen to allow a greater margin than previously. It has been found that a much greater percentage of bitumen than has been specified can be used without getting a "fat" surface, and also for hard stones it appears necessary to use a slightly greater quantity in order to make certain of holding the toppings, particularly if conditions are not favorable during the early life of the seal. The change in specification is indicated by the following table:—

| Thickness of Seal Coat. | Previous Quantity Binder per square yard. | Proposed Quantity Binder per square yard. |
|--------------------------|---|---|
| $\frac{1}{2}$ inch | 20 gallon | 22 gallon |
| $\frac{3}{4}$ inch | 25 gallon | 27 gallon |
| 1 inch | 30 gallon | 33 gallon |

These are the minimum quantities used on a road which is not so worn as to expose a considerable percentage of stone, and applies to most work. With a road exposing a large area of stone it is usual to increase the quantities by approximately 10 per cent.

| No. and Nature of Material. | Percentage Passing Screens or Sieves. | | | | | | | | | |
|---|---------------------------------------|-----------------------------|-----------------------------|----------------|----------------|----------------|-----------------------------|--------------|---------------|---------------|
| | $\frac{1}{4}$ -inch Square. | $\frac{1}{2}$ -inch Square. | $\frac{3}{4}$ -inch Square. | 1-inch Square. | 2-inch Square. | 1-inch Square. | $\frac{3}{8}$ -inch Square. | No. 8 B.S.I. | No. 18 B.S.I. | No. 36 B.S.I. |
| 1. Coarse gravel or screenings, maximum size 1 inch | 100 | .. | 0-50 | 0-10 | .. | 0-5 | .. | .. | .. | .. |
| 2. Coarse gravel or screenings, maximum size $\frac{3}{4}$ inch | .. | 100 | 90-100 | .. | 0-30 | 0-7 | .. | 0-4 | 0-2 | .. |
| 3. Graded gravel or screenings, maximum size $\frac{3}{4}$ inch | .. | .. | 100 | .. | 45-85 | 15-45 | .. | 0-10 | 0-2 | .. |
| 4. Coarse sand or toppings | .. | .. | .. | .. | 100 | 90-100 | 55-85 | 10-40 | 0-10 | 0-5 |
| 5. Fine sand or toppings | .. | .. | .. | .. | 100 | 95-100 | 75-95 | 30-70 | 0-25 | 0-10 |

Aggregates (1) and (2) are even-sized material suitable for a first-seal coat of the one-stone thickness type. The quantity of binder to be used will vary with the average least dimension.

Aggregate No. (3) is a graded type suitable for first seals of the type hitherto used, or for road-mix seal.

Aggregates (4) and (5) are for covering road-mix seal,

AGGREGATE.

Owing to the tendency to skidding on bituminous roads in the past it is essential that all future sealing work should provide a non-skid surface. The road-mix sealing now used as standard for resealing appears to be successful in this respect, but the practice hitherto adopted for first seals has not been universally satisfactory.

It has been felt for some time that aggregate containing a smaller percentage of finer particles would be more desirable for first-seal coat, and some work with "one-size stone" done on the Prince's Highway East in 1931, proved very satisfactory. The practice is of course not new in this State, but a paper read by Hanson at the 1935 Annual General Meeting of the New Zealand Society of Civil Engineers sets out in logical and quantitative form the arguments in favour of this type of seal coat, and the principles to be adopted in proportioning the bitumen and aggregate. He considers that a seal coat usually consists of a single layer of aggregate, the stones in which lie with their smallest dimensions vertical. These stones are held in position by the bituminous binder which, to avoid forming a slippery surface, must not come up the stones more than three-quarters of their height after consolidation by traffic.

It is considered that where sealing is being carried out on a hard dense pavement such as macadam, well-consolidated fine-crushed rock, or a stony gravel, Hanson's arguments hold and a one-size stone should be used, the binder being proportioned according to the average least dimension of the aggregate. An experimental section put down at Craigieburn during last summer on a new fine-crushed rock pavement supports this view. In this State, however, sealing is frequently carried out on fine sandy gravels which are considered to need a reasonably thick mat of binder and aggregate to protect them from surface failure, and which probably would not stand having large one-size aggregate rolled into them without damage to the primed surface.

It is therefore considered that the "one-size stone" type of first seal should not be applied to this type of pavement until further experience has been gained.

The aggregate used for road mix seals has been generally satisfactory, but it is felt that for $\frac{1}{2}$ -in. work a greater percentage of finer particles would be desirable. Such material, however, would be difficult to obtain from some quarries which can only just comply with the present specification in this respect.

From these considerations, and from observations of the Craigieburn experiment, the gradings adopted for next season's work are as set out below. It will be noticed that screens with square openings are used when specifying the materials as these screens have been adopted as the Australian standard.

When deciding on which of the aggregates (1), (2) or (3) is to be used for a first seal, the following factors are taken into account:—

1. Nature of pavement.
2. Average least dimension of aggregate if (1) or (2) is proposed.
3. Air temperature probable when the work will be carried out.

4. Desirable life for first seal before road-mix seal is applied.

5. Source of supply for aggregate.

Below is given an indication of the conditions under which each type of aggregate should be used.

No. 1 Aggregate.

First seal on macadam, well-consolidated fine-crushed rock or hard well-bound stony gravel or limestone where settlement or deformation of the pavement, or other reason for needing a road-mix seal soon after sealing, is not expected. A long life and good waterproofing is anticipated for this seal.

No. 2 Aggregate.

First seal on macadam, well-consolidated fine-crushed rock, gravel, or limestone where a thick mat is not required.

No. 3 Aggregate.

Road-mix seal or first seal on fine sandy buckshot or scrub gravels where a thick mat is considered essential to protect pavement from damage by traffic and where Aggregate No. 1 would probably damage gravel during rolling; or on thin coats of good gravel over poor bases. Work should be done in warm weather.

No. 4 Aggregate.

For covering road-mix seal constructed with gravel or screenings having less than 30 per cent. passing $\frac{1}{4}$ -in. square holes.

No. 5 Aggregate.

For covering road-mix seal constructed with gravel or screenings having more than 30 per cent. passing $\frac{1}{4}$ -in. square holes.

Rates of application of binder and aggregate with aggregates (1) and (2) cannot be fixed until the average least dimension of the material has been ascertained.

With these aggregates the rates of application will be based upon the following figures given in a paper read by Mr. F. M. Hanson before the New Zealand Society of Civil Engineers, March, 1935:—

- (i) Voids in loose aggregate are approximately 50 per cent. of loose volume.
- (ii) Voids after rolling and traffic compaction are approximately 20 per cent. of traffic compacted volume.
- (iii) The loose volume of aggregate is 1.6 times the volume after rolling and traffic consolidation.
- (iv) Sufficient aggregate must be applied to provide a carpet after consolidation by traffic and loss, equal in average depth to the average least dimension of the stone. (10 per cent. for loss by wipe off.)

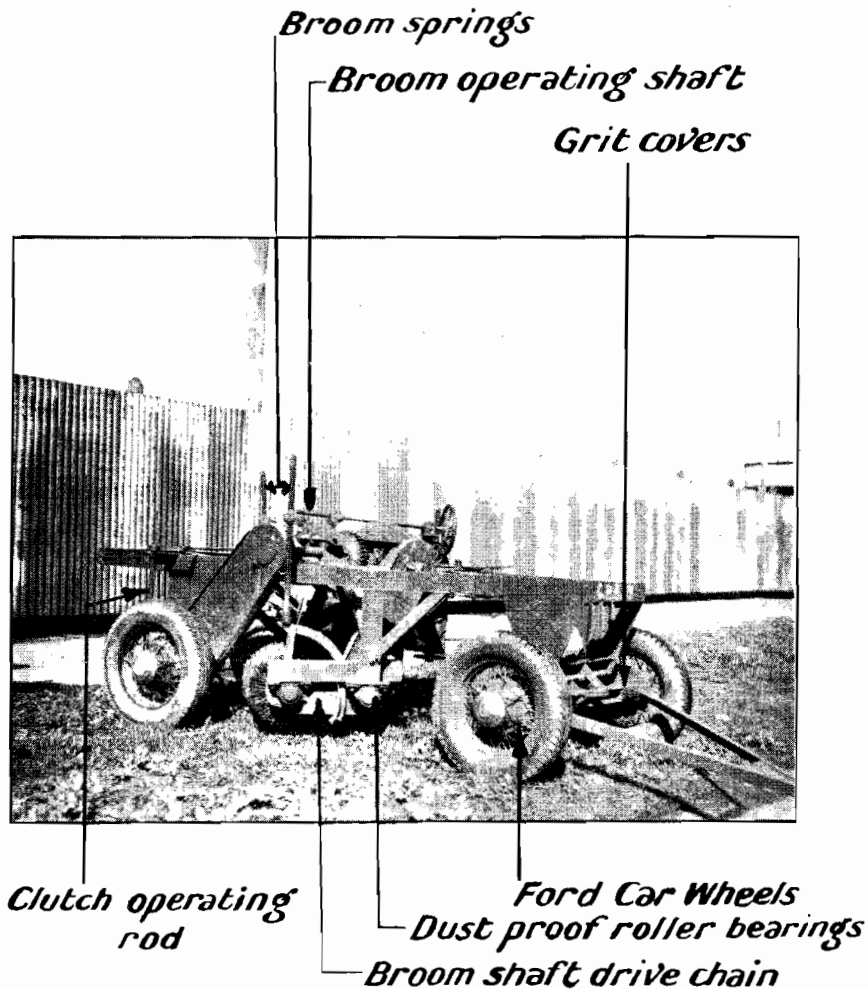
On the above basis the loose depth of aggregate applied to the road surface shall be equal in depth to 1.76 multiplied by the average least dimension of the aggregate.

Unless the supply is direct from the quarry or pit to the road, an additional allowance of $2\frac{1}{2}$ per cent. should be made for loss during handling.

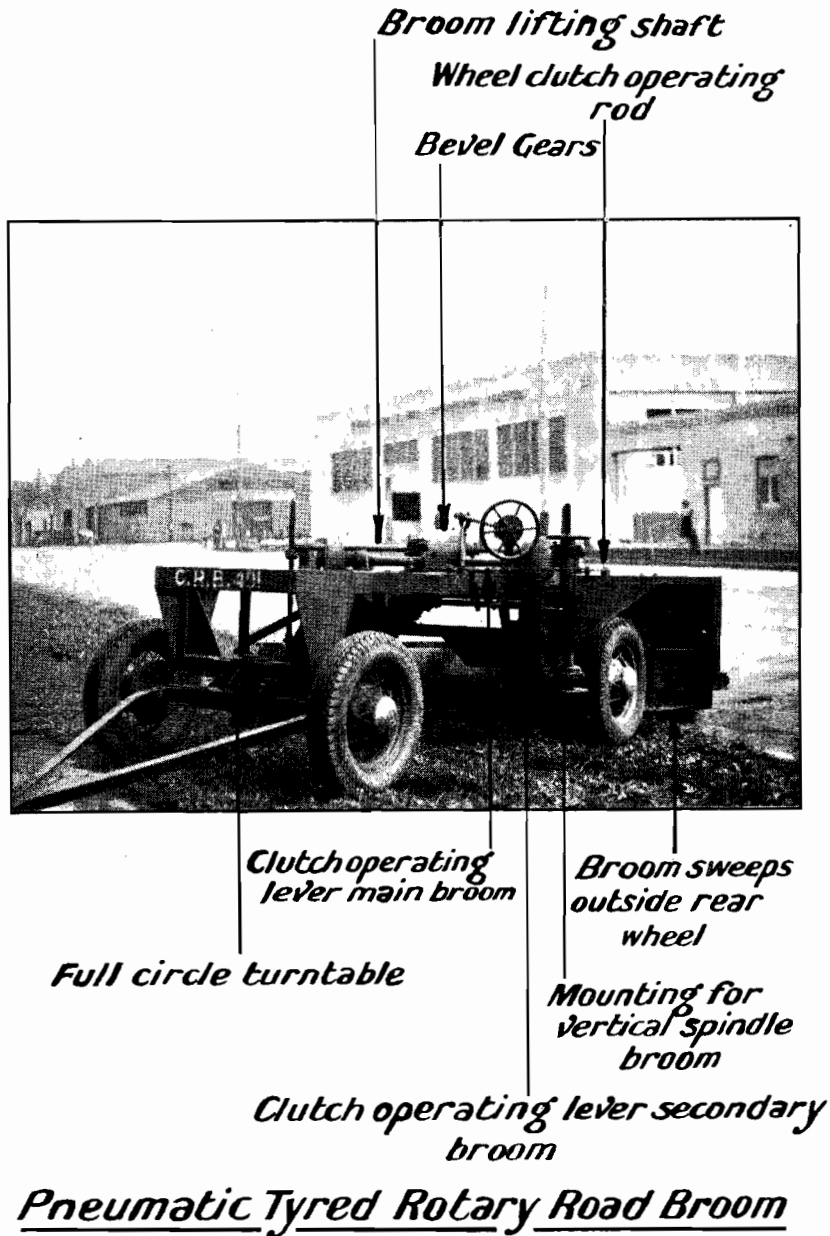
With this additional allowance the quantity of aggregate obtained shall provide for a loose depth 1.80 times the average least dimension of the aggregate.

The average least dimension may be obtained as follows:—

- (i) A representative sample should be spread out on a table so that there is segregation of the various sizes.
- (ii) An area containing 100–200 particles should be separated from the remainder.



Pneumatic Tyred Rotary Road Broom.



Pneumatic Tyred Rotary Road Broom

Plate 36.

(iii) The least dimension of each of these stones is then measured with caliper. From these measurements the average least dimension is then obtained.

It is probable that bar screens will be made available for carrying out this test more quickly when a large number of aggregates are being tested.

RATE OF APPLICATION OF BINDER WITH AGGREGATES NOS. (1) AND (2).

The rate of application of binder for this type of aggregate should be based upon the following :—

- (i) Binder should fill 75 per cent. of the voids in the pavement after consolidation by traffic.
- (ii) Voids in the pavement after consolidation by traffic shall be considered to be 20 per cent. of the compacted volume.
- (iii) The thickness of the carpet after consolidation should be taken to be equal to the average least dimension of the aggregate.
- (iv) One gallon of binder shall be considered to occupy 0.16 cubic feet.

On this basis the rate of application in gallons per square yard equals 0.7 times the average least dimension in inches.

The average least dimensions and corresponding rate of application of certain screenings crushed from a typical

basalt with the corresponding rates of application of binder are given below for information :—

| Description of Aggregate. | Average Least Dimension. | Rate of Application square yards covered by 1 cubic yard. | Rate of Application of Binder in gallons per square yard. |
|---|--------------------------|---|---|
| Aggregate No. 1 coarse limit of specification | Inches. 0.55 | 37 | 0.38 |
| Aggregate No. 1 fine limit of specification | 0.37 | 52 | 0.26 |
| Aggregate No. 2 coarse limit of specification | 0.33 | 58 | 0.23 |
| Aggregate No. 2 fine limit of specification | 0.26 | 74 | 0.18 |

PLANT DEVELOPMENT.

During the year development of the following items of spraying plant was proceeded with on the lines indicated briefly below :—

(a) *Rotary Road Broom.*—An experimental four-wheeled pneumatic-tired, non-automotive rotary road broom was designed, built, and put into service. The design, after certain modifications, proved quite successful, and these brooms will be used in future to replace the horse-drawn type of rotary road broom used hitherto.

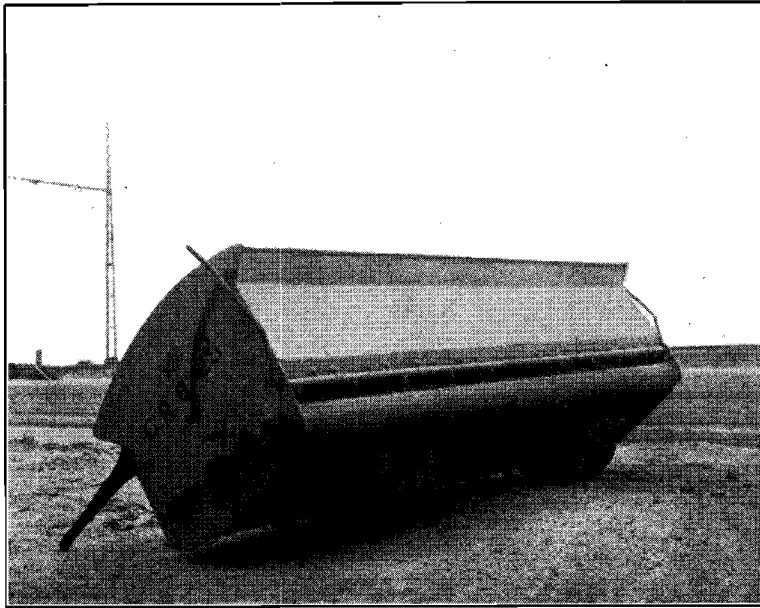


Plate 37.—“ Buckeye ” Spreader.

The broom is shown in Plates 35 and 36. The experimental vertical spindle and broom shown is not a standard fitting.

(b) *Jets*.—Experimental work on the design of jets for the distribution of bituminous binders was continued during the year. Progress to date gives promise of the production of a jet with a much better distribution than any hitherto used by the Board. It is anticipated that sets of these jets will be available during the coming spraying season.

(c) *Aggregate Loader*.—Developmental work on a light, portable, mechanical aggregate loader, designed late in the year 1934–35, was begun and will be continued in the hope that a satisfactory unit will be operating under service conditions during season 1936–37.

(d) *Aggregate Spreaders*.—The rotating disc type of aggregate spreader, although effecting a marked improvement on hand spreading, depends on the skill of the truck-driver for uniform rate of application. Arrangements were made during the year for the importation from America of a “ Buckeye ” spreader for experimental purposes in the hope that this type of machine will get over the disadvantages of the rotating disc type. Preliminary tests made with the imported machine have been very promising. The “ Buckeye ” spreader is shown in Plates 37 and 38.

DETAILS OF BITUMINOUS SURFACE TREATMENT WORK.

During the 1935–36 surface treatment season average weather conditions were experienced.

Two new 400-gallon spraying units put into service gave satisfactory performance.

The following information, with the exception of that under 2 (b) and 2 (c), refers only to work carried out by the Board’s spraying plant. Bituminous materials were supplied for 103.5 miles of surface treatment on Board’s roads carried out by Shire Councils by hand or by their own sprayers.

METHODS AND MATERIALS.

These were similar to those set out in last year’s report, except that the binder normally used for road mix seal work was as set out below :—

| Material. | Parts by Volume at 60 degrees Fahr. | |
|---|-------------------------------------|-----|
| | | |
| 85–100 penetration bitumen | 100 | 100 |
| Asphaltic oil (Shell fuel oil) | 20 | .. |
| Asphaltic oil (C.O.R.) | .. | 23 |
| Power kerosene or power kerosene substitute (tar oil) | 20 | 20 |



Plate 38.—“ Buckeye ” Spreader in Operation.

The gradings for mineral aggregate used were the same for first sealing and road mix seal, and the use of coarse sand instead of toppings was allowed for covering road mix seals where crushed and screened gravel was the coarser aggregate.

SPRAYING PLANT.

1. GENERAL.

Units in Operation.

The following sprayers were in service during the season :—

| | |
|--|---|
| (i) 300-gallon non-automotive (short periods only) | 5 |
| (ii) 400-gallon on V8 "Ford" chassis, old type, transferred from Thornycroft chassis | 4 |
| (iii) 400-gallon units on V8 "Ford" chassis, new type | 7 |

2. WORK.

(a) *Work carried out by C.R.B. Plant.*

- (i) The total length of bituminous surface treatment carried out by C.R.B. plant during the last five years is set out below :—

| Season. | Miles. |
|----------------------|--------------|
| 1931-32 | 422 |
| 1932-33 | 650 |
| 1933-34 | 835 |
| 1934-35 | 574 |
| 1935-36 | 740 |
| Total | 3,221 |

Average for five years 644

Season 1935-36—

| | |
|----------------------|--------------|
| Mileage | 740 miles. |
| No. of jobs | 451 |
| Longest job | 23·57 miles. |
| Shortest job | 0·07 miles. |
| Average job | 1·64 miles. |

- (ii) Nature of the work carried out by Board's sprayers.

| Type of Sprayer. | Miles of each Class of Work. | | | |
|----------------------|--------------------------------------|-------------|-----------------|-------------------|
| | First Seals, Double and Treble Coat. | Resealing. | Road Mix Seals. | Modified Macadam. |
| 400-gallon | 379·1 | 10·2 | 303·8 | 7·2 |
| 300-gallon | 27·2 | .. | 12·5 | .. |
| Total | 406·3 | 10·2 | 316·3 | 7·2 |

Total mileage carried out by Board's plant, 740.

(b) *Work carried out by municipally-owned plant.*

Approximate mileage of each class of work.

| First Seals. | | Road Mix Seal. | Plant Mix Seal. |
|-----------------|--------------|----------------|-----------------|
| Single Seal. | Double Coat. | | |
| 2·8 | 57·3 | 34·6 | 8·8 |
| Total .. | 60·1 | 34·6 | 8·8 |

Total miles 103·5

(c) *Total, including work carried out by Councils' plant.*

Total mileage for the year .. 843·5

Total mileage of bituminous surface-treated roads 3,630

3. EFFICIENCY OF OPERATION.

The figures for efficiency of operation for work on which 400-gallon sprayers were engaged are set out below.

The tables are based on the following rated outputs which have been altered since the last report was submitted to figures more reasonably attainable :—

| Work. | Loads per Day. | Loads per Week. |
|------------------------------|----------------|-----------------|
| Priming | 12 | 66 |
| Sealing (first seal) | 10 | 55 |
| Road mix sealing | 8 | 44 |

The efficiency is expressed in percentage of time the plant is away from the storeyard (exclusive of time stored in the field) spent in various operations or in idleness.

A total exceeding 100 per cent. indicates that the rated output per day was exceeded on certain occasions.

(a) *Efficiency of operation for work on which old 400-gallon sprayers were engaged—*

| Operation. | Sprayer No. | | | |
|---------------------------|--------------|--------------|--------------|--------------|
| | 16. | 17. | 18. | 19. |
| Spraying | 34·6 | 43·7 | 47·9 | 42·8 |
| Moving | 13·8 | 11·3 | 16·6 | 13·7 |
| Weather | 17·1 | 7·2 | 10·9 | 14·9 |
| Holidays | 4·7 | 8·1 | 7·7 | 8·7 |
| Mechanical delays | 1·0 | 0·8 | 1·7 | 5·7 |
| Avoidable delays | 28·8 | 29·4 | 16·5 | 14·5 |
| Total | 100·0 | 100·5 | 101·3 | 109·3 |

(b) *Efficiency of operation for work on which new 400-gallon sprayers were engaged—*

| Operation. | Sprayer No. | | | | | | |
|---------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | 11. | 12. | 13. | 14. | 15. | 20. | 21. |
| Spraying | 41·0 | 31·5 | 35·1 | 35·3 | 33·0 | 62·2 | 31·8 |
| Moving | 15·9 | 9·6 | 17·3 | 14·8 | 19·2 | 14·6 | 9·0 |
| Weather | 9·4 | 17·4 | 9·6 | 14·6 | 19·0 | 6·7 | 8·8 |
| Holidays | 8·2 | 6·1 | 7·3 | 8·6 | 6·8 | 9·1 | 9·1 |
| Mechanical delays | 2·8 | 1·9 | 3·1 | 3·3 | .. | 2·1 | 4·2 |
| Avoidable delays | 23·0 | 34·1 | 28·1 | 23·9 | 22·0 | 8·4 | 37·1 |
| Total | 100·3 | 100·5 | 100·5 | 100·5 | 100·0 | 103·1 | 100·0 |

(c) Efficiency of operation of all work on which 400-gallon sprayers were engaged during the season—

| Operation. | 1935-36. |
|---------------------------|----------|
| Spraying | 39.9 |
| Moving | 13.6 |
| Weather | 14.0 |
| Holidays | 7.6 |
| Mechanical delays | 2.4 |
| Avoidable delays | 24.1 |

(d) Avoidable delays.—The avoidable delays shown in tables (a) and (b) are set out in detail below—

| Delay. | Sprayer No. | | | | | | | | | | | Average. |
|-------------------------------------|-------------|------|------|------|------|------|------|------|------|-----|------|----------|
| | 11. | 12. | 13. | 14. | 15. | 16. | 17. | 18. | 19. | 20. | 21. | |
| No reason given | 3.7 | 3.7 | 2.3 | 5.1 | 2.9 | 4.5 | 0.2 | 1.5 | 2.2 | 1.3 | 5.5 | 2.8 |
| Long leads | 2.6 | .. | .. | 3.3 | 0.4 | 1.6 | 0.7 | 2.1 | 0.2 | 0.3 | .. | 0.9 |
| Short sections | 3.7 | 11.8 | 10.0 | 6.6 | 10.4 | 11.1 | 9.1 | 5.4 | 6.6 | 5.1 | 9.2 | 8.2 |
| Plant stored | 9.1 | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | 0.7 |
| Road not ready | 1.0 | 5.1 | 13.5 | 6.8 | 0.6 | 8.2 | 9.0 | 3.0 | 2.8 | 0.9 | 19.0 | 6.3 |
| No aggregate | .. | 6.1 | .. | .. | .. | 0.9 | 5.0 | .. | 0.5 | .. | 0.3 | 1.3 |
| No binder | .. | .. | .. | 1.8 | 3.6 | 0.4 | .. | 1.7 | .. | .. | .. | 0.7 |
| Other materials | 2.1 | 0.4 | 0.6 | 0.3 | 1.8 | .. | 2.2 | .. | 0.4 | .. | 1.1 | 0.8 |
| Shortage of labour or plant | 0.8 | 7.0 | 1.7 | .. | 2.3 | 2.1 | 3.2 | 2.8 | 1.8 | 0.8 | 2.0 | 2.4 |
| Total | 23.0 | 34.1 | 28.1 | 23.9 | 22.0 | 28.8 | 29.4 | 16.5 | 14.5 | 8.4 | 37.1 | 24.1 |

(b) Road mix seals—

| — | Cost in Pence per Square Yard. | | |
|----------------------------------|--------------------------------|---------|---------|
| | ¾ inch. | ¾ inch. | 1 inch. |
| Loose depth of aggregate | .. | .. | .. |
| Area in sq. yards costed | 1,991,616 | 449,826 | 94,892 |
| Materials | 4.80 | 5.80 | 6.80 |
| Labour | 1.20 | 1.39 | 1.50 |
| Supervision | 0.09 | 0.13 | 0.11 |
| Stores | 0.18 | 0.21 | 0.23 |
| Plant charges | 0.57 | 0.70 | 0.82 |
| Total | 6.84 | 8.23 | 9.46 |

(c) Aggregate—

Quantity costed, 111,559 cubic yards.
Average cost, 12s. 11d. per cubic yard.

(d) Binder—

4. COSTS.
(a) First seals—

| Area in sq. yards costed | Cost in Pence per Square Yard. | |
|--------------------------|--|--|
| | Primer—0.2 gall./sq. yd. Seal—0.3 gall./sq. yd. | Primer—0.2 gall./sq. yd. Seal—Two Seals at 0.15 gall./s. yd. each. |
| | 3,061,286 | 80,267 |
| Materials | 6.40 | 8.50 |
| Labour | 1.20 | 1.20 |
| Supervision | 0.13 | 0.15 |
| Stores | 0.26 | 0.34 |
| Plant charges | 0.60 | 0.61 |
| Total | 8.59 | 10.80 |

(f) Railway carriage.—The average mileage over which materials for binder and primer was forwarded by rail was 125 miles.

LABORATORY.

ABRASION TEST FOR METAL AND GRAVEL.

A new method, the "Los Angeles" abrasion test, for determining the wearing quality of road metal and gravel has been developed recently in the United States of America, and during the year details of this test became available. As this method of test offers certain advantages over the Deval abrasion test, in that it can be applied to crushed material of the sizes commonly used for screenings and fine-crushed rock, and since the performance of the Los Angeles abrasion test requires less time than the Deval test, it was decided to determine whether the Los Angeles abrasion test could be used and specified instead of the French coefficient (Deval test).

| Material. | Supplier. | Contract No. | Tons. | Basic Price per ton net f.o.r. Melbourne. | |
|-----------------------------------|-------------------------------------|--------------|-------|---|-----------------------------|
| | | | | Including Non-returnable Drums. | Excluding Returnable Drums. |
| Bitumen, 85-100 penetration | United Oil Company | 00/383 | 215 | £ 4 16 6 | £ |
| | | 00/343 | 7,236 | 4 16 0 | .. .. . |
| Duratenax | Duratar Proprietary Limited | 00/351 | 1,364 | 5 10 0 | .. .. . |
| Duratenax flux oil | Duratar Proprietary Limited | 00/345 | 138 | .. .. . | 5 0 6 |
| Power kerosene substitute | Duratar Proprietary Limited | 00/345 | 321 | .. .. . | 10 2 3 |
| Asphaltic oil | Shell Company | 00/346 | 1,177 | .. .. . | 5 2 3 |
| Power kerosene | Various | No contract | .. | .. .. . | 9 10 0 |

(e) Primer—

| Material. | Supplier. | Tons. | Basic Price per ton net. | |
|------------------|-------------------------------------|-------|--------------------------|------------------|
| | | | Including Drums. | Excluding Drums. |
| Cold tar | Albion Quarrying Company | 569 | £ 5 8 0 | £ 4 3 5 |
| | Brighton Gas Company | 1,689 | 4 19 6 | 3 15 4 |
| | Metropolitan Gas Company | 675 | 5 2 0 | 3 18 8 |
| | Metropolitan Gas Company | 800 | 4 17 0 | 3 13 10 |
| | Duratar Proprietary Limited | 675 | 5 2 0 | 3 12 6 |
| | Duratar Proprietary Limited | 557 | 4 17 0 | 3 13 3 |

After plans had been prepared the machine was manufactured locally, and tests with this machine have been carried out on a number of types of stone, the behaviour of which, as road material, was known. Plate 39 shows the machine.

In general, it was found that the results of the Los Angeles abrasion test were more closely related to the results of observations of the relative value of the material in service than were the results of the Deval test.

The research is being continued in order to establish the limits to be used in specifications and to determine the effect of certain variable factors.

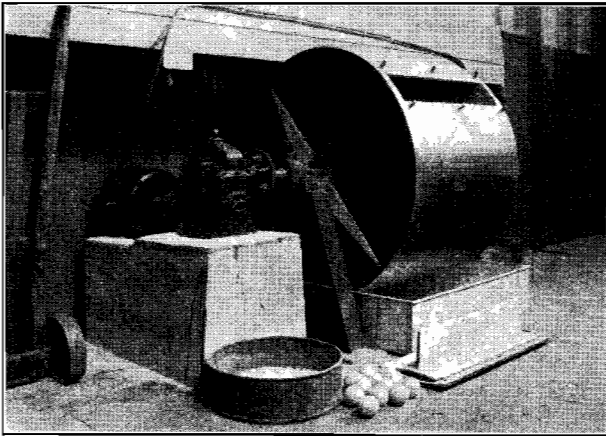


Plate 39.—“Los Angeles” Abrasion Machine.

VISCOMETRY.

The very large number of viscometers and allied instruments available for testing liquids and semi-liquids, and the unsystematic use of units and temperatures, has made the rapid assimilation of reports involving particularly the consistency of bituminous materials difficult for the practising Engineer. The State Road Authorities of Australia have agreed, following the last conference of Senior Technical Officers, to adopt the absolute unit of viscosity, the poise, as the unit to be used in all reports on viscosities, and for normal reporting practice (other than research information) it was further decided that for all bituminous materials softer than 300 penetration (100 gms. 5 sec. 77 deg. Fahr.) to report viscosities as 122 deg. Fahr. (50 deg. C.).

It has been the practice for some years in the Board's laboratory to determine viscosities in absolute units by means of an upward flow capillary viscometer. This instrument is satisfactory and convenient for viscosities of from 0.01 to 50 poises. In order to measure the viscosity

of heavier materials a “sinker” viscometer having four sets of sinkers and tubes was designed and has been constructed locally. The instrument is used in conjunction with a water bath automatically maintained at the desired temperature by means of a thermionic relay thermostat controlled by a mercury in glass thermometer. The instrument may be used over a range of viscosities from 1 to 100,000 poises. The principle involved will readily be surmised from Fig. D.

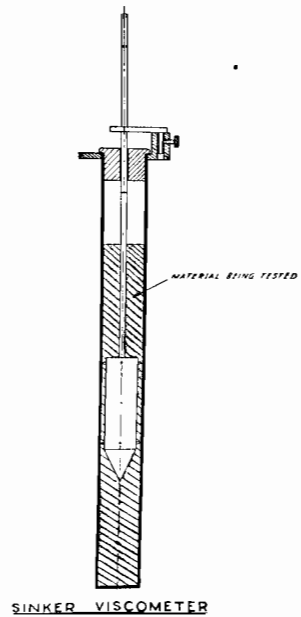


Fig. D.

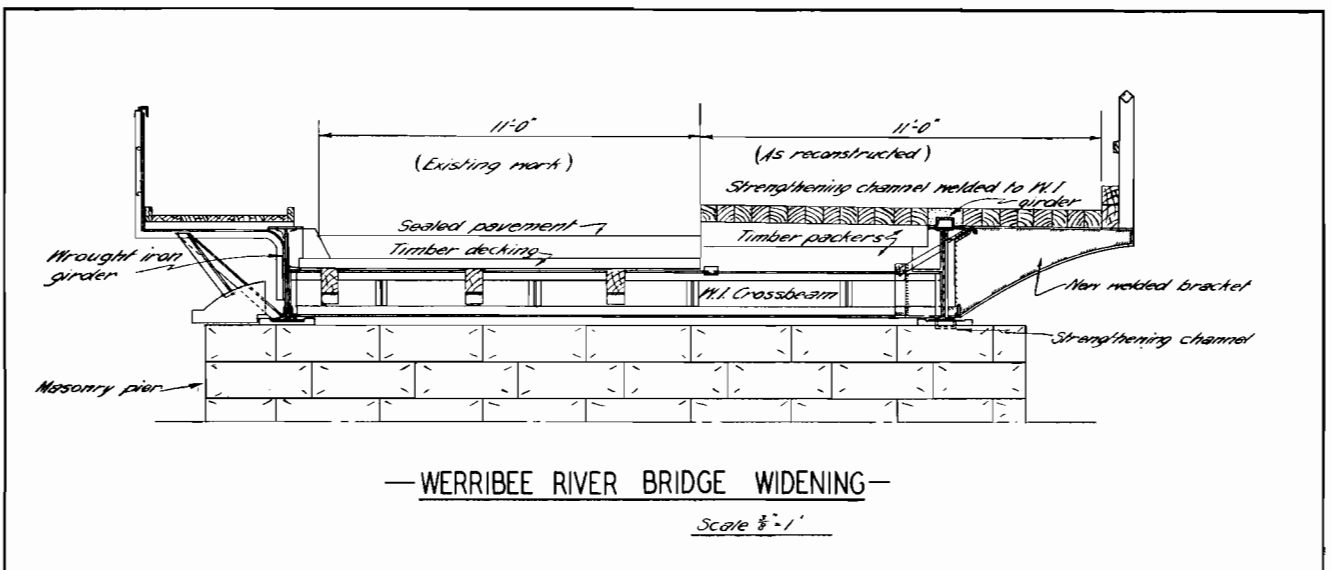
BITUMEN EXTRACTOR.

In consequence of the amount of bituminous surfacing being carried out by the drag spreading process with plant mixed materials, it became necessary both for research and control purposes, to provide a means for determining rapidly the amount of bitumen and the grading of the aggregate in such mixtures, both immediately after spreading and after a period of service on the road. The old hand-operated extractor was inefficient, slow, and laborious, and after consideration of the various methods available, it was decided to install an electrically-driven rotary type of extractor, which has been purchased and is operating satisfactorily.

BRIDGES.

WERRIBEE RIVER BRIDGE.

Prior to this financial year the bridge over the Werribee River on the Prince's Highway west, just beyond the



— WERRIBEE RIVER BRIDGE WIDENING —

Scale 1/2" = 1'

Fig. E.

township of Werribee, was of insufficient width to allow two vehicles to pass safely, and for many years there was a local by-law prohibiting vehicles from passing on the bridge. The wooden floor system of the bridge after 50 years became unsafe for the heavy traffic on this road and it was necessary to renew it.

The bridge was originally constructed with two lines of wrought-iron plate girders at 19-ft. centres on very high masonry piers. There are nine spans of 30 feet each. The roadway was carried between the girders with the deck level below the top flanges. Between the girders at 6-ft. centres were a number of steel cross beams. These carried light longitudinal timber stringers with a transverse timber deck. It was necessary to carry out repair work under traffic, as the cost of a temporary bridge 270 feet long over this deep gorge would have been too great. The narrow width of the structure prevented repairs being made half-width at a time at the existing level. "Half-width" construction was possible, however, by reason of the simultaneous widening of the bridge. The structure now provides a 22-ft. wide roadway and a 4-ft. footway. A cross-section of the widened bridge is shown in Fig. E.

The extensions to the old wrought-iron girders was done with electric arc welding, the sequence of operations being as follows :—

1. The bridge width available for road traffic was cut down to 12 feet.
2. Handrails and all movable sections of decking outside this width were removed.
3. Steel cantilever brackets were welded to the girder at 6-ft. centres.
4. Flange sections of girder were increased by the addition of a channel welded on. During this operation, the girders were propped to eliminate dead load deflections and stresses.
5. Timber packing pieces were placed on the exposed portions of the steel cross-beams between girders.
6. This width of the bridge was then decked with longitudinal decking 6 inches thick.
7. Traffic was diverted to the completed portion, and the work on the remainder was finished.

The total cost of the work was £1,900.

MARIBYRNONG RIVER BRIDGE (LYNCH'S BRIDGE).

In February of this financial year the construction of a new bridge on the Ballarat-road near the Melbourne City Abattoirs and Flemington Racecourse was approved. The old wooden bridge was reaching the end of its useful life, and the lift span to allow river traffic to pass up and down stream gave so much trouble that it was made a fixture. The old bridge was placed square to the stream with a sharp curve at each end. Extensive bores were put down to test the site, and these disclosed that soft material extended down for a depth of approximately 40 feet, while below this there were bands of clay, sand, gravel, and stone.

To give traffic the uninterrupted use of the old bridge for as long a period as possible, and to improve the alignment of the road at this point, the new bridge is being placed slightly upstream from the present bridge and with a skew of 32 degrees to the river.

A general perspective drawing of the new bridge is shown in Plate No. 33.

The details of the structure are as follows :—

- Spans : Five at 70 feet and two at 30 feet (concealed by curtain walls).
- Total length : 410 feet.
- Roadway : 40 feet.
- Footways : Two at 6 feet.
- Total width : 52 feet.
- Superstructure : Composite T-beam type, with reinforced concrete deck and steel plate girders.

Handrails : Concrete posts with mild steel fabricated panels.

Substructure : Concrete piers resting on driven composite concrete-timber piles.

The great depth to solid foundations through soft mud has provided far from ideal conditions. The design provides for driving timber piles with their tops approximately 10 feet below bed level. From this point, pre-cast concrete columns from each timber pile are carried up to low water level and are bonded into a concrete pier base 5 feet x 3 feet x 70 feet. From this base, six concrete columns are carried up to a concrete cap to support the six rows of girders. The pre-cast concrete columns are attached to the timber piles when the top of the timber pile is still above water level. The concrete column and the timber pile are then driven as a composite pile to the necessary depths. Since the concrete column is sleeved over the timber pile for a distance of 4 feet and the space is filled with mortar, the composite pile is rigid over the joint.

Conservative practice has frequently discarded the use of piles of considerable length as a means of supporting piers for important bridges, and it has been commonly considered necessary to sink cylinders through such strata to the bedrock or other satisfactory foundation. For the structure under consideration, a comparison between two cylinders with a heavy cross-head between them and a large number of long piles over the full area of the pier is instructive. At the Maribyrnong River the maximum load on each pier at water level is 600 tons, while the cylinders would have been 70 feet deep from water level. This would have required cylinders of 12 feet diameter and a total of 600 cubic yards of concrete in each pier. Including the cross-head, the estimated cost per pier would be approximately £4,000. In the contract now under construction the actual cost per pier is £1,600. The total difference in the cost of the structure with piles as against cylinders would be nearly £15,000. The maximum load is 20 tons per pile, and the piles are driven in three rows, of which the outer rows are battered at 1 in 8. The load is, therefore, transmitted to an area of nearly 1,000 square feet at the level of the toes of the piles. A firm stratum capable of preventing buckling of the piles as long columns exists at 40 feet below water level. At water level the piles are rigidly fixed into the base of the pier. Under these conditions the load which would cause failure in the piles is approximately ten times that allowed, and the system adopted is, therefore, both sound and economical. The details of the pre-cast concrete columns and their connexion to the timber piles follows the arrangement evolved by the Melbourne Harbor Trust Commissioners and previously used by the Board at the Tambo River Bridge, Swan Reach.

The design of the composite T-beams in which the reinforced concrete deck slabs serve to provide the compression area is based on the method introduced by the Tasmanian Department of Public Works. Spans of 70 feet were required by river traffic and aesthetic considerations. The steel stems of the girders consist of fabricated steel girders in lieu of standard rolled steel sections which have been used in Tasmania. A web plate of 54 inches is being used, and with the assistance of the concrete deck will be amply stiff for the span used. In addition to the economy of material given by the composite type, the stiffness obtained with a relatively shallow girder is of particular value at this site where it was desired to keep the deck level as low as possible both from a standpoint of economy and reduction of filling load on the soft alluvial ground.

Contracts have been let separately for the substructure, supply, delivery and erection of welded steel plate girders, and for the supply of filling (25,000 cubic yards) for the embankments. Tenders will be called at an early date for the construction of the reinforced concrete deck.

The structure is being erected by the Board, half the cost being borne by the Board and the remainder by the Cities of Melbourne and Footscray.

MERRI CREEK BRIDGE.

The widening of the old stone and brick arch bridge over Merri Creek on the Heidelberg-road was almost completed during the year.

The old bridge, which was constructed 80 years ago, had a width of only 29 feet between kerbs, including footpaths, but the structure was considered to be in sufficiently good order to warrant its continued use rather than to dismantle it and provide an entirely new bridge. This required a widened portion, which could conveniently be placed wholly on the south side, to conform to the linear dimensions and superficial appearance of the old bridge. It was, therefore, decided to build a hingeless reinforced concrete barrel arch alongside the old structure and to face the new work with bluestone masonry taken from the south face of the existing bridge. The arch ring existing is elliptical in shape, with the high ratio of rise to span of 0.4, and in calculating the new reinforced concrete ring the estimation of the direction of the reactions from the filling material presented a difficult problem. It is quite certain that the weight of the filling material acts vertically downward on the arch, but the horizontal component is difficult to ascertain. This depends largely on the nature

of the filling material, amount of consolidation, and its coefficient of internal friction. Assuming that the filling is well drained and waterproofed, and that clay was not used, the limiting conditions would be between loose dry sand and a set material such as is possible with brickbats and old mortar which have been consolidated and watered. In view of the high cost of sand filling it was found more economical to design the arch ring to take either of these extreme cases than to use sand.

An economical arrangement of spandrel walls on the arch was used. The spandrel wall is commonly erected as a gravity type wall along the outer edge of the arch. This produces concentrated stresses from the retained earth along the edge of the arch ring as to require the arch ring to be thickened. In this structure, the spandrel wall was made in the form of a hollow box. The inner wall retains the filling and the whole is prevented from overturning by the outer and cross walls acting as in the normal counterfort type of wall. The increase of vertical loading on the outer portion of the arch ring due to horizontal earth pressure on the inner wall is compensated for by the reduction of load from the filling due to the hollow section. The arrangement is shown in Fig. F.

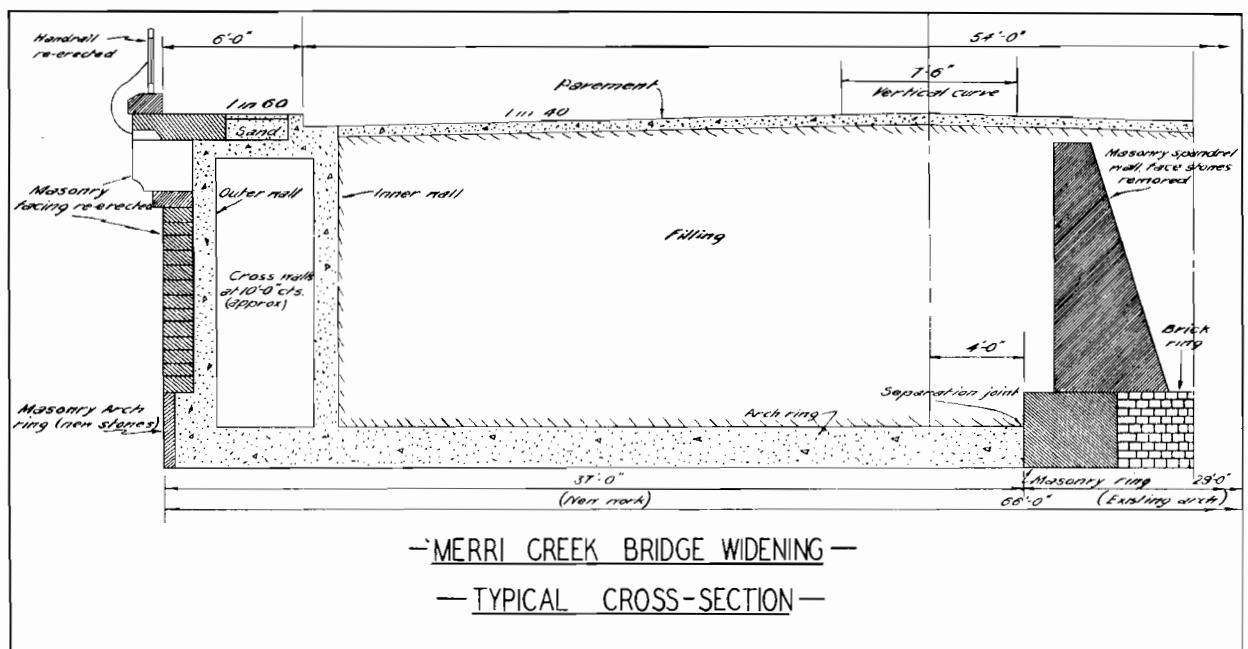


Fig. F.

The wing walls on the original structure extended back from the arch ring for a distance of 35 feet and consisted of a gravity masonry wall 50 feet high having a volume of masonry of at least 1,200 cubic yards. The wing wall for the extended structure conforms to the external appearance of the old wall, but consists only of a vertical triangular plate with the sloping bottom side just in to the earth filling. It is supported by a vertical column at the springing point of the arch and at the rear end. Between these columns and the old structure are the beams strutted vertically at intervals of $7\frac{1}{2}$ feet. The quantity of materials including reinforced concrete and stone facing in the wing wall is 160 cubic yards, or only 13.5 per cent. of the masonry in the old wing wall.

YARRA RIVER BRIDGES, WARBURTON.

During the year the Board has given assistance to the Shire of Upper Yarra in the reconstruction of the bridges over the Yarra River near Warburton. The bridges reconstructed are as follows:—

- | | |
|------------------------|---|
| Station-road bridge .. | Replaced by timber stringer bridge. |
| Dee bridge .. | .. Replaced by concrete piers and steel joists. |

- | | |
|----------------------|--|
| Parbury's bridge .. | Replaced by timber stringer bridge. |
| Brisbane's bridge .. | Replaced by steel truss on concrete piers. |
| Hazelwood-road .. | Replaced on a new site by steel joists and timber piers. |
| Cement Creek-road .. | Replaced by timber stringers and piers. |

To provide structures capable of resisting floods similar in intensity to that causing the damage would have been prohibitive in cost. The frequency of such floods is very rare, and several of the damaged bridges have been reconstructed as cheaply as possible to provide access for the very limited traffic. In the township of Warburton a substantial bridge was constructed to give access for the northern portion of the township to the railway station and the main road which passes through the southern portion of the township. This structure, which is known locally as Brisbane's bridge, consists of two steel joist approach spans and a central span of 120 feet over the river channel. Piers of reinforced concrete were constructed on bedrock and tied to the rock with steel bars grouted into the rock. To minimize the force of the blows from floating logs, sawn timber is placed upstream from the piers and constructed with a gap between it and the

concrete. The length of travel from the moment of impact to the time when the floating log is completely stopped is thereby considerably increased and the force of the blow considerably reduced. The bridge has a width of 18 feet between kerbs and is designed for the passage of two 10-ton vehicles passing on it. The Warren type used is

well suited to welded connexions, and the total weight in the truss, floor beams, and stringers was only 32½ tons. The detail of the floor beam connexion to the truss is shown in Fig. G. This allows the floor beam to be held securely in position without the necessity for heavy gusset plates.

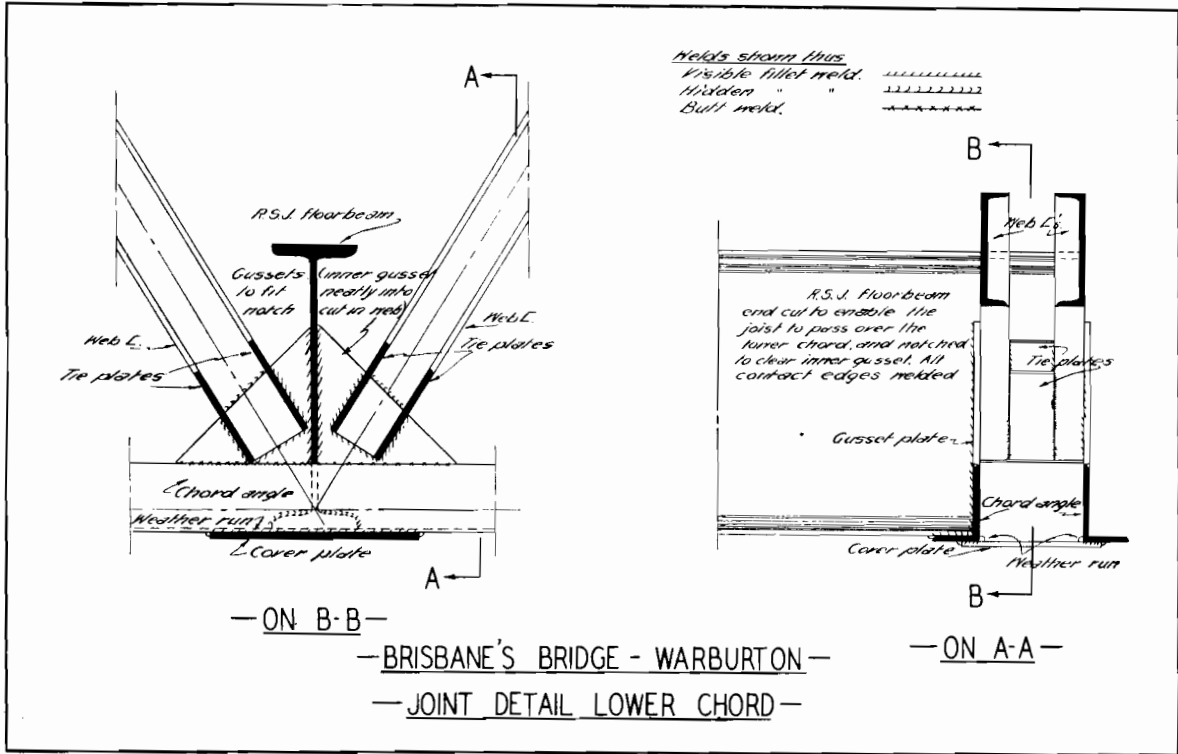


Fig. G.

FLAT SLAB BRIDGES.

Where shallow stream channels in flat country require bridging, the shallowest possible superstructure is required to enable road level to be kept reasonably low after making allowances for the underside of the superstructure to be kept clear of flood level. Frequently the road level in flat country is very little above flood level, and if standard timber stringer bridges, steel joist bridges, or concrete T-beam bridges were used, the level of the pavement over the bridge would be many feet above the level of the adjoining roads. Fig. H shows a type of structure which has been largely used in the flat country of the Murray and Goulburn Valley where there are many streams having slow velocity and where there is no risk of damage by large floating logs or by bed scour. The details are capable of some variation, but 15 feet is the maximum span which can be carried on three piles per pier, and it would be uneconomic to reduce this span. For spans from 15 feet to 20 feet four piles per pier are required and the deck thickness is greater.

To reduce the cost of abutments and wing walls, the details shown in the drawing are used. This arrangement

provides for protecting the embankment from scour by a layer of lightly-reinforced concrete. To avoid frequent maintenance to the pavement at the end of the bridge a timber slab is carried from the end of the bridge on to a bearer in the bank. One end of this span settles with the filling and eases out the unavoidable inequalities.

While this type of structure was evolved primarily to give a shallow deck, it has been found largely owing to the low cost of formwork to be very cheap to construct. A contract for a structure of this type has been recently let on the Murchison-Shepparton road. The length of the bridge is 120 feet, and the cost, excluding approaches, is £1,250. The cost of a bridge over Nine Mile Creek on the Murray Valley Highway, near Kerang, was £629 for a bridge 70 feet long and 22 feet between kerbs. The cost is, therefore, in the order of £10 per lineal foot for a bridge 22 feet wide, or a little under 10s. per square foot of deck surface. This is comparable in first costs with timber bridge construction, and when a capitalized cost comparison is made this type of structure is considerably more economical.

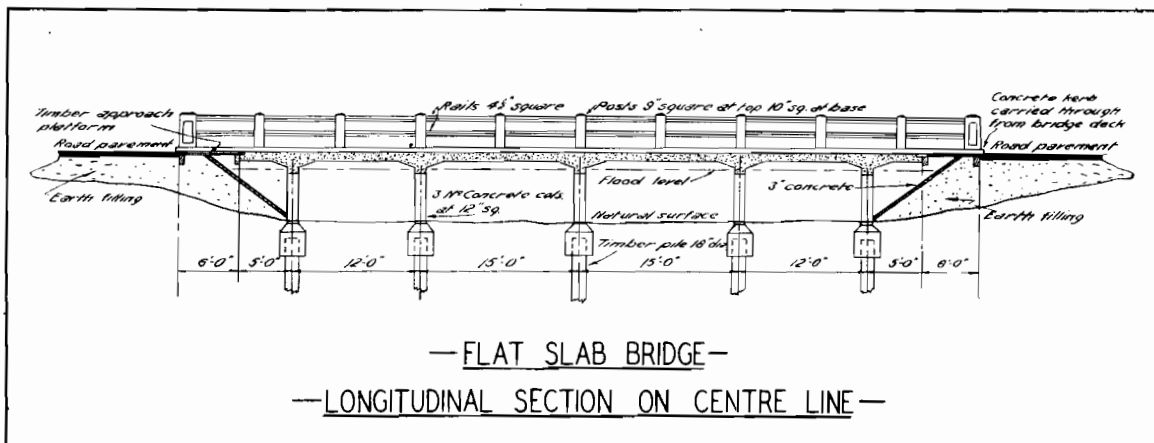


Fig. H.

GOULBURN RIVER, MURCHISON.

The old timber bridge at this crossing has been in use for 70 years with a relatively small amount spent on it for maintenance. It was constructed of selected redgum, which is now unobtainable in similar quality. Struts and straining pieces were used in conjunction with the stringers for the river spans. With the gradual weakening of the structure from age a load limit of 5 tons was imposed. Because this unduly restricted traffic using the structure, and as the structure was beyond repair, a new bridge is being provided, and contracts have been let for its construction. Investigation showed that the bed of the river was full of big logs which would greatly impede the construction of river piers. In view of this and the fact that floating timber had always been troublesome in flood time, the new design provided for a single span of 175 feet over the river channel. Approach spans of 40 feet were provided. The piers and abutments are of reinforced concrete. The original design for the trusses for the central span was for welded connexions, but it was found difficult to obtain a satisfactory tender and ultimately alternative tenders were called for either welded or rivetted connexions. The lowest tender then received was for a rivetted truss. The truss has seven panels of 25 feet each. The top chord is curved. The new bridge provides a width of 20 feet for the road and of 4 feet for the footway. During the year the greater part of the substructure has been completed and the trusses fabricated for erection.

KANANOOK CREEK, FRANKSTON.

The narrow timber bridge which has been in use for the past 40 years was no longer adequate to carry the dense heavy traffic on the Point Nepean-road. The curves on the approaches were very sharp and were a source of great danger to traffic. The new structure has a width of 40 feet for the roadway and two footpaths each 6 feet wide. It has been placed on a new alignment which enabled traffic to use the old bridge during construction and the road location to be considerably improved.

Foundations at this site consist of silt overlying fine sand. To make provision for rowing boats on the creek the channel is crossed in one span of 48 feet. It was found more economical to construct piers at the ends of this span and to cantilever from it than to construct an abutment and wing walls. Two cantilevers of 18 feet each were provided to bridge from the end of the central span to the top of the filling, which was then allowed to spill down to the pier on the creek bank. Instead of pitching the slope of the filling under the bridge for protection a light curtain wall was dropped from the sides of the cantilevers, and the openings between the columns in the piers were closed off similarly.

The finished structure is shown in Plate No. 23.

BRIDGE CONSTRUCTION PLANT.

(a) *Power Winch*.—The earlier contractors mainly relied on steam "donkey" engines for pile driving. Where the number of piles in a bridge is small, as is often the case, the cost of transport of these donkey engines is a relatively large item. During recent years internal combustion engines have been used and have gradually superseded the steam engines. Studies of pile-driving efficiency show that the cost of actual driving seldom exceeds 20 per cent.

of the total cost of driving operations. The remainder is caused by erecting staging, shifting pile machine, and in placing the pile ready to drive. Where there are only a few piles required, considerable economy may be made, with a very small extra cost in actual driving, if relatively light motor winches are employed. A unit having a single cylinder engine of 5 horse-power, with reduction gearing to a friction drum, has been successfully used during the past year by the Board. Such a machine is satisfactory for piles up to 30 feet long, where the hammer weight is 25 to 30 cwt.

(b) *Pile Machines*.—Where transport from job to job is of great importance timber machines, which cannot be easily dismantled, are awkward to handle. A light type of steel-framed pile machine, which can be easily dismantled and in which the longest member is 18 feet, has been constructed and found to be satisfactory. The weight is approximately 15 cwt.

WIDENING BRIDGES.

Steady progress has been made in widening bridges to meet the needs of traffic. In some instances this has been done in conjunction with re-alignment and regrading of the road. A case in point is the widened bridge over the Moorabool River on the Western Highway. The bridge, which is at the foot of a steep hill, was originally built with a level deck. To allow the abrupt change of grade to be improved by a suitable vertical curve it was necessary to build up the kerb so as to retain filling required over the deck.

STEEL JOIST STRINGER BRIDGES.

The increasing difficulty of obtaining satisfactory round timber stringers in durable species has led to the increased use of steel joists for stringers. During the year the Board has used 300 tons of steel joists in building an equivalent length of 2,000 lineal feet of double-lane bridge. The use of joists has been found to give an economic arrangement for bridges carrying very light traffic where spans far in excess of the normal limits of the joists are desirable. Over the River Yarra, near Warburton, a bridge has been constructed, having a span of 66 feet with steel joists only 24 inches deep. The deck is of timber. The structure serves a very limited area and is suitable for gross loads of 5 tons. The compression flanges have been braced together.

Provided that joists are made continuous they are quite strong enough to carry standard highway loads on timber decks for spans up to 50 feet. While standard practice usually presupposes non-yielding foundations for continuous bridges, slight settlement of foundations is not of great consequence for girders 24 inches deep with spans of 50 feet.

Steel joist bridges can, therefore, be made continuous over driven timber pile bents, and by this means it is possible to lengthen spans sufficiently to allow flood debris to pass. The field welding plant recently purchased by the Board is of considerable use for such work.

Yours obediently,

L. F. LODER,

Chief Engineer.

APPENDIX A.

COUNTRY ROADS BOARD FUND.

| Dr. | | RECEIPTS. | | £ | | s. d. | | £ | | s. d. | | Cr. | |
|--------------------|-----------------------------------|-----------|-------|--------|-----------|-------|-------|----|-------|---------|-------|-----|-------|
| 1935. | 1936. | £ | s. d. | £ | s. d. | £ | s. d. | £ | s. d. | £ | s. d. | £ | s. d. |
| July 1. To Balance | 1936. June 30. | .. | .. | 11,046 | 6 | 3 | .. | .. | .. | 985,280 | 12 | 4 | 4 |
| June 30. " | Motor Car Act No. 3741— | .. | .. | .. | .. | .. | .. | .. | .. | 118,619 | 12 | 3 | 3 |
| | Registration Fees | 1,467,683 | 3 | 9 | .. | .. | .. | .. | .. | 102,930 | 0 | 4 | 4 |
| | Less Refunds | 9,855 | 0 | 3 | 1,457,828 | 3 | 6 | .. | .. | 138,105 | 7 | 3 | 3 |
| | Fines | 18,682 | 18 | 5 | .. | .. | .. | .. | .. | 26,519 | 14 | 6 | 6 |
| | Less Refunds | 22 | 10 | 6 | 18,660 | 7 | 11 | .. | .. | 39,564 | 10 | 7 | 7 |
| | Less Cost of Collection | .. | .. | .. | .. | .. | .. | .. | .. | 3,726 | 19 | 0 | 0 |
| | Motor Omnibus Act— Fees and Fines | .. | .. | .. | .. | .. | .. | .. | .. | 176,558 | 13 | 6 | 6 |
| | Country Roads Board Act No. 3662— | .. | .. | .. | .. | .. | .. | .. | .. | 5,496 | 6 | 4 | 4 |
| | Registration of Traction Engines | 508 | 15 | 0 | .. | .. | .. | .. | .. | 50,921 | 1 | 0 | 0 |
| | Fees and Fines | 687 | 3 | 0 | 1,409,394 | 17 | 8 | .. | .. | 24,029 | 10 | 11 | 11 |
| | Act Nos. 3662, 3741, and 3742— | .. | .. | .. | .. | .. | .. | .. | .. | 35,213 | 5 | 6 | 6 |
| | Costs | 1,195 | 18 | 0 | 18 | 5 | 0 | .. | .. | 1,613 | 0 | 11 | 11 |
| | Municipalities' Repayments— | .. | .. | .. | .. | .. | .. | .. | .. | 2,534 | 15 | 8 | 8 |
| | Permanent Works | 38,065 | 2 | 1 | .. | .. | .. | .. | .. | 460 | 17 | 5 | 5 |
| | Relief—Act No. 4140 | 105,367 | 8 | 5 | .. | .. | .. | .. | .. | 73 | 3 | 7 | 7 |
| | Maintenance | 143,432 | 10 | 6 | .. | .. | .. | .. | .. | 102,578 | 12 | 11 | 11 |
| | Hire of Plant | 41,359 | 4 | 7 | 290,505 | 5 | 1 | .. | .. | .. | .. | .. | .. |
| | Stores and Materials | 184,186 | 5 | 11 | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| | Sundries | 78,962 | 9 | 10 | 304,508 | 0 | 4 | .. | .. | .. | .. | .. | .. |
| | Unemployment Relief Fund | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| | | .. | .. | .. | 2,005,788 | 1 | 8 | .. | .. | .. | .. | .. | .. |
| | | .. | .. | .. | 132 | 9 | 7 | .. | .. | .. | .. | .. | .. |
| | | .. | .. | .. | 2,016,966 | 17 | 6 | .. | .. | .. | .. | .. | .. |

RECONCILIATION STATEMENT.

| RECONCILIATION STATEMENT. | | £ | | s. d. | | |
|---|----|----|-------|-----------|-------|---|
| | | £ | s. d. | £ | s. d. | |
| Balance as per Treasury Books | .. | .. | .. | 22,651 | 4 | 0 |
| Add Outstanding Transfers | .. | .. | .. | 2,784 | 15 | 6 |
| Deduct Accounts in Transit | .. | .. | .. | 25,435 | 19 | 6 |
| Balance as per Country Roads Board Accounts | .. | .. | .. | 3,676 | 4 | 5 |
| | .. | .. | .. | 21,759 | 15 | 1 |
| | .. | .. | .. | 2,016,966 | 17 | 6 |

APPENDIX A—continued.

| REVENUE ACCOUNT, 30TH JUNE, 1936. | | 1935. | | 1936. | | |
|--|-----------|-------|----|-------|----|----|
| | £ | s. | d. | £ | s. | d. |
| To Maintenance Works—General | 517,274 | 3 | 11 | .. | .. | .. |
| Wood's Point Road | 1,074 | 3 | 8 | .. | .. | .. |
| State Highways | 466,932 | 4 | 9 | .. | .. | .. |
| | 468,006 | 8 | 5 | .. | .. | .. |
| Contribution to Sinking Fund | 29,654 | 18 | 0 | .. | .. | .. |
| Interest on Loans | 88,964 | 14 | 3 | .. | .. | .. |
| Recoup to Revenue Act No. 3944— | | | | .. | .. | .. |
| Interest— | | | | .. | .. | .. |
| Main Roads | 102,330 | 0 | 4 | .. | .. | .. |
| Developmental Roads | 138,105 | 7 | 3 | .. | .. | .. |
| Sinking Fund Contributions | 241,035 | 7 | 7 | .. | .. | .. |
| Exchange | 26,519 | 14 | 6 | .. | .. | .. |
| Loan Conversion Expenses | 39,564 | 10 | 7 | .. | .. | .. |
| | 3,726 | 19 | 0 | .. | .. | .. |
| Relief to Municipalities | .. | .. | .. | .. | .. | .. |
| Audit Fee | 394 | 10 | 4 | .. | .. | .. |
| Experimental Works | 47 | 18 | 3 | .. | .. | .. |
| Fidelity Guarantee | 220 | 1 | 4 | .. | .. | .. |
| Gravel Sites and Metal Investigation | 289 | 11 | 2 | .. | .. | .. |
| Instruments | 227 | 11 | 9 | .. | .. | .. |
| Motor Expenses | 5,500 | 11 | 8 | .. | .. | .. |
| Offices—Exhibition Building | 6,326 | 19 | 5 | .. | .. | .. |
| New Storeyard | 917 | 1 | 0 | .. | .. | .. |
| Office Expenses | 4,356 | 0 | 11 | .. | .. | .. |
| Office Furniture | 3,410 | 10 | 0 | .. | .. | .. |
| Patrolmen's Cottages and Engineer's Residences | 2,867 | 3 | 0 | .. | .. | .. |
| Plans—Purchase | 956 | 5 | 4 | .. | .. | .. |
| Plant Purchase | 26,984 | 17 | 3 | .. | .. | .. |
| Postages and Telegrams | 1,832 | 16 | 11 | .. | .. | .. |
| Printing and Stationery | 1,559 | 0 | 3 | .. | .. | .. |
| Salaries | 47,060 | 11 | 5 | .. | .. | .. |
| Storage Sites | 578 | 8 | 6 | .. | .. | .. |
| Telephones | 938 | 6 | 5 | .. | .. | .. |
| Timber, &c., Revenue Account | 0 | 15 | 0 | .. | .. | .. |
| Testing Materials | 1,227 | 6 | 0 | .. | .. | .. |
| Travelling Expenses | 1,810 | 1 | 2 | .. | .. | .. |
| Tree Protection | 799 | 3 | 10 | .. | .. | .. |
| Traffic Administration | 1,613 | 0 | 11 | .. | .. | .. |
| Motor Car Acts No. 3741, sections 11-13; No. 3901 sections 24-26 | 2,534 | 15 | 8 | .. | .. | .. |
| Act No. 3662 (width of tyres, &c.) | 460 | 17 | 5 | .. | .. | .. |
| Act No. 4332 (impounding of cattle) | .. | .. | .. | .. | .. | .. |
| Investigation Surveys | .. | .. | .. | .. | .. | .. |
| Advertising (Government Printer) | 306 | 5 | 9 | .. | .. | .. |
| Legal Work—Crown Solicitor (Annual Fee) | 300 | 0 | 0 | .. | .. | .. |
| Direction Boards and Warning Signs | 4,807 | 17 | 5 | .. | .. | .. |
| Traffic Census | 220 | 3 | 5 | .. | .. | .. |
| Incidentals | 9 | 3 | 5 | .. | .. | .. |
| Equipment &c., provided for Unemployment Relief Works under Act No. 4097 | 118,850 | 4 | 10 | .. | .. | .. |
| Balance | 30,348 | 8 | 10 | .. | .. | .. |
| | 321,191 | 18 | 7 | .. | .. | .. |
| | 2,035,137 | 8 | 6 | .. | .. | .. |
| July 1. By Balance | .. | .. | .. | .. | .. | .. |
| June 30. | .. | .. | .. | .. | .. | .. |
| Motor Car Act No. 3741— | .. | .. | .. | .. | .. | .. |
| Registration Fees | 1,467,683 | 3 | 9 | .. | .. | .. |
| Less Refunds | 9,855 | 0 | 3 | .. | .. | .. |
| Fines | 18,682 | 18 | 5 | .. | .. | .. |
| Less Refunds | 22 | 10 | 6 | .. | .. | .. |
| | 1,457,828 | 3 | 6 | .. | .. | .. |
| | 18,660 | 7 | 11 | .. | .. | .. |
| Less Cost of Collection | 1,476,488 | 11 | 5 | .. | .. | .. |
| | 67,093 | 13 | 9 | .. | .. | .. |
| Motor Omnibus Act, No. 3742— | 1,409,394 | 17 | 8 | .. | .. | .. |
| Fees and Fines | .. | .. | .. | .. | .. | .. |
| Country Roads Board Act, No. 3662— | .. | .. | .. | .. | .. | .. |
| Registration of Traction Engines | .. | .. | .. | .. | .. | .. |
| Fees and Fines | .. | .. | .. | .. | .. | .. |
| Certs—Acts No. 3662, No. 3741, and No. 3742 | .. | .. | .. | .. | .. | .. |
| Forfeited Deposits | .. | .. | .. | .. | .. | .. |
| Plans, Sale of | .. | .. | .. | .. | .. | .. |
| Plant Earnings | .. | .. | .. | .. | .. | .. |
| Deduct Working Costs | .. | .. | .. | .. | .. | .. |
| Rents | .. | .. | .. | .. | .. | .. |
| Royalty on Gravel and Metal | .. | .. | .. | .. | .. | .. |
| Sale of Old Roads | .. | .. | .. | .. | .. | .. |
| Storeyard | .. | .. | .. | .. | .. | .. |
| Timber, &c., Revenue Account | .. | .. | .. | .. | .. | .. |
| Maintenance Works— | .. | .. | .. | .. | .. | .. |
| Municipalities Payable by Municipalities | .. | .. | .. | .. | .. | .. |
| Adjustment | .. | .. | .. | .. | .. | .. |
| Permanent Works— | .. | .. | .. | .. | .. | .. |
| Contributions Payable by Municipalities | .. | .. | .. | .. | .. | .. |

APPENDIX A—continued.

BALANCE-SHEET AT 30TH JUNE, 1936.

| LIABILITIES. | | ASSETS. | |
|-------------------------------|---------------------|--|---------------------|
| | £ s. d. | | £ s. d. |
| Contractors' Deposits | 9,478 7 4 | Country Roads Board Fund | 21,759 15 1 |
| Sundry Liabilities | 6,648 8 10 | Maintenance Expenditure— | |
| Revenue Account | 321,191 18 7 | Contributions Payable by Municipalities | 133,152 15 3 |
| | | Contributions Payable by Municipalities (in arrears) | 2,811 3 9 |
| | | Permanent Works— | |
| | | Contributions Payable by Municipalities | 144,067 4 7 |
| | | Contributions Payable by Municipalities (in arrears) | 906 0 9 |
| | | Outstanding Accounts | |
| | | Materials—Stock— | |
| | | Storeyard | 11,959 16 9 |
| | | Branches | 4,399 12 8 |
| | | Trust Account | 16,359 9 5 |
| | | | 9,478 7 4 |
| | <u>337,318 14 9</u> | | <u>337,318 14 9</u> |

COUNTRY ROADS BOARD LOAN ACCOUNT, ACT No. 3662.

| RECEIPTS. | | PAYMENTS | |
|--|-------------------|--|-------------------|
| | £ s. d. | | £ s. d. |
| 1935. | | 1936. | |
| July 1 | 30,252 12 5 | June 30. By Permanent Works (Appendix) | 67,132 7 5 |
| 1936 | | Balance | 88 1 8 |
| June 30. State Loans Repayment Fund.. .. . | 35,595 4 2 | | |
| " Transfer | 1,372 12 6 | | |
| | <u>67,220 9 1</u> | | <u>67,220 9 1</u> |

RECONCILIATION.

| | |
|----------------------------------|---------------|
| Outstanding Credits | £ s. d. |
| | 96 6 8 |
| Less Accounts in Transit | 8 5 0 |
| | <u>88 1 8</u> |

APPENDIX A—continued.

BALANCE-SHEET AT 30TH JUNE, 1936.

| LIABILITIES. | | £ | s. | d. | £ | s. | d. | ASSETS. | £ | s. | d. |
|---|----|-----------|----|----|-----------|----|----|--|-----------|----|----|
| Interest on Permanent Works | .. | .. | .. | .. | .. | .. | .. | Permanent Works | .. | .. | .. |
| Loan Securities Issued | .. | .. | .. | .. | .. | .. | .. | Interest capitalized on Permanent Works (Act 3662) | .. | .. | .. |
| Less Amount Repaid | .. | .. | .. | .. | .. | .. | .. | Investment Account for Redemption of Loans | .. | .. | .. |
| | | 4,860,024 | 13 | 5 | | | | Country Roads Board Loan Account | .. | .. | .. |
| | | 80,000 | 0 | 0 | | | | National Debt Sinking Fund (cash in hand) | .. | .. | .. |
| Debit Discount | .. | .. | .. | .. | 4,780,024 | 13 | 5 | | .. | .. | .. |
| | | .. | .. | .. | 71,156 | 17 | 7 | | .. | .. | .. |
| Less Securities Purchased and Cancelled from National Debt Sinking Fund | .. | .. | .. | .. | 4,708,867 | 15 | 10 | | .. | .. | .. |
| | | .. | .. | .. | 171,359 | 7 | 1 | | .. | .. | .. |
| State Loans Repayment Fund | .. | .. | .. | .. | 4,537,508 | 8 | 9 | | .. | .. | .. |
| Contributions to National Debt Sinking Fund | .. | .. | .. | .. | 150,371 | 11 | 1 | | .. | .. | .. |
| Less Net Loss on Repurchase of Securities (including exchange) | .. | .. | .. | .. | 187,948 | 7 | 4 | | .. | .. | .. |
| | | .. | .. | .. | 8,397 | 4 | 3 | | .. | .. | .. |
| Redemption Funds | .. | .. | .. | .. | 179,551 | 3 | 1 | | .. | .. | .. |
| Main Roads Sinking Funds | .. | .. | .. | .. | 85,219 | 1 | 1 | | .. | .. | .. |
| Repaid to State Loans Repayment Fund | .. | .. | .. | .. | 285,688 | 7 | 7 | | .. | .. | .. |
| | | .. | .. | .. | 266,587 | 14 | 5 | | .. | .. | .. |
| | | .. | .. | .. | 637,495 | 3 | 1 | | .. | .. | .. |
| | | 5,537,674 | 3 | 7 | | | | | 5,537,674 | 3 | 7 |

DEVELOPMENTAL ROADS LOAN ACCOUNT, ACT No. 3662.

| RECEIPTS. | | £ | s. | d. | PAYMENTS. | | £ | s. | d. |
|----------------|------------------------------|-----------|----|----|------------------------------------|-----------|----|----|----|
| 1935. July | To Balance | .. | .. | .. | June 30. By Expenditure (Appendix) | .. | .. | .. | .. |
| 1936. June 30. | „ State Loans Repayment Fund | .. | .. | .. | Balance .. | .. | .. | .. | .. |
| | | 11,865 | 0 | 3 | | 46,453 | 17 | 9 | |
| | | 34,647 | 8 | 0 | | 58 | 10 | 6 | |
| | | 46,512 | 8 | 3 | | 46,512 | 8 | 3 | |
| | | 5,537,674 | 3 | 7 | | 5,537,674 | 3 | 7 | |

| RECONCILIATION. | | £ | s. | d. |
|--------------------------|----|----|----|----|
| Outstanding Credits | .. | .. | .. | .. |
| Less Accounts in Transit | .. | .. | .. | .. |
| | | 59 | 1 | 3 |
| | | 10 | 9 | |
| | | 58 | 10 | 6 |

APPENDIX A—continued.

BALANCE-SHEET AT 30TH JUNE, 1936.

| | | £ | s. | d. | £ | s. | d. | |
|---|---------|-----------|----|----|---------|-----------|----|----|
| LIABILITIES. | | | | | | | | |
| Loan Securities Issued | | 6,297,973 | 6 | 10 | .. .. . | 6,418,316 | 8 | 11 |
| Deduct Discount | | 112,112 | 2 | 0 | .. .. . | 30,250 | 0 | 0 |
| Less Securities Purchased and Cancelled from National Debt Sinking Fund | | 6,185,861 | 4 | 10 | .. .. . | 688 | 13 | 1 |
| Treasury—Developmental Railways, Act No. 3662 (sec. 83/16) | | 254,110 | 10 | 7 | .. .. . | 93,744 | 1 | 5 |
| Consolidated Revenue Act, No. 3662 (sec. 84/17) | | 6,875 | 0 | 0 | .. .. . | 2,450 | 6 | 10 |
| Interest, Act No. 3662 (sec. 86/1) | | 24,063 | 13 | 1 | .. .. . | .. | .. | .. |
| Arrears of Interest, Act No. 3662 (sec. 86/1) | | 77,087 | 7 | 10 | .. .. . | .. | .. | .. |
| Contributions Postponed | | 2,450 | 6 | 10 | .. .. . | .. | .. | .. |
| State Loans Repayment Fund | | 16,656 | 13 | 7 | .. .. . | .. | .. | .. |
| Contributions to National Debt Sinking Fund | | .. | .. | .. | | .. | .. | .. |
| Less Net Loss on Repurchase of Securities (including Exchange) | | 278,710 | 10 | 10 | .. .. . | .. | .. | .. |
| Redemption Funds | | 12,452 | 6 | 1 | .. .. . | .. | .. | .. |
| Developmental Roads Sinking Fund | | 646,386 | 7 | 4 | .. .. . | .. | .. | .. |
| | | 55,083 | 0 | 2 | .. .. . | .. | .. | .. |
| | | 701,469 | 7 | 6 | .. .. . | .. | .. | .. |
| | | 7,259,125 | 2 | 5 | .. .. . | .. | .. | .. |
|  |  |  |  |  | .. .. . | 7,259,125 | 2 | 5 |

DEVELOPMENTAL, ROADS INTEREST, ACT NO. 3662 (SECTIONS 83/16, 84/17, AND 86/1).

| | | £ | s. | d. | £ | s. | d. | |
|---|---------|---------|----|----|---------|---------|----|----|
| RECEIPTS. | | | | | | | | |
| June 30. To Interest Contributed by Municipalities— Act No. 3662, sec. 83/16 | | 2,404 | 1 | 3 | .. .. . | 121,187 | 19 | 9 |
| 84/17 | | 10,816 | 15 | 8 | .. .. . | .. | .. | .. |
| 86/1 | | 63,334 | 11 | 3 | .. .. . | .. | .. | .. |
| Act No. 4140—Relief | | 76,555 | 8 | 2 | .. .. . | .. | .. | .. |
| | | 44,632 | 11 | 7 | .. .. . | .. | .. | .. |
| | | 121,187 | 19 | 9 | .. .. . | .. | .. | .. |
| | | 121,187 | 19 | 9 | .. .. . | .. | .. | .. |
|  |  |  |  |  | .. .. . | 121,187 | 19 | 9 |

AUDITOR-GENERAL'S CERTIFICATE.

The Accounts have been audited and compared with the books, with which they agree. Reconciliations have also been made with the books of the Treasury. I certify that the statements submitted are correct.

J. A. NORRIS, Auditor-General,
5th November, 1936.

COUNTRY ROADS BOARD.

SUMMARY OF BOARD'S ASSETS AS AT 30TH JUNE, 1936.

| | | £ | s. | d. | £ | s. | d. | |
|--|---------|--------|----|----|---------|--------|----|----|
| Patrolmen's Cottages | | 15,015 | 0 | 0 | .. .. . | 38,574 | 17 | 2 |
| Workshop Fittings, Tools, &c. | | 1,564 | 12 | 5 | .. .. . | 124 | 15 | 0 |
| Motor Car Tools | | 336 | 0 | 3 | .. .. . | 800 | 0 | 0 |
| Office Furniture and Fittings | | 6,639 | 7 | 0 | .. .. . | 4,561 | 0 | 0 |
| Testing Laboratory Equipment | | 492 | 16 | 6 | .. .. . | .. | .. | .. |
| Furniture, &c., Motor Registration Branch | | 5,551 | 19 | 0 | .. .. . | .. | .. | .. |
| Works Film | | 40 | 0 | 0 | .. .. . | .. | .. | .. |
| Survey Instruments | | 493 | 4 | 6 | .. .. . | .. | .. | .. |
| Pistols | | 21 | 17 | 6 | .. .. . | .. | .. | .. |
| Motor Cars and Cycles (including Police Motor Cars and Cycles) | | 8,420 | 0 | 0 | .. .. . | .. | .. | .. |
| Carried forward | | 38,574 | 17 | 2 | .. .. . | .. | .. | .. |

E. J. HICKS, Accountant,
4th November, 1936.

APPENDIX B.

COUNTRY ROADS BOARD.

STATEMENT OF APPORTIONMENT OF EXPENDITURE IN CONNEXION WITH CONSTRUCTION OF MAIN ROADS FOR THE YEAR ENDED 30TH JUNE, 1935.

| Name of Municipality. | Permanent Works. | | Maintenance. | Name of Municipality. | Permanent Works. | | Maintenance. |
|------------------------------------|------------------|-----------|--------------|-------------------------------------|------------------|-----------|--------------|
| | Principal. | Interest. | Amount. | | Principal. | Interest. | Amount. |
| | | | | | | | |
| Alberton Shire .. | .. | .. | 2,176 3 7 | Brought forward | 12,114 6 0 | 242 14 3 | 49,666 0 1 |
| Alexandra Shire .. | .. | .. | 1,480 13 3 | Euroa Shire .. | 215 2 2 | 0 11 11 | 922 0 8 |
| Arapiles Shire .. | 734 10 6 | 18 11 1 | 628 6 9 | Ferntree Gully Shire .. | .. | .. | 1,535 3 8 |
| Ararat Town .. | .. | .. | 292 19 9 | Flinders Shire .. | 482 0 11 | 7 5 0 | 2,039 12 2 |
| Ararat Shire .. | .. | .. | 2,772 17 9 | Footscray City .. | .. | .. | 756 0 9 |
| Avoca Shire .. | 137 4 6 | 0 10 2 | 466 11 10 | Frankston and Hastings Shire .. | .. | .. | 2,420 17 8 |
| Avon Shire .. | .. | .. | 243 9 2 | Geelong City .. | .. | .. | 6 18 6 |
| Bacchus Marsh Shire .. | .. | .. | 1,551 15 2 | Gisborne Shire .. | .. | .. | 245 0 8 |
| Bairnsdale Shire .. | .. | .. | 1,843 18 11 | Glenelg Shire .. | .. | .. | 2,150 2 6 |
| Ballan Shire .. | .. | .. | 873 9 9 | Glenlyon Shire .. | 284 5 7 | 9 5 6 | 653 6 5 |
| Ballarat Shire .. | 26 9 10 | 1 0 10 | 682 18 0 | Gordon Shire .. | .. | .. | .. |
| Bannockburn Shire .. | 318 6 0 | 1 2 7 | 527 10 10 | Goulburn Shire .. | .. | .. | 492 7 0 |
| Barrabool Shire .. | .. | .. | 868 17 0 | Grenville Shire .. | .. | .. | 1,057 7 3 |
| Bass Shire .. | 43 19 6 | 1 6 1 | 1,529 13 4 | Hamilton Town .. | .. | .. | 505 0 4 |
| Beechworth Shire .. | 249 4 3 | 1 1 11 | 613 14 1 | Hampden Shire .. | .. | .. | 3,625 19 7 |
| Belfast Shire .. | .. | .. | 687 16 7 | Healesville Shire .. | .. | .. | 507 0 11 |
| Bellarine Shire .. | .. | .. | 1,086 0 0 | Heidelberg Shire .. | .. | .. | 1,558 16 11 |
| Benalla Shire .. | 489 19 8 | 2 19 2 | 919 2 4 | Heytesbury Shire .. | 63 9 9 | 1 19 1 | 1,276 14 8 |
| Berwick Shire .. | 240 8 0 | 1 14 6 | 1,297 19 4 | Horsham Town .. | .. | .. | 354 14 10 |
| Bet Bet Shire .. | .. | .. | 438 18 4 | Huntly Shire .. | .. | .. | 57 9 5 |
| Birchip Shire .. | .. | .. | 174 16 6 | Inglewood Borough .. | .. | .. | 96 12 8 |
| Blackburn and Mitcham Shire .. | .. | .. | 988 1 4 | Kara Kara Shire .. | 324 18 6 | 10 19 0 | 1,326 1 0 |
| Borong Shire .. | 2,455 10 4 | 46 17 7 | 3,294 10 2 | Karkaroc Shire .. | 425 19 7 | 6 5 3 | 1,570 2 0 |
| Box Hill City .. | .. | .. | 902 17 2 | Keilor Shire .. | .. | .. | 245 2 7 |
| Braybrook Shire .. | .. | .. | 131 2 7 | Kerang Shire .. | .. | .. | 6 6 3 |
| Bright Shire .. | 119 7 0 | 0 8 5 | 783 16 2 | Kilmore Shire .. | .. | .. | 145 15 5 |
| Broadford Shire .. | .. | .. | 44 10 2 | Koroit Borough .. | .. | .. | 65 17 8 |
| Broadmeadows Shire .. | .. | .. | 612 16 3 | Korong Shire .. | .. | .. | 373 11 5 |
| Bulla Shire .. | .. | .. | 263 16 10 | Korumburra Shire .. | .. | .. | 2,484 7 4 |
| Buln Buln Shire .. | .. | .. | 1,207 5 4 | Kowree Shire .. | 213 5 0 | 6 10 10 | 983 11 4 |
| Bungaree Shire .. | 26 9 10 | 1 0 10 | 240 5 8 | Kyneton Shire .. | .. | .. | 875 8 1 |
| Buninyong Shire .. | .. | .. | 179 4 7 | Lawloit Shire .. | 659 19 1 | 11 5 7 | 869 11 2 |
| Camberwell City .. | .. | .. | 399 12 4 | Leigh Shire .. | 34 2 9 | .. | 992 12 7 |
| Castlemaine Borough .. | .. | .. | 53 2 2 | Lexton Shire .. | .. | .. | 458 6 6 |
| Charlton Shire .. | 379 3 2 | 2 19 7 | 770 0 3 | Lillydale Shire .. | .. | .. | 718 10 9 |
| Chelsea City .. | .. | .. | 170 19 11 | Lowan Shire .. | 582 17 7 | 5 1 4 | 1,036 15 4 |
| Chiltern Shire .. | .. | .. | 127 3 5 | Maffra Shire .. | 558 7 4 | 13 0 11 | 2,293 6 2 |
| Clunes Borough .. | .. | .. | 262 4 8 | Maldon Shire .. | .. | .. | 350 13 8 |
| Cohuna Shire .. | .. | .. | 198 2 9 | Mansfield Shire .. | .. | .. | 1,189 12 9 |
| Colac Shire .. | 2,114 13 3 | 82 3 3 | 3,979 16 7 | Marong Shire .. | .. | .. | 787 1 5 |
| Corio Shire .. | .. | .. | 192 3 9 | Maryborough Borough .. | .. | .. | 90 6 4 |
| Cranbourne Shire .. | .. | .. | 894 8 9 | Melton Shire .. | .. | .. | 109 6 8 |
| Creswick Shire .. | .. | .. | 922 16 5 | Metcalfe Shire .. | .. | .. | 296 12 0 |
| Collingwood City .. | .. | .. | 35 3 3 | Mildura City .. | .. | .. | 18 10 1 |
| Dandenong Shire .. | .. | .. | 658 5 2 | Mildura Shire .. | 147 14 8 | 3 17 9 | 633 14 11 |
| Daylesford Borough .. | .. | .. | 348 1 0 | Minhamite Shire .. | 931 3 3 | 8 15 11 | 1,065 9 7 |
| Deakin Shire .. | .. | .. | 467 15 0 | Mirboo Shire .. | .. | .. | 758 13 1 |
| Dimboola Shire .. | 1,009 17 10 | 14 18 4 | 2,396 14 7 | Moorabbin City .. | .. | .. | 62 0 3 |
| Donald Shire .. | 577 2 9 | .. | 1,680 9 0 | Mordialloc City .. | 11,000 0 0 | 164 14 1 | 718 15 9 |
| Doncaster and Templestowe Shire .. | .. | .. | 658 19 9 | Mornington Shire .. | .. | .. | 629 6 7 |
| Dundas Shire .. | 265 7 5 | 9 7 2 | 3,383 13 0 | Mortlake Shire .. | .. | .. | 1,862 13 2 |
| Dunmunkle Shire .. | 2,254 13 1 | 43 13 5 | 830 13 6 | Morwell Shire .. | 20 19 10 | .. | 1,170 19 1 |
| Eaglehawk Borough .. | .. | .. | 427 8 7 | Mount Rouse Shire .. | .. | .. | 2,344 6 9 |
| East Loddon Shire .. | 650 1 1 | 12 4 6 | 105 18 1 | Mulgrave .. | .. | .. | 168 17 3 |
| Echuca Borough .. | 21 18 0 | 0 14 10 | 154 2 6 | McIvor Shire .. | 51 5 1 | .. | 825 16 10 |
| Eltham Shire .. | .. | .. | 464 7 4 | Narracan Shire .. | .. | .. | 1,131 4 6 |
| Essendon City .. | .. | .. | 277 19 10 | Newham and Woodend Shire .. | 564 14 5 | 4 9 0 | 320 10 4 |
| Carried forward | 12,114 6 0 | 242 14 3 | 49,666 0 1 | Newstead and Mt. Alexander Shire .. | .. | .. | 444 14 8 |
| | | | | Carried forward | 28,674 11 6 | 496 15 5 | 99,351 17 11 |

STATEMENT OF APPORTIONMENT OF EXPENDITURE IN CONNEXION WITH CONSTRUCTION OF MAIN
ROADS, ETC.—*continued.*

| Name of Municipality. | Permanent Works. | | | Maintenance. | Name of Municipality. | Permanent Works. | | | Maintenance. |
|------------------------------|------------------|-------|-----------|--------------|--------------------------|------------------|-------|-----------|--------------|
| | Principal. | | Interest. | Amount. | | Principal. | | Interest. | Amount. |
| | £ | s. d. | £ s. d. | £ s. d. | | £ | s. d. | £ s. d. | £ s. d. |
| Brought forward | 28,674 | 11 6 | 496 15 5 | 99,351 17 11 | Brought forward | 32,019 | 17 7 | 588 7 3 | 118,660 10 6 |
| Numurkah Shire | 300 | 8 7 | 9 7 4 | 1,348 10 5 | Strathfieldsaye Shire .. | 103 | 4 7 | 0 18 8 | 681 14 8 |
| Oakleigh City .. | .. | .. | .. | 112 0 4 | Swan Hill Shire .. | .. | .. | .. | 1,472 0 11 |
| Omeo Shire .. | .. | .. | .. | 588 13 8 | Talbot Shire .. | 467 | 8 10 | 13 15 1 | 461 19 3 |
| Orbost Shire .. | 287 | 4 8 | 2 1 8 | 694 6 0 | Tambo Shire .. | .. | .. | .. | 369 9 7 |
| Otway Shire .. | .. | .. | .. | 162 11 2 | Towong Shire .. | .. | .. | .. | 548 16 2 |
| Oxley Shire .. | 387 | 13 9 | 5 19 0 | 905 9 11 | Traralgon Shire .. | .. | .. | .. | 1,268 3 9 |
| Phillip Island Shire | .. | .. | .. | 428 13 8 | Tullaroop Shire .. | .. | .. | .. | 619 19 4 |
| Port Fairy Borough | .. | .. | .. | 92 17 5 | Tungamah Shire | 445 | 17 10 | 15 14 9 | 366 3 0 |
| Portland Shire .. | .. | .. | .. | 1,348 9 6 | Upper Murray Shire | 602 | 4 4 | 14 2 5 | 932 6 10 |
| Preston City .. | .. | .. | .. | 709 1 9 | Upper Yarra Shire | .. | .. | .. | 455 7 2 |
| Pyalong Shire .. | .. | .. | .. | 216 17 9 | Violet Town Shire | 263 | 1 8 | 7 15 8 | 228 12 0 |
| Queenscliffe Bor- ough .. | .. | .. | .. | 149 15 6 | Walpeup Shire .. | .. | .. | .. | 132 16 0 |
| Ringwood Borough | .. | .. | .. | 612 8 5 | Wangaratta Borough .. | .. | .. | .. | 860 3 2 |
| Ripon Shire .. | .. | .. | .. | 1,312 14 6 | Wangaratta Shire | .. | .. | .. | 396 16 0 |
| Rochester Shire .. | .. | .. | .. | 1,080 7 6 | Wannon Shire .. | .. | .. | .. | 1,158 2 2 |
| Rodney Shire .. | .. | .. | .. | 1,216 3 1 | Waranga Shire .. | .. | .. | .. | 1,301 12 8 |
| Romsey Shire .. | 220 | 19 11 | 2 9 11 | 836 16 0 | Warragul Shire .. | .. | .. | .. | 1,001 19 9 |
| Rosedale Shire .. | .. | .. | .. | 1,157 18 8 | Warrnambool Shire | 126 | 8 4 | 0 11 3 | 1,856 18 9 |
| Rutherglen Shire | 645 | 5 4 | 23 10 9 | 416 5 5 | Werribee Shire .. | .. | .. | .. | 91 18 2 |
| Sale Town .. | 16 | 1 7 | 0 13 3 | 207 13 2 | Whittlesea Shire | .. | .. | .. | 722 19 9 |
| Sebastopol Borough | .. | .. | .. | 72 3 9 | Wimmera Shire .. | .. | .. | .. | 1,566 8 1 |
| Sandringham City | .. | .. | .. | 26 4 10 | Winchelsea Shire | 170 | 14 3 | 5 17 10 | 1,326 13 7 |
| Seymour Shire .. | .. | .. | .. | 633 12 8 | Wodonga Shire .. | .. | .. | .. | 86 3 9 |
| Shepparton Shire | .. | .. | .. | 449 19 5 | Wonthaggi Borough | .. | .. | .. | 183 16 9 |
| Shepparton Borough | .. | .. | .. | 121 5 4 | Woorayl Shire .. | 422 | 2 2 | 3 18 11 | 4,013 15 1 |
| South Barwon Shire | 13 | 9 6 | 0 1 5 | 905 0 2 | Wycheproof Shire | 1,955 | 1 6 | 61 11 6 | 754 15 3 |
| South Gippsland Shire .. | .. | .. | .. | 1,522 12 8 | Yackandandah Shire .. | 63 | 6 9 | 2 3 9 | 1,053 8 8 |
| St. Arnaud Borough | 325 | 3 7 | 5 19 2 | 151 7 9 | Yarrowonga Shire | .. | .. | .. | 483 1 8 |
| Stawell Shire .. | 1,098 | 11 0 | 39 7 9 | 1,688 3 9 | Yea Shire .. | .. | .. | .. | 1,109 19 10 |
| Stawell Borough | 50 | 8 2 | 2 1 7 | 140 8 5 | | | | | |
| Carried forward | 32,019 | 17 7 | 588 7 3 | 118,660 10 6 | Totals .. | 36,639 | 7 10 | 714 17 1 | 144,166 12 3 |

APPENDIX C.

COUNTRY ROADS BOARD.

STATEMENT OF EXPENDITURE IN CONNEXION WITH CONSTRUCTION AND MAINTENANCE OF
MAIN ROADS FOR YEAR ENDING 30th JUNE, 1936

| Municipality and Road. | Permanent Works. | | Maintenance Works. | |
|--|------------------|------------|--------------------|-------------|
| | Amount. | Total. | Amount. | Total. |
| | £ s. d. | £ s. d. | £ s. d. | £ s. d. |
| ALBERTON SHIRE— | | | | |
| Albert River-Welshpool Road .. .. . | .. .. . | .. .. . | 585 2 5 | |
| Balook-Yarram Road .. .. . | .. .. . | .. .. . | 701 12 1 | |
| Boolarra-Welshpool Road .. .. . | .. .. . | .. .. . | Bd. 306 2 3 | |
| Carrajung-Gormandale Road | 177 6 1 | .. .. . | 1,949 18 8 | |
| Foster-Yarram Road .. .. . | .. .. . | .. .. . | 245 12 2 | |
| Yarram-Boolarra Road .. .. . | .. .. . | .. .. . | 1,014 11 6 | |
| Yarram-Port Albert Road .. .. . | .. .. . | .. .. . | 709 1 11 | |
| Yarram-Won Wron Road .. .. . | .. .. . | .. .. . | 1,246 7 5 | |
| | | 177 6 1 | | 6,758 8 5 |
| ALEXANDRA SHIRE— | | | | |
| Cathkin-Mansfield Road .. .. . | .. .. . | .. .. . | 539 2 5 | |
| Healesville-Alexandra Road .. .. . | .. .. . | .. .. . | 885 8 3 | |
| Healesville-Alexandra Road .. .. . | .. .. . | .. .. . | Bd. 1,804 17 10 | |
| Terip Terip Road .. .. . | .. .. . | .. .. . | 307 3 11 | |
| Upper Goulburn Road .. .. . | .. .. . | .. .. . | 2,233 15 0 | |
| Yarek Road .. .. . | .. .. . | .. .. . | 234 2 10 | |
| | | | | 6,004 10 3 |
| ARAPILES SHIRE— | | | | |
| Horsham-Hamilton Shire .. .. . | .. .. . | .. .. . | 1,824 14 6 | |
| Horsham-Natimuk-Edenhope Road | 978 0 5 | .. .. . | 394 7 4 | |
| | | 978 0 5 | | 2,219 1 10 |
| ARARAT SHIRE— | | | | |
| Ararat-Elmhurst Road .. .. . | .. .. . | .. .. . | 675 13 0 | |
| Ararat-Warrnambool Road .. .. . | .. .. . | .. .. . | 3,313 0 5 | |
| Ballarat-Hamilton Road .. .. . | .. .. . | .. .. . | 2,366 18 10 | |
| Maroona-Glenthompson Road .. .. . | .. .. . | .. .. . | 3,718 16 4 | |
| | | | | 10,074 8 7 |
| ARARAT TOWN— | | | | |
| Ballarat-Stawell Road .. .. . | .. .. . | .. .. . | 199 8 4 | |
| | | | | 199 8 4 |
| AVOCA SHIRE— | | | | |
| Ararat Road | 248 7 2 | .. .. . | 275 17 10 | |
| Ballarat-St. Arnaud Road .. .. . | .. .. . | .. .. . | 1,551 5 9 | |
| Bealiba Road .. .. . | .. .. . | .. .. . | 189 9 1 | |
| Landsborough Road .. .. . | .. .. . | .. .. . | 56 6 5 | |
| Maryborough Road .. .. . | .. .. . | .. .. . | 284 9 4 | |
| | | 248 7 2 | | 2,357 8 5 |
| AVOCA AND KARA KARA SHIRES (Joint Works)— | | | | |
| Navarre Road .. .. . | .. .. . | .. .. . | 46 4 7 | |
| | | | | 46 4 7 |
| AVON SHIRE— | | | | |
| Dargo Road—Sec. A., £341 13s. 2d.; sec. B., £487 15s. 11d. | .. .. . | .. .. . | 829 9 1 | |
| Maffra-Sale Road .. .. . | .. .. . | .. .. . | 16 9 7 | |
| Maffra-Stratford Road .. .. . | .. .. . | .. .. . | 28 15 3 | |
| Prince's Highway .. .. . | .. .. . | .. .. . | 312 2 5 | |
| | | | | 1,186 16 4 |
| BACCHUS MARSH SHIRE— | | | | |
| Ballarat Road .. .. . | .. .. . | .. .. . | 1 2 8 | |
| Bacchus Marsh-Balliang Road .. .. . | .. .. . | .. .. . | 2,089 10 10 | |
| Geelong-Bacchus Marsh Road .. .. . | .. .. . | .. .. . | 1,029 18 6 | |
| Gisborne Road .. .. . | .. .. . | .. .. . | 1,193 7 3 | |
| | | | | 4,313 19 3 |
| BACCHUS MARSH AND CORIO SHIRES (Joint Works)— | | | | |
| Balliang Road .. .. . | .. .. . | .. .. . | 67 12 8 | |
| | | | | 67 12 8 |
| BAIRNSDALE SHIRE— | | | | |
| Bairnsdale-Lindenow Road .. .. . | .. .. . | .. .. . | 2,631 15 3 | |
| Bairnsdale-Paynesville Road .. .. . | .. .. . | .. .. . | 1,823 1 11 | |
| Bullumwaal-Tabberabbera Road .. .. . | .. .. . | .. .. . | 968 16 6 | |
| Prince's Highway .. .. . | .. .. . | .. .. . | 256 19 0 | |
| | | | | 5,680 12 8 |
| BALLAN SHIRE— | | | | |
| Ballarat Road .. .. . | .. .. . | .. .. . | Bd. 2 3 9 | |
| Daylesford Road .. .. . | .. .. . | .. .. . | Bd. 674 4 7 | |
| Daylesford Road .. .. . | .. .. . | .. .. . | 486 16 11 | |
| Gordon-Meredith Road .. .. . | .. .. . | .. .. . | 604 0 4 | |
| Mount Wallace Road .. .. . | .. .. . | .. .. . | 470 1 10 | |
| Spargo Creek Road .. .. . | .. .. . | .. .. . | 11 8 1 | |
| | | | | 2,248 15 6 |
| Carried forward .. .. . | .. .. . | 1,403 13 8 | .. .. . | 41,157 6 10 |

STATEMENT OF EXPENDITURE IN CONNEXION WITH CONSTRUCTION AND MAINTENANCE, ETC.—*continued.*

| Municipality and Road. | Permanent Works. | | Maintenance Works. | |
|--|--|------------------------|---|-------------|
| | Amount. | Total. | Amount. | Total. |
| Brought forward | £ s. d. | £ s. d. | £ s. d. | £ s. d. |
| | | 1,403 13 8 | | 41,157 6 10 |
| BALLAN AND BUNINYONG SHIRES (Joint Works)— Gordon-Meredith Road | | | 3 17 8 | 3 17 8 |
| BALLARAT SHIRE— Ballarat-Lexton Road Maryborough-Ballararat Road | | | 1,925 12 7 1,435 17 10 | 3,361 10 5 |
| BALLARAT AND BUNGAREE SHIRES (Joint Works)— Ballarat-Croswick Road | | | Bd. 702 7 4 | 702 7 4 |
| BANNOCKBURN SHIRE— Gordon-Meredith Road Inverleigh Road Shelford-Bannockburn Road | | 211 13 2 | 29 11 3 1,507 7 0 308 0 11 | 1,844 19 2 |
| BARRABOOL SHIRE— Airey's Inlet Road Anglesea Road Anglesea Road Hendy Main Road | | | Bd. 343 8 2 Bd. 2,274 12 3 1,422 19 1 930 2 2 | 4,971 1 8 |
| BASS SHIRE— Almura Road Almura-Grantville Road Anderson-Dalyston Road Dalyston-Glen Forbes Road Dalyston-Wonthaggi Road Inverloch-Wonthaggi Road Korumburra-Wonthaggi Road Main Coast Road Wonthaggi-Loch Road | | 658 6 9 | 355 14 2 170 12 5 508 8 5 231 1 10 518 9 11 143 8 9 518 2 11 723 19 2 493 0 5 | 3,662 18 0 |
| BASS AND WONTHAGGI SHIRES (Joint Works)— Loch-Wonthaggi Road | | | 76 19 1 | 76 19 1 |
| BEECHWORTH SHIRE— Beechworth Road Bright Road Evertton-Myrtleford Road Myrtleford-Yackandandah Stanley Road | | 165 7 11 | 989 19 11 350 0 11 473 5 4 67 14 1 470 7 11 | 2,351 8 2 |
| BELFAST SHIRE— Hamilton Road Penshurst Road | | | 339 17 6 236 2 3 | 625 19 9 |
| BELLARINE SHIRE— Geelong-Portarlington Road Geelong-Portarlington Road Geelong-Queenscliff Road Geelong-Queenscliff Road Barwon Heads-Ocean Grove Road Portarlington-St. Leonards Road Portarlington-St. Leonards Road | | | Bd. 2,210 14 10 269 15 5 Bd. 210 0 11 289 7 6 50 5 4 Bd. 1,146 6 10 91 8 6 | 4,267 19 4 |
| BENALLA SHIRE— Benalla-Shepparton Road Goorambat Road Goorambat-Thoona Road Grete Road Kilfeera Road Lima Road Sydney Road Tatong-Tolmie Road | | 1,383 12 0 313 17 7 | 4 16 0 441 19 11 287 8 2 7 0 4 594 18 5 150 10 6 536 1 7 342 10 8 | 2,365 5 7 |
| BERWICK SHIRE— Beaconsfield-Emerald Road Cockatoo-Gembrook Road Gembrook Road Gembrook-Beenak Road Hallam-Emerald Road Koo-wee-rup-Longwarry Road Nar-Nar-Goon-Longwarry Road Prince's Highway Woori Yallock-Pakenham-Koo-wee-rup Road Woori Yallock-Pakenham-Koo-wee-rup Road | | 455 6 3 26 2 10 | 186 4 3 344 15 10 179 11 7 136 11 1 62 8 3 45 3 11 536 9 3 Bd. 29 1 1 Bd. 423 11 10 1,478 18 1 | 3,422 15 2 |
| BET BET SHIRE— Avoca-Bealiba Road Betley Road Dunolly Road Dunolly-Eddington Road Maryborough-Dunolly Road | | | 282 13 5 124 17 7 589 19 0 135 19 10 128 4 4 | 1,261 14 2 |
| Carried forward | | 4,618 0 2 | | 70,076 2 4 |

STATEMENT OF EXPENDITURE IN CONNEXION WITH CONSTRUCTION AND MAINTENANCE, ETC.—continued.

| Municipality and Road. | Permanent Works. | | Maintenance Works. | |
|--|------------------|-------------|--------------------|-------------|
| | Amount. | Total. | Amount. | Total. |
| | £ s. d. | £ s. d. | £ s. d. | £ s. d. |
| Brought forward | | 4,618 0 2 | | 70,076 2 4 |
| BET BET AND TULLAROOP SHIRES (Joint Works)— | | | | |
| Betley Road | .. | | 3 2 3 | |
| Maryborough—Dunolly Road | .. | | 2 17 9 | 6 0 0 |
| BIRCHIP SHIRE— | | | | |
| Beulah—Birchip—Wycheproof Road | .. | | 132 11 7 | |
| Donald—Birchip—Sea Lake Road | 179 3 9 | 179 3 9 | 341 18 3 | 474 9 10 |
| BLACKBURN AND MITCHAM SHIRE— | | | | |
| Burwood Road | .. | | 3,880 8 11 | |
| Main Healesville Road | .. | | 699 8 3 | 4,579 17 2 |
| BORUNG SHIRE— | | | | |
| Birchip Road | .. | | 3,055 18 1 | |
| Dimboola Road | 140 16 0 | | 1,254 10 11 | |
| Hopetoun Road | .. | | 2,642 9 3 | |
| Minyip Road | .. | | 3,339 13 5 | |
| Rainbow Road | 366 7 7 | 507 3 7 | 1,180 2 6 | 11,472 14 2 |
| BORUNG AND DUNMUNKLE SHIRES (Joint Works)— | | | | |
| Minyip Road | .. | | 39 16 2 | 39 16 2 |
| BOX HILL CITY— | | | | |
| Burwood Road (O.M.) | .. | | 1,948 6 0 | |
| Healesville Road (O.M.) | 8,499 12 11 | 8,499 12 11 | 638 15 8 | 2,587 1 8 |
| BRAYBROOK SHIRE— | | | | |
| Ballarat Road | .. | | 382 7 8 | |
| Prince's Highway | .. | | Bd. 807 11 2 | 1,189 18 10 |
| BRIGHT SHIRE— | | | | |
| Bright Road | .. | | 2,523 12 5 | |
| Harrietteville Road | .. | | 425 9 10 | |
| Kiewa Valley Road | .. | | 147 2 7 | |
| Myrtleford—Yackandandah Road | 64 0 0 | 64 0 0 | 428 8 10 | 3,524 13 8 |
| BRIGHTON CITY— | | | | |
| Beach Road (O.M.) | 334 12 7 | 334 12 7 | 405 17 9 | 405 17 9 |
| BROADMEADOWS SHIRE— | | | | |
| Sydney Road | .. | | 313 11 4 | 313 11 4 |
| BROADMEADOWS AND KEILOR SHIRES (Joint Works)— | | | | |
| Lancefield Road | .. | | 601 11 0 | 601 11 0 |
| BROADFORD SHIRE— | | | | |
| Sydney Road | .. | | Bd. 56 19 6 | 56 19 6 |
| BULLA SHIRE— | | | | |
| Melbourne—Lancefield Road | .. | | 1,548 15 6 | |
| Sunbury Road | .. | | 35 14 8 | |
| The Gap Road | .. | | 579 11 11 | 2,164 2 1 |
| BULLA AND KEILOR SHIRES (Joint Works)— | | | | |
| Melbourne—Lancefield Road | .. | | 73 6 11 | 73 6 11 |
| BULN BULN SHIRE— | | | | |
| Bloomfield Road | .. | | 16 14 3 | |
| Fumina Road | .. | | 262 3 1 | |
| Koo-wee-rup—Longwarry Road | .. | | 477 6 1 | |
| Loch Valley Road | .. | | 141 1 6 | |
| Longwarry—Drouin Road | .. | | 143 4 6 | |
| Main Neerim Road | .. | | 4,196 3 6 | |
| Main South Road | .. | | 1,247 19 9 | |
| Neerim East Road | .. | | 952 17 3 | |
| Neerim North—Noojee Road | .. | | 1,066 11 5 | |
| Prince's Highway | .. | | 514 14 11 | |
| Westernport Road | .. | | 1,067 0 10 | 10,085 17 1 |
| BULN BULN (Joint Contributory with Cranbourne) SHIRE— | | | | |
| Westernport Road | 77 13 3 | 77 13 3 | .. | |
| BUNGAREE SHIRE— | | | | |
| Daylesford—Ballarat Road | .. | | 1,382 4 2 | 1,382 4 2 |
| BUNINYONG SHIRE— | | | | |
| Ballarat—Rokewood Road | .. | | 611 12 8 | |
| Elaine—Mt. Mercer Road | .. | | 145 13 9 | 757 6 5 |
| CAMBERWELL CITY— | | | | |
| Doncaster Road (O.M.) | .. | | 30 14 4 | |
| Healesville Road (O.M.) | .. | | 5 19 0 | 36 13 4 |
| Carried forward | | 14,280 6 3 | | 109,828 3 5 |

STATEMENT OF EXPENDITURE IN CONNEXION WITH CONSTRUCTION AND MAINTENANCE, ETC.—*continued.*

| Municipality and Road. | Permanent Works. | | Maintenance Works. | |
|---|---|-------------|---|--------------|
| | Amount. | Total. | Amount. | Total. |
| | £ s. d. | £ s. d. | £ s. d. | £ s. d. |
| Brought forward | .. | 14,280 6 3 | .. | 103,828 3 |
| CAMBERWELL CITY, AND DONCASTER AND TEMPLESTOWE SHIRE (Joint Works)— Doncaster Road (O.M.) | 24 9 11 | 24 9 11 | .. | |
| CASTLEMAINE BOROUGH— Melbourne Bendigo Road | .. | | 1,099 10 5 | 1,099 10 5 |
| CHARLTON SHIRE— Bendigo Road Donald Road St. Arnaud Road | 954 16 3 | 954 16 3 | 39 11 7 1,763 13 8 1,120 8 6 | 2,923 13 9 |
| CHELSEA CITY— Point Nepean Road Point Nepean Road .. .. . | .. .. |  | 731 16 3 Bd. 4,094 8 6 | 4,826 4 9 |
| CHILTERN SHIRE— Barnawartha-Howlong Road Chiltern-Howlong Road Sydney Road | .. 243 1 0 .. | 243 1 0 | 497 6 2 164 19 3 58 0 10 | 720 6 3 |
| CLUNES BOROUGH— Maryborough-Ballarat Road | .. | | 633 1 11 | 633 1 11 |
| COBURG CITY— Sydney Road (O.M.) | 4,401 9 1 | 4,401 9 1 | .. | |
| COHUNA SHIRE— Cohuna-Leitchville Road Murray Valley Highway .. .. . | .. .. |  | 652 5 11 Bd. 171 15 0 | 824 0 11 |
| COLAC SHIRE— Colac-Ballarat Road Colac-Beech Forest Road Colac-Forrest Road Cororooke Road Cressy-Inverleigh Road Prince's Highway Swan Marsh Road | 55 13 4 .. | 55 13 4 | 824 9 2 666 6 2 1,044 19 1 883 4 8 384 3 10 112 17 8 1,761 18 1 | 5,677 18 8 |
| COLLINGWOOD CITY— Heidelberg Road (O.M.) | .. | | 0 18 2 | 0 18 2 |
| COLLINGWOOD AND HEIDELBERG CITIES (Joint Works)— Heidelberg Road (Metri Creek Bridge) | 8,363 18 10 | 8,363 18 10 | .. | |
| CORIO SHIRE— Geelong-Bacchus Marsh Road Prince's Highway .. .. . | .. .. |  | 260 14 3 Bd. 119 17 7 | 380 11 10 |
| CORIO SHIRE AND NEWTOWN AND CHILWELL TOWN (Joint Works)— Fyansford Road | .. | | 101 9 3 | 101 9 3 |
| CRANBOURNE SHIRE— Cranbourne-Frankston Road Koo-wee-rup-Longwarry Road Koo-wee-rup-Pakenham Road Main Coast Road Westernport Road .. .. . | .. .. .. .. .. |  | 1,652 16 3 374 16 1 1,390 6 11 271 8 7 569 4 7 | 4,258 12 5 |
| CRESWICK SHIRE— Castlemaine-Ballarat Road Daylesford-Ballarat Road .. .. . | .. .. |  | 1,393 4 3 570 10 5 | 1,963 14 8 |
| DANDENONG SHIRE— Cheltenham Road Prince's Highway Prince's Highway .. .. . | .. .. .. |  | 834 7 1 37 8 6 Bd. 3,763 9 5 | 4,635 5 0 |
| DANDENONG AND CRANBOURNE SHIRES (Joint Works)— Dandenong-Frankston Road | .. | | 468 2 10 | 468 2 10 |
| DAYLESFORD BOROUGH— Ballan Road Ballarat Road Castlemaine Road Daylesford-Trentham Road Hepburn-Daylesford Road Malmsbury-Daylesford Road .. .. . | .. .. .. .. .. .. |  | 483 8 5 149 12 5 99 19 1 347 10 10 67 18 11 539 15 9 | 1,688 5 5 |
| Carried forward | .. | 28,323 14 8 | .. | 140,029 19 8 |

STATEMENT OF EXPENDITURE IN CONNEXION WITH CONSTRUCTION AND MAINTENANCE, ETC.—*continued.*

| Municipality and Road. | Permanent Works. | | Maintenance Works. | |
|--|------------------|-------------|--------------------|---------------|
| | Amount. | Total. | Amount. | Total. |
| | £ s. d. | £ s. d. | £ s. d. | £ s. d. |
| Brought forward | .. | 28,323 14 8 | .. | 140,029 19 8 |
| DEAKIN SHIRE— | | | | |
| Echuca-Cornella Road | .. | .. | 288 17 11 | .. |
| Echuca-Picola Road | .. | .. | 41 12 7 | .. |
| Kyabram-Nathalia Road | .. | .. | 716 0 9 | .. |
| Kyabram-Tongala Road | .. | .. | 1,166 10 1 | .. |
| Rochester-Kyabram Road | .. | .. | 950 3 9 | .. |
| | | | | 3,163 5 1 |
| DEAKIN AND NUMURKAH SHIRES (Joint Works)— | | | | |
| Echuca-Picola Road | .. | .. | 40 0 0 | 40 0 0 |
| DEAKIN AND RODNEY SHIRES (Joint Works)— | | | | |
| Rochester-Kyabram Road | .. | .. | 342 18 8 | 342 18 8 |
| DIMBOOLA SHIRE— | | | | |
| Hopetoun-Rainbow Road | .. | .. | 11 3 8 | .. |
| Horsham Road | .. | .. | 12 3 5 | .. |
| Rainbow Road | 13 16 4 | .. | 2,283 9 5 | .. |
| Rainbow-Beulah-Birchip Road | .. | .. | 7 11 0 | .. |
| Rainbow Rises Road | .. | .. | 353 18 4 | .. |
| Warracknabeal Road | 710 8 8 | .. | 950 19 4 | .. |
| | | 721 5 0 | | 3,619 5 2 |
| DIMBOOLA AND KARAROOC SHIRES (Joint Works)— | | | | |
| Hopetoun-Rainbow Road | .. | .. | 348 6 9 | 348 6 9 |
| DONALD SHIRE— | | | | |
| Donald-Charlton Road | .. | .. | 431 1 3 | .. |
| Marnoo-Donald Road | .. | .. | 819 12 1 | .. |
| St. Arnaud-Birchip Road | 47 17 0 | .. | 1,053 11 5 | 2,304 4 9 |
| DONCASTER AND TEMPLESTOWE SHIRE— | | | | |
| Doncaster Road | .. | .. | 518 5 10 | .. |
| Heidelberg-Warrandyte Road | .. | .. | 498 3 2 | .. |
| Warrandyte-Ringwood Road | .. | .. | 907 19 5 | 1,924 8 5 |
| DUNDAS SHIRE— | | | | |
| Hamilton-Dunkeld Road | .. | .. | 1,051 5 4 | .. |
| Hamilton-Horsham Road | .. | .. | 3,607 1 6 | .. |
| Hamilton-Mount Gambier Road | .. | .. | 2,258 10 5 | .. |
| Hamilton-Port Fairy Road | .. | .. | 1,268 16 8 | .. |
| Hamilton-Portland Road | .. | .. | 1,217 15 7 | .. |
| Hamilton-Warrnambool Road | .. | .. | 110 19 11 | 9,514 9 5 |
| DUNMUNKLE SHIRE— | | | | |
| Horsham-Murtoa Road | .. | .. | 747 10 11 | .. |
| Marnoo-Donald Road | .. | .. | 30 8 8 | .. |
| Marnoo-Rupanyup Road | .. | .. | 2,531 10 11 | .. |
| Minyip-Donald Road | .. | .. | 310 0 1 | .. |
| Rupanyup-Murtoa Road | .. | .. | 227 4 8 | .. |
| Stawell-Warracknabeal Road | .. | .. | 3,524 11 4 | 7,371 6 7 |
| EAGLEHAWK BOROUGH— | | | | |
| Mount Korong Road | .. | .. | 903 15 9 | 903 15 9 |
| EAST LODDON SHIRE— | | | | |
| Borung-Prairie Road | .. | .. | 55 19 9 | .. |
| Dingee Road | .. | .. | 551 3 5 | .. |
| Mitiamo Road | .. | .. | 299 17 10 | .. |
| Prairie Road | .. | .. | 236 15 9 | 1,143 16 9 |
| ECHUCA BOROUGH— | | | | |
| Echuca-Cohuna Road | .. | .. | Bd. 433 10 9 | 433 10 9 |
| ELTHAM SHIRE— | | | | |
| Eltham-Yarra Glen Road | .. | .. | 900 14 6 | .. |
| Hurstbridge-Kinglake Road | .. | .. | 885 17 8 | .. |
| Yarra Glen-Glenburn Road | .. | .. | 217 7 1 | 2,003 19 3 |
| ESSENDON CITY— | | | | |
| Bendigo Road (Outer Metropolitan) | .. | .. | 668 18 7 | 668 18 7 |
| EUROA SHIRE— | | | | |
| Arcadia Road | .. | .. | 962 18 5 | .. |
| Avenel-Longwood Road | .. | .. | 5 6 0 | .. |
| Euroa-Arcadia Road | .. | .. | 472 5 8 | .. |
| Euroa-Mansfield Road | .. | .. | 484 9 9 | .. |
| Euroa-Strathbogie Road | .. | .. | 528 13 0 | .. |
| Murchison-Violet Town Road | .. | .. | 502 9 8 | .. |
| Murchison-Shepparton Road | .. | .. | Bd. 2,364 17 6 | .. |
| Sydney Road | .. | .. | Bd. 139 12 3 | 5,460 12 3 |
| Carried forward | .. | 29,095 16 8 | .. | 179,272 17 10 |

STATEMENT OF EXPENDITURE IN CONNEXION WITH CONSTRUCTION AND MAINTENANCE, ETC.—*continued.*

| Municipality and Road. | Permanent Works. | | Maintenance Works. | |
|---|------------------|-------------|--------------------|---------------|
| | Amount. | Total. | Amount. | Total. |
| | £ s. d. | £ s. d. | £ s. d. | £ s. d. |
| Brought forward | | 29,095 16 8 | | 179,272 17 10 |
| FERNTREE GULLY SHIRE— | | | | |
| Belgrave—Emerald Road | | | 1,442 10 2 | |
| Burwood Road | | | 1,347 15 4 | |
| Emerald Road | | | 219 3 3 | |
| Main Ferntree Gully Road | | | 2,959 1 4 | |
| Monbulk Road | | | 786 0 8 | |
| Olinda Road | | | 1,196 0 4 | |
| Beaconsfield—Emerald Road | | | 39 4 1 | |
| | | | | 7,989 15 2 |
| FLINDERS SHIRE— | | | | |
| Hastings—Flinders Road | | | 3,052 5 4 | |
| Mornington—Dromana Road | | | 883 8 3 | |
| Mornington—Flinders Road | | | 959 4 4 | |
| Point Nepean Road | | | 3,845 11 1 | |
| Red Hill Road | | | 1,068 7 9 | |
| Rosebud—Flinders Road | | | 1,395 4 7 | |
| Stony Point Road | | | 221 11 3 | |
| | | | | 11,425 12 7 |
| FOOTSCRAY CITY— | | | | |
| Napier Street (Outer Metropolitan) | 2,438 12 7 | | | |
| Ballarat Road (Outer Metropolitan) | 4,358 10 4 | | | |
| Prince's Highway | | | Bd. 124 7 5 | |
| | | 6,797 2 11 | | 124 7 5 |
| FOOTSCRAY AND MELBOURNE CITIES (Joint Works)— | | | | |
| Ballarat Road—Lynch's Bridge | 3,290 6 5 | | | |
| | | 3,290 6 5 | | |
| FRANKSTON AND HASTINGS SHIRE— | | | | |
| Cranbourne—Frankston Road | | | 688 11 2 | |
| Frankston—Dandenong Road | | | 601 7 9 | |
| Frankston—Flinders Road | | | 3,384 13 7 | |
| Point Nepean Road | | | 8,297 15 3 | |
| | | | | 12,972 7 9 |
| GEELONG CITY AND SOUTH BARWON SHIRE (Joint Works)— | | | | |
| Prince's Highway (Barwon River Bridge) | | | 118 4 11 | |
| | | | | 118 4 11 |
| GISBORNE SHIRE— | | | | |
| Bacchus Marsh Road | | | 895 7 6 | |
| Gisborne Station Road | | | 20 0 8 | |
| Melbourne—Bendigo Road | | | Bd. 49 8 6 | |
| Mount Macedon Road | | | 368 2 2 | |
| | | | | 1,332 18 10 |
| GLENELG SHIRE— | | | | |
| Coleraine—Casterton Road | | | 1,295 6 2 | |
| Dergholm Road | | | 1,526 6 0 | |
| Mount Gambier Road | | | 3,169 8 1 | |
| Portland—Casterton Road | | | 1,575 6 7 | |
| Wando Vale Road | | | 607 9 4 | |
| | | | | 8,173 16 2 |
| GLENLYON SHIRE— | | | | |
| Ballan Road | | | 175 11 2 | |
| Ballarat Road | | | 502 14 0 | |
| Castlemaine—Daylesford Road | | | 242 17 9 | |
| Daylesford—Hepburn Road | | | 517 19 0 | |
| Daylesford—Trentham Road | | | 719 4 9 | |
| Malmsbury—Daylesford Road | | | 1,467 8 11 | |
| | | | | 3,625 15 7 |
| GOULBURN SHIRE— | | | | |
| Avenel—Longwood Road | | | 21 8 4 | |
| Goulburn Valley Road | | | Bd. 1,202 13 8 | |
| Murehison—Shepparton Road | | | Bd. 163 2 11 | |
| Vicker's Road | | | 98 9 6 | |
| | | | | 1,488 14 5 |
| GRENVILLE SHIRE— | | | | |
| Ballarat—Hamilton Road | | | 4,257 2 7 | |
| Cressy Road | | | 347 7 10 | |
| Lismore Road | | | 196 12 7 | |
| Pitfield Road | | | 1,027 5 6 | |
| | | | | 5,828 8 6 |
| HAMILTON TOWN— | | | | |
| Ararat Road | | | 264 1 7 | |
| Coleraine Road | | | 895 11 4 | |
| Hamilton—Warrnambool Road | | | 41 0 11 | |
| Port Fairy Road | | | 28 16 9 | |
| Portland Road | | | 61 18 10 | |
| | | | | 1,291 9 5 |
| HAMPDEN SHIRE— | | | | |
| Camperdown—Ballarat Road | | | 4,484 6 4 | |
| Caramut—Lismore Road | | | 1,595 0 7 | |
| Cobden—Terang Road | | | 1 8 4 | |
| Lismore—Cressy Road | | | 791 19 4 | |
| McKinnon's Bridge—Noorat Road | | | 356 1 11 | |
| Prince's Highway | | | 531 16 6 | |
| Terang—Framlingham Road | | | 874 13 3 | |
| Terang—Mortlake Road | | | 984 10 2 | |
| | | | | 9,619 16 5 |
| Carried forward | | 39,183 6 6 | | 243,264 5 0 |

STATEMENT OF EXPENDITURE IN CONNEXION WITH CONSTRUCTION AND MAINTENANCE, ETC.—*continued.*

| Municipality and Road. | Permanent Works. | | Maintenance Works. | |
|--|------------------|------------|--------------------|-------------|
| | Amount. | Total. | Amount. | Total. |
| | £ s. d. | £ s. d. | £ s. d. | £ s. d. |
| Brought forward | .. | 39,183 6 0 | .. | 243,264 5 0 |
| HEALESVILLE SHIRE— | | | | |
| Healesville-Alexandra Road | .. | .. | 1,988 3 8 | |
| Healesville-Alexandra Road | .. | .. | Bd. 551 1 2 | |
| Healesville-Kinglake Road | .. | .. | 485 14 1 | |
| Healesville-Woori Yallock Road | .. | .. | Bd. 141 19 8 | |
| Marysville Road | .. | .. | Bd. 99 18 2 | |
| | | | | 3,266 16 9 |
| HEIDELBERG CITY— | | | | |
| Greensborough-Hurstbridge Road | .. | .. | 2,435 12 5 | |
| Heidelberg-Warrandyte Road | .. | .. | 30 4 9 | |
| Main Heidelberg-Eltham Road | .. | .. | 562 7 0 | |
| Main Whittlesea Road | .. | .. | 16 19 1 | |
| | | | | 3,045 3 3 |
| HEYTESBURY SHIRE— | | | | |
| Camperdown-Cobden Road | .. | .. | 525 17 8 | |
| Cobden-Port Campbell-Princetown Road | .. | .. | 1,903 17 0 | |
| Cobden-Terang Road | .. | .. | 1,921 15 4 | |
| Timboon-Nirranda Road | .. | .. | 216 5 2 | |
| Timboon-Port Campbell Road | .. | .. | 58 13 4 | |
| | | | | 4,626 8 6 |
| HORSHAM TOWN— | | | | |
| Dimboola-Horsham Road | .. | .. | 240 15 11 | |
| Dooen Road | .. | .. | 134 5 10 | |
| Hamilton Road | .. | .. | 781 6 3 | |
| Natimuk Road | .. | .. | 205 7 4 | |
| Western Highway | .. | .. | 33 0 8 | |
| | | | | 1,394 16 0 |
| HUNTLY SHIRE— | | | | |
| Bendigo-Echuca Road | .. | .. | Bd. 349 13 10 | |
| | | | | 349 13 10 |
| INGLEWOOD BOROUGH— | | | | |
| Bendigo-Charlton Road | .. | .. | 114 14 7 | |
| | | | | 114 14 7 |
| KARA KARA SHIRE— | | | | |
| Avoca-St. Arnaud Road | .. | .. | 719 12 7 | |
| Charlton Road | .. | .. | 295 9 1 | |
| Marnoo Road | .. | .. | 17 16 1 | |
| Navarre Road | .. | .. | 777 5 6 | |
| St. Arnaud-Donald Road | .. | .. | 1,059 6 3 | |
| | | | | 2,869 9 6 |
| KARA KARA AND STAWELL SHIRES (Joint Works)— | | | | |
| Navarre Road | .. | .. | 22 4 8 | |
| | | | | 22 4 8 |
| KARKAROOC SHIRE— | | | | |
| Hopetoun-Rainbow Road | 30 0 0 | .. | 937 5 2 | |
| Hopetoun-Warracknabeal Road | .. | .. | 2,006 8 1 | |
| Hopetoun-Woomelang-Sealake Road | .. | .. | 390 0 5 | |
| Rainbow-Beulah-Birchip Road | .. | .. | 541 11 11 | |
| | | 30 0 0 | | 3,875 5 7 |
| KEILOR SHIRE— | | | | |
| Melbourne-Bendigo Road | .. | .. | Bd. 253 0 0 | |
| | | | | 253 0 0 |
| KERANG SHIRE— | | | | |
| Koondrook Road | .. | .. | 12 2 6 | |
| | | | | 12 2 6 |
| KILMORE SHIRE— | | | | |
| Heathcote Road | 605 16 0 | .. | 61 16 9 | |
| Kilmore-Kilmore East Road | .. | .. | 246 19 9 | |
| Lancefield-Kilmore Road | .. | .. | 41 15 1 | |
| Sydney Road | .. | .. | Bd. 8 6 0 | |
| | | 605 16 0 | | 358 17 7 |
| KILMORE AND PYALONG SHIRES (Joint Works)— | | | | |
| Heathcote Road | .. | .. | 221 9 11 | |
| | | | | 221 9 11 |
| KILMORE AND ROMSEY SHIRES (Joint Works)— | | | | |
| Lancefield-Kilmore Road | .. | .. | 258 5 8 | |
| | | | | 258 5 8 |
| KOROIT BOROUGH— | | | | |
| Koroit-Warrnambool Road | .. | .. | 331 9 0 | |
| | | | | 331 9 0 |
| KORONG SHIRE— | | | | |
| Borong-Hurstwood Road | .. | .. | 152 13 10 | |
| Charlton-Bendigo Road | .. | .. | 62 9 1 | |
| Serpentine Road | .. | .. | 718 17 10 | |
| | | | | 934 0 9 |
| Carried forward | .. | 39,819 2 0 | .. | 265,198 3 1 |

STATEMENT OF EXPENDITURE IN CONNEXION WITH CONSTRUCTION AND MAINTENANCE, ETC.—*continued.*

| Municipality and Road. | Permanent Works. | | Maintenance Works. | |
|--|------------------|-------------|--------------------|--------------|
| | Amount. | Total. | Amount. | Total. |
| | £ s. d. | £ s. d. | £ s. d. | £ s. d. |
| Brought forward | .. | 39,819 2 0 | .. | 265,198 3 1 |
| KORUMBURRA SHIRE— | | | | |
| Bena-Kongwak Road | 611 0 9 | | 387 16 3 | |
| Bena-Korumburra Road | .. | | 414 8 11 | |
| Bena-Poowong Road | 741 1 8 | | 571 14 0 | |
| Fairbank Road | .. | | 225 19 9 | |
| Kongwak-Inverloch Road | 390 15 3 | | 632 11 5 | |
| Korumburra-Drouin Road | .. | | 726 8 9 | |
| Korumburra-Leongatha Road | .. | | 1,626 7 5 | |
| Korumburra-Warragul Road | .. | | 2,558 2 6 | |
| Korumburra-Wonthaggi Road | .. | | 946 14 7 | |
| Lang Lang-Nyora Road | .. | | 165 15 3 | |
| Loch-Nyora Road | .. | | 92 11 0 | |
| Loch-Wonthaggi Road | .. | | 1,337 0 9 | |
| Nyora-Poowong Road | .. | | 719 3 0 | |
| Poowong-Ranceby Road | .. | | 153 4 6 | |
| | | 1,742 17 8 | | 10,557 18 1 |
| KOWREE SHIRE— | | | | |
| Booropki Road | .. | | 177 15 1 | |
| Booropki-Frances Road | .. | | 207 7 2 | |
| Edenhope-Goroke Road | .. | | 979 12 1 | |
| Hamilton-Edenhope-Apsley Road | .. | | 1,174 4 6 | |
| Little Desert Road | .. | | 230 6 4 | |
| Wombelano Road | .. | | 478 0 1 | |
| | | | | 3,247 5 3 |
| KYNETON SHIRE— | | | | |
| Daylesford Road | .. | | 295 5 0 | |
| Daylesford-Trentham Road | .. | | 65 15 1 | |
| Melbourne-Bendigo Road | .. | | 232 12 7 | |
| Redesdale Road | .. | | 533 7 8 | |
| Trentham Road | .. | | 1,605 5 1 | |
| Tylden-Woodend Road | .. | | 130 2 9 | |
| | | | | 2,862 8 2 |
| KYNETON AND GLENLYON SHIRES (Joint Works)— | | | | |
| Daylesford-Trentham Road | .. | | 42 5 11 | |
| | | | | 42 5 11 |
| LAWLOIT SHIRE— | | | | |
| Broughton Road | .. | | 553 15 10 | |
| Little Desert Road | .. | | 420 3 3 | |
| Nhill-Kaniva Border Road | .. | | 46 1 8 | |
| South Lillimur Road | .. | | 498 0 11 | |
| Yearinga Road | .. | | 664 14 0 | |
| | | | | 2,182 15 8 |
| LEIGH SHIRE— | | | | |
| Ballarat-Rokewood Road | .. | | 278 9 4 | |
| Cressy-Rokewood Road | .. | | 241 18 1 | |
| Inverleigh-Cressy Road | .. | | 1,945 9 0 | |
| Inverleigh-Shelford Road | .. | | 65 16 5 | |
| Rokewood-Shelford Road | .. | | 232 7 3 | |
| Shelford-Bannockburn Road | .. | | 1,213 0 2 | |
| Werneth Road | .. | | 94 7 4 | |
| | | | | 4,071 7 7 |
| LEIGH AND BANNOCKBURN SHIRES (Joint Works)— | | | | |
| Bannockburn-Shelford Road | 215 5 10 | | .. | |
| | | 215 5 10 | | |
| LEIGH AND COLAC SHIRES (Joint Works)— | | | | |
| Cressy-Inverleigh Road | .. | | 679 3 3 | |
| | | | | 679 3 3 |
| LENTON SHIRE— | | | | |
| Avoca-Ararat Road | .. | | 203 10 0 | |
| Avoca-Ballararat Road | .. | | 1,653 12 1 | |
| | | | | 1,857 2 1 |
| LILLYDALE SHIRE— | | | | |
| Evelyn-Lilydale Road | 27 2 4 | | 317 1 2 | |
| Main Healesville Road | .. | | 980 11 7 | |
| Main Healesville Road | .. | | Bd. 1,823 13 4 | |
| Main Warburton Road | .. | | Bd. 237 1 5 | |
| Monbulk Road | .. | | 653 12 6 | |
| Mount Dandenong Road | .. | | Bd. 798 10 11 | |
| Mount Dandenong Road | .. | | 1,982 4 0 | |
| Yarra Glen Road | .. | | 112 17 9 | |
| | | 27 2 4 | | 6,905 12 8 |
| LOWAN SHIRE— | | | | |
| Dimboola-Kaniva Road | .. | | 741 18 3 | |
| Goroke Road | .. | | 410 15 2 | |
| Lorquon Road | .. | | 189 12 1 | |
| Lorquon West Road | 427 10 0 | | 797 18 11 | |
| Yanac Road | 399 13 11 | | 612 11 4 | |
| | | 827 3 11 | | 2,752 15 9 |
| Carried forward | | 42,631 11 9 | | 300,356 17 6 |

STATEMENT OF EXPENDITURE IN CONNEXION WITH CONSTRUCTION AND MAINTENANCE, ETC.—*continued.*

| Municipality and Road. | Permanent Works. | | Maintenance Works. | |
|---|------------------|-------------|--------------------|--------------|
| | Amount. | Total. | Amount. | Total. |
| | £ s. d. | £ s. d. | £ s. d. | £ s. d. |
| Brought forward | | 42,631 11 9 | | 300,356 17 6 |
| MAFFRA SHIRE— | | | | |
| Boisdale-Briagolong Road | | | 521 9 0 | |
| Briagolong-Dargo Road | | | 356 3 9 | |
| Bushy Park-Valencia Creek Road | | | 374 9 1 | |
| Licola Road | | | 2,194 17 1 | |
| Maffra-Newry Road | | | 1,274 19 5 | |
| Maffra-Sale Road | | | 657 4 1 | |
| Maffra-Stratford Road | | | 96 2 8 | |
| Tinamba-Boisdale Road | | | 1,583 18 3 | |
| Tinamba-Newry Road | | | 451 5 8 | |
| Traralgon-Maffra Road | 586 1 10 | | 1,042 1 7 | |
| | | 586 1 10 | | 8,546 10 7 |
| MAFFRA AND AVON SHIRES (Joint Works)— | | | | |
| Maffra-Stratford Road | | | 9 12 5 | 9 12 5 |
| MALDON SHIRE— | | | | |
| Baringhup Road | | | 128 13 5 | |
| Castlemaine-Maldon Road | | | 302 15 7 | |
| Castlemaine-Maryborough Road | | | Bd. 24 11 5 | |
| Maldon-Eddington Road | | | 317 0 1 | |
| Maldon-Newstead Road | | | 143 3 6 | |
| | | | | 916 4 0 |
| MANSFIELD SHIRE— | | | | |
| Benalla-Mansfield Road | 1,661 9 5 | | 438 11 7 | |
| Euroa-Merton Road | | | 139 18 9 | |
| Maindample-Benalla Road | | | 174 14 7 | |
| Mansfield Road | | | 2,997 10 2 | |
| Mansfield-Tolmie Road | | | 516 12 5 | |
| Mansfield-Woodspoint Road | | | 978 1 4 | |
| Merton-Strathbogie Road | | | 93 18 5 | |
| | | 1,661 9 5 | | 5,339 7 3 |
| MARONG SHIRE— | | | | |
| Bendigo-Bridgewater Road | | | 11 0 6 | |
| Bendigo-Eddington Road | | | 1,230 9 5 | |
| Bendigo-Serpentine Road | | | 377 7 8 | |
| | | | | 1,618 17 7 |
| MARYBOROUGH BOROUGH— | | | | |
| Avoca Road | | | 9 11 6 | |
| Ballarat Road | | | 9 11 6 | |
| Castlemaine | | | 25 11 4 | |
| Eddington Road | | | 2 18 10 | |
| | | | | 47 13 2 |
| MELTON SHIRE— | | | | |
| The Gap Road | | | 12 1 5 | |
| Toolern Road | | | 312 2 9 | |
| | | | | 324 4 2 |
| METCALFE SHIRE— | | | | |
| Kyneton-Redesdale Road | | | 354 16 10 | 354 16 10 |
| MILDURA SHIRE— | | | | |
| Irymple Road | 20 18 0 | | 364 14 4 | |
| Melbourne Road | | | 77 1 3 | |
| Murray Valley Road | | | 355 17 1 | |
| Wentworth Road | | | 1,075 15 11 | |
| | | 20 18 0 | | 1,873 8 7 |
| MINHAMITE SHIRE— | | | | |
| Hamilton-Macarthur-Port Fairy Road | | | 1,040 4 10 | |
| Warrnambool-Hawkesdale-Penshurst Road | | | 808 12 2 | |
| Woolthorpe-Bessie Belle Road | 944 10 5 | | 887 17 5 | |
| | | 944 10 5 | | 2,736 14 5 |
| MIRBOO SHIRE— | | | | |
| Grand Ridge Road | | | 621 5 6 | |
| Mardan Road | | | 572 3 6 | |
| Mirboo-Leongatha Road | | | 542 7 1 | |
| Mirboo South Road | | | 517 11 8 | |
| Mirboo-Yarragon Road | | | 332 2 9 | |
| Morwell-Mirboo Road | | | 296 6 8 | |
| | | | | 2,881 17 2 |
| MOORABBIN CITY— | | | | |
| Centre Dandenong Road | | | 177 18 9 | |
| Point Nepean Road | | | 451 3 9 | |
| | | | | 629 2 6 |
| MORDIALLOC CITY— | | | | |
| Beach Road-(Outer Metropolitan) | 24 4 11 | | 104 9 7 | |
| Point Nepean Road | | | 444 7 9 | |
| | | 24 4 11 | | 548 17 4 |
| MORNINGTON SHIRE— | | | | |
| Mornington-Dromana Road | | | 804 12 8 | |
| Point Nepean Road | | | 467 13 8 | |
| | | | | 1,272 6 4 |
| MORTLAKE SHIRE— | | | | |
| Caramut-Lismore Road | | | 1,002 10 9 | |
| Mortlake-Ararat Road | | | 2,540 0 8 | |
| Mortlake-Warrnambool Road | | | 387 8 5 | |
| Terang-Framlingham Road | | | 1,322 3 9 | |
| Terang-Mortlake Road | | | 166 13 7 | |
| | | | | 5,418 17 2 |
| Carried forward | | 45,868 16 4 | | 332,875 7 0 |

STATEMENT OF EXPENDITURE IN CONNEXION WITH CONSTRUCTION AND MAINTENANCE, ETC.—*continued.*

| Municipality and Road. | Permanent Works. | | Maintenance Works. | |
|--|------------------|-------------|--------------------|--------------|
| | Amount. | Total. | Amount. | Total. |
| | £ s. d. | £ s. d. | £ s. d. | £ s. d. |
| Brought forward | .. | 45,868 16 4 | .. | 332,875 7 0 |
| MORWELL SHIRE— | | | | |
| Boolarra-Welshpool Road | .. | .. | Bd. 331 11 3 | .. |
| Jeeralang West Road | 437 10 0 | .. | 925 18 6 | .. |
| Jumbuk Road | .. | .. | 417 6 4 | .. |
| Morwell-Mirboo Road | .. | .. | 1,744 15 10 | .. |
| Morwell-Mirboo Road | .. | .. | Bd. 343 15 6 | .. |
| Prince's Highway | .. | .. | 74 5 7 | .. |
| | | 437 10 0 | | 3,837 13 0 |
| MORWELL AND WOORAYL SHIRES (Joint Works)— | | | | |
| Boolarra-Foster Road | .. | .. | Bd. 236 2 4 | .. |
| | | | | 236 2 4 |
| MOUNT ROUSE SHIRE— | | | | |
| Ballarat-Hamilton Road | .. | .. | 3,504 2 11 | .. |
| Hamilton-Dunkeld Road | .. | .. | 1,525 19 9 | .. |
| Hamilton-Penshurst Road | .. | .. | 1,336 0 1 | .. |
| Maroona-Glenhompson Road | .. | .. | 33 14 11 | .. |
| Penshurst-Caramut Road | .. | .. | 2,580 5 8 | .. |
| | | | | 8,980 3 4 |
| MULGRAVE SHIRE— | | | | |
| Fernree Gully Road | .. | .. | 910 5 10 | .. |
| | | | | 910 5 10 |
| MCIVOR SHIRE— | | | | |
| Heathcote-Elmore Road | 241 7 4 | .. | 490 13 0 | .. |
| Heathcote-Redesdale Road | .. | .. | 378 7 6 | .. |
| Kilmore-Heathcote-Bendigo Road | .. | .. | 1,024 11 5 | .. |
| Lancefield-Tooborac Road | .. | .. | 7 3 2 | .. |
| Mount Camel Estate | .. | .. | 109 7 5 | .. |
| | | 241 7 4 | | 2,010 2 6 |
| NARRACAN SHIRE— | | | | |
| Allambee-Childers Road | .. | .. | 313 5 10 | .. |
| Childers-Thorpdale Road | .. | .. | 196 6 6 | .. |
| Mirboo-Yarragon Road | .. | .. | 1,198 16 3 | .. |
| Moe-Yallourn Road | .. | .. | 34 15 3 | .. |
| Prince's Highway | .. | .. | 85 8 1 | .. |
| Trafalgar-Thorpdale Road | .. | .. | 1,487 4 10 | .. |
| Walhalla Road | .. | .. | 2,594 3 1 | .. |
| Willowgrove Road | .. | .. | 1,519 7 5 | .. |
| Yarragon-Leongatha Road | .. | .. | 605 10 4 | .. |
| Yarragon-Shady Creek Road | .. | .. | 1,040 12 8 | .. |
| | | | | 9,075 10 3 |
| NEWHAM AND WOODEND SHIRE— | | | | |
| Lancefield Road | .. | .. | 435 11 8 | .. |
| Mount Macdon Road | 175 3 9 | .. | 827 8 11 | .. |
| Tylden Road | .. | .. | 200 3 4 | .. |
| Melbourne-Bendigo Road | .. | .. | Bd. 31 7 1 | .. |
| | | 175 3 9 | | 1,494 11 0 |
| NEWHAM AND WOODEND AND KYNETON SHIRES (Joint Works)— | | | | |
| Tylden Road | .. | .. | 94 13 11 | .. |
| | | | | 94 13 11 |
| NEWSTEAD AND MT. ALEXANDER SHIRE— | | | | |
| Castlemaine-Daylesford Road | .. | .. | 2,567 2 10 | .. |
| Castlemaine-Maryborough Road | .. | .. | Bd. 250 18 8 | .. |
| Creswick Road | .. | .. | 1,031 18 6 | .. |
| Maldon Road | .. | .. | 443 11 5 | .. |
| | | | | 4,293 11 5 |
| NUMURKAH SHIRE— | | | | |
| Echuca-Picola Road | 162 17 3 | .. | 220 15 9 | .. |
| Nathalia-Picola Road | .. | .. | 440 1 3 | .. |
| Numurkah-Nathalia Road | .. | .. | 489 8 8 | .. |
| Numurkah-Tungamah Road | 259 0 11 | .. | 57 19 11 | .. |
| Shepparton-Numurkah-Cobram Road | .. | .. | 1,132 16 3 | .. |
| | | 421 18 2 | | 2,341 1 10 |
| NUMURKAH AND DEARIN SHIRES (Joint Works)— | | | | |
| Echuca-Picola Road | .. | .. | 86 1 8 | .. |
| | | | | 86 1 8 |
| OAKLEIGH CITY— | | | | |
| Fernree Gully Road | .. | .. | 87 14 9 | .. |
| Prince's Highway | .. | .. | 765 5 11 | .. |
| | | | | 853 0 8 |
| OMEQ SHIRE— | | | | |
| Benambra Road | .. | .. | 452 18 2 | .. |
| Day Avenue | .. | .. | 411 17 0 | .. |
| Swift's Creek-Omeo Road | .. | .. | 469 11 8 | .. |
| | | | | 1,334 6 10 |
| OMEQ AND BRIGHT SHIRES (Joint Works)— | | | | |
| Bright-Omeo Road | .. | .. | 2,338 12 7 | .. |
| Bright-Omeo Road | .. | .. | Bd. 3,150 6 6 | .. |
| | | | | 5,488 19 1 |
| ORBOST SHIRE— | | | | |
| Carn Valley Road | .. | .. | Bd. 1,038 2 11 | .. |
| Corribenbar Road | .. | .. | 130 16 9 | .. |
| Geroa-Gipsy Point Road | .. | .. | Bd. 196 0 9 | .. |
| Marlo Road | .. | .. | 585 12 0 | .. |
| Prince's Highway | .. | .. | 685 13 2 | .. |
| | | | | 2,636 5 7 |
| Carried forward | .. | 47,144 15 7 | .. | 376,547 16 3 |

STATEMENT OF EXPENDITURE IN CONNEXION WITH CONSTRUCTION AND MAINTENANCE, ETC.—*continued.*

| Municipality and Road. | Permanent Works. | | Maintenance Works. | |
|---|------------------|-------------|--------------------|--------------|
| | Amount. | Total. | Amount. | Total. |
| | £ s. d. | £ s. d. | £ s. d. | £ s. d. |
| Brought forward | .. | 47,144 15 7 | .. | 376,517 16 3 |
| OTWAY SHIRE— | | | | |
| Beech Forest—Apollo Bay Road | .. | | 745 16 6 | |
| Carlisle—Gellibrand Road | .. | | 139 13 11 | |
| Colac—Beech Forest Road | .. | | 43 15 0 | 929 5 5 |
| OXLEY SHIRE— | | | | |
| Bright Road | 759 0 9 | | 1,522 8 10 | |
| Greta—Glenrowan Road | .. | | 331 8 8 | |
| Kilfeera—Boggy Creek Road | .. | | 47 3 2 | |
| Wangaratta—Whitfield Road | .. | 759 0 9 | 2,446 11 0 | 4,347 11 8 |
| PHILLIP ISLAND SHIRE— | | | | |
| Newhaven Road | .. | | 98 9 11 | |
| Phillip Island Road | .. | | 309 5 6 | |
| Ventnor Road | .. | | 486 6 4 | 894 1 9 |
| PORT FAIRY BOROUGH— | | | | |
| Hamilton Road | .. | | 69 9 8 | |
| Prince's Highway (Portland) | .. | | 32 17 2 | |
| Prince's Highway (Warrnambool) | .. | | 602 11 1 | 704 17 11 |
| PORTLAND SHIRE— | | | | |
| Bridgewater Road | .. | | 452 18 6 | |
| Heath Road | .. | | 349 8 11 | |
| Portland—Casterton Road | .. | | 872 6 10 | |
| Portland—Hamilton Road | .. | | 2,994 0 8 | 4,668 14 11 |
| PRESTON CITY— | | | | |
| Epping (Outer Metropolitan) Road | .. | | 670 2 10 | |
| Epping Road | .. | | 59 6 10 | |
| Whittlesea Road | .. | | 1,082 14 0 | 1,812 3 8 |
| PYALONG SHIRE— | | | | |
| Kilmore—Hoathcote—Bendigo Road | .. | | 416 18 10 | |
| Lancefield—Tooborac Road | .. | | 241 5 2 | 658 4 0 |
| PYALONG AND McIVOR SHIRES (Joint Works)— | | | | |
| Lancefield—Tooborac Road | .. | | 18 11 10 | 18 11 10 |
| QUEENSLIFFE BOROUGH— | | | | |
| Geelong Road | .. | | 16 5 11 | |
| Point Lonsdale Road | .. | | 1 13 4 | 17 19 3 |
| RINGWOOD BOROUGH— | | | | |
| Main Healesville Road | .. | | 2,408 8 10 | |
| Mount Dandenong Road | .. | | 98 16 2 | |
| Ringwood—Warrandyte Road.. .. . | .. | | 431 15 10 | 2,939 0 10 |
| RINGWOOD BOROUGH AND DONCASTER AND TEMPLESTOWE SHIRES (Joint Works)— | | | | |
| Ringwood—Warrandyte Road.. .. . | .. | | 1 16 0 | 1 16 0 |
| RIPON SHIRE— | | | | |
| Ballarat—Ararat Road | .. | | 334 8 4 | |
| Ballarat—Hamilton Road | .. | | 1,926 4 4 | |
| Skipton Road | .. | | 1,916 14 0 | 4,177 6 8 |
| RIPON AND HAMPDEN SHIRES (Joint Works)— | | | | |
| Ballarat—Hamilton Road | .. | | 10 7 9 | 10 7 9 |
| ROCHESTER SHIRE— | | | | |
| Bendigo—Echuca Road | .. | | 304 12 1 | |
| Corop Road | .. | | 134 13 3 | |
| Rochester—Bamawm—Prairie Road | .. | | 1,904 11 6 | |
| Timmering Road | .. | | 736 7 3 | 3,080 4 1 |
| RODNEY SHIRE— | | | | |
| Kyabram—Nathalia Road | .. | | 6 19 0 | |
| Kyabram—Tongala | .. | | 317 18 11 | |
| Mooroopna—Undera Road | .. | | 28 3 2 | |
| Shepparton—Tatura Road | .. | | 219 19 3 | |
| Tatura—Byrneside—Kyabram Road | .. | | 1,930 8 7 | |
| Tatura—Murchison Road | .. | | 1,793 8 2 | 4,296 17 1 |
| RODNEY AND SHEPPARTON BOROUGH (Joint Works)— | | | | |
| Shepparton—Tatura Road | .. | | 36 10 10 | 36 10 10 |
| ROMSEY SHIRE— | | | | |
| Lancefield—Kilmore Road | .. | | 253 10 7 | |
| Lancefield—Tooborac Road | .. | 22 1 0 | 245 7 1 | |
| Melbourne—Lancefield Road | .. | | 1,563 7 0 | |
| Woodend—Lancefield Road | .. | | 358 12 11 | |
| | | 22 1 0 | | 2,420 17 7 |
| Carried forward | | 47,925 17 4 | | 407,562 7 6 |

STATEMENT OF EXPENDITURE IN CONNEXION WITH CONSTRUCTION AND MAINTENANCE, ETC.—*continued.*

| Municipality and Road. | Permanent Works. | | Maintenance Works. | |
|--|------------------|-------------|--------------------|-------------|
| | Amount. | Total. | Amount. | Total. |
| Brought forward | £ s. d. | £ s. d. | £ s. d. | £ s. d. |
| ROMSEY AND NEWHAM AND WOODEND SHIRES (Joint Works)— | .. | 47,925 17 4 | .. | 407,562 7 6 |
| Woodend-Lancefield Road | 31 6 0 | | .. | |
| | | 31 6 0 | | |
| ROSEDALE SHIRE— | | | | |
| Prince's Highway | .. | | 49 3 8 | |
| Seaspray Road | .. | | 378 17 0 | |
| Traralgon-Gormandale Road | .. | | 113 12 5 | |
| Traralgon-Maffra Road | .. | | 1,656 10 11 | |
| Willung Road | .. | | 139 5 6 | |
| | | | | 2,337 9 6 |
| ROSEDALE AND ALBERTON SHIRES (Joint Works)— | | | | |
| Carrajuug-Gormandale Road | .. | | 5 15 6 | |
| | | | | 5 15 6 |
| RUTHERGLEN SHIRE— | | | | |
| Barnawartha-Howlong Road | .. | | 62 0 9 | |
| Chiltern-Howlong Road | .. | | 277 14 3 | |
| Murray Valley Road | .. | | 39 4 7 | |
| Rutherglen-Wahgunyah Road | .. | | 353 19 2 | |
| Springhurst-Rutherglen Road | .. | | Bd. 204 9 0 | |
| | | | | 937 7 9 |
| SALE TOWN— | | | | |
| Prince's Highway | .. | | 394 2 7 | |
| Sale-Longford Road | .. | | 1,132 18 0 | |
| Sal-Longford Road (Latrobe River Swing Bridge) | .. | | 494 8 3 | |
| | | | | 2,021 8 10 |
| SANDRINGHAM CITY— | | | | |
| Beach (Outer Metropolitan) Road | 13,583 14 1 | | 7,000 0 0 | |
| | | 13,583 14 1 | | 7,000 0 0 |
| SEBASTOPOL BOROUGH— | | | | |
| Ballarat-Hamilton Road | .. | | 13 1 7 | |
| Ballarat-Rokewood Road | .. | | 229 10 9 | |
| | | | | 242 12 4 |
| SEYMOUR SHIRE— | | | | |
| Avenel-Longwood Road | .. | | 14 19 6 | |
| Goulburn Valley Road | .. | | Bd. 355 15 0 | |
| Highlands Road | .. | | 449 13 11 | |
| Seymour-Yea Road | .. | | Bd. 426 7 4 | |
| Sydney Road | .. | | Bd. 39 6 5 | |
| Upper Goulburn Road | .. | | 542 13 9 | |
| | | | | 1,828 15 11 |
| SHEPPARTON SHIRE— | | | | |
| Dookie-Nalinga Road | .. | | 56 0 4 | |
| Dookie-Violet Town Road | .. | | 39 1 0 | |
| Katandra Road | .. | | 245 16 5 | |
| Fine Lodge Road | .. | | 40 19 7 | |
| Shepparton-Nagambie Road | .. | | 518 16 1 | |
| Shepparton-Numurkah Road | .. | | 496 19 11 | |
| | | | | 1,397 13 4 |
| SHEPPARTON SHIRE AND SHEPPARTON BOROUGH (Joint Works)— | | | | |
| Shepparton-Nalinga Road | .. | | 72 18 4 | |
| | | | | 72 18 4 |
| SHEPPARTON BOROUGH— | | | | |
| Shepparton-Nagambie Road | .. | | 85 9 0 | |
| Shepparton-Nalinga Road | .. | | 91 3 0 | |
| Shepparton-Numurkah Road | .. | | 29 17 2 | |
| | | | | 206 9 2 |
| SHEPPARTON BOROUGH AND RODNEY SHIRE (Joint Works)— | | | | |
| Shepparton-Mooroopna Road | .. | | 50 7 5 | |
| Shepparton-Tatura Road | .. | | 42 17 3 | |
| | | | | 93 4 8 |
| SOUTH BARWON SHIRE— | | | | |
| Barwon Heads Road | 84 5 8 | | 1,490 15 2 | |
| Prince's Highway | .. | | 391 16 6 | |
| Torquay Road | .. | | 414 10 0 | |
| | | 84 5 8 | | 2,297 1 8 |
| SOUTH BARWON SHIRE AND GEELONG CITY (Joint Works)— | | | | |
| Prince's Highway | .. | | 60 12 7 | |
| | | | | 60 12 7 |
| SOUTH BARWON AND BARRARBOOL SHIRES (Joint Works)— | | | | |
| Torquay Road | .. | | 1,166 0 5 | |
| | | | | 1,166 0 5 |
| SOUTH BARWON AND BELLARINE SHIRES (Joint Works)— | | | | |
| Barwon Heads Bridge | .. | | 48 7 6 | |
| | | | | 48 7 6 |
| SOUTH GIPPSLAND SHIRE— | | | | |
| Albert River-Welshpool Road | .. | | 21 9 0 | |
| Boolarra-Foster Road | .. | | 241 15 1 | |
| Boolarra-Welshpool Road | .. | | 316 12 11 | |
| Falls Road | .. | | 214 13 10 | |
| Foster-Yarram Road | .. | | 2,180 16 6 | |
| Hazel Park Road | .. | | 114 1 2 | |
| Main South Gippsland Road | .. | | 2,242 4 7 | |
| Stony Creek-Dollar Road | .. | | 157 16 8 | |
| Toora-Gunyah Road | .. | | 372 13 1 | |
| Toora-Wonyip Road | .. | | 320 18 1 | |
| Turton's Creek Road | .. | | 105 1 0 | |
| | | | | 6,288 1 11 |
| Carried forward | .. | 61,025 3 1 | .. | 433,566 11 |

STATEMENT OF EXPENDITURE IN CONNEXION WITH CONSTRUCTION AND MAINTENANCE, ETC.—*continued*

| Municipality and Road. | Permanent Works. | | Maintenance Works. | |
|--|------------------|-------------|--------------------|--------------|
| | Amount. | Total. | Amount. | Total. |
| | £ s. d. | £ s. d. | £ s. d. | £ s. d. |
| Brought forward | | 61,625 3 1 | | 433,566 6 11 |
| SOUTH GIPPSLAND AND WOORAYL SHIRES (Joint Works)— | | | | |
| Dollar-Stony Creek Road | .. | | 155 12 1 | |
| Boolarra-Foster Road | .. | | Bd. 170 15 0 | |
| | | | | 326 7 1 |
| ST. ARNAUD BOROUGH AND KARA KARA SHIRE (Joint Works)— | | | | |
| Charlton Road | 249 7 9 | 249 7 9 | .. | |
| ST. ARNAUD BOROUGH— | | | | |
| Avoca-St. Arnaud Road | .. | | 2 15 0 | |
| Charlton Road | .. | | 114 18 3 | |
| Navarre Road | .. | | 18 14 9 | |
| St. Arnaud-Donald Road | .. | | 0 18 4 | |
| | | | | 137 6 4 |
| STAWELL SHIRE— | | | | |
| Horsham-Wal Wal Road | .. | | 64 13 9 | |
| Landsborough Road | .. | | 63 9 6 | |
| Marnoo Road | 1,021 2 4 | | 594 12 1 | |
| Marnoo-Rupanyup Road | .. | | 81 10 0 | |
| Navarre Road | 956 17 1 | | 609 14 11 | |
| Stawell-Glenorchy-Horsham Road | .. | | 1,457 17 10 | |
| Stawell-Grampians Road | .. | | Bd. 1,000 0 0 | |
| Stawell-Warracknabeal | .. | | 580 15 2 | |
| | | 1,977 19 5 | | 4,452 13 3 |
| STAWELL BOROUGH— | | | | |
| Ararat-Stawell Road | .. | | 435 0 7 | |
| Glenorchy Road | .. | | 20 18 9 | |
| | | | | 455 19 4 |
| STRATHFIELDSAYE SHIRE— | | | | |
| Heathcote-Bendigo Road | 41 7 4 | | 168 14 0 | |
| Mandurang Road | .. | | 327 19 2 | |
| Strathfieldsaye Road | 620 9 5 | | 665 0 4 | |
| | | 661 16 9 | | 1,161 13 6 |
| SWAN HILL SHIRE— | | | | |
| Annuello-Wemen Road | .. | | 169 12 7 | |
| Euston Road | .. | | 297 4 0 | |
| Nyah-Ouyen Road | .. | | 943 13 11 | |
| Piangil Station Road | .. | | 7 16 8 | |
| Swan Hill Road | .. | | 97 5 0 | |
| Tooleybuc | .. | | 4 6 5 | |
| Ultima Road | .. | | 736 5 10 | |
| Ultima-Sea Lake Road | .. | | 132 5 7 | |
| | | | | 2,388 10 0 |
| TALBOT SHIRE— | | | | |
| Maryborough-Avoca Road | .. | | 39 11 2 | |
| Maryborough-Ballarat Road | .. | | 1,209 7 5 | |
| | | | | 1,248 18 7 |
| TAMBO SHIRE— | | | | |
| Bairnsdale-Bruthon Road | .. | | 121 17 10 | |
| Basin Road | .. | | 177 0 9 | |
| Bruthen-Omeo Road | .. | | 47 4 7 | |
| Mossiface Road | .. | | 95 3 9 | |
| Nowa Nowa-Buchan-Gelantipy Road | .. | | 927 19 7 | |
| Prince's Highway | .. | | Bd. 321 16 8 | |
| | | | | 1,691 3 2 |
| TOWONG SHIRE— | | | | |
| Murray Valley Road | .. | | 884 1 1 | |
| Omeo Road | .. | | 974 16 0 | |
| | | | | 1,858 17 1 |
| TRARALGON SHIRE— | | | | |
| Prince's Highway | .. | | 243 8 0 | |
| Traralgon-Balook Road | .. | | 258 16 1 | |
| Traralgon Creek Road | 370 1 10 | | 253 14 11 | |
| Traralgon-Gormandale Road | .. | | 482 19 2 | |
| Traralgon-Maffra Road | .. | | 383 2 6 | |
| Tyers Road | .. | | 779 14 5 | |
| | | 370 1 10 | | 2,401 15 1 |
| TRARALGON AND ROSEDALE SHIRES (Joint Works)— | | | | |
| Latrobe River Bridge, Traralgon-Maffra Road | .. | | 899 5 4 | |
| | | | | 899 5 4 |
| TRARALGON AND MORWELL SHIRES (Joint Works)— | | | | |
| Tyers River Bridge Road | .. | | 254 8 7 | |
| | | | | 254 8 7 |
| TULLAROOP SHIRE— | | | | |
| Avoca Road | .. | | 57 4 6 | |
| Ballarat Road | .. | | 35 4 1 | |
| Castlemaine-Maryborough Road | .. | | Bd. 447 8 0 | |
| Dunolly Road | .. | | 19 0 11 | |
| Eddington Road | .. | | 1,054 12 5 | |
| Maryborough-Dunolly Road | .. | | 76 11 0 | |
| Natte Yallock Road | .. | | 268 11 7 | |
| | | | | 1,958 12 6 |
| Carried forward | | 64,884 8 10 | | 452,801 16 9 |

STATEMENT OF EXPENDITURE IN CONNEXION WITH CONSTRUCTION AND MAINTENANCE, ETC.—*continued.*

| Municipality and Road. | Permanent Works. | | Maintenance Works. | |
|---|------------------|-------------|--------------------|--------------|
| | Amount. | Total. | Amount. | Total. |
| | £ s. d. | £ s. d. | £ s. d. | £ s. d. |
| Brought forward | | 64,884 8 10 | | 452,801 16 9 |
| TUNGAMAH SHIRE— | | | | |
| Cobram-Katamatite Road | | | 325 7 6 | |
| Cobram South Road | | | 230 13 6 | |
| Katandra Road | | | 115 15 2 | |
| Numurkah-Tungamah-Wilby Road | | | 603 7 7 | |
| St. James Road | | | 325 15 2 | |
| Yarrowonga-Cobram Road | | | 125 15 0 | |
| | | | | 1,726 13 11 |
| UPPER MURRAY SHIRE— | | | | |
| Corryong Road | | | 722 16 5 | |
| Tntaldra Road | 137 18 1 | | 565 17 8 | |
| | | 137 18 1 | | 1,288 14 1 |
| UPPER YARRA SHIRE— | | | | |
| Don Road | | | 50 11 4 | |
| Little Yarra Road | | | 854 15 7 | |
| Warburton Road | | | 1,819 3 0 | |
| Woods Point Road | | | Bd. 1,074 3 8 | |
| | | | | 3,798 13 7 |
| VIOLET TOWN SHIRE— | | | | |
| Murchison-Violet Town Road | 696 3 6 | | 242 0 4 | |
| Sydney Road | | | Bd. 5 3 5 | |
| Violet Town-Dookie Road | | | 547 1 8 | |
| | | 696 3 6 | | 794 5 5 |
| WALPEUP SHIRE— | | | | |
| Mildura Road | | | 76 13 4 | |
| Ouyon-Pinnaroo Road | | | 466 8 6 | |
| | | | | 543 1 10 |
| WANGARATTA SHIRE— | | | | |
| Beechworth Road | | | Bd. 263 10 8 | |
| Beechworth Road | | | 529 10 6 | |
| Peechelba Road | | | 27 13 8 | |
| Springhurst-Rutherglen Road | | | Bd. 140 1 3 | |
| Wangaratta-Myrtleford Road | | | 195 2 2 | |
| Yarrowonga Road | | | Bd. 308 19 0 | |
| | | | | 1,464 17 3 |
| WANGARATTA BOROUGH AND WANGARATTA SHIRE (Joint Works)— | | | | |
| Yarrowonga Road | | | 6 14 10 | |
| | | | | 6 14 10 |
| WANGARATTA BOROUGH— | | | | |
| Beechworth Road | | | Bd. 28 4 3 | |
| Beechworth Road | | | 101 7 11 | |
| Sydney Road | | | Bd. 214 18 6 | |
| Sydney Road | | | 13 15 5 | |
| | | | | 358 6 1 |
| WANNON SHIRE— | | | | |
| Coleraine-Harrow-Apsley Road | | | 1,866 2 5 | |
| Hamilton-Coleraine-Casterton Road | | | 1,853 3 11 | |
| Wannon Bridge Road | | | 537 18 9 | |
| | | | | 4,257 5 1 |
| WANNON AND GLENELG SHIRES (Joint Works)— | | | | |
| Hamilton-Coleraine-Casterton Road | | | 677 14 7 | |
| | | | | 677 14 7 |
| WARANGA SHIRE— | | | | |
| Colbinabbin-Moora Road | | | 654 11 9 | |
| Elmore-Colbinabbin Road | | | 543 15 3 | |
| Heatheote-Elmore Road | | | 965 18 10 | |
| Murchison-Rushworth Road | | | 817 17 10 | |
| Rushworth-Stanhope Road | | | 936 19 3 | |
| Tatura Road | | | 27 9 9 | |
| | | | | 3,946 12 8 |
| WARANGA AND HUNTLY SHIRES (Joint Works)— | | | | |
| Heatheote-Elmore Road | | | 24 7 0 | |
| | | | | 24 7 0 |
| WARANGA AND GOULBURN SHIRES (Joint Works)— | | | | |
| Murchison-Rushworth Road | | | 4 0 0 | |
| | | | | 4 0 0 |
| WARRAGUL SHIRE— | | | | |
| Bloomfield Road | | | 565 1 10 | |
| Brandy Creek Road | | | 821 9 3 | |
| Darnum-Allambee Road | | | 332 11 5 | |
| Darnum-Allambee Road | | | Bd. 105 15 6 | |
| Prince's Highway | | | 406 2 3 | |
| Warragul-Korumburra Road | | | 1,273 7 0 | |
| Warragul-Leongatha Road | | | 104 2 6 | |
| | | | | 3,608 9 9 |
| WARRNAMBOOL SHIRE— | | | | |
| Allansford-Nirranda Road | | | 133 4 9 | |
| Caramut-Lismore Road | | | 15 2 7 | |
| Framlingham Road | | | 286 0 9 | |
| Garvoc-Laang Road | | | 54 16 2 | |
| Garvoc-Laang Road | 460 18 3 | | | |
| Mortlake Road | | | 1,709 7 2 | |
| Peterborough Road | | | 210 16 3 | |
| Timboon-Nirranda Road | | | 125 13 0 | |
| | | 460 18 3 | | 2,535 0 8 |
| Carried forward | | 66,179 8 8 | | 477,836 13 6 |

STATEMENT OF EXPENDITURE IN CONNEXION WITH CONSTRUCTION AND MAINTENANCE, ETC.—*continued.*

| Municipality and Road. | Permanent Works. | | Maintenance Works. | |
|--|------------------|------------|--------------------|--------------|
| | Amount. | Total. | Amount. | Total. |
| Brought forward | £ s. d. | £ s. d. | £ s. d. | £ s. d. |
| WERRIBEE SHIRE— | | 66,179 8 8 | | 477,836 13 6 |
| Geelong—Bacchus Marsh Road .. .. . | .. .. . |  | 169 9 1 | |
| Prince's Highway .. .. . | .. .. . |  | Bd. 20 0 2 | 189 9 3 |
| WHITTLESEA SHIRE— | | | | |
| Epping Road .. .. . | .. .. . |  | 462 19 2 | |
| Main Whittlesea Road .. .. . | .. .. . |  | 1,524 1 4 | |
| Wallan Road .. .. . | .. .. . |  | 1,853 16 3 | |
| Whittlesea—Kingslake Road .. .. . | .. .. . |  | 134 14 3 | 3,975 11 0 |
| WIMMERA SHIRE— | | | | |
| Horsham—Murtoa Road .. .. . | .. .. . |  | 925 7 11 | |
| Horsham—Wal Wal Road .. .. . | .. .. . |  | 639 8 10 | |
| Natimuk Road .. .. . | .. .. . |  | 380 3 6 | 1,945 0 3 |
| WIMMERA AND ARAPILES SHIRES (Joint Works)— | | | | |
| Horsham—Hamilton Road .. .. . | .. .. . |  | 1,398 0 0 | 1,398 0 0 |
| WINCHELSEA SHIRE— | | | | |
| Birregurra Road .. .. . | .. .. . |  | 1,155 7 1 | |
| Birregurra—Dean's Marsh Road | 41 8 4 | | 1,376 15 1 | |
| Birregurra—Forrest Road .. .. . | .. .. . |  | 1,347 0 11 | |
| Lorne Road .. .. . | .. .. . |  | Bd. 1,013 16 8 | |
| Prince's Highway .. .. . | .. .. . |  | Bd. 371 15 10 | 5,264 15 7 |
| WINCHELSEA AND COLAC SHIRES (Joint Works)— | | 41 8 4 | | |
| Birregurra Road .. .. . | .. .. . |  | 2 0 0 | 2 0 0 |
| WODONGA SHIRE— | | | | |
| Kiewa—Wodonga Road .. .. . | .. .. . |  | 5 13 10 | |
| Wodonga—Yackandandah Road .. .. . | .. .. . |  | 57 4 4 | |
| Sydney Road .. .. . | .. .. . |  | 13 19 10 | 76 18 0 |
| WONTHAGGI BOROUGH— | | | | |
| Wonthaggi—Inverloch Road .. .. . | .. .. . |  | 910 0 10 | |
| Wonthaggi—Korumburra Road .. .. . | .. .. . |  | 154 14 11 | |
| Wonthaggi—Loch Road .. .. . | .. .. . |  | 430 18 4 | 1,495 14 1 |
| WOORAYL SHIRE— | | | | |
| Fairbank Road .. .. . | .. .. . |  | 118 13 11 | |
| Farmer's Road .. .. . | .. .. . |  | 1,840 16 5 | |
| Inverloch—Leongatha Road .. .. . | .. .. . |  | 1,531 19 7 | |
| Inverloch—Wonthaggi Road .. .. . | .. .. . |  | 567 5 1 | |
| Kongwak—Inverloch Road | 11 12 0 | | 55 9 6 | |
| Leongatha—Mirboo Road .. .. . | .. .. . |  | 754 6 6 | |
| Leongatha—Yarragon Road .. .. . | .. .. . |  | 1,051 16 2 | |
| Lower Tarwin Road .. .. . | .. .. . |  | 1,412 5 4 | |
| Main South Gippsland Road .. .. . | .. .. . |  | 1,500 16 11 | |
| Mardan Road | 12 15 8 | | 2,461 5 2 | |
| Mardan Road .. .. . | .. .. . |  | Bd. 2,103 11 2 | |
| Turton's Creek Road .. .. . | .. .. . |  | 233 16 9 | |
| Wild Dog Valley Road .. .. . | .. .. . |  | 1,517 10 1 | 15,149 12 7 |
| WYCHEPROOF SHIRE— | | 24 7 8 | | |
| Birchip—Sea Lake Road | 114 8 4 | | 350 10 4 | |
| Birchip—Wycheproof Road | 32 0 0 | | 310 17 6 | |
| Coraek Road .. .. . | .. .. . |  | .. .. . |  |
| Sea Lake—Ultima Road | 294 18 6 | | 141 3 11 | |
| Woomelang—Sea Lake Road | 445 15 11 | | 329 5 11 | |
| Wycheproof—Sea Lake Road .. .. . | .. .. . |  | 432 0 11 | 1,563 18 7 |
| YACKANDANDAH SHIRE— | | 887 2 9 | | |
| Dederang Road .. .. . | .. .. . |  | 806 19 2 | |
| Gundowring Road .. .. . | .. .. . |  | 375 7 9 | |
| Kergunyah South Road .. .. . | .. .. . |  | 149 14 5 | |
| Kiewa East Road .. .. . | .. .. . |  | 543 10 5 | |
| Kiewa—Wodonga Road .. .. . | .. .. . |  | 887 13 2 | |
| Myrtleford—Yackandandah Road .. .. . | .. .. . |  | 148 4 9 | |
| Yackandandah—Wodonga Road .. .. . | .. .. . |  | 993 1 9 | 3,904 11 5 |
| YARRAWONGA SHIRE— | | | | |
| Peechelba Road .. .. . | .. .. . |  | 198 5 9 | |
| Tungamah—Wilby Road .. .. . | .. .. . |  | 211 9 1 | |
| Wangaratta—Yarrawonga Road .. .. . | .. .. . |  | 865 3 0 | |
| Yarrawonga—Cobram Road .. .. . | .. .. . |  | 1 2 0 | 1,275 19 10 |
| YEA SHIRE— | | | | |
| Highlands Road .. .. . | .. .. . |  | 148 5 10 | |
| Molesworth—Dropmore Road .. .. . | .. .. . |  | 200 18 2 | |
| Upper Goulburn Road .. .. . | .. .. . |  | 1,711 3 5 | |
| Yea—Glenburn Road .. .. . | .. .. . |  | Bd. 139 2 1 | |
| Whittlesea—Yea Road .. .. . | .. .. . |  | 806 10 4 | |
| Yarra Glen—Glenburn Road .. .. . | .. .. . |  | 304 16 0 | |
| Yea—Glenburn Road .. .. . | .. .. . |  | 805 9 5 | 4,116 5 3 |
| YEA AND BROADFORD SHIRES (Joint Works)— | | | | |
| Upper Goulburn Road .. .. . | .. .. . |  | 153 18 3 | 153 18 3 |
| Carried forward .. .. . | .. .. . | 67,132 7 5 | .. .. . | 518,348 7 7 |

STATEMENT OF EXPENDITURE IN CONNEXION WITH CONSTRUCTION AND MAINTENANCE ETC.—*continued.*

| Municipality and Road. | Permanent Works. | | Maintenance Works. | |
|---------------------------------|------------------|------------|--------------------|--------------|
| | Amount. | Total. | Amount. | Total. |
| | £ s. d. | £ s. d. | £ s. d. | £ s. d. |
| Brought forward | .. | 67,132 7 5 | .. | 518,348 7 7 |
| STATE HIGHWAYS. | | | | |
| Prince's Highway West | .. | .. | 65,564 8 7 | .. |
| Prince's Highway East | .. | .. | 110,543 8 10 | .. |
| Western Highway | .. | .. | 38,634 18 8 | .. |
| Calder Highway | .. | .. | 46,616 5 4 | .. |
| Northern Highway | .. | .. | 3,655 1 4 | .. |
| Hume Highway | .. | .. | 16,276 10 3 | .. |
| Omeo Highway | .. | .. | 28,548 13 4 | .. |
| Murray Valley Highway | .. | .. | 102,709 16 0 | .. |
| South Gippsland Highway | .. | .. | 24,971 5 2 | .. |
| Midland Highway | .. | .. | 21,867 3 3 | .. |
| Bonang Highway | .. | .. | 7,544 14 0 | .. |
| | | | | 466,932 4 9 |
| Total | .. | 67,132 7 5 | | 985,280 12 4 |

APPENDIX D.

COUNTRY ROADS BOARD.

STATEMENT OF EXPENDITURE IN CONNEXION WITH CONSTRUCTION OF DEVELOPMENTAL ROADS FOR YEAR ENDED 30TH JUNE, 1936.

| Municipality and Road. | Act No. 3662 (3255). | | Municipality and Road. | Act No. 3662 (3255). | |
|------------------------------|----------------------|--------------|-----------------------------|----------------------|--------------|
| | Amount. | Total. | | Amount. | Total. |
| | £ s. d. | £ s. d. | | £ s. d. | £ s. d. |
| ALBERTON SHIRE— | | | Brought forward .. | | 13,016 11 11 |
| Binginwarri South Road .. | 242 17 2 | | DONALD SHIRE— | | |
| Blackwarri Yarram Road .. | 538 13 11 | | Corack-East Donald Road .. | 486 1 0 | |
| Carrajung Lower Road .. | 279 14 0 | | Donald-Minyip Road .. | 720 14 8 | |
| Lay's Road .. | 297 17 11 | | Litchfield Road .. | 683 11 9 | |
| Tarra Valley Road .. | 474 8 0 | | Jeffcott Road .. | 476 3 11 | |
| Whitelaw's Track .. | 773 2 10 | 2,606 13 10 | Watchem-Warracknabeal Road | 10 11 0 | 2,377 2 4 |
| ARAPILES SHIRE— | | | DUNDAS SHIRE— | | |
| Miga Lake-Gymbowen Road | 60 6 0 | 60 6 0 | Melville Forest Road .. | 110 4 9 | 110 4 9 |
| AVON SHIRE— | | | DUNMUNKLE SHIRE— | | |
| Clydebank Road .. | 559 5 5 | 559 5 5 | Burrum Siding Road .. | 7 7 4 | |
| BASS SHIRE— | | | Lubeck West Road .. | 7 3 7 | 14 10 11 |
| Kernot-Krowera Road .. | 72 3 10 | 72 3 10 | ELTHAM SHIRE— | | |
| BAIRNSDALE SHIRE— | | | Cottle's Bridge-Strathewan | | |
| Glenaladale-Lindenow Road | 85 4 10 | | Road | 1 4 6 | 1 4 6 |
| Bairnsdale-Bengworden Road | 286 8 9 | | FERNTREE GULLY SHIRE— | | |
| Calulu-Boggy Creek Road .. | 635 16 5 | 1,348 17 0 | Emerald-Maclosfield Road .. | 588 11 0 | |
| Fernbank-Stockdale Road .. | 341 7 0 | | Emerald-Monbulk .. | 513 4 1 | |
| BENALLA SHIRE— | | | Lysterfield .. | 31 12 8 | 1,133 7 9 |
| Lima Road .. | 394 16 11 | | FLINDERS SHIRE— | | |
| Molyullah-Tatong Road .. | 319 0 5 | 713 17 4 | Bittern-Dromana Road .. | 482 4 2 | |
| BERWICK SHIRE— | | | Brown's Road .. | 373 10 11 | 855 15 1 |
| Nar-nar-noon-Gembrook Road | 779 0 8 | | GLENELG SHIRE— | | |
| Tynong-Tonimbuk Road .. | 45 3 6 | 824 4 2 | Dorgholm-Elderslie Road .. | 715 8 7 | |
| BORUNG SHIRE— | | | Merino-Struan-Tahara Road | 134 5 6 | 849 14 1 |
| Aubrey Road .. | 328 8 5 | | GLENLYON SHIRE— | | |
| Boolite-Sheep Hills Road .. | 34 19 5 | | Porcupino Ridge Road .. | 242 13 10 | 242 13 10 |
| Brim East Road .. | 406 18 11 | | GRENVILLE SHIRE— | | |
| Brim West Road .. | 20 10 5 | | Gillett's Road .. | 126 1 3 | 126 1 3 |
| Donald-Warracknabeal Road | 215 16 10 | 1,168 12 0 | HAMPDEN SHIRE— | | |
| Lah West Road .. | 161 18 0 | | Vite Vite Road .. | 788 19 11 | 788 19 11 |
| BORUNG AND KARKAROOC SHIRES | | | HAMPDEN, HEYTESBURY, AND | | |
| (Joint Works)— | | | WARRNAMBOOL SHIRES | | |
| Galaquil West Road .. | 80 5 10 | 80 5 10 | (Joint Works)— | | |
| BRIGHT SHIRE— | | | Ayresford Road .. | 987 12 6 | 987 12 6 |
| Happy Valley Road .. | 196 12 11 | 196 12 11 | HEYTESBURY SHIRE— | | |
| BULLA SHIRE— | | | South Ecklin Road .. | 726 6 11 | 726 6 11 |
| Konagaderra Road .. | 1,083 19 9 | 1,083 19 9 | KARKAROOC SHIRE— | | |
| BULLA AND BROADMEADOWS | | | Hopetoun-Lascelles Road .. | 25 9 6 | |
| SHIRES (Joint Works)— | | | Hopetoun-Yaapeet Road .. | 159 10 4 | |
| Konagaderra Road .. | 212 10 0 | 212 10 0 | Rosebery East Road .. | 296 0 0 | |
| BULN BULN SHIRE— | | | Rosebery West Road .. | 7 6 0 | |
| Neerim South-Neerim East | | | Patchewollock-Speed Road .. | 282 19 5 | |
| Road | 511 6 5 | | Yaapeet-Nypo Road .. | 334 12 5 | 1,105 17 8 |
| Rokeyby-North Jindiviek Road | 893 13 1 | 1,404 19 6 | KORONG SHIRE— | | |
| CHARLTON SHIRE— | | | Borong-Charlton Road .. | 966 19 2 | |
| Borong-Charlton Road .. | 283 5 2 | | Buckrabanyule South Road .. | 17 10 7 | |
| Glenloth .. | 232 7 7 | | Mysia West Road .. | 213 14 9 | |
| Yeungroon Road .. | 9 9 8 | 525 2 5 | Nine Mile Road .. | 298 11 9 | |
| DEAKIN SHIRE— | | | Wedderburn-Springhill Road | 55 0 9 | |
| Girgarre West Road .. | 524 9 6 | 524 9 6 | Enu-Logan Road .. | 9 2 0 | |
| DIMBOOLA SHIRE— | | | Wychitella North Road .. | 144 8 8 | 1,705 7 8 |
| Detpa-Hindmarsh Road .. | 981 17 11 | | KORUMBURRA SHIRE— | | |
| Glenlee-Jeparit Road .. | 652 14 6 | 1,634 12 5 | Witherden's Road .. | 60 0 4 | 60 0 4 |
| Carried forward .. | | 13,016 11 11 | Carried forward .. | | 24,101 11 5 |

STATEMENT OF EXPENDITURE IN CONNEXION WITH CONSTRUCTION OF DEVELOPMENTAL ROADS, ETC.—*continued.*

| Municipality and Road. | Act No. 3662 (3255). | | Municipality and Road. | Act No. 3662 (3255). | |
|--|----------------------|-------------|--|----------------------|-------------|
| | Amount. | Total. | | Amount. | Total. |
| | £ s. d. | £ s. d. | | £ s. d. | £ s. d. |
| Brought forward .. | .. | 24,101 11 5 | Brought forward .. | .. | 33,763 5 2 |
| KOWREE SHIRE— Edenhope-Natinuk Road .. | 15 14 0 | | TRARALGON SHIRE— Traralgon-Jeeralang Road .. | 683 16 5 | |
| Miga Lake-Gymbowen Road .. | 12 0 0 | 27 14 0 | Walker's Road .. | 249 15 0 | 933 11 5 |
| LOWAN SHIRE— Winiam Road .. | 17 19 2 | 17 19 2 | TUNGAMAH SHIRE— Yabba North Road .. | 909 15 1 | |
| MAFFRA SHIRE— Bundalaguah Road .. | 72 12 4 | 72 12 4 | Wunghnu-Youanmite Road .. | 343 9 10 | 1,253 4 11 |
| MARONG SHIRE— Bondigo-Serpentine Road .. | 319 10 2 | | UPPER MURRAY SHIRE— Beetoomba Road .. | 534 19 2 | |
| Yarlaberb Road .. | 183 13 10 | 503 4 0 | Kancobin Road .. | 563 12 8 | |
| MILDURA SHIRE— Benetook Avenue .. | 76 13 9 | | Thowgla Road .. | 150 6 1 | 1,248 17 11 |
| Red Cliffs West Road .. | 1,523 15 3 | | UPPER YARRA SHIRE— Woori Yallock-Cockatoo Road .. | 79 3 3 | 79 3 3 |
| Red Cliffs East Road .. | 77 1 9 | 1,677 10 9 | VIOLET TOWN SHIRE— Fernhills Road .. | 101 2 5 | |
| MORWELL SHIRE— Thorpdale East Road .. | 906 6 1 | 906 6 1 | Harry's Creek Road .. | 500 3 0 | 601 5 5 |
| MCLIVOR SHIRE— Baynton Road .. | 336 7 11 | 336 7 11 | WANGARATTA SHIRE— Boorhaman-Springhurst Road .. | 436 4 5 | 436 4 5 |
| NARRACAN SHIRE— Canal Road .. | 245 0 0 | | WANNON SHIRE— Melville Forest Road .. | 284 8 7 | 284 8 7 |
| Coalville-Moo Road .. | 11 1 7 | 256 1 7 | WARANGA SHIRE— Mount Camel-Corop Road .. | 26 0 7 | |
| NEWHAM AND WOODEND SHIRE— Campaspe Road .. | 374 2 9 | 374 2 9 | Mount Camel Estate Road .. | 45 10 8 | 71 11 3 |
| NEWSTEAD AND MOUNT ALEXANDER SHIRE— Glogower-Joyce's Creek Road .. | 294 0 4 | 294 0 4 | WARRNAMBOOL SHIRE— Pannure Road .. | 432 10 8 | 432 10 8 |
| OMEO SHIRE— Brookville Road .. | 807 8 10 | | WERRIBEE SHIRE— Bulban Road .. | 524 0 0 | 524 0 0 |
| Mount Leinster Road .. | 457 14 6 | 1,265 3 4 | WHITTLESEA SHIRE— Chadd's Creek Road .. | 471 17 1 | 471 17 1 |
| ORBOST SHIRE— Beto Bolong-Waygara Road .. | 277 18 2 | | WODONGA SHIRE— Beechworth-Wodonga Road .. | 45 15 10 | 45 15 10 |
| Jarrahrmond Road .. | 44 13 0 | | WOORAYL SHIRE— Coulter's Road .. | 320 18 2 | |
| Tostaroo Road .. | 16 7 6 | 338 18 8 | Dumbalk Road .. | 331 8 7 | |
| OXLEY SHIRE— Boggy Creek Road .. | 340 0 6 | | Inverloch-Lower Tarwin Road .. | 932 19 1 | |
| Buffalo River Road .. | 142 11 9 | 482 12 3 | Mardan-Dumbalk Road .. | 1,367 0 9 | |
| RUTHERGLEN SHIRE— Black Swamp Road .. | 470 10 10 | 470 10 10 | Meenyan-Nerrena Road .. | 994 14 0 | 3,947 0 7 |
| SOUTH GIPPSLAND SHIRE— Amoy's Track .. | 3 13 0 | | WYCHEPROOF SHIRE— Berriwillock-Woomelang Road .. | 532 6 5 | |
| Dollar-Poster Road .. | 7 14 0 | | Culgoa-Lalbert Road .. | 140 17 2 | |
| O'Grady's Ridgo Road .. | 448 2 8 | | Meridian Road .. | 0 18 0 | |
| Whitelaw's Track .. | 491 9 8 | | Nyarrin Road .. | 159 3 10 | |
| Yarakie Road .. | 166 13 11 | 1,117 13 3 | Myall-Sealake Road .. | 394 1 0 | |
| TOWONG SHIRE— Burrowyc-Koetong Road .. | 149 11 0 | | Glenloth-Wycheproof Road .. | 959 14 3 | 2,187 0 8 |
| Guy's Forest Road .. | 159 18 0 | | YACKANDANDAU SHIRE— Running Creek Road .. | 196 14 2 | 196 14 2 |
| Snowy Creek Road .. | 105 4 6 | | Less Suspense .. | .. | 46,476 11 4 |
| Tallangatta Creek Road .. | 255 11 8 | | Total .. | .. | 22 13 7 |
| Yabba Road .. | 850 11 4 | 1,520 16 6 | | | 46,453 17 9 |
| Carried forward .. | .. | 33,763 5 2 | | | |

APPENDIX E.

COUNTRY ROADS BOARD.

MAIN ROADS.

STATEMENT SHOWING MILEAGE, LOCALITY, ETC., OF ROADS CONSTRUCTED, RECONSTRUCTED, AND MAINTAINED UNDER THE PROVISIONS OF THE COUNTRY ROADS ACT 1928 DURING THE YEAR ENDED 30TH JUNE, 1936.

| Name of Municipality and Road. | Nature and Locality of Works. | Permanent Works Constructed. | Reconstruction and Maintenance Works Carried Out. |
|--------------------------------|--|------------------------------|---|
| | | Miles. | Miles. |
| UNDER MUNICIPALITIES. | | | |
| ALBERTON SHIRE— | | | |
| Albert River—Welshpool Road | Patrol maintenance throughout | .. | 8 |
| Balook—Yarram Road | Gravel sheeting from J. McKenzie's to Pattinson's | .. | 2 |
| .. .. | Patrol maintenance throughout | .. | 9 |
| Carrajjung—Gormandale Road | Reconditioning and double coat sealing between Tarra River and Max Creek, Calrossie | .. | 8.85 |
| .. .. | Improvement to curves from Bruthen Creek to Reedy Creek | .. | 1.5 |
| .. .. | Painting and tarring bridges over Max Creek, Greig's Creek, Shaw's Creek, Bodman's Creek, Bruthen Creek, and Reedy Creek | .. | — |
| .. .. | Patrol maintenance throughout | .. | 30 |
| Foster—Yarram Road | Erecting guard posts on curves | .. | — |
| .. .. | Patrol maintenance throughout | .. | 8 |
| Yarram—Boolarra Road | Reconditioning rough macadam between Keadling's Corner and stone quarry | .. | 5.55 |
| .. .. | Widening pavement with crushed rock between Mason's Corner and Waverley Corner | .. | 3 |
| .. .. | Patrol maintenance throughout | .. | 15 |
| Yarram—Port Albert Road | Widening pavement with crushed rock north of Le Grand's Crossing | .. | 1 |
| .. .. | Erecting guard posts on curves | .. | — |
| .. .. | Patrol maintenance throughout | .. | 9 |
| Yarram—Won Wron Road | Regrading, gravelling and double coat bitumen sealing from R. May's to W. Bodman's | .. | 1.1 |
| .. .. | Patrol maintenance throughout | .. | 5 |
| ALEXANDRA SHIRE— | | | |
| Cathkin—Mansfield Road | Reconstruction in gravel and construction of 8 feet x 6 feet reinforced concrete box culvert 42 feet between kerbs | .. | 66 |
| .. .. | Additions to 5 feet diameter reinforced concrete pipe culvert | .. | — |
| .. .. | Patrol maintenance throughout | .. | 12 |
| Healesville—Alexandra Road | Road-mix seal with quartz gravel aggregate from Alexandra towards Acheron | .. | 1.6 |
| .. .. | Patrol maintenance throughout | .. | 18 |
| Terip Terip Road | Patrol maintenance throughout | .. | 9.8 |
| Upper Goulburn Road | Construction of 4-span timber bridge and approaches | .. | 38 |
| .. .. | Sealing water-bound gravel in Alexandra township | .. | 5 |
| .. .. | Sealing water-bound gravel at Vea Shire boundary | .. | 19 |
| .. .. | Construction of 42-in. diameter reinforced concrete pipe culvert 36 feet long near Eglington Hill | .. | — |
| .. .. | Reconstruction in gravel through the township of Thornton | .. | 57 |
| .. .. | Renewal of superstructure of bridge over the Goulburn River | .. | 99 |
| .. .. | Superelevation of curves throughout | .. | — |
| .. .. | Patrol maintenance throughout | .. | 27 |
| Yarck Road | Superelevation of curves throughout | .. | — |
| .. .. | Patrol maintenance throughout | .. | 3.8 |
| ARAPILES SHIRE— | | | |
| Horsham—Hamilton Road | Double coat bituminous surfacing at McKenzie Creek | .. | 8.5 |
| .. .. | General maintenance throughout | .. | 25.4 |
| Horsham—Natinuk—Edenhope Road | Gravel construction in Parish of Tooan | 1.35 | .. |
| .. .. | Gravel construction in Parish of Kalingur | 1.3 | .. |
| .. .. | Reforming and gravelling in Jacky sand in Parish of Tooan | .. | 16 |
| .. .. | General maintenance throughout | .. | 23.5 |
| ARARAT SHIRE— | | | |
| Ararat—Elmhurst Road | Reforming and gravelling | .. | 5 |
| .. .. | General maintenance throughout | .. | 23 |
| Ararat—Warrnambool Road | Reforming, gravelling and sealing with bitumen from 23 to 24.5 miles | .. | 1.5 |
| .. .. | Road-mix sealing from 4 to 5 miles, 12.25 to 13 miles, 14.8 to 15.3 miles, and 28.3 to 31.3 miles | .. | 5.25 |
| .. .. | General maintenance throughout | .. | 34 |
| Ballarat—Hamilton Road | Double coat sealing from 4.3 to 4.5 miles, and 6.3 to 7.55 miles | .. | 1.45 |
| .. .. | Road-mix sealing from 1 to 3 miles | .. | 2 |
| .. .. | Widening with gravel from 12 to 18 feet from 13 to 14 miles | .. | 1 |
| .. .. | General maintenance throughout | .. | 22.5 |
| Maroona—Glenthompson Road | Reforming and gravelling from 2 to 4.2 miles | .. | 2.2 |
| .. .. | Road-mix sealing from 10.5 to 12.5 miles and 13.8 to 17.2 miles | .. | 5.4 |
| .. .. | General maintenance throughout | .. | 22 |
| ARARAT TOWN— | | | |
| Ballarat—Stawell Road | Reconstruction near Maude Street and Albert Street | .. | 12 |
| .. .. | Patrol maintenance | .. | 3.5 |
| AVOCA SHIRE— | | | |
| Ararat Road | Scarifying, reshaping, resheeting and shouldering | .. | 5 |
| .. .. | Patrol maintenance throughout | .. | 7.2 |
| Ballarat—St. Arnaud Road | Realigning, shouldering with road-mix seal coat | .. | 92 |
| .. .. | Double coat sealing | .. | 57 |
| .. .. | Construction of pipe culverts, 30-in. diameter at .75 miles, 27-in. diameter at .95 miles, 21-in. diameter at 1.2 miles, 18-in. diameter at 6 miles south of Avoca | .. | — |
| .. .. | Construction of double 21-in. diameter and 18-in. diameter relieving pipes in floodways at Redbank | .. | — |
| .. .. | Patrol maintenance throughout | .. | 23.25 |
| Bealiba Road | Patrol maintenance throughout | .. | 9 |
| Landsborough Road | Redecking timber bridge 73 feet long, 16 ft. 6 in. wide | .. | 101 |
| .. .. | Patrol maintenance throughout | .. | 1.8 |
| Maryborough Road | Superelevating and realigning two curves at 3.3 and 3.7 miles from Avoca | .. | — |
| .. .. | Construction of 24-in. diameter pipe culvert at 2.25 miles from Avoca | .. | — |
| .. .. | Patrol maintenance throughout | .. | 5 |
| Navarre Road | Resheeting and drainage | .. | 4 |
| Carried forward | | 2.65 | 391.57 |

STATEMENT SHOWING MILEAGE, LOCALITY, ETC., OF ROADS CONSTRUCTED, ETC.—*continued.*

| Name of Municipality and Road. | Nature and Locality of Works. | Permanent Works Constructed. | Reconstruction and Maintenance Works Carried Out. |
|---|---|------------------------------|---|
| | | Miles. | Miles. |
| UNDER MUNICIPALITIES—<i>continued.</i> | | | |
| | Brought forward | 2.65 | 391.57 |
| AVON SHIRE — | | | |
| Dargo Road | General maintenance | | 45 |
| Sale-Maffra Road | General maintenance | | 2.96 |
| Maffra-Stratford Road | General maintenance | | 2 |
| Prince's Highway | General maintenance | | .75 |
| BACCHUS MARSH SHIRE — | | | |
| Bacchus Marsh-Balliang Road | Forming and gravelling from 4.15 to 4.87 miles, and 8.6 to 9.74 miles | | 1.86 |
| " " " " | Sealing from 1.5 to 3.5 miles | | 2 |
| " " " " | Construction of reinforced concrete pipe culvert at 4.2 miles | | 15.2 |
| " " " " | Patrol maintenance throughout | | 1.2 |
| Ballarat Road | Patrol maintenance throughout | | 1.5 |
| Geelong-Bacchus Marsh Road | Sealing from 2 to 3.5 miles | | .7 |
| " " " " | Road-mix sealing from .5 to 1.2 miles | | 7.8 |
| " " " " | Patrol maintenance throughout | | 1 |
| Gisborne Road | Shouldering and gravel resheeting, from 8 to 9 miles | | 1.5 |
| " " " " | Sealing from 5.2 to 6.7 miles | | .12 |
| " " " " | Construction of culvert and flood crossing at 3 miles | | 9.8 |
| " " " " | Patrol maintenance throughout | | 1.6 |
| BACCHUS MARSH AND CORIO SHIRES (Joint Works) — | | | |
| Bacchus Marsh-Balliang Road | Patrol maintenance from 10.3 to 11.9 miles | | — |
| BAIRNSDALE SHIRE — | | | |
| Bairnsdale-Lindenow Road | Construction of timber bridge | | 1.87 |
| " " " " | Reconstruction and bitumen surfacing | | 9 |
| " " " " | Patrol maintenance | | 1.25 |
| Bairnsdale-Paynesville Road | Reconstruction and bitumen surfacing | | .28 |
| " " " " | Construction of deviation | | 10 |
| " " " " | Patrol maintenance | | 16 |
| Buhunwaal-Tabberabbera Road | Patrol maintenance | | 3.4 |
| " " " " | Patrol maintenance | | — |
| BALLAN SHIRE — | | | |
| Ballarat Road | Patrol maintenance in Ballan township | | 1 |
| Daylesford Road | Resheeting with crushed rock and double coat bitumen sealing, northerly from 5.4 miles towards State Forest | | .93 |
| " " " " | Road-mix rescaling near Building School | | .11 |
| " " " " | Patrol maintenance throughout | | 12.7 |
| Mount Wallace Road | Road-mix bituminous rescaling two sections between 0 and 2 miles | | .85 |
| " " " " | Patrol maintenance throughout | | 10.7 |
| Gordon-Meredith "A" Road | General maintenance throughout | | 3.6 |
| Gordon-Meredith "B" Road | Reconstruction, widening, and resurfacing with crushed gravel, northerly from shire boundary towards Morrisons | | .62 |
| " " " " | Double coat bitumen sealing northerly from shire boundary towards Morrisons | | .62 |
| " " " " | General maintenance throughout | | 1.5 |
| Spargo Creek Road | General maintenance throughout | | 1.25 |
| BALLAN AND BUNINYONG SHIRES (Joint Works) — | | | |
| Gordon-Meredith "A" Road | General maintenance throughout | | .4 |
| BALLARAT SHIRE — | | | |
| Ballarat-Lexton Road | Road-mix rescaling with bitumen 15 feet wide, mainly between Learmonth and Waulbra, with two short sections at Pound Hill | | 3.73 |
| " " " " | General maintenance | | 18.21 |
| Maryborough-Ballararat Road | Reconditioning, scrubbing, reforming, gravelling, and priming and sealing with bitumen from 9.65 to 10.65 miles between Ascot and Chines | | 1 |
| " " " " | Road-mix rescaling with bitumen 15 feet wide between Miner's Rest and Ascot | | 3.2 |
| " " " " | Road-mix rescaling with bitumen 15 feet wide between Miner's Rest and Ballarat | | 1.08 |
| " " " " | General maintenance | | 12.65 |
| BANNOCKBURN SHIRE — | | | |
| Gordon-Meredith Road | Gravel sheeting | | .75 |
| " " " " | General maintenance throughout | | 3 |
| Inverleigh Road | Double coat bitumen sealing 18 feet wide on gravel, east of Inverleigh | | 1.7 |
| " " " " | Realignment and reconstruction at Fyansford | | .54 |
| " " " " | General maintenance | | 16.5 |
| Shelford-Bannockburn Road | Reconstruction and gravel sheeting, west of Bannockburn | | 2 |
| " " " " | General maintenance throughout | | 6.5 |
| BARRABOOL SHIRE — | | | |
| Anglesea Road | Gravel resheeting and double coat bitumen surfacing from 55 to 55.75 miles | | .75 |
| " " " " | Patrol maintenance from 51 to 68 miles | | 17 |
| Hendy Main Road | Double coat bitumen surfacing from 3.75 to 4.75 miles | | 1 |
| BASS SHIRE — | | | |
| Almurta Road | Construction of concrete culvert and approaches at Tennent's Creek | | .1 |
| " " " " | Patrol maintenance throughout, erecting timber mile and half-mile posts | | 4.95 |
| Almurta-Grantville Road | Superlevating curves at east end of road | | .15 |
| " " " " | Patrol maintenance throughout, erecting timber mile and half-mile posts | | 3.81 |
| Anderson-Dalyston Road | Construction of timber and steel bridge, 40 feet by 20 feet, over Bridge Creek, and approaches | | .19 |
| " " " " | Patrol maintenance throughout, erecting timber mile and half-mile posts | | 6.65 |
| Dalyston-Glen Forbes Road | Patrol maintenance throughout, erecting timber mile and half-mile posts | | 10.34 |
| Dalyston-Wonthaggi Road | Road-mix seal, 12 feet wide | | 1.93 |
| " " " " | Patrol maintenance throughout, erecting timber mile and half-mile posts | | 1.93 |
| Korumburra-Wonthaggi Road | Road-mix seal 12 feet wide, northerly from near the west boundary of Allotment 34E, Parish of Wonthaggi | | .89 |
| " " " " | Road-mix seal 12 feet wide, northerly from the Outtrill Road | | 1.4 |
| " " " " | Patrol maintenance throughout, erecting timber mile and half-mile posts | | 7.72 |
| Inverloch-Wonthaggi Road | Road-mix seal 12 feet wide, westerly from shire boundary | | 1.25 |
| " " " " | Patrol maintenance throughout, erecting timber mile and half-mile posts | | 3.57 |
| Main Coast Road | Surfacing and flanking northerly from 627 feet south of north boundary of Allotment 85H, Parish of Corinella | | 1.27 |
| " " " " | Forming and gravelling, fencing, &c., Hoddinott's deviation, through Allotment 26, Parish of Woolamai | .94 | — |
| " " " " | Patrol maintenance, erecting timber mile and half-mile posts | | 18.66 |
| Wonthaggi-Loch Road | Bitumen surfacing road-mix seal north-westerly and north-easterly from .3 miles south-east of the junction with the Dalyston-Wonthaggi Road | | 1.59 |
| " " " " | Superlevating and widening curves north of Allotment 63, Parish of Wonthaggi North to parish boundary | | .4 |
| " " " " | Patrol maintenance throughout, erecting timber mile and half-mile posts | | 16.21 |
| BASS SHIRE AND WONTHAGGI BOROUGH (Joint Works) — | | | |
| Loch-Wonthaggi Road | Patrol maintenance throughout | | .7 |
| | Carried forward | 3.59 | 735.96 |

STATEMENT SHOWING MILEAGE, LOCALITY, ETC., OF ROADS CONSTRUCTED, ETC.—*continued.*

| Name of Municipality and Road. | Nature and Locality of Works. | Permanent Works Constructed. | Reconstruction and Maintenance Works Carried Out. |
|---|---|------------------------------|---|
| | | Miles. | Miles. |
| UNDER MUNICIPALITIES—<i>continued.</i> | | | |
| | Brought forward | 3·59 | 735·96 |
| BEECHWORTH SHIRE— | | | |
| Beechworth Road | Scarifying at Golden Ball | | 1·5 |
| " " | Scarifying at Wooragee | | 2 |
| " " | Reconditioning near Golden Ball | | 1·5 |
| " " | Reconditioning near Wooragee | | 1 |
| " " | Surfacing at Golden Ball | | 1·75 |
| " " | Surfacing at Wooragee | | 25 |
| Bright Road | Patrol maintenance | | 5 |
| " " | Forming and gravelling near Myrtleford | | .. |
| " " | Widening at Bluebell | | 3 |
| " " | Gravelling at Bluebell | | 75 |
| " " | Patrol maintenance | | 5 |
| Everton-Myrtleford Road | Realigning at Everton | | 1 |
| " " | Reconditioning at Bowman's | | 2 |
| " " | Gravelling at Everton | | 1 |
| " " | Construction of culverts at 1, 8, and 9 miles | | — |
| " " | Patrol maintenance | | 11 |
| Myrtleford-Yackandandah Road | Patrol maintenance | | 3 |
| Stanley Road | Scarifying at Stanley | | 1·5 |
| " " | Reshaping at Stanley and Deep Creek | | 2 |
| " " | Gravelling at Stanley | | 1 |
| " " | Gravelling at Deep Creek | | 5 |
| " " | Patrol maintenance | | 9 |
| BELFAST SHIRE - | | | |
| Hamilton Road | Patrol maintenance | | 13·5 |
| Penshurst Road | General maintenance | | 9·5 |
| BELLARINE SHIRE - | | | |
| Barwon Heads-Ocean Grove Road | Patrol maintenance throughout | | 2 |
| Geelong-Portarlington Road | Patrol maintenance throughout | | 17 |
| Geelong-Queenscliffe Road | Patrol maintenance throughout | | 15 |
| Portarlington-St. Leonards Road | Patrol maintenance throughout | | 6·75 |
| BENALLA SHIRE— | | | |
| Benalla-Shepparton Road | General maintenance throughout | | 9 |
| Goorambat Road | General maintenance throughout | | 5·6 |
| Goorambat-Thoono Road | General maintenance throughout | | 11·8 |
| Greta Road | General maintenance throughout | | 8 |
| Lima Road | General maintenance throughout | | 2·9 |
| Tatong-Tolmie Road | General maintenance throughout | | 10 |
| Sydney Road | Reconstruction on new alignment western approach to Broken River Bridge | | 26 |
| " " | General maintenance throughout | | 2 |
| Kellicera Road | Forming and gravelling | 1·34 | |
| " " | General maintenance | | 11·2 |
| BERWICK SHIRE - | | | |
| Baconsfield-Emerald Road | Patrol maintenance | | 6·7 |
| Cockatoo-Gembrook Road | Reconstruction and sealing | | 81 |
| " " | Patrol maintenance | | 4·3 |
| " " | Patrol maintenance | | 2 |
| Gembrook Road | Patrol maintenance | | 5·5 |
| Gembrook-Becnak Road | Patrol maintenance | | 2 |
| Hallam-Emerald Road | Patrol maintenance | | 4·5 |
| Koo-wee-rup-Longwarry Road | Patrol maintenance | | 1·6 |
| Nar-Nar-Goon-Longwarry Road | Construction of bridge and approaches at Ararat Creek | 10 | |
| " " | Patrol maintenance | | 11·6 |
| Woori Yallock-Pakenham-Koo-wee-rup Road | Patrol maintenance | | 17·75 |
| BET BET SHIRE— | | | |
| Avoca-Bealiba Road | Forming and gravelling in detached sections | | 66 |
| " " | General maintenance throughout | | 13·7 |
| Betley Road | Patrol maintenance throughout | | 4·5 |
| Dunolly Road | Double coat seal from Broadway to Storm Channel, Dunolly | | 57 |
| " " | Patrol maintenance throughout | | 12 |
| " " | Patrol maintenance throughout | | 5 |
| Dunolly-Eddington Road | Patrol maintenance throughout | | 4·5 |
| Maryborough-Dunolly Road | Patrol maintenance throughout | | .. |
| BIRCHIP SHIRE - | | | |
| Beulah-Birehip-Wycheproof Road | Patrol maintenance throughout | | 22 |
| Donald-Birchip-Sealake Road | Forming and limestoning 2·5 miles north of Birchip | 58 | |
| " " | Forming and limestoning, 2 miles north of Birchip | | 49 |
| " " | Patrol maintenance throughout | | 26·75 |
| BLACKBURN AND MITCHAM SHIRES— | | | |
| Burwood Road | Reconstruction in crushed rock and sealing with bitumen, pavement width 20 feet | | 1·14 |
| " " | Provision for flood drainage | | 6 |
| " " | Patrol maintenance throughout | | 3·8 |
| Main Healesville Road | Reconstruction in modified macadam and superelevation of curve | | 11 |
| " " | Patrol maintenance throughout | | 4·2 |
| BORUNG SHIRE— | | | |
| Birchip Road | Crushed rock resheeting | | 3·44 |
| " " | General maintenance | | 14·7 |
| " " | General maintenance | | 7·5 |
| Dimboola Road | Crushed rock resheeting | | 7 |
| Hopetoun Road | General maintenance | | 18 |
| " " | Crushed rock resheeting | | 2·59 |
| Minyip Road | General maintenance | | 13 |
| Rainbow Road | Limestone construction | 1·48 | |
| " " | Limestone resheeting | | 1·83 |
| " " | General maintenance | | 18 |
| BOX HILL SHIRE— | | | |
| Burwood Road | General maintenance | | 2·01 |
| Main Healesville Road | Construction of rolled concrete base | 62 | |
| " " | General maintenance | | 1·42 |
| BRAYBROOK SHIRE— | | | |
| Ballarart Road | General maintenance from Ashley-street to Albion Railway gates | | 2·3 |
| BRIGHT SHIRE— | | | |
| Bright Road | Realigning of railway crossing at Bright | | — |
| " " | Double coat sealing through Myrtleford and Bright townships | | 2·28 |
| " " | Patrol maintenance | | 20· |
| Harrieville Road | Realigning curves between Smoko and Harrieville | | — |
| " " | Patrol maintenance | | 16 |
| Kiewa Valley Road | Patrol maintenance | | 7·8 |
| Myrtleford-Yackandandah Road | Alteration to curve and culvert near Myrtleford | | — |
| " " | Patrol maintenance | | 10·46 |
| | Carried forward | 8·3 | 1,214·31 |

STATEMENT SHOWING MILEAGE, LOCALITY, ETC., OF ROADS CONSTRUCTED, ETC.—continued.

| Name of Municipality and Road. | Nature and Locality of Works. | Permanent Works Constructed. | Reconstruction and Maintenance Works Carried Out. |
|--|---|------------------------------|---|
| | | Miles. | Miles. |
| UNDER MUNICIPALITIES—continued. | | | |
| | Brought forward | 8·3 | 1,214·31 |
| BRIGHTON CITY— | | | |
| Beach Road | Construction of concrete kerb and channel | ·4 | .. |
| " " | Crushed rock surfacing, priming and sealing shoulders and plant-mix seal coat over full width | .. | ·4 |
| BROADMEADOWS SHIRE | | | |
| Sydney Road | Resurfacing with plant-mix seal south of Camp-road, Campbellfield | .. | ·3 |
| " " | Patrol maintenance throughout | .. | 2 |
| Lancefield Road | Resurfacing with plant-mix seal from Albion railway to Broadmeadows Road | .. | ·87 |
| " " | Patrol maintenance throughout | .. | 4·5 |
| BULLA SHIRE— | | | |
| Mc Bourne-Lancefield Road | Priming and sealing at the junction with Sunbury Road and commencing 4 miles north at junction with Frances' Lane | .. | 3 |
| " " | General maintenance | .. | 12·25 |
| Sunbury Road | General maintenance | .. | 2 |
| The Gap Road | General maintenance | .. | 1·5 |
| BULN BULN SHIRE | | | |
| Bicomfield Road | Patrol maintenance | .. | ·9 |
| Fumina Road | Patrol maintenance | .. | 9·7 |
| Koo-wee-rup-Longwarry Road | Reshaping road surfacing and bitumen sealing | .. | 1 |
| " " | Patrol maintenance | .. | 6·5 |
| Loch Valley Road | Patrol maintenance | .. | 6·4 |
| Longwarry-Drouin Road | Patrol maintenance | .. | 5·7 |
| Main Neerim Road | Crushed rock sheeting on sand and bitumen sealing, reshaping, widening, superlevating curves, realigning where necessary | .. | 3·75 |
| " " | Patrol maintenance | .. | 22 |
| Main South Road | Sand sheeting and bitumen sealing | .. | 1·5 |
| " " | Patrol maintenance | .. | 14·75 |
| Ne-rim East Road | Reshaping, widening and superlevating curves and bitumen sealing | .. | 1 |
| " " | Patrol maintenance | .. | 4 |
| Ne-rim North-Noojee Road | Reshaping, widening and superlevating curves and bitumen sealing 12 feet wide | .. | 1·5 |
| " " | Patrol maintenance | .. | 3·5 |
| Prince's Highway | Patrol maintenance | .. | 1·06 |
| Westernport Road | Reshaping, widening and superlevating curves and bitumen sealing | .. | 1·5 |
| " " | Patrol maintenance | .. | 8·25 |
| BUNGAREE SHIRE— | | | |
| Daylesford-Ballarat Road | Resheeting, widening, and improving curves at Gong Gong | .. | ·55 |
| " " | Bitumen sealing | .. | 1·42 |
| " " | General maintenance throughout | .. | 7·7 |
| BUNYONG SHIRE— | | | |
| Ballarat-Rokewood Road | General maintenance | .. | 14 |
| Elaine-Mt. Mercer Road | Reconditioning | .. | 1·5 |
| CAMERWELL CITY | | | |
| Deane-st Road | Drag seal work applied in two coats from Koomung Creek to near Tannock Street | .. | ·52 |
| " " | Channel laid on south side with pitchers grouted with concrete mortar, pavement widened to channel with metal, penetrated and sealed with bitumen from Hatfield Street to Marwal Avenue | .. | ·29 |
| " " | Patrol maintenance | .. | 2·29 |
| Healesville Road | Sealing centre of roadway from Union Road to York Street, resheeting with metal and sealing with bitumen intersection of Union and Healesville Roads, and removal of gutter in Healesville Road at north side of intersection | .. | ·13 |
| CASTLEMAINE BOROUGH— | | | |
| Melbourne-Bendigo Road | Reconstruction in granitic sand, priming and sealing, Barker Street north | .. | ·39 |
| " " | Road-mix seal, Barker Street | .. | ·06 |
| " " | General maintenance | .. | 3·9 |
| CHARLTON SHIRE— | | | |
| Bendigo Road | Patrol maintenance | .. | 1·75 |
| Donald Road | Patrol maintenance, resheeting and double coat bitumen work | .. | 12·55 |
| St. Arnaud Road | Gravelling near the Charlton South State School | 1·53 | .. |
| " " | Patrol maintenance, resheeting, and double coat bitumen work | .. | 15·4 |
| CHELSEA CITY— | | | |
| Point Nepean Road | General maintenance | .. | 5·62 |
| CHILTERN SHIRE— | | | |
| Barnawartha-Howlong Road | Resheeting in preparation for first seal | .. | ·5 |
| " " | Patrol maintenance throughout | .. | 5·9 |
| Chiltern-Howlong Road | Construction of pipe culverts and 218 feet forming, gravelling approaches in place of open crossings throughout | .. | ·4 |
| " " | Patrol maintenance, shouldering and realigning | .. | 1·4 |
| Sydney Road | General maintenance | .. | 1·15 |
| CLUNES BOROUGH— | | | |
| Maryborough-Ballarat Road | Sealing | .. | 1·38 |
| " " | Road-mix seal | .. | ·75 |
| " " | General maintenance throughout | .. | 3·2 |
| COBURG CITY— | | | |
| Sydney Road | Construction of rolled concrete base from Baker's Road to Boundary Road | ·56 | .. |
| COHLNA SHIRE | | | |
| Leitchville Road | Patrol maintenance throughout, resurfacing, grading and flanking | .. | 10·69 |
| Murray River Valley Road | General maintenance, Cohna Township | .. | ·54 |
| COLAC SHIRE— | | | |
| Colac-Ballarat Road | Road-mix seal from 6·85 to 7·04 miles | .. | ·19 |
| " " | Road-mix seal from 7·85 to 9·22 miles | .. | 1·37 |
| " " | General maintenance throughout | .. | 21·4 |
| Colac-Beech Forest Road | Reconstruction of metalled road with fine-crushed rock from 1·2 to 2·04 miles | .. | ·84 |
| " " | Forming, gravelling and fencing deviation at Tulloh | .. | ·24 |
| " " | General maintenance throughout | .. | 11·25 |
| Colac-Forrest Road | Double coat sealing on fine-crushed rock road from ·68 to ·93 miles | .. | ·25 |
| " " | Double coat sealing on fine-crushed rock road from 3·52 to 3·88 miles | .. | ·36 |
| " " | Reconstruction of two sections of gravelled road with fine-crushed rock from ·68 to ·93 miles and 3·52 to 3·88 miles | .. | ·61 |
| " " | General maintenance throughout | .. | 16·9 |
| Cororooke Road | Road-mix seal from 3·36 to 4·4 miles | .. | 1·04 |
| " " | Road-mix seal from 6 to 7·25 miles | .. | 1·25 |
| " " | General maintenance throughout | .. | 7·25 |
| Cressy-Inverleigh Road | Resheeted with gravel from 1·1 to 3·66 miles | .. | 2·56 |
| " " | General maintenance throughout | .. | 8·7 |
| Prince's Highway | General maintenance throughout | .. | 2·44 |
| Swan Marsh Road | Double coat sealing on fine-crushed rock road from 0 to ·71 miles | .. | ·71 |
| " " | Double coat sealing on fine-crushed rock road from 2·51 to 3·46 miles | .. | ·95 |
| " " | Reconstruction of gravelled road with fine-crushed rock from 2·51 to 3·46 miles | .. | ·95 |
| " " | General maintenance throughout | .. | 5·66 |
| COLLINGWOOD CITY— | | | |
| Heidelberg Road | General maintenance between Merri Creek Bridge and Heidelberg Road railway gates | .. | ·5 |
| | Carried forward | 10·79 | 1,513·54 |

STATEMENT SHOWING MILEAGE, LOCALITY, ETC., OF ROADS CONSTRUCTED, ETC.—*continued.*

| Name of Municipality and Road. | Nature and Locality of Works. | Permanent Works Constructed. | Reconstruction and Maintenance Works Carried Out. |
|---|---|------------------------------|---|
| | | Miles. | Miles. |
| UNDER MUNICIPALITIES—<i>continued.</i> | | | |
| | Brought forward | 10·79 | 1,513·54 |
| CORIO SHIRE— | | | |
| Geelong-Bacchus Marsh Road .. | Road-mix seal from 0 to 1·4 miles, 5 to 5·45 miles, 7·9 to 8·3 miles, 8·8 to 9 miles, and 13 to 13·8 miles | .. | 2·25 |
| " " " " .. | General maintenance throughout | .. | 19·19 |
| CRANBOURNE SHIRE— | | | |
| Cranbourne-Frankston Road .. | Crushed rock surfacing and sealing westerly from South Gippsland Highway | .. | ·9 |
| " " " " .. | General maintenance throughout | .. | 7·5 |
| Koo-wee-rup-Longwarry Road .. | General maintenance throughout | .. | 6 |
| Koo-wee-rup-Pakenham Road .. | Crushed rock surfacing and sealing northerly from Island Road | .. | ·9 |
| " " " " .. | General maintenance throughout | .. | 5·5 |
| Main Coast Road " " .. | General maintenance throughout | .. | 8 |
| Westernport Road .. | Double seal coat Lang Lang Township | .. | ·28 |
| " " " " .. | Repairs to Heath Hill bridge | .. | — |
| " " " " .. | General maintenance throughout | .. | 9 |
| CRESWICK SHIRE— | | | |
| Castlemaine-Ballarat Road .. | Deviation and reinforced concrete culvert 4 ft. 6 in. square x 96 feet long at foot of Spring Hill, between Creswick and Springmount | .. | ·25 |
| " " " " .. | Road-mix seal through Creswick Township | .. | 2·25 |
| " " " " .. | Scarifying, reshaping and blinding rough metal road from 7·95 to 8·3 miles between Springmount and Kingston | .. | ·35 |
| " " " " .. | General maintenance throughout | .. | 23·7 |
| Daylesford-Ballarat Road .. | Scarifying, reshaping and blinding with gravel rough metal road in various sections, between Newlyn and Blampied | .. | 1·8 |
| " " " " .. | Badly shaped and narrow, pitched section commencing from southern shire boundary reconstructed by sheeting with loam stabilized with quartz gravel, later sheeted lightly with crushed rock | .. | ·37 |
| " " " " .. | General maintenance throughout | .. | 12·4 |
| DANDENONG SHIRE— | | | |
| Cheltenham Road .. | Road-mix seal | .. | 1·5 |
| " " " " .. | Patrol maintenance throughout | .. | 6·2 |
| Dandenong-Frankston Road .. | Patrol maintenance throughout | .. | 6·2 |
| Prince's Highway .. | Patrol maintenance throughout | .. | 1·7 |
| DAYLESFORD BOROUGH— | | | |
| Ballan Road .. | Sheeting with crushed rock from Ballarat Road to Sartori's Hill | .. | ·54 |
| " " " " .. | Sheeting with crushed rock near Borough boundary | .. | ·26 |
| " " " " .. | General maintenance throughout | .. | 1·6 |
| Ballarat Road .. | Sheeting with crushed rock at Borough boundary | .. | ·15 |
| " " " " .. | General maintenance throughout | .. | 1·05 |
| Castlemaine Road .. | General maintenance throughout | .. | ·65 |
| Daylesford-Hepburn Road .. | General maintenance throughout | .. | 1·14 |
| Daylesford-Trentham Road .. | Sheeting throughout with crushed rock and general maintenance | .. | ·9 |
| Malmsbury-Daylesford Road .. | Road-mix sealing from Borough boundary | .. | ·6 |
| " " " " .. | Road-mix sealing from Trentham Road to Railway Station | .. | ·2 |
| " " " " .. | Double coat sealing southerly from Castlemaine Road | .. | ·23 |
| " " " " .. | General maintenance throughout | .. | 1·42 |
| DEAKIN SHIRE— | | | |
| Echuca-Cornelia Road .. | Forming and sanding | .. | 1·25 |
| " " " " .. | General maintenance | .. | 6·25 |
| Echuca Picola Road .. | General maintenance throughout | .. | 5 |
| Kyabram-Nathalia Road .. | Double coat seal | .. | 2 |
| " " " " .. | Patrol maintenance | .. | 5 |
| Kyabram-Tongala Road .. | Double coat seal | .. | 3 |
| " " " " .. | Patrol maintenance | .. | 5 |
| Rochester-Kyabram Road .. | Double coat seal | .. | 3 |
| " " " " .. | Patrol maintenance | .. | 10 |
| DEAKIN AND RODNEY SHIRES (Joint Works)— | | | |
| Kyabram-Tongala Road .. | Road-mix seal | .. | 1 |
| " " " " .. | General maintenance | .. | 2 |
| DIMBOOLA SHIRE— | | | |
| Rainbow Road .. | Rubbling loam formations near Highway Junction | .. | 1·15 |
| " " " " .. | Road-mix seal 3 miles from Dimboola | .. | ·76 |
| " " " " .. | Resheeting existing rubble with limestone rubble 1 mile south of Antwerp | .. | ·45 |
| " " " " .. | Bitumen surfacing on rubble and gravel 1 mile south from Jeparit | .. | ·15 |
| " " " " .. | Road-mix seal south from Jeparit Township | .. | ·95 |
| " " " " .. | Rubbling loam formation 1 mile north of Jeparit | .. | ·51 |
| " " " " .. | Rubbling loam formation 3 miles north of Jeparit | .. | ·4 |
| " " " " .. | Rubbling loam formation 4·5 miles north of Jeparit | .. | ·4 |
| " " " " .. | Resheeting existing rubble with limestone rubble 5 miles north of Jeparit | .. | ·85 |
| " " " " .. | Resheeting existing rubble with limestone rubble 6 miles north of Jeparit | .. | ·4 |
| " " " " .. | Rubbling loam formation 7 miles north of Jeparit | .. | ·51 |
| " " " " .. | Rubbling loam formation 1 mile south of Rainbow | .. | ·4 |
| " " " " .. | Patrol maintenance throughout | .. | 42 |
| Warracknabeal Road .. | Forming, rubbling and gravelling approximately 8 miles north-east of Dimboola | 76 | .. |
| " " " " .. | Road-mix seal from 1·44 to 2·4 miles from Dimboola | .. | ·96 |
| " " " " .. | Bitumen surfacing on gravel between 4·25 and 5·15 miles from Dimboola | .. | ·91 |
| " " " " .. | Patrol maintenance throughout | .. | 9·5 |
| DIMBOOLA AND KARKAROO SHIRES (Joint Works)— | | | |
| Hopetoun-Rainbow Road .. | Scarifying and resheeting metal with limestone metal 3 miles north of Rainbow | .. | ·19 |
| " " " " .. | Rubbling loam formations between allotments 11A and 12A, Parish of Albacutya | .. | ·76 |
| " " " " .. | General maintenance throughout | .. | 5 |
| DONALD SHIRE— | | | |
| St. Arnaud-Birchip Road .. | Road-mix seal through the Town of Donald | .. | ·7 |
| " " " " .. | Road-mix seal at Glennon's Hill | .. | ·26 |
| " " " " .. | Resheeting with granite sand and double coat sealing south of Glennon's Hill | .. | ·36 |
| " " " " .. | Patrol maintenance throughout | .. | 28·7 |
| Donald-Charlton Road .. | Resheeting with granite sand and double coat sealing at the Donald Showground | .. | ·28 |
| " " " " .. | Patrol maintenance throughout | .. | 14 |
| Marnoo-Donald Road .. | Re-forming, boxing and surfacing with granite sand at Pope's sandhill | .. | ·52 |
| " " " " .. | Re-forming, boxing and surfacing with crushed limestone and schist, north from Kemmis' Dam | .. | 1·42 |
| " " " " .. | Patrol maintenance throughout | .. | 12·7 |
| DONCASTER AND TEMPLESTOWE SHIRE— | | | |
| Doncaster Road .. | Road-mix resealing | .. | ·5 |
| " " " " .. | Patrol maintenance | .. | 6·2 |
| Heidelberg-Warrandyte Road .. | Road-mix resealing | .. | ·5 |
| " " " " .. | Patrol maintenance | .. | 9·8 |
| Warrandyte-Ringwood Road .. | Double coat sealing and surfacing | .. | 2 |
| " " " " .. | Patrol maintenance | .. | 4·2 |
| | Carried forward | 11·55 | 1,830·41 |

STATEMENT SHOWING MILEAGE, LOCALITY, ETC., OF ROADS CONSTRUCTED, ETC.—*continued.*

| Name of Municipality and Road. | Nature and Locality of Works. | Permanent Works Constructed. | Reconstruction and Maintenance Works Carried Out. |
|---|---|------------------------------|---|
| | | Miles. | Miles. |
| UNDER MUNICIPALITIES—<i>continued.</i> | | | |
| DUNDAS SHIRE— | Brought forward .. | 11·55 | 1,830·41 |
| Hamilton-Horsham Road .. | Modified macadam surfacing opposite Allotment 1A, Section 10, Allotments 6A and 6B, Section 6, Allotment 3, Section 6, and Allotments 1A and 1B, Section 15, Parish of Jerrywarook .. | .. | 2·18 |
| " " " .. | Gravel sheeting from 14 to 22·3 miles, in Parishes of Cavendish, Mooralla and Geerak .. | .. | 8·3 |
| " " " .. | Priming and sealing from 14 to 17·3 miles, Parishes of Cavendish and Mooralla .. | .. | 3·3 |
| Hamilton-Mt. Gambier Road .. | Gravel sheeting and priming and sealing from 9·59 to 12·85 miles, Parish of Redruth .. | .. | 3·26 |
| Hamilton-Port Fairy Road .. | Modified macadam surfacing opposite Allotment 4B, Section 17, and Allotments 2A, 2B and 4B, Section 18, Parish of Bvaduk .. | .. | 1·15 |
| Hamilton-Portland Road .. | Gravel sheeting opposite Allotments 5, 4B, 6 and 8, Section 30, Allotments 4 and 7, Section 35, and Allotments 5A and 5B, Section 34, Parish of Yulecart .. | .. | 2·91 |
| DUNMUCKLE SHIRE— | | | |
| Horsham-Murtoa Road .. | Double coat bitumen spraying west of Murtoa .. | .. | 1·48 |
| " " " .. | Patrol maintenance throughout .. | .. | 5·33 |
| Marnoo-Donald Road .. | Patrol maintenance throughout .. | .. | 3·5 |
| Marnoo-Rupanyup Road .. | Double coat bitumen spraying on two sections east of Rupanyup .. | .. | 7 |
| " " " .. | Patrol maintenance throughout .. | .. | 10·2 |
| Minyip-Donald Road .. | Double coat bitumen spraying north-east of Minyip .. | .. | ·58 |
| " " " .. | Patrol maintenance throughout .. | .. | 3·2 |
| Rupanyup-Murtoa Road .. | Patrol maintenance throughout .. | .. | 9·25 |
| Stawell-Warracknabeal Road .. | Road-mix sealing south of Rupanyup .. | .. | 5·47 |
| " " " .. | Double coat bitumen spraying north of Minyip .. | .. | 5·35 |
| " " " .. | Patrol maintenance throughout .. | .. | 28·5 |
| EAST LODDOX SHIRE— | | | |
| Dingee Road .. | General maintenance throughout .. | .. | 7 |
| Mitiamo Road .. | General maintenance throughout .. | .. | 5·5 |
| Prairie Road .. | General maintenance throughout .. | .. | 8 |
| Prairie-Boring Road .. | General maintenance throughout .. | .. | 1·5 |
| ELTHAM SHIRE | | | |
| Eltham-Yarra Glen Road .. | Sealing with bitumen between Memorial Tower and Cemetery, Kangaroo Ground .. | .. | 1 |
| " " " .. | Patrol maintenance between Lower Plenty and Yarra Glen .. | .. | 20 |
| Hurstbridge-Kinglake Road .. | Patrol maintenance between Watfle Glen and Kinglake .. | .. | 14·5 |
| " " " .. | General maintenance, reshaping, and graveling sections between Queenstown and Queenstown North .. | .. | 1·5 |
| Yarra Glen-Glenburn Road .. | Patrol maintenance between Yarra Glen and The Landing .. | .. | 10·4 |
| ESSEXON CITY— | | | |
| Bendigo Road .. | Construction of channel on south side, relaying channel on north side, laying underground drain along Keilor Road and Renown Street, widening in macadam and crushed rock, and road-mix seal on central bitumen surfaced roadway from Gillies Street to Hoffman's Road .. | .. | ·66 |
| " " " .. | Removal of water main to south footpath and laying duplicate main under north footpath .. | ·66 | .. |
| Sunbury Road .. | Patrol maintenance from Keilor Road to Woodlands Street .. | .. | ·2 |
| EUROA SHIRE— | | | |
| Arcadia Road .. | Construction of shoulders and gravel, and sand surfacing .. | .. | 5·7 |
| " " " .. | Patrol maintenance .. | .. | 5·7 |
| Avenel-Longwood Road .. | Patrol maintenance .. | .. | 2·1 |
| Euroa-Arcadia Road .. | Patrol maintenance .. | .. | 17 |
| Euroa-Mansfield Road .. | Patrol maintenance .. | .. | 16·1 |
| Euroa-Strathbogie Road .. | Patrol maintenance .. | .. | 19·2 |
| Murchison-Violet Town Road .. | Grubbing, clearing, and formation south of Allotment 108, Parish of Tamlehgh .. | .. | ·8 |
| " " " .. | Patrol maintenance .. | .. | 16·5 |
| FERTREE GULLY SHIRE— | | | |
| Beaconsfield-Emerald Road .. | Widening approaches, Emerald railway crossing .. | .. | ·1 |
| Belgrave-Emerald Road .. | Widening pavement and resurfacing between Selby and Clematis .. | .. | 1·48 |
| " " " .. | Patrol maintenance .. | .. | 6·73 |
| Burwood Road .. | Widening pavement to 20 feet near Wantirna .. | .. | ·55 |
| " " " .. | Resurfacing pavement, drag seal .. | .. | 1·2 |
| " " " .. | Patrol maintenance .. | .. | 4·55 |
| Emerald Road .. | Patrol maintenance .. | .. | 3·25 |
| Main Ferntree Gully Road .. | Widening pavement to 20 feet between Ferntree Gully and Tecoma .. | .. | ·6 |
| " " " .. | Resurfacing pavement, drag seal between Ferntree Gully and Tecoma .. | .. | 1·56 |
| " " " .. | Patrol maintenance .. | .. | 10·8 |
| Mondbulk Road .. | Widening pavement to 18 feet between Belgrave and Kallista .. | .. | ·48 |
| " " " .. | Resurfacing pavement, drag seal between Belgrave and Kallista .. | .. | ·57 |
| " " " .. | Patrol maintenance .. | .. | 5 |
| Olinda Road .. | Widening formation and pavement near Ferny Creek and Olinda .. | .. | ·7 |
| " " " .. | Resurfacing pavement near Ferny Creek and Olinda .. | .. | ·7 |
| " " " .. | Patrol maintenance .. | .. | 6·25 |
| FLINDERS SHIRE— | | | |
| Hastings-Flinders Road .. | Sheeting and double coat sealing between Merricks and Shoreham .. | .. | 2·56 |
| " " " .. | Patrol maintenance throughout .. | .. | 17 |
| Mornington-Dromana Road .. | Road-mix seal throughout .. | .. | 2·5 |
| " " " .. | Patrol maintenance throughout .. | .. | 2·5 |
| Mornington-Flinders Road .. | Road-mix seal between Moat's Corner and Jarraus .. | .. | 3·04 |
| " " " .. | Patrol maintenance throughout .. | .. | 12 |
| Point Nepean Road .. | Road-mix seal between Hearne's Bridge and Quarantine Station .. | .. | 10·44 |
| " " " .. | Double coat sealing at Dromana and Rye .. | .. | ·79 |
| " " " .. | Widening and sheeting at Dromana .. | .. | ·16 |
| " " " .. | Patrol maintenance throughout .. | .. | 21·5 |
| Red Hill Road .. | Widening, sheeting, and double coat sealing Wiseman's deviation to Craigs .. | .. | 1·19 |
| " " " .. | Patrol maintenance throughout .. | .. | 3·75 |
| Rosebud-Flinders Road .. | Widening, sheeting, and double coat sealing at Bone .. | .. | ·5 |
| " " " .. | Double coat sealing at Stockyard Creek .. | .. | ·46 |
| " " " .. | Scarifying, reshaping, and double coat sealing at Sutherlunds .. | .. | ·64 |
| " " " .. | Patrol maintenance throughout .. | .. | 13·5 |
| Stony Point Road .. | Construction and double coat sealing at Naval Base .. | .. | ·1 |
| " " " .. | Patrol maintenance throughout .. | .. | 4 |
| FOOTSCRAY CITY— | | | |
| Ballarat Road .. | Construction of stormwater drain under channels, to permit channels and shoulders to be raised and constructed, from Droop Street to Nicholson Street connecting with open concrete drain in Footscray Park, and from chainage 696 feet east from Nicholson Street to chainage 3,133 feet at Maribyrnong River, and lifting and relaying water mains .. | ·91 | .. |
| " " " .. | Reconstruction of shoulders and channels, and widening of carriageway from Nicholson Street to chainage 2,600 feet east .. | ·49 | .. |
| Napier Street .. | Reconstruction in rolled concrete with plant-mix bituminous surface coat from swing bridge, Maribyrnong River to Morland Street .. | ·08 | .. |
| Prince's Highway .. | Patrol maintenance .. | .. | ·99 |
| FRANKSTON AND HASTINGS SHIRE— | | | |
| Cranbourne-Frankston Road .. | Priming and sealing westerly from shire boundary .. | .. | 1·22 |
| " " " .. | General maintenance throughout .. | .. | 2·8 |
| Dandenong-Frankston Road .. | General maintenance throughout .. | .. | 5·5 |
| Frankston-Flinders Road .. | Pre-mixed seal, drag spread, 1 inch thick, easterly from Point Nepean Road .. | .. | ·56 |
| " " " .. | Reconstruction and construction of four reinforced concrete pipe culverts, west of Allotment 80, Parish of Tyabb .. | .. | ·25 |
| " " " .. | General maintenance throughout .. | .. | 14 |
| " " " .. | General maintenance throughout .. | .. | 8 |
| Moorooduc Road .. | Reconstruction with crushed rock, priming and sealing north of Seaford .. | .. | 1·52 |
| Point Nepean Road .. | Pre-mixed seal coat, dragged, 1 inch thick, southerly from Mile Bridge .. | .. | 1·22 |
| " " " .. | Part reconstruction with crushed rock, to be primed and sealed, between Frankston and Oliver's Hill .. | .. | ·42 |
| " " " .. | General maintenance throughout .. | .. | 7·5 |
| Carried forward .. | | 13·69 | 2,264·86 |

STATEMENT SHOWING MILEAGE, LOCALITY, ETC., OF ROADS CONSTRUCTED, ETC.—*continued.*

| Name of Municipality and Road. | Nature and Locality of Works. | Permanent Works Constructed. | Reconstruction and Maintenance Works Carried Out. |
|---|---|------------------------------|---|
| | | Miles. | Miles. |
| UNDER MUNICIPALITIES—<i>continued.</i> | | | |
| | Brought forward | 13·69 | 2,264·86 |
| GISBORNE SHIRE— | | | |
| Bacchus Marsh Road | General maintenance | | 9·7 |
| Gisborne Station Road | General maintenance | | 1·2 |
| Mt. Macedon Road | General maintenance | | 6·75 |
| GLENELG SHIRE— | | | |
| Coleraine—Casterton Road | Scarifying, reforming, and gravel sheeting, &c., between Campbell's Hill and the Lodge | | 2 |
| Dergholm Road | Patrol maintenance throughout | | 7 |
| .. .. . | Double coat sealing between 1 and 2 miles | | 1·06 |
| .. .. . | Sheeting with gravel at Dimrobin | | ·95 |
| .. .. . | Patrol maintenance throughout | | 22 |
| Mount Gambier Road | Sheeting with crushed limestone rock at Wilkin Gate | | ·82 |
| .. .. . | Sheeting with crushed limestone rock near Ardno | | ·95 |
| .. .. . | Double coat sealing between the Wilderness Church and the South Australian border | | 6·25 |
| .. .. . | Patrol maintenance throughout | | 30 |
| Portland—Casterton Road | Road-mix seal on modified macadam at Merino | | ·45 |
| .. .. . | Double coat sealing at Merino | | ·15 |
| .. .. . | Sheeting with gravel near Merino | | 1·04 |
| .. .. . | Sheeting with gravel between Sandford and Henty | | 2·27 |
| .. .. . | Patrol maintenance throughout | | 20· |
| Wando Vale Road | Scarifying, reforming, and gravel sheeting, &c., from the Lodge to Bartagunyah Road | | 1·51 |
| .. .. . | Patrol maintenance throughout | | 6·55 |
| GLENELG SHIRE— | | | |
| Ballan Road | Patrol maintenance throughout | | 4·45 |
| Ballarat Road | Reconditioning and sheeting in fine crushed rock | | ·83 |
| .. .. . | Patrol maintenance throughout | | 3·5 |
| Castlemaine—Daylesford Road | Patrol maintenance throughout | | 13 |
| Daylesford—Heplburn Road | Road-mix seal | | 1 |
| .. .. . | Patrol maintenance throughout | | ·25 |
| Daylesford—Trentnam Road | Reconstruction and sheeting in crushed rock | | 10 |
| .. .. . | Patrol maintenance throughout | | 3 |
| Malmesbury—Daylesford Road | Sealing at Malmesbury end | | 2·5 |
| .. .. . | Resheeting in fine-crushed rock at Daylesford end | | 15 |
| .. .. . | Patrol maintenance throughout | | |
| GOULBURN SHIRE— | | | |
| Avenel—Longwood Road | General maintenance | | 5 |
| Vicker's Road | General maintenance | | 2·2 |
| GRENVILLE SHIRE— | | | |
| Ballarat—Hamilton Road | Modified macadam surfacing at Smythe's Creek from 6·2 to 7·2 miles | | 1 |
| .. .. . | Modified macadam surfacing west side of Cherry Hill from 16·2 to 17·6 miles | | 1·4 |
| .. .. . | Road-mix seal at Smythe's Creek from 5 to 5·5 miles | | ·5 |
| .. .. . | Road-mix seal at Smythesdale from 9·15 to 10·65 miles | | 1·5 |
| .. .. . | Modified macadam surfacing, Oldham Creek deviation from 13·2 to 13·5 miles | | ·3 |
| .. .. . | Road-mix seal west of Scarsdale from 12·7 to 13·2 miles | | ·5 |
| .. .. . | Road-mix seal west of Scarsdale from 13·5 to 14·15 miles | | ·65 |
| Ballarat—Hamilton Road | Patrol maintenance from 0 to 24·1 miles | | 24·1 |
| Cressy Road | Patrol maintenance from 0 to 9·5 miles | | 9·5 |
| Lismore Road | Patrol maintenance from 0 to 10 miles | | 10 |
| Pitfield Road | Double coat sealing reshaped gravel from Scarsdale to Newtown 0 to 2·25 miles | | 2·25 |
| .. .. . | Patrol maintenance from 0 to 12·6 miles | | 12·6 |
| HAMILTOWN TOWN— | | | |
| Ararat Road | Road mix seal | | ·91 |
| .. .. . | Patrol maintenance | | ·91 |
| Coleraine Road | Widening existing macadam | | ·81 |
| .. .. . | Road mix seal | | 1·31 |
| .. .. . | Patrol maintenance | | 1·31 |
| Hamilton—Warrnambool Road | Patrol maintenance | | ·51 |
| Port Fairy Road | Patrol maintenance | | ·3 |
| Portland Road | Patrol maintenance | | ·5 |
| HAMPDEN SHIRE— | | | |
| Camperdown—Ballarat Road | Regrading and crushed rock surfacing through Stoney Rises from 4·3 to 6·74 miles south of Skipton | | 2·44 |
| .. .. . | Road mix seal 16 feet wide with scoria aggregate from 2 to 3·34 miles south of Camperdown | | 1·34 |
| .. .. . | Road mix seal 16 feet wide with scoria aggregate from 1 to 1·5 miles north of Camperdown | | ·5 |
| .. .. . | Road mix seal 10 feet wide with scoria aggregate from 4 to 7 miles north of Lismore—Cressy Road | | 3 |
| .. .. . | Road mix seal 10 feet wide with quartz gravel aggregate southerly from Skipton township | | 2·3 |
| .. .. . | Patrol maintenance throughout | | 51 |
| Caramat—Lismore Road | Double coat seal 16 feet wide on section reconstructed with basaltic gravel from ·5 to 3·75 miles west of Derrinallum | | 3·25 |
| .. .. . | Road mix seal 10 feet wide with scoria aggregate 1-in. loose from 3·75 to 6·45 miles west of Derrinallum | | 2·7 |
| .. .. . | Construction of new steel and timber superstructure on existing masonry abutments to 15-ft. span bridge ·9 miles east of Derrinallum | | — |
| .. .. . | Construction of new timber superstructure on existing pile abutments to 20-ft. span bridge ·7 miles east of Darlington | | — |
| .. .. . | Patrol maintenance throughout | | 16 |
| .. .. . | Patrol maintenance throughout | | 2·95 |
| .. .. . | Widening masonry abutments, and construction of steel and timber superstructure to 3-span bridge with masonry piers over Gnarkeet chain of ponds | | — |
| .. .. . | Construction of new timber superstructure on existing pile abutments and piers to 3-span bridge over Lismore Creek | | — |
| .. .. . | Repairs to deck and placing running strips on bridge 2 miles east of Lismore township | | — |
| .. .. . | Patrol maintenance throughout | | 18·7 |
| .. .. . | Patrol maintenance throughout | | 3·85 |
| McInno's Bridge—Noorat Road | Widening and reconstruction in modified macadam in Terang township | | ·4 |
| .. .. . | Patrol maintenance throughout in townships of Camperdown and Terang | | 2·63 |
| Terang—Framlingham Road | Construction of double 4-ft. diameter reinforced concrete pipe culvert, masonry end walls, outlet drain and realignment and gravelling of road curve and approaches from ·8 to ·87 miles west from Terang township boundary | | ·07 |
| .. .. . | Reshaping and sheeting with basaltic gravel 16 feet wide westerly from Terang township boundary | | ·8 |
| .. .. . | Patrol maintenance throughout | | 1·6 |
| .. .. . | Widening pavement with basaltic gravel from 12 to 16 feet northerly from Terang | | 2·9 |
| .. .. . | Sheeting with crushed rock 16 feet wide and double coat sealing northerly from Noorat | | ·35 |
| .. .. . | Construction of 21-in. diameter reinforced concrete pipe culvert and end walls to replace old timber culvert at ·4 miles north of Terang | | — |
| .. .. . | Patrol maintenance throughout | | 7 |
| HEALESVILLE SHIRE— | | | |
| Healesville—Alexandra Road | Reconstruction from Shire Hall to Church-street | | ·22 |
| .. .. . | Road mix seal from Church-street to south-eastern Shire boundary | | ·71 |
| .. .. . | Road mix seal at Castella-street corner | | ·08 |
| .. .. . | Reconstruction in modified macadam between bridges | | ·07 |
| .. .. . | Double coat sealing from ·11 to ·4 miles at railway crossing | | ·29 |
| | Carried forward | 13·69 | 2,043·25 |

STATEMENT SHOWING MILEAGE, LOCALITY, ETC., OF ROADS CONSTRUCTED, ETC. *continued.*

| Name of Municipality and Road. | Nature and Locality of Works. | Permanent Works Constructed. | Reconstruction and Maintenance Works Carried Out. |
|---|--|------------------------------|---|
| | | Miles. | Miles. |
| UNDER MUNICIPALITIES—continued. | | | |
| | Brought forward | 13.69 | 2,643.25 |
| HEIDELBERG CITY— | | | |
| Greensborough-Hurstbridge Road .. | Carpeting with pre-mixed bituminous screenings, including repairs and widening of metal bed where necessary to uniform width of 20 feet from 1.23 to 2.49 miles | .. | 1.26 |
| " " " " | Carpeting with pre-mixed bituminous screenings, including repairs and widening of metal bed where necessary to uniform width of 20 feet from 3.83 to 4.52 miles | .. | .69 |
| " " " " | Carpeting with pre-mixed bituminous screenings, including repairs and widening of metal bed where necessary to uniform width of 20 feet from 5.02 to 5.25 miles | .. | .23 |
| Heidelberg Warrandyte Road .. | General maintenance | .. | 9.15 |
| Main Heidelberg Eltham Road .. | Carpeting with pre-mixed bituminous screenings, including repairs and widening of metal bed where necessary to uniform width of 25 feet from 3.91 to 4.41 miles | .. | .43 |
| " " " " | General maintenance throughout | .. | .5 |
| Main Whittlesea Road .. | General maintenance throughout | .. | 7.64 |
| HEYTESBURY SHIRE— | | | |
| Campdown Cobden Road .. | General maintenance throughout, road mix sealing and graveling shoulders | .. | 1.19 |
| Cobden-Port Campbell-Princtown Road .. | Reconstruction and graveling, &c. | .. | 5 |
| " " " " | General maintenance | .. | 3 |
| Terang-Cobden Road .. | Bitumen sealing | .. | 27 |
| " " " " | Reconstruction | .. | 2 |
| Timboon-Nirranda Road .. | General maintenance throughout | .. | 2 |
| Timboon-Port Campbell Road .. | General maintenance throughout, graveling shoulders | .. | 12 |
| HORSHAM TOWN— | | | |
| Dimboola-Horsham Road .. | General maintenance throughout | .. | 8 |
| Dooet Road .. | Widening of road from Wawuna Road to railway line | .. | 5 |
| Hamilton Road .. | Construction of 200-ft. radius curve at intersection of Dooet Road and Baillie Street | .. | .32 |
| Natimuk Road .. | General maintenance throughout | .. | 2 |
| Western Highway .. | Sealing with road mix seal from Stawell Road to Wimmera Bridge | .. | .06 |
| INGLEWOOD BOROUGH— | | | |
| Bendigo-Charlton Road .. | General maintenance throughout | .. | 2.4 |
| KARA KARA SHIRE— | | | |
| Avoca-St. Arnaud Road .. | Sealing with road mix seal from Stawell Road to Wimmera Bridge | .. | .7 |
| " " " " | General maintenance throughout | .. | 1.7 |
| Charlton Road .. | Modified macadam surfacing from end of bitumen surfaced road towards town boundary | .. | .15 |
| Navarre Road .. | General maintenance throughout | .. | 1.5 |
| St. Arnaud-Donald Road .. | General maintenance throughout | .. | .75 |
| KARA KARA AND STAWELL SHIRES (Joint Works)— | | | |
| Navarre Road .. | Single coat resealing from Brooke Street to railway intersection | .. | .52 |
| KARKAROO SHIRE— | | | |
| Hopetoun Rainbow Road .. | General maintenance throughout | .. | 1.55 |
| " " " " | Relocating and graveling north of Stuart Mill | .. | .52 |
| Hopetoun-Warracknabeal Road .. | Reforming, graveling, and drainage work between Medlyn and Carapooce West | .. | .54 |
| " " " " | Patrol maintenance throughout | .. | 23 |
| Hopetoun-Woomelang-Sea Lake Road .. | Patrol maintenance throughout | .. | 10 |
| " " " " | Forming and graveling at Tottington | .. | 1.08 |
| " " " " | Patrol maintenance throughout | .. | .22 |
| " " " " | Modifying cross section, widening pavement to 16 feet and sealing between St. Arnaud North and Swanwater | .. | 2.65 |
| " " " " | Patrol maintenance throughout | .. | 17 |
| KILMORE SHIRE— | | | |
| Koondrook Road .. | General maintenance west of Navarre | .. | 1.52 |
| KILMORE AND PYALONG SHIRES (Joint Works)— | | | |
| Heathcote Road .. | Double coat sealing | .. | .89 |
| Kilmore-Kilmore East Road .. | Construction of curve at south-eastern corner of Allotment 9, Parish of Nandemarriman | .. | .24 |
| Lancefield-Kilmore Road .. | Forming and metalling between Allotments 47 and 48, Parish of Goyura | .. | 57 |
| " " " " | General maintenance | .. | 24 |
| " " " " | Double coat sealing at Hopetoun | .. | 1.52 |
| " " " " | Double coat sealing at Beulah | .. | 1.11 |
| " " " " | General maintenance | .. | 20 |
| " " " " | Construction of larger radius curves at south-eastern corner of Allotment 9 and south-eastern corner of Allotment 5, Parish of Crononby, and north-western corner of Allotment 37, Parish of Minapre | .. | .76 |
| " " " " | Double coat sealing at Hopetoun | .. | .57 |
| " " " " | General maintenance | .. | 24 |
| " " " " | Double coat sealing at Beulah | .. | .92 |
| " " " " | General maintenance | .. | 23 |
| KERANG SHIRE— | | | |
| Koondrook Road .. | General maintenance | .. | 1 |
| KILMORE SHIRE— | | | |
| Heathcote Road .. | Construction of twin cell reinforced concrete culvert at .37 miles | .. | .01 |
| Kilmore-Kilmore East Road .. | Patrol maintenance | .. | 3.56 |
| Lancefield-Kilmore Road .. | Double coat bitumen sealing between Hume Highway and George Street | .. | .31 |
| " " " " | General maintenance | .. | 2.26 |
| " " " " | Patrol maintenance | .. | 1.29 |
| KILMORE AND ROMSEY SHIRES (Joint Works)— | | | |
| Heathcote Road .. | Resheeting with granitic sand in sections throughout | .. | .62 |
| " " " " | Patrol maintenance | .. | 2.99 |
| " " " " | Resheeting sections with gravel | .. | 1.03 |
| " " " " | Patrol maintenance | .. | 2.28 |
| KORONG SHIRE— | | | |
| Bendigo-Charlton Road .. | Patrol maintenance | .. | 6.25 |
| Borong-Hurstwood Road .. | General maintenance throughout township of Wedderburn | .. | 1.25 |
| Serpentine Road .. | Reconstruction of inverts in detached sections | .. | .26 |
| " " " " | General maintenance throughout | .. | 7 |
| " " " " | Patrol and general maintenance throughout | .. | 10.5 |
| KORUMBURRA SHIRE— | | | |
| Bena-Kongwak Road .. | Construction of 3-span timber bridge at Allotment 45, Parish of Jumbunna East | .. | .01 |
| " " " " | General maintenance | .. | 11.5 |
| Bena Korumburra Road .. | Scarifying and surfacing with fine crushed rock throughout | .. | 3.2 |
| " " " " | General maintenance | .. | 3.2 |
| Bena Poowong Road .. | Construction of 27-ft. span timber bridge over Bass River tributary at Allotment 20, Parish of Jeetho | .. | .01 |
| " " " " | General maintenance throughout | .. | 6.01 |
| " " " " | Gravel surfacing throughout | .. | 5.4 |
| " " " " | General maintenance throughout | .. | 5.4 |
| " " " " | Double coat bitumen surfacing from end of bitumen to the Powlett River | .. | 1 |
| " " " " | Construction of 2-span timber bridge over the Powlett River at Allotment 20A, Parish of Kongwak | .. | .01 |
| " " " " | General maintenance throughout | .. | 6.3 |
| " " " " | Road mix seal surfacing of bitumen from 0 to 1.82 miles | .. | 1.82 |
| " " " " | Improvement of bitumen cross section from 0 to .4 miles | .. | .4 |
| " " " " | General maintenance | .. | 4.7 |
| " " " " | Road mix seal surfacing with bitumen throughout | .. | 4.84 |
| " " " " | Construction of 36-in. diameter reinforced concrete pipe | .. | — |
| " " " " | Improving curves at Leura Creek, near Allotment 2, Section J, Parish of Korumburra | .. | — |
| " " " " | Realigning curve at Coal Creek near Allotment 92, Parish of Korumburra | .. | — |
| " " " " | General maintenance throughout | .. | 4.84 |
| | Carried forward | 15.06 | 3,013.76 |

STATEMENT SHOWING MILEAGE, LOCALITY, ETC., OF ROADS CONSTRUCTED, ETC.—*continued.*

| Name of Municipality and Road. | Nature and Locality of Works. | Permanent Works Constructed. | Reconstruction and Maintenance Works Carried Out. |
|---|--|------------------------------|---|
| | | Miles. | Miles. |
| UNDER MUNICIPALITIES—<i>continued.</i> | | | |
| | Brought forward | 15·06 | 3,013·76 |
| KORUMBURRA SHIRE—<i>continued.</i> | | | |
| Korumburra—Warragul Road .. | Fine crushed rock surfacing and double coat bitumen surfacing from 8·95 to 9·95 miles .. | | 1 |
| " " " .. | Modified macadam surfacing, Commercial Street, Korumburra, from ·04 to ·34 miles .. | | ·3 |
| " " " .. | General maintenance throughout .. | | 13 |
| Korumburra—Wonthaggi Road .. | Road mix seal surfacing of bitumen in 3 sections near Korumburra, Kongwak and Jumbunna .. | | 3·12 |
| " " " .. | Reshaping bitumen cross section at Moyarra .. | | ·14 |
| " " " .. | Forming, fine crushed rock surfacing and double coat bitumen surfacing deviation from 10·1 to 10·53 miles .. | | ·43 |
| " " " .. | General maintenance and benching of curves throughout .. | | 12·25 |
| Lang Lang—Nyora Road .. | Scarifying macadam section and gravelling from ·9 to 1·91 miles .. | | 1·01 |
| " " " .. | General maintenance throughout .. | | 1·91 |
| Loch—Nyora Road .. | General maintenance throughout .. | | 5 |
| Loch—Wonthaggi Road .. | Reconstruction in fine crushed rock and double coat bitumen surfacing in two sections from 1·04 to 2·04 miles .. | | 1 |
| " " " .. | Improving dangerous "S" curve ½ miles from Loch .. | | ·1 |
| " " " .. | General maintenance throughout .. | | 4·64 |
| Poowong—Nyora Road .. | Double coat bitumen surfacing of existing fine crushed rock roadway from 2·82 to 5·25 miles .. | | 2·43 |
| " " " .. | Removal of bad foundations throughout .. | | 6 |
| " " " .. | General maintenance throughout .. | | 6 |
| Poowong—Ranceby Road .. | General maintenance throughout .. | | 2·35 |
| KOWREE SHIRE— | | | |
| Hamilton—Edenhope—Apsley Road .. | Gravelling and culverts .. | | ·47 |
| " " " .. | General maintenance .. | | 41 |
| Edenhope—Goroke Road .. | Gravelling and culverts .. | | ·68 |
| " " " .. | Forming .. | | 2·5 |
| " " " .. | General maintenance .. | | 28·5 |
| Booroopki Road .. | General maintenance .. | | 13·5 |
| Booroopki—Frances Road .. | Forming and gravelling .. | | ·2 |
| " " " .. | Forming .. | | ·7 |
| " " " .. | General maintenance .. | | 18 |
| Little Desert Road .. | Gravelling and culvert .. | | ·13 |
| " " " .. | General maintenance .. | | 14·5 |
| Wombelano Road .. | Forming, gravelling, culverts, &c. .. | | ·2 |
| " " " .. | General maintenance .. | | 21 |
| KYNETON SHIRE— | | | |
| Daylesford Road .. | Double coat sealing at Malmesbury .. | | ·7 |
| Daylesford—Trentham Road .. | General maintenance .. | | 1·25 |
| Melbourne—Bendigo Road .. | Resealing through Kyneton .. | | ·71 |
| " " " .. | General maintenance, balance of road .. | | 1·75 |
| Redesdale Road .. | Reconditioning and double coat sealing .. | | ·4 |
| " " " .. | General maintenance, balance of road .. | | 6·25 |
| Trentham Road .. | Reconditioning with crushed rock and double coat sealing south from Kyneton railway station .. | | 2 |
| " " " .. | General maintenance, balance of road .. | | 17 |
| Tylden—Woodend Road .. | General maintenance throughout .. | | 3·25 |
| KYNETON AND GLENLYON SHIRES (Joint Works)— | | | |
| Daylesford—Trentham Road .. | General maintenance .. | | 1·2 |
| LAWLOIT SHIRE— | | | |
| Broughton Road .. | Road mix seal from ·35 to ·79 miles .. | | ·44 |
| " " " .. | Patrol maintenance throughout .. | | 9·9 |
| Little Desert Road .. | Patrol maintenance throughout .. | | 12·1 |
| Nhill—Kaniva—Border Road .. | Patrol maintenance throughout .. | | ·7 |
| South Lillimur Road .. | Gravelling from 6·07 to 6·46 miles .. | | ·39 |
| " " " .. | Patrol maintenance throughout .. | | 6·5 |
| Yearinga Road .. | Road mix seal from ·06 to ·33 miles .. | | ·27 |
| " " " .. | Metalling with limestone from 5·9 to 6·28 miles .. | | ·38 |
| " " " .. | Resheeting with limestone from ·45 to ·6 miles, and from 1·9 to 2·3 miles .. | | ·55 |
| " " " .. | Patrol maintenance throughout .. | | 9·7 |
| LEIGH SHIRE— | | | |
| Ballarat—Rokewood Road .. | General maintenance .. | | 8 |
| Cressy—Inverleigh Road .. | Reconditioning with crushed rock and bituminous sealing from Warrambine Creek to Shire boundary .. | | 2·25 |
| " " " .. | General maintenance .. | | 11·25 |
| Cressy—Rokewood Road .. | General maintenance .. | | 11 |
| Inverleigh—Shefford Road .. | General maintenance .. | | 6 |
| Rokewood—Shefford Road .. | General maintenance .. | | 17 |
| Shefford—Bannockburn Road .. | Reconditioning with gravel and bituminous sealing easterly from Shefford .. | | 3·18 |
| " " " .. | Patrol maintenance .. | | 6·75 |
| Werneth Road .. | General maintenance .. | | 3 |
| LEIGH AND COLAC SHIRES (Joint Works)— | | | |
| Cressy—Inverleigh Road .. | Reconditioning with gravel, shire boundary, westerly to Cressy railway crossing .. | | 1·7 |
| " " " .. | Bituminous sealing from Rokewood turn-off to Cressy railway crossing .. | | ·7 |
| " " " .. | General maintenance .. | | 2·5 |
| LEXTON SHIRE— | | | |
| Avoca—Ararat Road .. | Construction of 4-ft. diameter pipe culvert at 1·05 miles .. | | — |
| " " " .. | Patrol maintenance throughout .. | | 9·7 |
| Avoca—Ballarat Road .. | Reconstruction and double coat sealing from 9·4 to 10·4 miles .. | | 1 |
| " " " .. | Reconstruction and double coat sealing from 6·05 to 7·21 miles .. | | 1·16 |
| " " " .. | Patrol maintenance throughout .. | | 17 |
| LILLYDALE SHIRE— | | | |
| Evelyn—Lilydale Road .. | Sealing on gravel .. | | ·57 |
| " " " .. | General maintenance .. | | 3 |
| Main Healsville Road .. | Reconstruction 20-ft. pavement width at Lilydale .. | | ·4 |
| " " " .. | General maintenance .. | | 1 |
| Monbulk Road .. | Reconstruction 16-ft. pavement width at Silvan .. | | 4·26 |
| " " " .. | General maintenance .. | | 8·2 |
| Mount Dandenong Road .. | Reconstruction 20-ft. pavement width near Croydon .. | | 1·37 |
| " " " .. | General maintenance .. | | 11·8 |
| Yarra Glen Road .. | Widening embanked road 30 feet, pavement width 16 feet .. | | ·85 |
| " " " .. | General maintenance .. | | 4·6 |
| LOWAN SHIRE— | | | |
| Dimboola—Kaniva Road .. | Patrol maintenance throughout .. | | 2·2 |
| Goroke Road .. | Patrol maintenance throughout .. | | 6·7 |
| Lorquon West Road .. | Forming between Allotments 148 and 149, Parish of Woorak .. | 28 | .. |
| " " " .. | Patrol maintenance throughout .. | | 14 |
| " " " .. | Patrol maintenance throughout .. | | 5 |
| Lorquon Road .. | Forming and gravelling between Allotments 10 and 106, and Allotments 68 and 65, Parish of Yanac .. | 32 | .. |
| Yanac Road .. | Patrol maintenance throughout .. | | 18 |
| " " " .. | Patrol maintenance throughout .. | | .. |
| | Carried forward | 15·66 | 3,475·4 |

STATEMENT SHOWING MILEAGE, LOCALITY, ETC., OF ROADS CONSTRUCTED, ETC.—*continued.*

| Name of Municipality and Road. | Nature and Locality of Works. | Permanent Works Constructed. | Reconstruction and Maintenance Works Carried Out. |
|---|---|------------------------------|---|
| | | Miles. | Miles. |
| UNDER MUNICIPALITIES—<i>continued.</i> | | | |
| | Brought forward | 15·66 | 3,475·4 |
| MAFFRA SHIRE— | | | |
| Boisdale-Briagolong Road | Gravelling and bitumen sealing near 4 miles | | ·75 |
| | Patrol maintenance throughout | | 5 |
| Briagolong-Dargo Road | Gravelling and bitumen sealing near 4 miles | | ·5 |
| | Patrol maintenance throughout | | 5 |
| Bushy Park-Valencia Creek Road | Drag seal near 4 miles | | ·5 |
| | Patrol maintenance throughout | | 7 |
| Licola Road | Gravelling and bitumen sealing near 2 miles | | ·75 |
| | Patrol maintenance throughout | | 40 |
| Maffra-Newry Road | Construction of timber bridge over Newry Creek | | — |
| | Patrol maintenance throughout | | 7 |
| Maffra-Sale Road | Drag seal near 1 mile | | 7 |
| | Patrol maintenance throughout | | 7 |
| Stratford-Maffra Road | Patrol maintenance throughout | | 3 |
| Tinamba-Boisdale Road | Drag seal between 3 and 6 miles | | 3 |
| | Patrol maintenance throughout | | 14 |
| Tinamba-Newry Road | Patrol maintenance throughout | | 3 |
| Traralgon-Maffra Road | Construction of bridge at 5 miles | 13 | .. |
| | Drag seal near 3 miles | | 1·25 |
| | Patrol maintenance throughout | | 7 |
| MALDON SHIRE— | | | |
| Baringhup Road | Patrol maintenance | | 5 |
| Castlemaine-Maldon Road | Patrol maintenance | | 10 |
| Maldon-Eddington Road | Patrol maintenance | | 16 |
| Newstead Road | Patrol maintenance | | 5 |
| MANSFIELD SHIRE— | | | |
| Benalla-Mansfield Road | Realignment at 5 miles, construction of two bridges and gravelling | 7 | .. |
| | Patrol maintenance throughout, including power grading | | 9·5 |
| Enrol-Merton Road | Patrol maintenance throughout, including power grading | | 4·4 |
| Maindample-Benalla Road | Patrol maintenance throughout | | 5·5 |
| Mansfield Road | Priming and sealing with bitumen | | 3·5 |
| | Reforming, realigning and surfacing | | ·8 |
| | Patrol maintenance throughout, including power grading | | 42·7 |
| Mansfield-Tolmie Road | Priming and sealing with bitumen | | ·25 |
| | Patrol maintenance throughout | | 5·7 |
| Mansfield-Woods Point Road | Patrol maintenance throughout, including power grading | | 18·5 |
| Merton-Strathbogrie Road | Patrol maintenance throughout, including power grading | | 6·6 |
| MARONG SHIRE— | | | |
| Bendigo-Bridgewater Road | General maintenance and placing guide posts | | 1·24 |
| Bendigo-Eddington Road | Preparation of road surface and sealing | | 1·36 |
| | General maintenance | | 25 |
| Bendigo-Serpentine Road | Widening formations | | ·5 |
| | General maintenance | | 8·5 |
| MELTON SHIRE— | | | |
| The Gap Road | Patrol maintenance throughout | | ·75 |
| Toolem Road | Patrol maintenance throughout | | 6 |
| METCALFE SHIRE— | | | |
| Kyneton-Redesdale Road | General maintenance, construction of pipe culverts | | 12·25 |
| MILDURA SHIRE— | | | |
| Deakin Avenue | General maintenance | | ·81 |
| Irymple Road | Bituminous sealing and general maintenance from Deakin Avenue to Ginquam Avenue | | 4·87 |
| Melbourne Road | General maintenance from main channel south of Red Cliffs to north railway crossing | | 1 |
| Wentworth Road | General maintenance and road-mix seal between 15th Street and the Abbotsford Bridge over the River Murray | | 15·5 |
| MIXHAMITE SHIRE— | | | |
| Hamilton-MacArthur-Port Fairy Road | Widening to 15 feet and reshaping at Orford | | 1 |
| | Double coat bitumen sealing north of MacArthur | | ·7 |
| | Patrol maintenance throughout | | 17 |
| Warrnambool-Hawkesdale-Penshurst Road | Widening to 15 feet and reshaping at Warrong | | 1 |
| | Patrol maintenance throughout | | 22 |
| Woolsthorpe-Bessiebell Road | Forming and gravelling at Bessiebell | | 1 |
| | Forming and grading east of Hamilton-MacArthur-Port Fairy Road | | 1 |
| | Construction of 20 feet span reinforced concrete bridge and approach at Dunmore | 25 | .. |
| | Patrol maintenance throughout | | 29 |
| MIRBOO SHIRE— | | | |
| Grand Ridge Road | Road mix seal from junction with Leongatha Road | | 3·5 |
| | Patrol maintenance throughout, super-elevation of curves | | 6 |
| Leongatha-Mirboo Road | Double coat bitumen seal on macadam from Grand Ridge Road | | 3·5 |
| | Repairs to culvert at Allotment 15, Parish of Mardian | | — |
| | Patrol maintenance throughout | | 4·4 |
| Mardian Road | Reshaping and crushed rock surfacing | | ·63 |
| | Patrol maintenance throughout | | 4·6 |
| Mirboo South Road | Road mix seal from Nichols Road junction | | 2·7 |
| | Improvement to curves at foot of Cain's Hill | | — |
| | Patrol maintenance throughout | | 9·5 |
| Mirboo-Yarragon Road | Repairs to culvert at Allotment 38, Parish of Allambee East | | — |
| | Patrol maintenance throughout | | 5·7 |
| Morwell-Mirboo Road | Road mix seal in township of Mirboo North | | ·34 |
| | Patrol maintenance throughout | | 5·5 |
| MOORABBIN SHIRE— | | | |
| Centre Dandenong Road | General maintenance | | 2·89 |
| Point Nepean Road | Double coat drag spread application of pre-mixed material on western side of road between railway gates and Wickham Road | | ·75 |
| | General maintenance | | 2·38 |
| MORDIALLOE CITY— | | | |
| Beach Road | Patrol maintenance from Cromer Road, Beaumaris, to Mordialloe Creek Bridge | | 3·09 |
| Point Nepean Road | Patrol maintenance from Latrobe Street, Mentone, to Mordialloe Creek Bridge | | 3 |
| | Priming and sealing fine crushed rock from Latrobe Street to Warrigal Road | | ·6 |
| MORNINGTON SHIRE— | | | |
| Mornington-Dromana Road | Road mix seal | | 1·3 |
| | Reforming and gravelling | | 1·2 |
| | Patrol maintenance | | 6·5 |
| Point Nepean Road | Road mix seal | | ·5 |
| | Patrol maintenance | | 9·5 |
| MORTLAKE SHIRE— | | | |
| Caramut-Lismore Road | Road mix seal 12 feet wide on Mortlake-Darlington section from 4·15 to 5·87 miles, 9·3 to 11·87 miles and 12·86 to 14 miles | | 5·45 |
| | Double coat bitumen surfacing 12 feet wide on Hexham-Caramut section from ·46 to 1·12 miles | | ·66 |
| | Patrol maintenance throughout | | 29 |
| | Carried forward | 16·74 | 3,984·27 |

STATEMENT SHOWING MILEAGE, LOCALITY, ETC., OF ROADS CONSTRUCTED, ETC.—*continued.*

| Name of Municipality and Road. | Nature and Locality of Works. | Permanent Works Constructed. | Reconstruction and Maintenance Works Carried Out. |
|--|--|------------------------------|---|
| | | Miles. | Miles. |
| UNDER MUNICIPALITIES—<i>continued.</i> | | | |
| | Brought forward | 16.74 | 3,984.27 |
| MORTLAKE SHIRE—<i>continued.</i> | | | |
| Mortlake-Ararat Road | Scarifying, gravelling and double coat bitumen surfacing 16 feet wide on Woorndoo-Bolac section from 6.31 to 10.47 miles | .. | 4.16 |
| " " " " | Scarifying, metalling and double coat bitumen surfacing 12 feet wide on Mortlake-Woorndoo section from 13.37 miles to Woorndoo | .. | .27 |
| " " " " | Road mix seal 12 feet wide on Mortlake-Woorndoo section from 5.05 to 9.76 miles | .. | 4.71 |
| " " " " | Patrol maintenance throughout | .. | 24 |
| Mortlake-Warrnambool Road | Road mix seal 12 feet wide from 7.31 to 9.76 miles | .. | 2.45 |
| " " " " | Patrol maintenance throughout | .. | 14 |
| Terang-Framlingham Road | Scarifying, metalling, and double coat bitumen surfacing 12 feet wide from 12.23 to 12.52 miles and from Framlingham to 1.01 miles towards Panmure | .. | 1.3 |
| " " " " | Road mix seal 12 feet wide from 2.6 to 6 miles | .. | 3.4 |
| " " " " | Patrol maintenance throughout | .. | 11 |
| Terang-Mortlake Road | Patrol maintenance throughout | .. | 7 |
| MORWELL SHIRE— | | | |
| Jerralang West Road | Clearing, forming, and sanding on and adjacent to Chessum's Hill deviation | .57 | .. |
| " " " " | Double coat bituminous surfacing on scarified and resheeted sanded road at the Morwell end | .. | .8 |
| " " " " | General maintenance throughout | .. | 23.5 |
| Jumbuk Road | General maintenance throughout | .. | 12.5 |
| Morwell-Mirboo Road | Double coat bituminous surfacing on scarified and resheeted sanded road at Hazelwood | .. | 2.91 |
| " " " " | General maintenance throughout | .. | 9.14 |
| Prince's Highway | General maintenance throughout | .. | 1.5 |
| MOUNT ROUSE SHIRE— | | | |
| Ballarat-Hamilton Road | Modified macadam surfacing between Dunkeld and Glenthompson | .. | 1.49 |
| " " " " | Reconditioning and double coat sealing on gravel between Glenthompson and Wickliffe | .. | 2.06 |
| " " " " | Scarifying, reforming, and double coat sealing on water bound macadam between Dunkeld and Glenthompson | .. | .77 |
| " " " " | Construction of reinforced concrete superstructure on two culverts between Dunkeld and Glenthompson | .. | — |
| " " " " | Patrol maintenance throughout | .. | 21 |
| Hamilton-Dunkeld Road | Modified macadam surfacing between Dunkeld and the western Shire boundary | .. | 1.35 |
| " " " " | Patrol maintenance throughout | .. | 4 |
| Hamilton-Penshurst Road | Road mix seal between Penshurst and 7.51 miles north, and Penshurst and 4 miles south | .. | 3.06 |
| " " " " | Patrol maintenance throughout | .. | 14 |
| Maroona-Glenthompson Road | Patrol maintenance throughout | .. | 1 |
| Penshurst-Caramut Road | Modified macadam surfacing between 7.77 and 15.06 miles from Penshurst to Caramut | .. | 1.59 |
| " " " " | Road mix seal between 3 and 6.33 miles from Penshurst to Caramut | .. | 3.33 |
| " " " " | Patrol maintenance throughout | .. | 15 |
| MULGRAVE SHIRE— | | | |
| Ferntree Gully Road | Widening three sections to 20 feet and sealing with bitumen between Springvale Road and Dandenong Creek | .. | .81 |
| " " " " | Patrol maintenance between Box Hill Road and Dandenong Creek | .. | 4.94 |
| MCIVOR SHIRE— | | | |
| Heathcote-Elmore Road | Forming, gravelling, and construction of concrete culverts | 1.9 | .. |
| " " " " | Gravelling | .. | .28 |
| Heathcote-Redesdale Road | Gravelling | .. | .19 |
| Kilmore-Heathcote-Bendigo Road | Gravelling | .. | 1.52 |
| NARRACAN SHIRE— | | | |
| Allambee-Childers Road | Patrol maintenance | .. | 8.5 |
| Childers-Thorpdale Road | Patrol maintenance | .. | 1.5 |
| Mirboo-Yarragon Road | Patrol maintenance, improvement to curves and removal of landslips | .. | 6.5 |
| Moe-Yallourn Road | Patrol maintenance | .. | 2 |
| Prince's Highway | Patrol maintenance | .. | 1.5 |
| Trafalgar-Thorpdale Road | Construction of two timber bridges over the Narracan Creek | .. | — |
| " " " " | Patrol maintenance, widening, benching and super-elevating of curves where necessary | .. | 9 |
| Walhalla Road | Construction of a timber bridge | .. | — |
| " " " " | Sand sheeting and bitumen surfacing | .. | 1 |
| " " " " | Patrol maintenance, realignment, and regrading where necessary | .. | 32 |
| Willow Grove Road | Patrol maintenance and sand and loam sheeting where necessary | .. | 22 |
| Varragon-Leongatha Road | Patrol maintenance, widening, benching, &c., where necessary on curves, and removing land slips | .. | 9 |
| Yarragon-Shady Creek | Sand sheeting and bitumen surfacing | .. | .5 |
| " " " " | Patrol maintenance and sheeting where necessary | .. | 6 |
| NEWHAM AND WOODEND SHIRE— | | | |
| Lancefield Road | General maintenance throughout | .. | 9.25 |
| Mount Macedon Road | Reconditioning with crushed rock easterly from East Street | .. | 1 |
| " " " " | General maintenance throughout | .. | 5.25 |
| Tylden Road | General maintenance throughout | .. | 3.2 |
| NEWHAM AND WOODEND AND KYNETON SHIRES (Joint Works) | | | |
| Tylden Road | General maintenance throughout | .. | 1.2 |
| NEWSTEAD AND MT. ALEXANDER SHIRE— | | | |
| Castlemaine-Daylesford Road | Reconstruction and sealing | .. | 5.8 |
| " " " " | Patrol maintenance throughout | .. | 7.3 |
| Creswick Road | Reconstruction and sealing | .. | 2 |
| " " " " | Patrol maintenance throughout | .. | 10 |
| Maldon Road | Reconstruction and sealing | .. | 1 |
| " " " " | Patrol maintenance throughout | .. | 4 |
| NUMURKAH SHIRE— | | | |
| Echuca-Picola Road | Forming between Boal's and Walalla Creek bridges | .56 | .. |
| " " " " | Patrol maintenance from 0 to 5 miles | .. | 5 |
| Nathalia-Picola Road | Forming and gravelling around creek from Nathalia pit | .. | 1.08 |
| " " " " | Patrol maintenance throughout | .. | 7.8 |
| Numurkah-Nathalia Road | Double coat sealing through Nathalia Township | .. | .27 |
| " " " " | Patrol maintenance throughout | .. | 15.9 |
| Numurkah-Tungamah Road | Forming and gravelling westerly from Shire boundary | .68 | .. |
| " " " " | Patrol maintenance throughout | .. | 5 |
| Shepparton-Numurkah-Cobram Road | Regrading and gravelling in Melville Street, Numurkah | .. | .43 |
| " " " " | Patrol maintenance throughout | .. | 20.6 |
| OAKLEIGH CITY— | | | |
| Ferntree Gully Road | Pre-mixed bituminous seal coat | .. | .12 |
| " " " " | General maintenance throughout | .. | .48 |
| Prince's Highway | Pre-mixed bituminous seal coat | .. | .73 |
| " " " " | General maintenance throughout | .. | 1.12 |
| OMEQ SHIRE— | | | |
| Benambra Road | General maintenance throughout | .. | 13 |
| Bright-Omeo Road | Widening and improving by day labour near Hotham | .. | 1.25 |
| " " " " | General maintenance throughout | .. | 31 |
| Day Avenue Road | General maintenance throughout | .. | 1.75 |
| Swift's Creek-Omeo Road | General maintenance throughout | .. | 20 |
| | Carried forward | 20.45 | 4,458.33 |

STATEMENT SHOWING MILEAGE, LOCALITY, ETC., OF ROADS CONSTRUCTED, ETC.—*continued.*

| Name of Municipality and Road. | Nature and Locality of Works. | Permanent Works Constructed. | Reconstruction and Maintenance Works Carried Out. |
|--|---|------------------------------|---|
| | | Miles. | Miles. |
| UNDER MUNICIPALITIES—<i>continued.</i> | | | |
| | Brought forward | 20·45 | 4,458·33 |
| ORBOST SHIRE— | | | |
| Comberbar Road | General maintenance | | 8·5 |
| Marlo Road | General maintenance | | 10·2 |
| Prince's Highway | General maintenance | | 1·32 |
| OTWAY SHIRE— | | | |
| Beech Forest—Apollo Bay Road | Resheeting old waterbound macadam with fine crushed rock and double coat sealing from Apollo Bay towards Barham River Forks | | 1·14 |
| " " Beech Forest Road | Patrol maintenance from Apollo Bay to Aire River | | 11 |
| Gellibrand—Carlisle Road | Patrol maintenance from Shire boundary to Gellibrand | | 4 |
| | Patrol maintenance throughout | | 11 |
| OXLEY SHIRE— | | | |
| Bright Road | Sealing at Vaneo | | ·6 |
| " " " " | Reconstruction at Vaneo | | 1 |
| " " " " | Gravelling at Oxley Flats | | ·5 |
| " " " " | Gravelling at Whorouly South | | ·75 |
| " " " " | Patrol maintenance | | 25 |
| Greta—Glenrowan Road | Grading at Cotter's | | ·6 |
| " " " " | Gravelling at Iskor's | | ·7 |
| " " " " | Construction of four reinforced concrete pipe culverts near Cotter's and Robbies | | — |
| " " " " | Patrol maintenance | | 6 |
| Kilfeera Road | Construction of 20-foot span timber bridge and approaches | | ·8 |
| " " " " | Patrol maintenance throughout | | 2 |
| Wangaratta—Whitfield Road | Reconstruction at Targoora | | ·7 |
| " " " " | Reconstruction at Docker | | 2 |
| " " " " | Reconstruction at Moyhu | | ·8 |
| " " " " | Reconstruction at Whitfield | | 1 |
| " " " " | Gravelling at Targoora | | ·7 |
| " " " " | Gravelling at Docker | | 2 |
| " " " " | Gravelling at Moyhu | | ·6 |
| " " " " | Gravelling at Whitfield | | ·5 |
| " " " " | Sealing at Wangaratta Borough boundary | | ·25 |
| " " " " | Patrol maintenance throughout | | 31·5 |
| PHILLIP ISLAND SHIRE— | | | |
| Newhaven Road | General maintenance throughout | | 7·75 |
| Phillip Island Road | General maintenance throughout | | 2·5 |
| Ventnor Road | General maintenance throughout | | 4·5 |
| PORT FAIRY BOROUGH— | | | |
| Hamilton Road | Patrol maintenance | | 1·4 |
| Prince's Highway—Portland | Patrol maintenance | | 1·56 |
| Prince's Highway—Warrnambool | Patrol maintenance | | 2·6 |
| PORTLAND SHIRE— | | | |
| Bridgewater Road | Patrol maintenance throughout | | 10·5 |
| Heath Road | Patrol maintenance throughout | | 10·8 |
| Portland—Casterton Road | Reforming at Drumborg | | 2 |
| " " " " | Patrol maintenance throughout | | 20·85 |
| Portland—Hamilton Road | Reforming at Bolvorra | | 1·42 |
| " " " " | Patrol maintenance throughout | | 28·8 |
| PRESTON CITY— | | | |
| Epping Road | General maintenance | | 1·4 |
| Whittlesea Road | Widening existing roadway 4 feet on west side in modified macadam between Tyler Street and chainage 6,035 feet | | 1·14 |
| PYALONG SHIRE— | | | |
| Kilmore—Heathcote—Bendigo Road | Construction of pipe culverts to replace three timber culverts near J. H. Walters | | ·11 |
| " " " " | Patrol maintenance | | 11·34 |
| Lancefield—Tooborac Road | Patrol maintenance | | 10·8 |
| PYALONG AND MCVOR SHIRES (Joint Works)— | | | |
| Lancefield—Tooborac Road | Patrol maintenance | | 2·04 |
| QUEENSLAND BOROUGH— | | | |
| Geelong Road | General maintenance throughout | | 3·5 |
| Point Lonsdale Road | General maintenance throughout | | 1·6 |
| RINGWOOD BOROUGH— | | | |
| Main Healesville Road | Road mix resealing | | ·87 |
| " " " " | Reconstruction and widening | | ·67 |
| " " " " | Channelling | | ·26 |
| " " " " | Patrol maintenance | | 3·24 |
| Mount Dandenong Road | Road mix resealing | | ·22 |
| " " " " | Patrol maintenance | | 1·75 |
| Ringwood—Warrandyte Road | Widening from 12 to 16 feet | | ·5 |
| " " " " | Construction of footbridge over Mullum Creek | | — |
| " " " " | Patrol maintenance | | 1·5 |
| RIPON SHIRE— | | | |
| Ballarāt—Ararat Road | Double coat sealing 20 feet wide from 98·96 to 99·11 miles, including new curve at 99 miles | | ·15 |
| " " " " | General maintenance throughout | | 1·4 |
| Ballarāt—Hamilton Road | Double coat sealing 16 feet wide from 8 to 10·28 miles, and 11·41 to 13·65 miles | | 4·52 |
| " " " " | Patrol maintenance throughout | | 16·26 |
| Skipton Road | Double coat sealing 12 feet wide from 5·23 to 6·66 miles, 9·6 to 11·56 miles, 13·61 to 15·87 miles | | 5·65 |
| " " " " | Patrol maintenance throughout | | 18·67 |
| ROCHESTER SHIRE— | | | |
| Bendigo—Echuca Road | Road mix seal through township of Rochester | | ·88 |
| Corop Road | Patrol maintenance throughout | | 5·5 |
| Rochester—Bamawin—Prairie Road | Sealing waterbound macadam east from township of Lockington | | 2·84 |
| " " " " | Patrol maintenance throughout | | 27·5 |
| Timbering Road | Sealing gravel from Allotment 165 to Allotment 916, Parish of Nanneella | | 1·51 |
| " " " " | Road mix seal through township of Rochester | | ·26 |
| " " " " | Patrol maintenance throughout | | 4·5 |
| RODNEY SHIRE— | | | |
| Kyabram—Nathalia Road | Patrol maintenance throughout | | 1 |
| Kyabram—Tongala Road | Gravel widening to sides of bitumen pavement, north of Kyabram | | ·75 |
| " " " " | Patrol maintenance throughout | | 1 |
| Moorepark—Undera Road | Patrol maintenance throughout | | 8 |
| Shepparton—Tatura Road | Road mix seal north of Tatura | | 1·11 |
| " " " " | Patrol maintenance throughout | | 10 |
| Tatura—Byrneside—Kyabram Road | Road mix seal north of Merrigum | | ·64 |
| " " " " | Road mix seal at Byrneside | | ·11 |
| " " " " | Modified macadam reconstruction, 14 feet wide, south of Merrigum | | ·82 |
| " " " " | Modified macadam reconstruction, 12 feet wide, at Byrneside | | ·4 |
| " " " " | Patrol maintenance throughout | | 16·5 |
| Tatura—Murchison Road | Road mix seal south of Tatura | | 1 |
| " " " " | Road mix seal north of Murchison | | 1·4 |
| " " " " | Double coat sealing north of Murchison | | 3·22 |
| " " " " | Patrol maintenance throughout | | 13 |
| | Carried forward | 20·45 | 4,867·7 |

STATEMENT SHOWING MILEAGE, LOCALITY, ETC., OF ROADS CONSTRUCTED, ETC.—*continued.*

| Name of Municipality and Road. | Nature and Locality of Works. | Permanent Works Constructed. | Reconstruction and Maintenance Works Carried Out. |
|--|---|------------------------------|---|
| | | Miles. | Miles. |
| UNDER MUNICIPALITIES—<i>continued.</i> | | | |
| | Brought forward | 20·45 | 4,867·7 |
| RODNEY SHIRE AND SHEPPARTON BOROUGH (Joint Works)— Shepparton-Tatura Road .. | Patrol maintenance throughout | | 1·8 |
| ROMSEY SHIRE— Lancefield-Kilmore Road .. | Regrading and gravelling at Mt. William | | ·23 |
| .. | Patrol maintenance | | 9·71 |
| Lancefield-Tooborac Road .. | Sealing south of Deep Creek | | ·3 |
| .. | Patrol maintenance | | 4·31 |
| Melbourne-Lancefield Road .. | Reconditioning with gravel from Monegeetta to Lancefield | | 5·92 |
| .. | Sealing from Monegeetta towards Lancefield | | 5 |
| .. | Patrol maintenance | | 15·85 |
| Woodend-Lancefield Road .. | Sealing at Seven Roads | | ·15 |
| .. | Patrol maintenance | | 5·62 |
| ROSEDALE SHIRE— Carrajung-Gormandale Road .. | General maintenance throughout | | ·75 |
| Prince's Highway | General maintenance throughout | | ·91 |
| Seaspray Road | General maintenance throughout | | 15·75 |
| Traralgon-Gormandale Road .. | General maintenance throughout | | 4·53 |
| Traralgon-Maffra Road | Road-mix seal near Heyfield Bridge | | 1·75 |
| .. | Double coat sealing near Cowwarr | | 1 |
| .. | General maintenance throughout | | 21 |
| Willung Road | General maintenance throughout | | 8 |
| RUTHERGLEN SHIRE— Barnawartha-Howlong Road .. | Patrol maintenance throughout | | 1·6 |
| Chiltern-Howlong Road | Patrol maintenance throughout | | 4·6 |
| Murray Valley Road | Patrol maintenance throughout | | ·79 |
| Rutherglen-Wahgunyah Road .. | Patrol maintenance throughout | | 5·9 |
| SALE TOWNSHIP— Prince's Highway | Widening gravel from Thompson River to Sale Post Office and from Raglan Street to town boundary | | 1·24 |
| .. | Patrol maintenance, Thompson River to north town boundary | | 2·3 |
| Sale-Longford Road | Reconstruction and resealing at Flooding Creek and Robinson Park | | ·7 |
| .. | Under-pinning abutment Swing Bridge over Latrobe River | | — |
| .. | Patrol maintenance from Sale Post Office to Latrobe River | | 2·84 |
| SANDRINGHAM CITY— Beach Road | Construction of rolled concrete base and black top from New Street to Small Street | ·61 | .. |
| .. | Construction of concrete base, including drainage works from Small Street to Georgiana Street | ·44 | .. |
| .. | Construction of modified macadam base from Georgiana Street to The Crescent | ·32 | .. |
| .. | Construction of rolled concrete base from the Crescent to Bay Road | ·22 | .. |
| .. | Construction of rolled concrete base, including drainage works from Tennyson Street to Royal Avenue | ·41 | .. |
| .. | Construction of rolled concrete base from Balcombe Road to Central Avenue | ·52 | .. |
| .. | Construction of modified macadam base from Central Avenue to Cromer Road | | 1·96 |
| .. | Patrol maintenance throughout | | 5·83 |
| SEBASTOPOL BOROUGH— Ballarat-Hamilton Road | Sealing shoulders at intersection with Rokewood Road | | — |
| .. | Patrol maintenance throughout | | ·84 |
| Ballarat-Rokewood Road | Road-mix seal from George Street to Victoria Street | | ·83 |
| .. | Patrol maintenance throughout | | 2·34 |
| SEYMOUR SHIRE— Avenel-Longwood Road | General maintenance in Avenel township | | 1·5 |
| Highlands Road | General maintenance throughout and placing pipe culverts | | 16 |
| Upper Goulburn Road | General maintenance throughout | | 11·4 |
| SHEPPARTON BOROUGH— Shepparton-Mooroopna Road .. | Road-mix seal 20 feet wide throughout | | ·04 |
| .. | Patrol maintenance throughout | | ·04 |
| Shepparton-Nagambie Road | Patrol maintenance | | 2·05 |
| Shepparton-Nalinga Road | Patrol maintenance throughout | | ·95 |
| Shepparton-Nunmurkah Road .. | Patrol maintenance throughout | | ·95 |
| SHEPPARTON BOROUGH AND RODNEY SHIRE (Joint Works)— Shepparton-Tatura Road | Patrol maintenance throughout | | ·14 |
| SHEPPARTON BOROUGH AND SHEPPARTON SHIRE (Joint Works)— Shepparton-Nagambie Road | General maintenance of Broken River bridge | | — |
| SHEPPARTON SHIRE— Dookie-Nalinga Road | General maintenance | | 7·75 |
| Katandra Road | General maintenance | | 7·77 |
| Pine Lodge Road | General maintenance | | 3·57 |
| Shepparton-Nagambie Road | General maintenance | | 9·38 |
| Shepparton-Nalinga Road | General maintenance | | ·4 |
| Shepparton-Nunmurkah Road .. | General maintenance | | 12 |
| Violet Town-Dookie Road | General maintenance | | ·1 |
| SOUTH BARWON SHIRE— Barwon Heads Road | Road-mix seal on Barwon Heads bridge | | ·19 |
| .. | Earthwork and scoria base, Marshall deviation | | ·28 |
| .. | Road-mix seal commencing 1 mile from Barwon Heads township | | 1 |
| .. | Crushed rock surfacing between 9 and 10 miles | | ·28 |
| .. | Crushed rock surfacing between 6 and 7 miles | | ·28 |
| .. | Patrol maintenance | | 12 |
| Prince's Highway | Pre-mixed surface coat on Barwon bridge | | ·08 |
| .. | Road-mix seal | | ·95 |
| .. | Patrol maintenance | | 1·33 |
| Torquay Road | Road-mix seal between 3 and 4 miles | | 1 |
| .. | Patrol maintenance | | 3·5 |
| SOUTH BARWON AND BARRABOOL SHIRES (Joint Works)— Torquay Road | Reconstruction with scoria and bitumen sealing between 6 and 8 miles | | 1·7 |
| .. | Road-mix seal between 8 and 10 miles | | 1·4 |
| .. | Patrol maintenance | | 9 |
| | Carried forward | 22·97 | 5,109·08 |

STATEMENT SHOWING MILEAGE, LOCALITY, ETC., OF ROADS CONSTRUCTED, ETC.—*continued.*

| Name of Municipality and Road. | Nature and Locality of Works. | Permanent Works Constructed. | Reconstruction and Maintenance Works Carried Out. |
|---|---|------------------------------|---|
| | | Miles. | Miles. |
| UNDER MUNICIPALITIES—<i>continued.</i> | | | |
| | Brought forward | 22.97 | 5,109.08 |
| SOUTH GIPPSLAND SHIRE— | | | |
| Albert River Welshpool Road | General maintenance throughout .. .. . | .. .. . | 1.7 |
| Boolarra-Foster Road | General maintenance throughout .. .. . | .. .. . | 8 |
| Boolarra-Welshpool Road | General maintenance throughout .. .. . | .. .. . | 11.8 |
| Falls Road | General maintenance throughout .. .. . | .. .. . | 5 |
| Foster-Yarram Road | Construction of bridge over Muddy Creek .. .. . | .. .. . | — |
| " " " " | General maintenance throughout .. .. . | .. .. . | 18 |
| Hazel Park Road | General maintenance throughout .. .. . | .. .. . | 4.89 |
| Main South Gippsland Road | General maintenance throughout .. .. . | .. .. . | 14 |
| Stony Creek-Dollar Road | General maintenance throughout .. .. . | .. .. . | 9.1 |
| Toora-Gunyah Road | General maintenance throughout .. .. . | .. .. . | 12 |
| Toora-Wonyup Road | General maintenance throughout .. .. . | .. .. . | 5 |
| Turton's Creek Road | General maintenance throughout .. .. . | .. .. . | 5 |
| ST. ARNAUD BOROUGH— | | | |
| Avoca-St. Arnaud Road | Patrol maintenance throughout .. .. . | .. .. . | 1.48 |
| Charlton Road | Patrol maintenance throughout .. .. . | .. .. . | 1.34 |
| Navarre Road | Patrol maintenance throughout .. .. . | .. .. . | .95 |
| St. Arnaud Donald Road | Patrol maintenance throughout .. .. . | .. .. . | 2.25 |
| STAWELL BOROUGH— | | | |
| Ararat Stawell Road | Road-mix seal and general maintenance .. .. . | .. .. . | 1.5 |
| Glenorchy Road | General maintenance .. .. . | .. .. . | .5 |
| Stawell-Granpians Road | General maintenance .. .. . | .. .. . | .5 |
| STAWELL SHIRE— | | | |
| Horsham-Wal Wal Road | Forming and gravelling at Faux Bridge .. .. . | .. .. . | — |
| " " " " | General maintenance .. .. . | .. .. . | 2.5 |
| Landsborough Road | General maintenance .. .. . | .. .. . | 5.5 |
| Manoo Road | Construction of approaches to Anderson Creek bridge | 17 | .. |
| " " " " | General maintenance .. .. . | .. .. . | 35 |
| Navarre Road | Forming and gravelling near Green's Creek .. .. . | .. .. . | .9 |
| " " " " | Forming and gravelling Navarre Road Hills | 2.3 | .. |
| " " " " | General maintenance .. .. . | .. .. . | 22 |
| Stawell-Glenorchy-Horsham Road | Gravelling near Lubeck .. .. . | .. .. . | .73 |
| " " " " | Gravelling at Nyalla Swamp .. .. . | .. .. . | 2.19 |
| " " " " | General maintenance .. .. . | .. .. . | 21 |
| Stawell-Warracknabeal Road | General maintenance .. .. . | .. .. . | 8.5 |
| STRATHFIELDSAYE SHIRE— | | | |
| Heathcote-Bendigo Road | Reconstruction in gravel 16 feet wide easterly from 1.5 miles from Bendigo City boundary .. .. . | .. .. . | 1 |
| " " " " | Patrol maintenance .. .. . | .. .. . | 11 |
| Mandurang Road | Scarifying and reshaping with gravel sheeting, various sections .. .. . | .. .. . | 2.5 |
| " " " " | Patrol maintenance .. .. . | .. .. . | 7 |
| Strathfieldsaye Road | Road-mix seal 15 feet wide easterly from Bendigo City boundary .. .. . | .. .. . | 1 |
| " " " " | Construction of timber bridge over Axe Creek near Allotment 6, Section XIII, Parish of Strathfieldsaye .. .. . | .. .. . | .. |
| " " " " | Patrol maintenance .. .. . | .. .. . | 8 |
| SWAN HILL SHIRE— | | | |
| Anuello-Wemen Road | Reshaping and sheeting with limestone gravel .. .. . | .. .. . | .75 |
| " " " " | Patrol maintenance .. .. . | .. .. . | 16 |
| Euston Road | Sealing crushed rock pavement north of Swan Hill .. .. . | .. .. . | .7 |
| " " " " | Patrol maintenance .. .. . | .. .. . | 2.46 |
| Nyah-Onyen Road | Road-mix seal on sealed macadam from Murray Valley Highway to Nyahwest .. .. . | .. .. . | 2.03 |
| " " " " | Reshaping and sheeting with limestone gravel west from Nyahwest township .. .. . | .. .. . | 2.75 |
| " " " " | Patrol maintenance .. .. . | .. .. . | 49 |
| Swan Hill Road | Patrol maintenance .. .. . | .. .. . | 1.27 |
| Ultina Road | Reshaping and light forming east from Ulina .. .. . | .. .. . | 6 |
| Ultina-Sea Lake Road | Patrol maintenance throughout .. .. . | .. .. . | 19 |
| TALBOT SHIRE— | | | |
| Maryborough-Ballararat Road | Reshaping and resheeting from 2 to 3.75 miles .. .. . | .. .. . | 1.75 |
| " " " " | Priming and road mix seal from 15.55 to 15.6 miles .. .. . | .. .. . | .05 |
| " " " " | Patrol maintenance throughout .. .. . | .. .. . | 17.3 |
| TAMBO SHIRE— | | | |
| Bairnsdale-Bruthen Road | Resealing .. .. . | .. .. . | .21 |
| " " " " | Patrol maintenance .. .. . | .. .. . | .6 |
| Basin Road | Painting and timber treatment of bridge .. .. . | .. .. . | — |
| " " " " | Patrol maintenance .. .. . | .. .. . | 10.2 |
| Bruthen-Omeo Road | Patrol maintenance .. .. . | .. .. . | .8 |
| Mossface Road | Patrol maintenance .. .. . | .. .. . | 3 |
| Nowa-Nowa-Buchan-Gelantipy Road | Resheeting gravel .. .. . | .. .. . | 1.7 |
| " " " " | Realignment .. .. . | .. .. . | .3 |
| " " " " | Patrol maintenance .. .. . | .. .. . | 33 |
| TOWONG SHIRE— | | | |
| Murray Valley Road | Patrol maintenance .. .. . | .. .. . | 20.3 |
| Omeo Road | Construction and raising of floodway west of Tallangatta township .. .. . | .. .. . | .19 |
| " " " " | Patrol maintenance .. .. . | .. .. . | 1.35 |
| TRARALGON SHIRE— | | | |
| Prince's Highway | Road-mix seal .. .. . | .. .. . | .25 |
| " " " " | Patrol maintenance throughout .. .. . | .. .. . | 1.05 |
| Traralgon-Balook Road | Patrol maintenance throughout .. .. . | .. .. . | 12.25 |
| Traralgon Creek Road | Construction of bridge and approaches at Stony Creek | 1 | .. |
| " " " " | Patrol maintenance, &c., throughout .. .. . | .. .. . | 16 |
| Traralgon-Gormandale Road | Double coat sealing .. .. . | .. .. . | .5 |
| " " " " | Patrol maintenance, &c., throughout .. .. . | .. .. . | 6.9 |
| Traralgon-Maffra Road | Double coat sealing .. .. . | .. .. . | .5 |
| " " " " | Patrol maintenance, &c., throughout .. .. . | .. .. . | 3 |
| Tyers Road | Double coat sealing .. .. . | .. .. . | .17 |
| " " " " | Patrol maintenance, &c., throughout .. .. . | .. .. . | 7.75 |
| TULLAROOP SHIRE— | | | |
| Avoca Road | Patrol maintenance throughout .. .. . | .. .. . | 9.2 |
| Ballararat Road | Patrol maintenance throughout .. .. . | .. .. . | 3.1 |
| Eddington Road | Patrol maintenance throughout .. .. . | .. .. . | 13.9 |
| " " " " | Reconditioning between Maryborough and Havelock .. .. . | .. .. . | 4 |
| " " " " | Construction of pipe culverts at .8, 3.3 and 3.5 miles .. .. . | .. .. . | — |
| Maryborough-Dunolly Road | Construction and sealing of floodway at 1.4 miles .. .. . | .. .. . | .06 |
| " " " " | Patrol maintenance throughout .. .. . | .. .. . | 3.4 |
| Natte-Yallock Road | Construction of pipe culverts at .6, .9 and 1.1 miles .. .. . | .. .. . | — |
| " " " " | Patrol maintenance throughout .. .. . | .. .. . | 7.25 |
| TUNGAMAH SHIRE— | | | |
| Cobram South Road | Patrol maintenance .. .. . | .. .. . | 4.36 |
| Cobram-Katamatite Road | Patrol maintenance .. .. . | .. .. . | 1.02 |
| Katandra Road | Patrol maintenance .. .. . | .. .. . | 9.47 |
| Numerkah-Tungamah-Wilby Road | Reforming and gravelling between Parishes of Dunbulbalane and Naring, and construction of timber bridge | 1.12 | .. |
| " " " " | Patrol maintenance .. .. . | .. .. . | 30.7 |
| St. Janes Road | Patrol maintenance .. .. . | .. .. . | 8.98 |
| Yarrowonga-Cobram Road | Patrol maintenance .. .. . | .. .. . | 1.68 |
| | Carried forward | 26.66 | 5,677.09 |

STATEMENT SHOWING MILEAGE, LOCALITY, ETC., OF ROADS CONSTRUCTED, ETC.—continued.

| Name of Municipality and Road. | Nature and Locality of Works. | Permanent Works Constructed. | Reconstruction and Maintenance Works Carried Out. |
|--|---|------------------------------|---|
| | | Miles. | Miles. |
| UNDER MUNICIPALITIES—continued. | | | |
| | Brought forward | 26·66 | 5,677·09 |
| UPPER MURRAY SHIRE— | | | |
| Corryong Road | Patrol maintenance throughout | .. | 13·5 |
| Tintaldra Road | Construction of 10-ft. x 7-ft. reinforced concrete culvert and reforming and surfacing | ·09 | .. |
| " " " " | Patrol maintenance throughout | .. | 14·25 |
| UPPER YARRA SHIRE— | | | |
| Don Road | General maintenance throughout | .. | 1·15 |
| Little Yarra Road | Replacement of old timber culvert at creek between Hazeldene Road and Britannia Avenue at Gladysdale with new twin pipe culvert | .. | — |
| " " " " | Reconstruction of road at Yarra Junction with sand | .. | 1·27 |
| " " " " | Bitumen sealing of reconstructed section of road at Yarra Junction | .. | 1·27 |
| " " " " | General maintenance | .. | 10·2 |
| Warburton Road | Reconstruction in modified macadam at western railway crossing at Launching Place | .. | ·07 |
| " " " " | Replacement of old pipe culvert at Scotchman's Creek, Warburton, with new twin pipe culvert | .. | — |
| " " " " | General maintenance between Shire boundary at Woori Yallock Creek and Pocknee's Corner at Warburton | .. | 13·75 |
| VIOLET TOWN SHIRE— | | | |
| Murchison-Violet Town Road | Construction of three-span timber bridge over Mullen's Creek | — | .. |
| " " " " | Patrol maintenance | .. | 6·6 |
| Violet Town Dookie Road | Forming and gravelling opposite Allotment 9A, Parish of Upotipotpon | ·15 | .. |
| " " " " | Construction of timber bridge near Broken River | — | .. |
| " " " " | Patrol maintenance | .. | 16·35 |
| WANGARATTA SHIRE— | | | |
| Beechworth Road | Patrol maintenance throughout | .. | 11 |
| Peechelba Road | Patrol maintenance throughout | .. | 1·5 |
| Wangaratta-Myrtleford Road | Patrol maintenance throughout | .. | 6·5 |
| WANNON SHIRE— | | | |
| Coleraine-Harrow-Apsley Road | Reforming and gravelling | .. | 2·2 |
| " " " " | Road-mix seal | .. | 1·99 |
| " " " " | Double coat bitumen surfacing | .. | 1·52 |
| " " " " | Patrol maintenance throughout | .. | 35 |
| Hamilton-Coleraine-Casterton Road | Road-mix seal | .. | 1·96 |
| " " " " | Double coat bitumen surfacing | .. | 2·25 |
| " " " " | Reforming and gravelling | .. | 2·25 |
| " " " " | Patrol maintenance throughout | .. | 16 |
| Wannon Bridge Road | Road-mix seal, bitumen | .. | 1·55 |
| " " " " | Patrol maintenance throughout | .. | 6 |
| WANNON AND GLENELG SHIRES (Joint Works)— | | | |
| Hamilton-Coleraine-Casterton Road | Reforming and gravelling | .. | 2·12 |
| " " " " | Patrol maintenance throughout | .. | 2·12 |
| WARANGA SHIRE— | | | |
| Colbinabbin-Moorra Road | General maintenance | .. | 8 |
| Elmore-Colbinabbin Road | Forming and gravelling at Colbinabbin West Timber Reserve | .. | ·2 |
| " " " " | General maintenance | .. | 11 |
| Heathcote-Elmore Road | Flanking and sheeting with gravel between Elmore and Jackson's Bridge | .. | 3 |
| " " " " | General maintenance | .. | 20 |
| Murchison-Rushworth Road | General maintenance | .. | 16 |
| Rushworth-Stanhope Road | General maintenance | .. | 12 |
| Tatura Road | General maintenance | .. | 1·2 |
| WARRAGUL SHIRE— | | | |
| Bloomfield Road | Road-mix seal 12 feet wide from 1 to 3 miles | .. | 2 |
| " " " " | Road mix seal between 5 and 6 miles | .. | ·12 |
| " " " " | Construction of timber bridge at Nilma | .. | — |
| " " " " | Regrading and surfacing with crushed rock between 7 and 8 miles | .. | ·28 |
| " " " " | Patrol maintenance throughout | .. | 8 |
| Brandy Creek Road | Road-mix seal with bitumen 16 feet wide between 3 and 5 miles | .. | 1 |
| " " " " | Widening by 3 feet and double coat sealing between 2 and 3 miles | .. | ·75 |
| " " " " | Road-mix seal 12 feet wide between 5 and 7 miles | .. | 1 |
| " " " " | Double coat sealing various sections | .. | ·25 |
| " " " " | Patrol maintenance throughout | .. | 8·3 |
| Darnum-Alambee Road | Replacing culvert with double cell 2 ft. 6 in. pipe culvert at 2·5 miles | .. | — |
| " " " " | Patrol maintenance throughout | .. | 8 |
| Prince's Highway | Road-mix seal 20 feet wide throughout | .. | 1·05 |
| " " " " | Patrol maintenance throughout | .. | 1·05 |
| Warragul-Korumburra Road | Widening and resheeting with sand from 8 to 10 miles | .. | 2 |
| " " " " | Double coat sealing extra 3 feet sanded width from 1 to 2 miles | .. | 1 |
| " " " " | Double coat sealing from 8 to 10 miles | .. | 2 |
| " " " " | Patrol maintenance throughout | .. | 15·5 |
| Warragul-Leongatha Road | Patrol maintenance throughout | .. | 4 |
| WARRNAMBOOL SHIRE— | | | |
| Allansford-Nirranda Road | Patrol maintenance | .. | 17 |
| Caramut-Lismore Road | Patrol maintenance | .. | 6 |
| Framlingham Road | Patrol maintenance | .. | 4·5 |
| Garvoc-Laang Road | Patrol maintenance | .. | 5 |
| Mortlake Road | Road-mix seal bitumen surfacing | .. | 1·8 |
| " " " " | Patrol maintenance | .. | 16 |
| Peterborough Road | Patrol maintenance | .. | 9 |
| Timboon-Nirranda Road | Patrol maintenance | .. | 5·5 |
| WERRIBEE ROAD— | | | |
| Geelong-Bacchus Marsh Road | Patrol maintenance and sheeting sections with crushed rock | .. | 2·37 |
| WHITTLESEA SHIRE— | | | |
| Epping Road | General maintenance, sealing, and resealing | .. | 10 |
| Main Whittlesea Road | Patrol maintenance throughout, resealing, and reconstruction | .. | 14 |
| Wallan Road | General maintenance | .. | 6 |
| Whittlesea-Kinglake Road | General maintenance | .. | 4·5 |
| WIMMERA SHIRE— | | | |
| Dooen Road | Trimming shoulders to bitumen throughout | .. | 3·1 |
| " " " " | Construction of stone crossing and formation in side track at 3 miles | .. | ·06 |
| Horsham-Murtoa Road | Reshaping, priming, and sealing easterly from Dooen School | .. | 2·52 |
| " " " " | General maintenance from 0 to 1·7 miles | .. | 1·7 |
| Horsham-Wal Wal Road | Loaming and gravelling north of Allotment 51, Parish of Golton and Allotment 192, Parish of Warranook | .. | ·95 |
| " " " " | Grading side track between Allotments 6 and 35, Parish of Drung | .. | 1 |
| " " " " | General maintenance north and west of Allotment 6, Parish of Drung | .. | ·25 |
| Natimuk Road | General maintenance south of Allotments 16, 17, and 18, Parish of Quantong | .. | 3·4 |
| " " " " | Patrol maintenance | .. | 8·26 |
| WIMMERA AND ARAPILES SHIRES (Joint Works)— | | | |
| Horsham-Hamilton Road | Scarifying, reshaping, priming, and sealing between ·65 and 2·68 miles | .. | 2·03 |
| " " " " | Shouldering throughout | .. | 3·1 |
| " " " " | Reconstruction through Allotment 23, Parish of Bungalally | .. | ·21 |
| " " " " | Construction of McKenzie Creek bridge | .. | ·01 |
| | Carried forward | 26·9 | 6,104·82 |

STATEMENT SHOWING MILEAGE, LOCALITY, ETC., OF ROADS CONSTRUCTED, ETC.—*continued.*

| Name of Municipality and Road. | Nature and Locality of Works. | Permanent Works Constructed. | Reconstruction and Maintenance Works Carried Out. |
|--|--|------------------------------|---|
| | | Miles. | Miles. |
| UNDER MUNICIPALITIES—<i>continued.</i> | | | |
| | Brought forward | 26.9 | 6,104.82 |
| WINCHELSEA ROAD— | | | |
| Birregurra Road | Widening, resheeting, and double coat bituminous surfacing Main Street, Birregurra | .. | .48 |
| " " " " | Widening, resheeting, and construction of new curve from Darcy's Corner to Prince's Highway | .. | .77 |
| " " " " | General maintenance throughout | .. | 2.5 |
| Birregurra-Dean Marsh Road | Re-forming and gravelling near Whoorel railway station | .. | .74 |
| " " " " | Construction of new curve and resheeting floodway and hill at Hannam's | .. | .44 |
| " " " " | Double coat bituminous surfacing from Darcy's to Pennyroyal Creek | .. | 2.65 |
| " " " " | General maintenance throughout | .. | 7.5 |
| Birregurra-Forrest Road | Widening and resheeting with gravel near Callahan's Lane | .. | .39 |
| " " " " | Construction of new timber bridge 30 feet long over Dewing's Creek | .. | .01 |
| " " " " | Double coat bituminous surfacing from Section Hill to Callahan's Lane | .. | 1.5 |
| " " " " | General maintenance throughout | .. | 10 |
| WODONGA SHIRE— | | | |
| Kiewa-Wodonga Road | Patrol maintenance | .. | 1 |
| Sydney Road | Patrol maintenance | .. | 1 |
| Tallangatta Road | Patrol maintenance | .. | 1 |
| Wodonga-Yackandandah Road | Patrol maintenance | .. | 3.8 |
| WONTHAGGI BOROUGH— | | | |
| Korumburra-Wonthaggi Road | Road mix seal and patrol maintenance throughout | .. | .76 |
| Loch-Wonthaggi Road | Road mix seal and patrol maintenance throughout | .. | .85 |
| Wonthaggi-Inverloch Road | Road mix seal and patrol maintenance throughout | .. | 2.33 |
| WOORAYL SHIRE— | | | |
| Fairbank Road | General maintenance throughout | .. | 2.08 |
| Farmer's Road | General maintenance throughout | .. | 13.5 |
| Inverloch-Leongatha Road | General maintenance throughout | .. | 16 |
| Inverloch-Wonthaggi Road | General maintenance throughout | .. | 2.5 |
| Kongwak-Inverloch Road | General maintenance throughout | .. | 2.16 |
| Leongatha-Mirboo Road | General maintenance throughout | .. | 6.8 |
| Leongatha-Varragon Road | General maintenance throughout | .. | 13 |
| Lower Tarwin Road | General maintenance throughout | .. | 11.75 |
| Main South Gippsland Road | General maintenance throughout | .. | 17 |
| Mardan Road | Construction of deviation through Allotment 112A, Parish of Mardan and Allotment 102A, Parish of Koorooman | ..17 | .. |
| " " " " | Construction of new concrete bridges, &c., near O'Shannassy's | .. | .. |
| " " " " | General maintenance throughout | .. | 10 |
| Tutton's Creek Road | General maintenance throughout | .. | 6.75 |
| Wild Dog Valley Road | General maintenance throughout | .. | 9 |
| WYCHEPROOF SHIRE— | | | |
| Birchip-Sea Lake Road | Forming and limestoneing near Green Lake | ..3 | .. |
| " " " " | Forming and grading, 15 miles south of Sea Lake | .. | 2 |
| " " " " | Patrol maintenance throughout | .. | 12 |
| Birchip-Wycheproof Road | Patrol maintenance throughout | .. | 15 |
| Sea Lake-Uffina Road | Forming and limestoneing, 5 miles east of Sea Lake | ..71 | .. |
| " " " " | Patrol maintenance throughout | .. | 7 |
| Woomelang Sea Lake Road | Forming and limestoneing 6.5 and 11 miles south-west from Sea Lake | ..1.13 | .. |
| " " " " | Forming and limestoneing 12 miles south-west from Sea Lake | .. | .49 |
| " " " " | Patrol maintenance throughout | .. | 8 |
| Wycheproof-Sea Lake Road | Patrol maintenance throughout | .. | 1 |
| " " " " | Double coat sealing in Wycheproof township | .. | .52 |
| YACKANDANDAH SHIRE— | | | |
| Dederang Road | Patrol maintenance, placing culverts | .. | 28 |
| Gundowring Road | Patrol maintenance, placing culverts | .. | 20.08 |
| Kergunyah South Road | Patrol maintenance, placing culverts | .. | 11.2 |
| Kiewa-East Road | Patrol maintenance and sealing | .. | 3.2 |
| Kiewa-Wodonga Road | Patrol maintenance and sealing | .. | 6.5 |
| Myrtleford-Yackandandah Road | Patrol maintenance, placing culverts | .. | 5.4 |
| Yackandandah-Wodonga Road | Patrol maintenance, placing culverts, and sealing | .. | 15.75 |
| YARRAWONGA SHIRE— | | | |
| Peechelba Road | Resheeting with gravel between bridges No. 4 and No. 7 at Peechelba | .. | .33 |
| " " " " | Screwing up and general maintenance to bridges No. 4, 5, 6, and 7 | .. | .. |
| " " " " | Patrol maintenance between Varrawonga, Wangaratta Road and bridge No. 4 | .. | 1.15 |
| Tunzamah-Wilby Road | Resheeting with gravel and reshoulderling at Wilby | .. | 1 |
| Wangaratta-Varrawonga Road | Draining and resheeting with gravel between Bundalong and Peechelba, construction of three inverts and four 12-in. and one 24-in. diameter pipes and general maintenance on this section | .. | 9.3 |
| " " " " | Widening from 12 to 16 feet, priming and sealing McNally Street, township of Yarrowonga | .. | .5 |
| " " " " | Resealing McNally Street and Belmore Street, township of Yarrowonga | .. | .75 |
| " " " " | Patrol maintenance between Bundalong and Peechelba | .. | 9.3 |
| YEA SHIRE— | | | |
| Highlands Road | General maintenance | .. | 2.5 |
| Mclesworth-Dropmore Road | General maintenance | .. | 10 |
| Upper Goulburn Road | Trimming and resheeting | .. | 1.44 |
| " " " " | Re-alignment, gravelling, and timber culvert at Gardiner's | .. | .25 |
| " " " " | Construction of 15-foot span timber culvert at Bumaunto | .. | .. |
| " " " " | Re-alignment and gravelling at Morrissey's | .. | .57 |
| Whittlesea-Yea Road | General maintenance, removal of corrugations, and reshaping with power grader | .. | 21 |
| " " " " | Construction of 21-foot span timber bridge at Gum Creek | .. | .. |
| " " " " | Trimming and resheeting | .. | 2 |
| Vaira Glen-Glenburn Road | General maintenance, removal of corrugations, and reshaping with power grader | .. | 31 |
| " " " " | Topdressing with 1-in. crushed rock | .. | 2 |
| " " " " | Trimming and resheeting | .. | 1.5 |
| Yea-Glenburn Road | General maintenance | .. | 10 |
| " " " " | Trimming and resheeting | .. | 1.13 |
| " " " " | General maintenance, removal of corrugations, and reshaping with power grader | .. | 18 |
| YEA AND BROADFORD SHIRES (Joint Works)— | | | |
| Upper Goulburn Road | Trimming and resheeting | .. | .25 |
| " " " " | General maintenance, removal of corrugations, and reshaping with power grader | .. | 1.75 |
| | Total | 20.21 | 6,514.34 |
| UNDER DIRECT SUPERVISION OF BOARD. | | | |
| ALBERTON SHIRE— | | | |
| Boolarra-Walshpool Road | General maintenance—Grand Ridge Road to South Gippsland Shire boundary | .. | 8.5 |
| ALBERTON, MIRBOO, MORWELL, SOUTH GIPPSLAND AND WOORAYL SHIRES (Joint Works)— | | | |
| Grand Ridge Road | General maintenance—Limonite to Ryton | .. | 18.8 |
| ALBERTON, MORWELL, ROSEDALE AND TRARALGON SHIRES (Joint Works)— | | | |
| Grand Ridge Road | General maintenance—Ryton to Carrarung | .. | 38.8 |
| BALLAN SHIRE— | | | |
| Ballarat Road | General maintenance at Ballan | .. | 1.01 |
| | Carried forward | — | 67.11 |

STATEMENT SHOWING MILEAGE, LOCALITY, ETC., OF ROADS CONSTRUCTED, ETC.—continued.

| Name of Municipality and Road. | Nature and Locality of Works. | Permanent Works Constructed. | Reconstruction and Maintenance Works Carried Out. |
|--|--|------------------------------|---|
| | | Miles. | Miles. |
| UNDER DIRECT SUPERVISION OF THE BOARD—continued. | | | |
| | Brought forward | — | 67·11 |
| BALLARAT SHIRE— Ballarat—Creswick Road | Priming and sealing, widening edges, and road mix sealing from Howitt Street to Mount Rowan—day labour | | 2 |
| ” ” ” ” | General maintenance—Ballarat City boundary to Ballarat-Maryborough railway crossing | | 5·75 |
| BARRABOOL SHIRE— Airey's Inlet Road | General maintenance—Anglesea to Airey's Inlet bridge | | 7 |
| Anglesea Road | Reconstruction in gravel from Bellbrae towards Anglesea—day labour | | 1·5 |
| BELLARINE SHIRE— Geelong-Portarlington Road | Road mix sealing from Curlew to Drysdale—day labour | | 2·25 |
| ” ” ” ” | Double coat sealing from Drysdale post office towards Portarlington—day labour | | 2·5 |
| ” ” ” ” | Reconstruction in gravel from Bellarine to Portarlington—day labour | | 3 |
| Geelong-Queenscliffe Road | Road mix sealing between 1 and 2·3 mile pegs and 9·15 and 10·35 mile pegs—day labour | | 2·5 |
| Portarlington-St. Leonards Road | Double coat sealing between Webber's Corner and St. Leonards—day labour | | 1·7 |
| ” ” ” ” | Reconstruction in gravel between Webber's Corner and St. Leonards—day labour | | 1·2 |
| BERWICK SHIRE— Woori Yallock-Pakenham-Koo-wee-rup Road | Road mix sealing between Cockatoo railway station and Emerald Road Junction—day labour | | ·63 |
| ” ” ” ” | General maintenance—Cockatoo railway station to Shepherd's Creek bridge | | 6 |
| BRAYBROOK SHIRE— Prince's Highway | Road mix sealing from Footscray City boundary to start of highway at Braybrook—day labour | | 1 |
| ” ” ” ” | General maintenance—Footscray City boundary to start of highway at Braybrook | | 1·33 |
| BRIGHT SHIRE— Bright-Omeo Road | Widening existing side cutting between Harrierville and Mount St. Bernard—day labour | | 2·5 |
| ” ” ” ” | Widening existing side cutting between Mount St. Bernard and Mount Hotham—day labour | | ·32 |
| ” ” ” ” | General maintenance—Harrierville to Mount Hotham | | 19·5 |
| BROADFORD SHIRE— Sydney Road | General maintenance at Broadford | | 1·45 |
| COHUNA SHIRE— Murray River Valley Road | Re-alignment and reconstruction of existing curve at Cohuna—day labour | | ·02 |
| ” ” ” ” | General maintenance at Cohuna | | ·51 |
| CORIO SHIRE— Prince's Highway | General maintenance—Bacchus Marsh Road junction to Separation Street bridge | | 2 |
| DANDENONG SHIRE— Prince's Highway | Widening, resheeting, priming and sealing at Dandenong—day labour | | ·88 |
| ECHUCA BOROUGH— Echuca-Cohuna Road | Construction of two bridges near Echuca—day labour | | ·03 |
| ” ” ” ” | General maintenance | | 1·18 |
| EUROA SHIRE— Sydney Road | General maintenance at Euroa | | 1·8 |
| Murchison-Shepparton Road | Priming and sealing between Muddy Creek and Arcadia Road—day labour | | 5 |
| EUROA AND GOULBURN SHIRES (Joint Works) | | | |
| Murchison-Shepparton Road | General maintenance—Murchison East to Shepparton Shire boundary | | 10·8 |
| FOOTSCRAY CITY— Napier Street | Experimental bituminous surfacing throughout—day labour | | ·11 |
| GISBORNE SHIRE— Melbourne-Bendigo Road | General maintenance at Gisborne | | 1·33 |
| GOULBURN SHIRE— Goulburn Valley Road | Reconstruction near Hughes' Creek—day labour | | ·35 |
| GOULBURN AND SEYMOUR SHIRES— (Joint Works) | | | |
| Goulburn Valley Road | General maintenance between Hume Highway and Murchison | | 30 |
| HEALESVILLE SHIRE— Healesville-Alexandra Road | Priming and sealing near St. Fillan's—day labour | | ·38 |
| ” ” ” ” | Road mix sealing over Varra Flats at Healesville—day labour | | ·65 |
| ” ” ” ” | General maintenance—Yarra River to shire boundary at Buxton | | 28 |
| Healesville-Woori Yallock Road | General maintenance—Healesville-Alexandra Road junction to Yarra River | | 7 |
| Marysville Road | General maintenance—St. Fillan's to Marysville | | 6·5 |
| HUNTLY SHIRE— Bendigo-Echuca Road | General maintenance at Epsom and Elmore | | 2·15 |
| ” ” ” ” | Road mix sealing at Epsom—day labour | | ·84 |
| KEILOR SHIRE— Melbourne-Bendigo Road | General maintenance—North Essendon to Spring Gully | | 1·1 |
| KILMORE SHIRE— Sydney Road | General maintenance at Kilmore | | 1·58 |
| LILLYDALE SHIRE— Main Healesville Road | Construction of bank near “Brooklesby”—day labour | | ·16 |
| ” ” ” ” | General maintenance—Ringwood Borough boundary to Yarra River | | 16·5 |
| ” ” ” ” | General maintenance—Healesville Road junction to Woori Yallock Creek | | 9 |
| Mount Dandenong Road | Surfacing with crushed rock between Montrose and Olinda—day labour | | 1·65 |
| MORWELL SHIRE— Boolarra-Foster Road | General maintenance—Boolarra to Boolarra South | | 6 |
| Boolarra-Welshpool Road | General maintenance—Morwell-Mirboo Road to English's corner | | 9 |
| Morwell-Mirboo Road | Widening and sealing from 2-mile peg to 5·2-mile peg—day labour | | 3·2 |
| ” ” ” ” | General maintenance—Morwell-Mirboo Shire boundary to Whitelaw's Track | | 7 |
| Morwell River Road | General maintenance throughout | | 18·5 |
| NEWHAM AND WOODEND SHIRE— Melbourne-Bendigo Road | General maintenance at Woodend | | 1·14 |
| NEWSTEAD AND MT. ALEXANDER SHIRE— Castlemaine-Maryborough Road | Construction of a 3-cell reinforced concrete culvert west of the Loddon River at Newstead | | ·01 |
| ” ” ” ” | Reconditioning and sealing at Newstead—day labour | | ·1 |
| NEWSTEAD AND MT. ALEXANDER AND TULLAROOP SHIRES (Joint Works)— Castlemaine-Maryborough Road | General maintenance—Castlemaine to Maryborough | | 25·84 |
| ORBOST SHIRE— Cann Valley Road | Grubbing, clearing, forming, grading, general reconditioning and gravelling from Double Bridges towards Bidjo House—day labour | | 2·84 |
| ” ” ” ” | General maintenance—from junction with Prince's Highway to New South Wales Border | | 28 |
| Genoe-Gipsy Point Road | General maintenance—from junction with Prince's Highway to Gipsy Point | | 7 |
| ONLEY SHIRE— Mansfield-Tolmie Road | General maintenance—Broken Creek to Mansfield Shire boundary | | 11·5 |
| RUTHERGLEN AND WANGARATTA SHIRES— (Joint Works) | | | |
| Springhurst-Rutherglen Road | General maintenance between Springhurst and Rutherglen | | 10·3 |
| SEYMOUR SHIRE— Goulburn Valley Road | Resheeting and shouldering between Hume Highway and Hughes Creek—day labour | | 1·65 |
| Seymour-Yea Road | General maintenance between Seymour and Goulburn River | | 6·8 |
| ” ” ” ” | Reshaping and shouldering near Seymour—day labour | | 1·3 |
| SOUTH GIPPSLAND SHIRE— Boolarra-Foster Road | General maintenance—Gonyah junction to Mt. Squarctop | | 8·5 |
| Toora-Gonyah Road | General maintenance—Grand Ridge Road to Devil's Pinch junction | | 4·2 |
| | Carried forward | — | 411·64 |

STATEMENT SHOWING MILEAGE, LOCALITY, ETC., OF ROADS CONSTRUCTED, ETC.—*continued.*

| Name of Municipality and Road. | Nature and Locality of Works. | Permanent Works Constructed. | Reconstruction and Maintenance Works Carried Out. |
|--|--|------------------------------|---|
| | | Miles. | Miles. |
| UNDER DIRECT SUPERVISION OF THE BOARD—<i>continued.</i> | | | |
| | Brought forward | — | 411·64 |
| STAWELL SHIRE— | | | |
| Stawell-Grampians Road | Forming, grading, draining and surfacing with sandstone and gravel at Hall's Gap | .. | ·9 |
| " " " | Grubbing, clearing, forming, grading and draining east of Mokepilly bridge | .. | 2·55 |
| " " " | General maintenance—Stawell Borough boundary to Myrtlebank | .. | 19·03 |
| TAMBO SHIRE— | | | |
| Prince's Highway | General maintenance at Lakes Entrance | .. | 2·42 |
| UPPER YARRA SHIRE— | | | |
| Wood's Point Road | General maintenance—McVeigh's to Matlock | .. | 34 |
| VIOLET TOWN SHIRE— | | | |
| Sydney Road | General maintenance at Violet Town | .. | ·8 |
| WANGARATTA SHIRE— | | | |
| Beechworth Road | Resheeting and shouldering three miles from Wangaratta—day labour | .. | 1·5 |
| " " " | Road mix sealing Avenue section—day labour | .. | ·9 |
| " " " | General maintenance—Avenue section | .. | ·9 |
| Yarrowonga Road | General maintenance—Wangaratta to Yarrowonga Shire boundary | .. | 11·3 |
| WANGARATTA BOROUGH— | | | |
| Beechworth Road | Road mix sealing at Wangaratta—day labour | .. | ·1 |
| Sydney Road | Road mix sealing at Wangaratta—day labour | .. | ·52 |
| " " " | General maintenance at Wangaratta | .. | 2·4 |
| WERRIBEE SHIRE— | | | |
| Prince's Highway | General maintenance at Werribee | .. | ·85 |
| WINCHELSEA SHIRE— | | | |
| Lorne Road | Road mix sealing between Dean's Marsh and Swayne's Hill—day labour | .. | ·65 |
| " " " | General maintenance—Lorne to Dean's Marsh | .. | 16 |
| Prince's Highway | Road mix sealing—Inverleigh Road to Lorne Road—day labour | .. | ·65 |
| " " " | General maintenance—Inverleigh Road to Lorne Road | .. | ·65 |
| | Total | — | 507·76 |

APPENDIX F.

COUNTRY ROADS BOARD.

DEVELOPMENTAL ROADS.

STATEMENT SHOWING MILEAGE, LOCALITY, ETC., OF ROADS CONSTRUCTED UNDER THE PROVISIONS OF THE COUNTRY ROADS ACT 1928, DURING THE YEAR ENDED 30TH JUNE, 1936.

| Name of Municipality and Road. | Nature and Locality of Works. | Works Constructed. |
|-------------------------------------|--|--------------------|
| | | Miles. |
| UNDER MUNICIPALITIES. | | |
| ALBERTON SHIRE— | | |
| Binginwari South Road | Reforming and gravelling from McInnes to Lade's | ·87 |
| Carraing Lower Road | Clearing and forming | ·5 |
| Lay's Road | Reforming and gravelling from O'Connor's to Sheild's | 1·3 |
| Tarra Valley Road | Forming, grading, and culverts at Fisher's Gully | ·25 |
| Whitelaw's Track Road | Reforming and crushed rock surfacing | 2 |
| " " " " | Sheeting gravel road from Alford's to Womerah Post Office with crushed rock | 2 |
| ARAPILES SHIRE— | | |
| Miga Lake-Gymbowen Road | Gravelling in Parish of Kalingur | ·15 |
| AVON SHIRE— | | |
| Clydebank Road | Forming and gravelling | 1·61 |
| BAIRNSDALE SHIRE— | | |
| Bairnsdale-Bengworden Road | Forming and gravelling at Bengworden | ·67 |
| Calulu-Boggy Creek Road | Forming and gravelling at Melwood | ·25 |
| Fernbank-Stockdale Road | Forming and gravelling at Stockdale | 1·28 |
| BENALLA SHIRE— | | |
| Molyullah-Tatong Road | Construction of pipe culverts and approaches near Tatong | ·32 |
| BERWICK SHIRE— | | |
| Nar-nar-noon-Gembrook Road | Reforming and sanding | ·51 |
| BORUNG SHIRE— | | |
| Aulrey Road | Limestoning west of Warracknabeal | 1·14 |
| Brim East Road | Limestoning east of Hopetoun Road | 1·59 |
| Galaquil West Road | Limestoning west of Hopetoun Road | ·27 |
| BRIGHT SHIRE— | | |
| Happy Valley Road | Forming and gravelling near Allotments 4A and 4B, Section XXI, Parish of Barwidgee | ·33 |
| BULLA SHIRE— | | |
| Konagaderra Road | Forming and gravelling from end of fine crushed rock section, 500 feet east of junction with Wildwood Road | 2·71 |
| BULN BULN SHIRE— | | |
| Neerim South-Neerim East Road | Reforming and crushed rock surfacing | ·58 |
| Rokeby-North Jindivick Road | Fencing, forming, reforming and crushed rock surfacing | ·98 |
| CHARLTON SHIRE— | | |
| Borong-Charlton Road | Gravelling and stone invert | 1·43 |
| Glenloch Road | Construction and remodelling three stone inverts | ·14 |
| Veungroon Road | Forming and gravelling and two stone inverts | 1·66 |
| DEAKIN SHIRE— | | |
| Girgarre West Road | Forming and gravelling west only from Girgarre, commencing from the north-western angle of Allotment 13, Section D, Parish of Girgarre, westerly to the north-western angle of Allotment 1, Parish of Girgarre | 1 |
| DIMBOOLA SHIRE— | | |
| Delpa-Hindmarsh Road | Forming and metalling near the Hindmarsh School between Allotments 30, 30A, 15, 26, 58, 13, 14, 25, and 2A, Parish of Babatchio | ·95 |
| Glenlee Jeparit Road | Forming and rubbling between 4 and 7 miles from Jeparit | 1·59 |
| DONALD SHIRE— | | |
| Corack East-Donald Road | Reforming and surfacing with granite sand north from the old gravel pits | 1·89 |
| Donald-Minyip Road | Reforming and surfacing with fine crushed rock to the Laen Cemetery | 1·14 |
| Jeffcott Road | Reforming and surfacing with granite sand at Jeffcott | 1·03 |
| Litchfield Road | Reforming and surfacing with fine crushed rock to the Shire boundary | ·93 |
| FERNTREE GULLY SHIRE— | | |
| Emerald-Macesfield Road | Banked formation, metalling, and timber bridge at Woori Yallock Creek near Parslow's | ·25 |
| Emerald-Monbulk Road | Forming and metalling between Emerald Quarry and the Meazies Creek | 1·13 |
| FLINDERS SHIRE— | | |
| Bittern-Dromana Road | Reshaping and top coat metalling at Merricks North | 1·29 |
| GLENELG SHIRE— | | |
| Bergholm-Elderslie Road | Forming and gravelling near Bergholm | ·42 |
| " " " " | Forming and gravelling two sections at Podajjelo | 1·48 |
| " " " " | Gravel-sheeting on formations through Elderslie Estate | 2·21 |
| Merino-Struan-Tahara Road | Regrading and gravelling Dalton's Hill | ·19 |
| GLENLYON SHIRE— | | |
| Porcupine Ridge Road | Construction of one-span timber bridge over Wallaby Creek, Wombat | — |
| GOULBURN SHIRE— | | |
| Longwood-Ruffy Road | Reformation and gravelling between Ruffy and Longwood | ·44 |
| HAMPDEN SHIRE— | | |
| Vite Vite Road | Sheeting with crushed rock 12 feet wide by 3 inches loose depth from 6,600 to 18,600 lineal feet | 2·27 |
| HEYTESBURY SHIRE— | | |
| South Ecklin Road | Forming and surfacing with crushed rock | ·92 |
| KORONG SHIRE— | | |
| Borong-Charlton Road | Forming and gravelling, &c., from Allotment 19 to Allotment 69, Section IV, Parish of Borung | 2·55 |
| Borong-Charlton Road | Forming, &c., from Allotment 6 to Allotment 10, Section IV, Parish of Borung | 1·49 |
| Mysia-West Road | Forming and gravelling, &c., north of Allotment 118, Parish of Mysia | ·72 |
| Nine Mile Road | Forming and gravelling, &c., from Allotment 105b to Allotment 107A, Parish of Barrakee | 1·17 |
| Wedderburn-Spring Hill Road | Forming and gravelling, &c., in detached sections | 1·26 |
| Wychitella North Road | Forming and gravelling, &c., adjoining Allotment 49, Parish of Buckrabanyule | ·53 |
| KORUMPURRA SHIRE— | | |
| Witherden's Road | Forming and grading deviation through Allotment 81C, Parish of Aliambec | ·26 |
| MILDURA SHIRE— | | |
| Red Cliffs South East Road | Limestone metalling top course between Red Cliffs and South-East Red Cliffs | ·55 |
| Red Cliffs West Road | Limestone metalling top course on section between Cardross and 15th Street | 2 |
| MORWELL SHIRE— | | |
| Thorpdale East Road | Reforming and sanding between Wilderness Creek and Narracan Corner | 1·21 |
| McIVOR SHIRE— | | |
| Baynton Road | Forming and gravelling | 1·2 |
| Carried forward | | 54·64 |

STATEMENT SHOWING MILEAGE, LOCALITY, ETC., OF ROADS CONSTRUCTED, ETC.—*continued.*

| Name of Municipality and Road. | Nature and Locality of Works. | Works Constructed. |
|--|---|--------------------|
| | | Miles. |
| <i>UNDER MUNICIPALITIES—continued.</i> | | |
| | Brought forward | 54·64 |
| NARRACAN SHIRE— | | |
| Canal Road | Reforming, sanding, and metalling | ·51 |
| NEWSTEAD AND MT. ALEXANDER SHIRE— | | |
| Glengower-Joyce's Creek | Forming and gravelling, &c. | ·65 |
| OMEO SHIRE— | | |
| Brookville Road | Forming and fencing | ·81 |
| Mount Leinster Road | Reforming and gravelling | 1·1 |
| RUTHERGLEN SHIRE— | | |
| Black Swamp Road | Forming and gravelling east of Allotment 3, Section Q, Parish of Norong | ·74 |
| SOUTH GIPPSLAND SHIRE— | | |
| Franklin River Road | Clearing, forming, and gravelling from Dickenson's to Tin Creek | ·54 |
| O'Gandy's Ridge Road | Clearing, forming, and gravelling northerly from McBride's junction | 1 |
| TRARALGON SHIRE— | | |
| Traradon-Jeevalang Road | Construction of Thompson's Bridge and approaches | ·13 |
| Walker's Road | Widening and regrading | ·63 |
| UPPER MURRAY SHIRE— | | |
| Beetomba Road | Forming and sanding east of Allotment 6 and west of Allotment 2, Section A, Parish of Berrin- | ·81 |
| Kancelin Road | gama Forming and gravelling north of Allotment 5, Section 7, and west of Allotment 1B, Section 11, | ·47 |
| Thowgla Road | Parish of Towong Forming and gravelling west of Allotment 27, Parish of Thowgla | ·29 |
| VIOLET TOWN SHIRE— | | |
| Harty's Creek Road | Reforming and gravelling from Allotment 15 to Allotment 3, Section B, Parish of Boho | 1·8 |
| " | Forming, grading, and pipe culverts south of Allotment 3, Parish of Boho | ·5 |
| WANGARATTA SHIRE— | | |
| Boorhaman-Springhurst Road | Forming and gravelling between Allotments 31, 35, 74, 77, and 78, Parish of Bontherambo | ·77 |
| WARNAMBOOL SHIRE— | | |
| Parrivure Road | Forming and gravelling | ·4 |
| WERIBEE SHIRE— | | |
| Bulban Road | Crushed rock surfacing westerly from Manor | 1·01 |
| WOORAYL SHIRE— | | |
| Coulter's Road | Forming and surfacing with crushed rock near McCall's | ·41 |
| Lower Tarwin-Inverloch Road | Forming and gravelling in seven sections between Henderson's and the Cemetery | 2·25 |
| | Total | 69·49 |

APPENDIX G.

COUNTRY ROADS BOARD.

STATE HIGHWAYS.

STATEMENT SHOWING MILEAGE, LOCALITY, ETC., OF HIGHWAYS RECONSTRUCTED AND MAINTAINED UNDER THE PROVISIONS OF THE COUNTRY ROADS ACT 1928 DURING THE YEAR ENDED 30TH JUNE, 1936.

| Name of Highway and Section. | Nature and Locality of Works. | Works Re- | Maintenance |
|--|--|--------------|--------------------|
| | | constructed. | Works Carried Out. |
| | | Miles. | Miles. |
| UNDER DIRECT SUPERVISION OF THE BOARD. | | | |
| PRINCE'S HIGHWAY (WEST)— | | | |
| Section 1 | Resealing experimental tar-sealed section near Little River—day labour | ·4 | .. |
| " | Road mix sealing through cutting at Point Cooke Road junction—day labour .. | ·42 | .. |
| " | Resheeting with fine crushed rock and sealing, from Werribee River bridge towards Geelong—day labour | 3·83 | .. |
| " | Resheeting with fine crushed rock and sealing between Lara and Bacchus Marsh Road junction—day labour | 6·55 | .. |
| " | Improving shoulders with gravel between Skeleton Creek and Hopper's Crossing—day labour | 1·37 | .. |
| " | Widening Werribee River bridge—day labour | ·62 | .. |
| " | Resheeting with gravel and double coat sealing between Belmont and Mount Moriac—day labour | 2·7 | .. |
| " | Forming, gravelling, and double coat sealing at Waurn Ponds Creek—day labour .. | ·3 | .. |
| " | Forming, gravelling, and double coat sealing between Mount Moriac and Buckley .. | ·2 | .. |
| " | Road mix sealing from Buckley railway crossing to Inverleigh Road—day labour .. | 1·9 | .. |
| " | General maintenance | .. | 52 |
| Section 2 | Resheeting with gravel from Winchelsea township boundary westerly towards Colac—day labour | 3·5 | .. |
| " | Resheeting with gravel at Armutage overhead bridge—day labour | ·25 | .. |
| " | Increasing super-elevation and widening four 300 feet radius curves at Cameron's Hill—day labour | ·5 | .. |
| " | Laying eighteen pipe culverts for stock crossings between Weerite and Colac—day labour | ·1 | .. |
| " | General maintenance | .. | 48·81 |
| Section 3 | Road mix sealing from Garvock railway crossing to Garvock—day labour | 2·15 | .. |
| " | Re-aligning and reconstructing in crushed rock and sealing, from Garvock towards Panmure—day labour | 2·24 | .. |
| " | Re-aligning and reconstructing in crushed rock and sealing near Panmure—day labour .. | 2·12 | .. |
| " | Re-aligning and reconstructing in crushed rock between Cudjee and Allansford—day labour | 1·1 | .. |
| " | Re-aligning in scoria, the Warrambocul approach to Hopkins River bridge at Allansford—day labour | ·19 | .. |
| " | Re-aligning in scoria of sharp curve at Batterbee's corner near eastern boundary of Warrambocul City—day labour | ·13 | .. |
| " | Super-elevating west end of bridge and approach over Merri River at Dennington—day labour | ·01 | .. |
| " | Repairs to bridge over Moyne River at Rosebrook—day labour | ·02 | .. |
| " | General maintenance | .. | 52·38 |
| Section 4 | Forming, grading, boxing, trimming, and surfacing with fine crushed rock near Goose Lagoon approximately 3½ miles west of Port Fairy | ·29 | .. |
| " | Road mix sealing from Yambuck to Belfast—Portland Shire boundary—day labour .. | 12·16 | .. |
| " | Re-aligning sharp curves, widening, and resurfacing with buckshot gravel—day labour .. | 2·39 | .. |
| " | Sealing near Heathmere—day labour | 3·73 | .. |
| " | General maintenance | .. | 49·8 |
| Section 5 | Replacing timber bridge by a reinforced concrete culvert and regrading approaches near Greenwald—day labour | ·25 | .. |
| " | Construction of a timber stock bridge over Glenelg River at Dartmoor—day labour .. | ·02 | .. |
| " | General maintenance | .. | 41·02 |
| PRINCE'S HIGHWAY (EAST)— | | | |
| Section 1 | Construction of a 4-cell precast reinforced concrete culvert over Gum Scrub Creek .. | ·01 | .. |
| " | Re-aligning, resheeting, priming, and sealing approach curves at junction with South Gippsland Highway at Dandenong—day labour | ·38 | .. |
| " | Improving shoulders at Narre Warren—day labour | 3 | .. |
| " | Re-aligning and resheeting with crushed rock west of Berwick—day labour | ·5 | .. |
| " | Re-aligning and resheeting with crushed rock east of Berwick—day labour | ·1 | .. |
| " | Regrading and surfacing with crushed rock at Cardinia Creek, Beaconsfield—day labour .. | ·2 | .. |
| " | Road mix sealing between Officer and Pakenham—day labour | 1·55 | .. |
| " | Regrading and re-aligning, including sanding and bitumen sealing at Cemetery Hill—day labour | ·2 | .. |
| " | Re-aligning at Gum Scrub Creek—day labour | ·5 | .. |
| " | Regrading and sheeting with sand at Army Road—day labour | ·2 | .. |
| " | Regrading and re-aligning, surfacing with sand, and bitumen sealing at Dore Road—day labour | ·2 | .. |
| " | Resheeting and regrading from Hancock's Gully to Nar Nar Goon—day labour | 2 | .. |
| " | Improving super-elevation at Ti Ti Creek—day labour | ·3 | .. |
| " | Resheeting with sand east of Bunyip River—day labour | 1·77 | .. |
| " | Resheeting with sand easterly from Picnic Point—day labour | 1·3 | .. |
| " | Re-alignment at Hearn's Corner—day labour | ·4 | .. |
| " | Improving road reserve near Fogarty's Lane—day labour | ·1 | .. |
| " | Construction of reinforced concrete culvert over Hazel Creek near Warragul—day labour .. | ·01 | .. |
| " | General maintenance | .. | 49·93 |
| Section 2 | Resheeting and regrading, surfacing in sand and bitumen sealing between Little Moe and Moe Rivers—day labour | 3 | .. |
| " | Road mix sealing from Narracan Creek to the easterly Yallourn turnoff—day labour .. | 5·15 | .. |
| " | Construction of a pipe culvert at Narracan Creek—day labour | ·01 | .. |
| " | Resheeting west of Traralgon—day labour | ·3 | .. |
| " | Resheeting with gravel east of Flynn's Creek—day labour | 2 | .. |
| " | Resheeting in modified macadam at Kilmany railway crossing—day labour | ·4 | .. |
| " | Re-aligning, regrading, and sheeting with gravel east of Rosedale—day labour | ·3 | .. |
| " | Road mix Rosedale sealing floodway—day labour | ·4 | .. |
| " | Widening reinforced concrete bridge over Lock Creek—day labour | ·01 | .. |
| " | Widening reinforced concrete culvert over Mosquito Creek—day labour | ·01 | .. |
| " | Replacing with concrete culvert a timber bridge at 71·7 mile peg—day labour | ·01 | .. |
| " | Widening concrete culvert at the 79 mile post—day labour | ·01 | .. |
| " | Reshaping, gravelling, and sealing one mile west of Traralgon—day labour | ·04 | .. |
| " | Resheeting with gravel, sealing, and shouldering in two sections at Flynn's Creek—day labour | 2 | .. |
| " | Resheeting with gravel and sealing at Kilmany—day labour | ·4 | .. |
| " | General maintenance | .. | 66·76 |
| | Carried forward | 75·57 | 364·3 |

STATEMENT SHOWING MILEAGE, LOCALITY, ETC., OF HIGHWAYS RECONSTRUCTED, ETC.—*continued.*

| Name of Highway and Section. | Nature and Locality of Works. | Works Re- | Maintenance |
|--|---|--------------|--------------------|
| | | Constructed. | Works Carried Out. |
| | | Miles. | Miles. |
| UNDER DIRECT SUPERVISION OF THE BOARD—<i>continued.</i> | | | |
| | Brought forward | 75·57 | 364·3 |
| PRINCE'S HIGHWAY (EAST)— <i>continued.</i> | | | |
| Section 3 | Removal of existing abutment and replacing by a new pier and the erection of a new abutment, together with a concrete protection wall and bank over Avon River at Stratford—day labour | ·01 | .. |
| " | Repairing shoulders and bitumen surface from northern boundary of Town of Sale to railway crossing west of Bairnsdale—excluding township of Stratford—day labour | 38·09 | .. |
| " | Road mix sealing on top of bituminous pavement from Dalvine to railway crossing west of Bairnsdale—day labour | 12·94 | .. |
| " | Superelevating and double coat sealing at Napper's corner and Montgomery railway station—day labour | ·13 | .. |
| " | Grubbing, clearing, forming, grading, draining, gravelling, and spraying two curves near Fernbank turnoff—day labour | ·34 | .. |
| Section 4 | General maintenance | 8·34 | 38·1 |
| " | Reconditioning, shouldering, gravelling and small sections of grubbing, clearing, forming, grading, and draining from Wombat Creek to Newmerella railway crossing—day labour | ·21 | .. |
| " | Improvement to eastern approach to Mitchell River bridge—day labour | ·07 | .. |
| " | Double coat sealing at Lucknow turnoff at junction of Omco and Prince's Highways—day labour | 3·39 | .. |
| " | Reconditioning and re-aligning with section of grubbing, clearing, forming, grading, and draining, from one mile east of Toorloo Arm to top of Nowa Nowa Hill—day labour | 1·29 | .. |
| " | Grubbing, clearing, forming, grading, and draining from top of Nowa Nowa Hill towards Nowa Nowa—day labour | 8·34 | .. |
| " | Double coat sealing from Wombat Creek to Newmerella railway crossing—day labour | ·46 | .. |
| " | Repairing slips at Jemmy's Point between Kalinna Hotel turnoff and North Arm bridge—day labour | ·1 | .. |
| " | Improving eastern approach to Snowy River bridge—day labour | ·08 | .. |
| " | Repairing damage caused by floods to bridges at Salt Creek, Bunga Creek, Wombat Creek, and Dinner Creek—day labour | ·46 | .. |
| " | Repairing flood damage to road surface and removing slips at Jemmy's Point—day labour | 1·75 | 58·83 |
| Section 5 | General maintenance | ·82 | .. |
| " | Improvement to curves, top dressing and widening from Newton's Creek towards Bellbird—day labour | 4·32 | .. |
| " | Improvement to curves, top dressing and widening from Bellbird to McKenzie River—day labour | ·02 | .. |
| " | Straightening, top dressing and widening from Club Terrace to Euchre Creek Valley—day labour | ·09 | .. |
| " | Construction of a single-span steel and timber bridge at Jones' Creek—day labour | — | .. |
| " | Construction of a two-span timber bridge at Raymond Creek—day labour | — | .. |
| " | Repairing damage caused by floods between Orbst and Cann River, including new culverts at Perry's, Ross's, and Euchre Creek, and extension of bridge over Brodribb River flats, over 54·18 miles—day labour | .. | 54·18 |
| Section 6 | General maintenance | 1·76 | .. |
| " | Surfacing near Mount Drummer—day labour | 1·18 | .. |
| " | Straightening, widening, and top-dressing near Wingau River—day labour | 1·43 | .. |
| " | Re-aligning, reshaping, super-elevating and gravelling between Genoa and New South Wales border—day labour | .. | 41·19 |
| " | General maintenance | .. | .. |
| WESTERN HIGHWAY— | | | |
| Section 1 | Sealing edges between Deer Park and Djerriwarrah Creek—day labour | 28·6 | .. |
| " | Road mix sealing Pyke's Creek deviation—day labour | ·48 | .. |
| " | Regrading and re-aligning at Werribee River—day labour | ·5 | .. |
| " | Re-aligning and surfacing with fine crushed rock at Woodman's Hill—day labour | ·42 | .. |
| " | Construction of stock bridges near Ballan—day labour | ·02 | .. |
| " | General maintenance | .. | 55·2 |
| Section 2 | General maintenance | .. | 50·32 |
| Section 3 | Road mix sealing from Ararat Shire boundary to overhead bridge at Armstrong—day labour | 4·29 | .. |
| " | Super-elevating curves east of overhead bridge at Armstrong—day labour | ·06 | .. |
| " | Widening existing banks between Great Western and Stawell—day labour | ·12 | .. |
| " | Widening existing pavement with gravel, priming, and sealing edges from Wal Wal turnoff past Greenlake towards Horsham—day labour | 7·45 | .. |
| " | Widening existing bridges across S.R. & W.S.C. channels—day labour | ·06 | .. |
| " | General maintenance | .. | 50·36 |
| Section 4 | Reconstruction and completion of reshaping from Lochiel bridge to Gerang—day labour | 6·36 | .. |
| " | Priming and sealing between Lochiel bridge and Lowan Shire boundary—day labour | 0·76 | .. |
| " | Road mix sealing from Pimpino to Wall—day labour | 16 | .. |
| " | General maintenance | .. | 38·7 |
| CALDEK HIGHWAY— | | | |
| Section 1 | Resheeting with gravel south of Gisborne—day labour | 2·4 | .. |
| " | Road mix sealing from Kyneton Mineral Springs to Malmesbury—day labour | 5·75 | .. |
| " | General maintenance | .. | 58 |
| Section 2 | Benching on curve near Castlemaine—day labour | ·02 | .. |
| " | Widening cutting at Big Hill—day labour | ·2 | .. |
| " | Super-elevating curves between Big Hill and Kangaroo Flat—day labour | ·5 | .. |
| " | Reconditioning and sealing from Harcourt to Bendigo—day labour | 6·77 | .. |
| " | Reshaping invert at Specimen Hill—day labour | ·02 | .. |
| " | Laying modified macadam wearing strip from Bendigo to Marong—day labour | 1·91 | .. |
| " | Widening seven culverts between Castlemaine and Bendigo—day labour | ·07 | .. |
| " | Widening two concrete bridges between Ravenswood and Big Hill—day labour | ·02 | .. |
| " | General maintenance | .. | 43·07 |
| Section 3 | Road mix sealing between Ingledwood and Wedderburn—day labour | 9·72 | .. |
| " | Road mix sealing and double coat work near Wedderburn—day labour | ·52 | .. |
| " | Road mix sealing at Woosang—day labour | ·7 | .. |
| " | Road mix sealing at Teddywaddy—day labour | ·44 | .. |
| " | Road mix sealing south of Charlton—day labour | ·25 | .. |
| " | General maintenance | .. | 52·23 |
| Section 5 | Reshaping, rough limestone between Nandaly and Ouyen—day labour | 7·48 | .. |
| " | Reshaping rough limestone between Pier Milban and Nunga—day labour | 4·33 | .. |
| " | Reforming and limestone south of Nunga—day labour | ·7 | .. |
| Section 6 | Resheeting with limestone between Kiamit and Hattah—day labour | 3·2 | .. |
| " | General maintenance | .. | 40·13 |
| NORTHERN HIGHWAY— | | | |
| Section 1 | Road mix sealing between Epsom and Baushot—day labour | 4·94 | .. |
| " | Widening formation and gravelling shoulders between Epsom and Huntly—day labour | 1·46 | .. |
| " | General maintenance | .. | 48·38 |
| HUME HIGHWAY— | | | |
| Section 1 | Resheeting with fine crushed rock and double coat sealing north of Craigburn railway crossing—day labour | 1·36 | .. |
| " | Road mix sealing at Somerton—day labour | 1·64 | .. |
| " | Resurfacing at Goulburn River Bridge—day labour | ·1 | .. |
| " | Construction of stock route from Pyalong Road junction to Goulburn River Bridge—day labour | ·55 | .. |
| " | General maintenance | .. | 48·32 |
| Section 2 | Construction of a reinforced concrete superstructure on existing masonry abutments and demolition of existing timber superstructure about 3½ miles from Baddaginnie | ·02 | .. |
| " | Widening existing reinforced concrete bridge together with a three-cell reinforced concrete culvert at One-Mile Creek near Violet Town | ·03 | .. |
| " | Pre-mix patching between Longwood and Violet Town—day labour | 16 | .. |
| " | Provision of culverts and drains between Seymour and Benalla—day labour | ·06 | .. |
| " | Construction of approaches to bridge over One-Mile Creek near Violet Town—day labour | ·15 | .. |
| " | General maintenance | .. | 55·66 |
| | Carried forward | 300·63 | 1097·27 |

STATEMENT SHOWING MILEAGE, LOCALITY, ETC., OF HIGHWAYS RECONSTRUCTED, ETC.—continued.

| Name of Highway and Section. | Nature and Locality of Works. | Works Re- | Maintenance |
|---|--|--------------|--------------------|
| | | constructed. | Works Carried Out. |
| | | Miles. | Miles. |
| UNDER DIRECT SUPERVISION OF THE BOARD—continued. | | | |
| | Brought forward | 300.63 | 1097.27 |
| HUME HIGHWAY—continued. | | | |
| Section 3 | Reconstruction of bridge over Black Dog Creek at Chiltern—day labour | .02 | .. |
| " | Road mix sealing between Ovens River and Long Bridge, Wangaratta—day labour | 1.82 | .. |
| " | Pre-mix patching between Benalla and Barnawartha—day labour | 51.34 | .. |
| " | Road mix sealing between Wodonga and the Murray River—day labour | 1.33 | .. |
| " | Provision of culverts and drains between Winton and Wodonga—day labour | .37 | .. |
| " | Priming and sealing near Benalla storeyard—day labour | .05 | .. |
| " | General maintenance | .. | 60.18 |
| OMFO HIGHWAY— | | | |
| Section 1 | Construction of a two-span timber bridge over Deep Creek, Shire of Tambo | .02 | .. |
| " | Double coat sealing from Lucknow to Hopkins deviation—day labour | 1.65 | .. |
| " | Reshaping, top dressing and double coat sealing from Hopkins deviation to top of Sand Hill—day labour | 1.19 | .. |
| " | Reshaping and top dressing from Sarsfield to Mossface turn-off—day labour | 3.39 | .. |
| " | Gravelling and top dressing from Brathen to Ramrod Creek—day labour | 2.69 | .. |
| " | Repairing damage caused by floods to road surface between Bairnsdale and Ramrod Creek—day labour | 16.53 | .. |
| " | General maintenance | .. | 16.53 |
| Section 3 | Widening existing side cutting between Granite Flat and Lightning Creek—day labour | .55 | .. |
| MURRAY VALLEY HIGHWAY— | | | |
| Section 1 | Construction of two timber bridges over Kiewa River Flats approximately 5½ miles east of Wodonga | .04 | .. |
| Section 2 | Grubbing, clearing, forming, grading and trimming west of the new concrete bridge over the Ovens River, Shire of Yarrawonga | .02 | .. |
| " | Shouldering and resheeting between Brown's Plains and Rutherglen—day labour | 6.3 | .. |
| " | Shouldering and resheeting between Hume Highway and Brown's Plains—day labour | 3.8 | .. |
| " | Reforming and gravelling west of Rutherglen—day labour | 1.3 | .. |
| " | Forming new curve between Nathalia and McCoy's Bridge—day labour | .3 | .. |
| " | Construction of new reinforced concrete bridge between Parollos and Yarrawonga—day labour | .09 | .. |
| " | Priming and sealing east of Rutherglen—day labour | 3.11 | .. |
| " | Construction of new culverts at Rutherglen—day labour | .02 | .. |
| " | Resheeting and shouldering west of Rutherglen—day labour | 6 | .. |
| " | Resheeting and shouldering between Rutherglen and Parollos—day labour | 1.6 | .. |
| " | Shouldering and reshaping between Rutherglen and Parollos—day labour | 1.23 | .. |
| " | Resheeting and shouldering near Bundalong—day labour | .5 | .. |
| " | Regrading open crossing east of Yarrawonga—day labour | .05 | .. |
| " | Shouldering west of Yarrawonga—day labour | 4.5 | .. |
| " | Forming and sanding between Yarrawonga and Cobram—day labour | .5 | .. |
| " | Reshaping, priming and sealing near Cobram—day labour | 1.7 | .. |
| " | Scarifying and reshaping near Strathnorton—day labour | .6 | .. |
| " | Shouldering south of Nathalia—day labour | .5 | .. |
| " | Priming and sealing open crossing between Hume Highway and Parollos—day labour | .35 | .. |
| " | Sanding on swamp cement westerly from Wynna—day labour | 7.97 | .. |
| " | Construction in modified macadam and re-aligning east of Echuca—day labour | 1.13 | .. |
| " | Re-aligning short radius curves east of Echuca—day labour | .6 | .. |
| " | Re-aligning and sheeting east of Echuca—day labour | .5 | .. |
| " | Construction of approach road near High Street, Echuca—day labour | .52 | .. |
| " | Reconditioning and sealing east of Echuca—day labour | .78 | .. |
| " | General maintenance | .. | 140.5 |
| Section 3 | Construction of a five-span reinforced concrete bridge over channel at Lake Charm | .02 | .. |
| " | Construction of a nine-span reinforced concrete bridge over Laddon River, Shire of Kerang | .02 | .. |
| " | Reconditioning and sealing at Wharparilla East—day labour | 5.86 | .. |
| " | Re-aligning and construction in modified macadam at Gumbower—day labour | 1.9 | .. |
| " | Reconditioning and sealing at Gunbower West—day labour | 2.64 | .. |
| " | Reconditioning and sealing from Leitchville to Keely—day labour | 1.82 | .. |
| " | Construction in modified macadam at Cohuna East—day labour | 1.94 | .. |
| " | Re-aligning dangerous curves between Cohuna and Pyramid Creek—day labour | .56 | .. |
| " | Reconditioning and sealing south of Kerang—day labour | 1.5 | .. |
| " | Reconditioning and sealing from Kerang to Lake Charm—day labour | 8.94 | .. |
| " | Re-aligning, reconditioning and sealing at Lake Boga—day labour | 1.25 | .. |
| " | Construction of reinforced concrete bridge at Lake Charm—day labour | .02 | .. |
| " | Construction of reinforced concrete bridge at Barr Creek—day labour | .02 | .. |
| " | Construction of reinforced concrete bridge at Nine Mile Creek—day labour | .02 | .. |
| " | Construction of reinforced concrete bridge at Kerang—day labour | .02 | .. |
| " | Construction of reinforced concrete culvert near Kangaroo Lake—day labour | .01 | .. |
| " | General maintenance | .. | 85.19 |
| Section 4 | Clearing and light forming from Boundary Bend to Lake Powell—day labour | 6.1 | .. |
| SOUTH GIPPSLAND HIGHWAY— | | | |
| Section 1 | Forming, grading, trimming and surfacing with granite sand at Lang Lang | 1.18 | .. |
| " | Resheeting with sand from main drain to 17½ mile peg—day labour | 5.08 | .. |
| " | Sheeting with sand detour at Lang Lang—day labour | 1.12 | .. |
| " | Resheeting with sand between 54 and 56 mile posts—day labour | 2. | .. |
| " | Resheeting in fine crushed rock and sealing east of Tooradin—day labour | 1. | .. |
| " | Resheeting in fine crushed rock and sealing Little Tooradin bridge approaches—day labour | .25 | .. |
| " | Re-aligning of sharp curve at Hampton Park—day labour | .2 | .. |
| " | Sheeting in fine crushed rock and sealing bridge approaches at Richardson's Inlet—day labour | .2 | .. |
| " | Re-aligning of sharp curve between Dandenong and Hampton Park—day labour | .15 | .. |
| " | Construction of a cell culvert near 54.3 mile peg—day labour | .01 | .. |
| " | Widening timber bridge over Lang Lang River—day labour | .01 | .. |
| " | General maintenance | .. | 37.5 |
| MIDLAND HIGHWAY— | | | |
| Section 1 | General repairs between Geelong and Bell Post Hill—day labour | .3 | .. |
| " | Road mix sealing at Batesford Hill—day labour | .34 | .. |
| " | Gravelling and sealing between Batesford and South Bannockburn—day labour | 8.1 | .. |
| " | Re-aligning at Elaine railway crossing—day labour | .25 | .. |
| " | Completion of sealing from Mount Clear to Ballarat City boundary—day labour | 1.55 | .. |
| " | General maintenance | .. | 49.50 |
| Section 4 | Widening in modified macadam east of Shepparton—day labour | 3.06 | .. |
| " | Resheeting, priming and sealing at Eum Plains—day labour | .06 | .. |
| " | General maintenance | .. | 36.32 |
| Section 5 | Construction of a double cell reinforced concrete culvert near the 10-mile post, Shire of Benalla | .01 | .. |
| " | Construction of a skew reinforced concrete culvert at 11.68 mile peg, and a three-cell reinforced concrete culvert at 17.79 mile peg, Shire of Benalla | .02 | .. |
| " | Construction of a two-cell reinforced concrete culvert at 11-mile post, Shire of Benalla | .01 | .. |
| " | Construction of a two-cell concrete box culvert near Karn railway station, approximately 7½ miles south of Benalla | .01 | .. |
| " | Construction of a reinforced concrete culvert of three cells, approximately 6.2 miles south of Benalla | .01 | .. |
| " | Construction of approaches to bridge south of Benalla—day labour | .4 | .. |
| " | Shouldering south of Benalla—day labour | 1.3 | .. |
| " | Construction of deviation between Benalla and Swanpool—day labour | .6 | .. |
| " | Superelevating curves between Swanpool and Maudamle turnoff—day labour | 1.1 | .. |
| " | Priming and sealing open crossings between Benalla and Maudamle turnoff—day labour | .2 | .. |
| " | Construction of approaches to two bridges north of Swanpool—day labour | .99 | .. |
| " | General maintenance | .. | 28.6 |
| | Carried forward | 487.74 | 1551.68 |

STATEMENT SHOWING MILEAGE, LOCALITY, ETC., OF HIGHWAYS RECONSTRUCTED, ETC.—*continued.*

| Name of Highway and Section. | Name and Locality of Works. | Works Re- | Maintenance |
|--|---|--------------|--------------------|
| | | constructed. | Works Carried Out. |
| | | Miles. | Miles. |
| UNDER DIRECT SUPERVISION OF THE BOARD— <i>continued.</i> | | | |
| | Brought forward | 487·74 | 1551·68 |
| BONANG HIGHWAY— | | | |
| Section 1 | Repairing damage to road surface caused by floods, Orbost to Delegate River—day labour | 72·04 | .. |
| " | Reshaping, widening, top dressing and benching curves between Mill Creek and Sardine Creek—day labour | 18·5 | .. |
| " | Widening, reshaping and top dressing from Gongerah to Little Bill Gap—day labour | 8·1 | .. |
| " | Shouldering, top dressing, re-aligning and draining from Bonang to New South Wales Border—day labour | 1·51 | .. |
| " | General maintenance | .. | 72·04 |
| | Total | 587·09 | 1623·72 |
| UNDER MUNICIPALITIES. | | | |
| ALBERTON SHIRE— | | | |
| South Gippsland Highway— | | | |
| Section 3 | Reforming and gravelling south of Four Mile Creek between 25 and 27 miles | 1·5 | .. |
| " | Reforming, gravelling, and double coat bitumen sealing from 37 to 41 miles, Hubert's Corner to Buckley's Corner | 4 | .. |
| " | Widening pavement with crushed rock near Yarram, near 44 miles | ·5 | .. |
| " | Patrol maintenance throughout, improvements to drains, and lengthening culverts | .. | 27 |
| LAWLICK SHIRE— | | | |
| Western Highway— | | | |
| Section 5 | Preparation of side tracks throughout | 10·5 | .. |
| " | Resheeting gravel from 248·57 to 251·57 miles | 3 | .. |
| " | Road mix seal from 252·3 to 255 miles | 2·7 | .. |
| " | Priming and sealing from 258·66 to 263·17 miles | 4·51 | .. |
| " | Resheeting gravel from 245·83 to 246·12 miles, and from 247·16 to 247·58 miles | ·77 | .. |
| " | Raising and widening shoulders from 255 to 257·1 miles | 2·1 | .. |
| " | Patrol maintenance throughout | .. | 29·2 |
| LOWAN SHIRE— | | | |
| Western Highway— | | | |
| Section 1 | Road mix seal between Allotments 65 and 69 and Allotments 24 and 26, Parish of Badrootan | 2·23 | .. |
| " | Patrol maintenance throughout | .. | 3·4 |
| Section 5 | Road mix seal between Allotments 71 and 74 and Allotments 70 and 68A, Parish of Tarranginnie | 2·1 | .. |
| " | Patrol maintenance throughout | .. | 9·3 |
| MILDURA SHIRE— | | | |
| Calder Highway— | | | |
| Section 6 | General maintenance, regrading, reforming, and road mix seal from Nowingi to Irymple | .. | 21·13 |
| Murray Valley Highway— | | | |
| Section 5 | General maintenance, regrading, reforming, and new construction between Merbein Irrigation Settlement and the South Australian border | .. | 61·09 |
| OMEQ SHIRE— | | | |
| Omeo Highway— | | | |
| Section 1 | Improvements to curves, widening various sections, erection of guard posts, and construction of culverts in lieu of open crossings | — | .. |
| " | Reconstruction of timber bridge at 50 miles south of Omeo | — | .. |
| " | General maintenance from 46 to 62·9 miles south of Omeo | .. | 16·9 |
| Section 2 | Improvements to curves, widening various sections, erection of guard posts, and construction of culverts in lieu of open crossings | — | .. |
| " | Flanking of road between 19 and 23 miles south of Omeo | 1·5 | .. |
| " | General maintenance from Omeo to 46 miles south | .. | 46 |
| Section 3 | Forming and gravelling Wilson's Creek deviation from 2·4 to 2·98 miles north of Omeo | ·58 | .. |
| " | Improvements to curves, widening various sections, erection of guard posts, and construction of culverts in lieu of open crossings | — | .. |
| " | General maintenance from Omeo to 65 miles north | .. | 65 |
| ROSEDALE SHIRE— | | | |
| South Gippsland Highway— | | | |
| Section 3 | Construction of pipe culvert in Longford Causeway at 3·46 miles | — | .. |
| " | General maintenance from River Bridge 2·8 miles from Sale to 16·8 miles | .. | 14 |
| SWAN HILL SHIRE— | | | |
| Murray Valley Highway— | | | |
| Section 3 | Scarifying, reshaping, and widening pavement from 92·33 to 94·35 miles | 2·02 | .. |
| " | Patrol maintenance from Lake Boga to Swan Hill, 85·79 to 94·75 miles | .. | 8·96 |
| Section 4 | Scarifying, reshaping, and widening pavement from 2·87 to 4·26 miles | 1·39 | .. |
| " | Re-alignment of short radius curves between 32·82 and 35·23 miles | ·5 | .. |
| " | Reforming and limestone gravel sheeting from 19·1 to 22 miles | 2·9 | .. |
| " | Light forming from Hayesdale to Boundary Bend, 37·5 to 56·75 miles | 19·25 | .. |
| " | Patrol maintenance from Swan Hill to Boundary Bend 1·81 to 60·88 miles | .. | 58·42 |
| TOWONG SHIRE— | | | |
| Murray Valley Highway— | | | |
| Section 1 | Gravel repairs and sealing near Huon railway station | 1·05 | .. |
| " | Road mix seal at Huon railway station | ·78 | .. |
| " | Road mix seal from Sandy Creek to Huon School, from 17·43 to 20·86 miles | 3·43 | .. |
| " | Construction of timber and steel bridge and approaches at Washaway Creek, 23·4 miles | ·6 | .. |
| " | Reforming, gravelling, and culverts from Bolga to Tallangatta, 24·02 to 27·35 miles | 3·33 | .. |
| " | Construction of timber and steel bridge and approaches at Tallangatta Creek, 33·69 to 33·92 miles | ·23 | .. |
| " | Re-aligning at Kennedy's, from 58·9 to 59·4 miles | ·5 | .. |
| " | Re-aligning and raising roadway above flood level west of Burrowye, 64·2 to 64·7 miles | ·47 | .. |
| " | Forming, gravelling, culverts, and fencing deviation above flood waters east of Burrowye, 69·35 to 71·43 miles | 2·08 | .. |
| " | Construction of timber bridge and approaches above flood level at Mt. Alfred Creek, 73·98 to 74·38 miles | ·4 | .. |
| " | Forming and culverts from 5 miles east of Walwa to Upper Murray Shire boundary, 88·42 to 90·75 miles | 2·33 | .. |
| " | Reconditioning and re-aligning from 62·35 to 62·9 miles | ·55 | .. |
| " | Patrol maintenance from 11·93 to 90·75 miles | .. | 77·47 |
| Omeo Highway— | | | |
| Section 3 | Construction of concrete culvert and approaches at Harker's Creek, 59·5 miles | ·05 | .. |
| " | Patrol maintenance from Lightening Creek to Eskdale, 54·89 to 80·24 miles | .. | 25·35 |
| Section 4 | Completion of side-cuttings between Eskdale and Tallandcon, approximately 82·99 to 84·04 miles | 1·12 | .. |
| " | Shaping and reconstruction north of Little Scrubby Creek, between 84·53 and 85·93 miles | ·3 | .. |
| " | Re-aligning of curves and double coat sealing north of Little Scrubby Creek, from 84·53 to 85·93 miles | 1·4 | .. |
| " | Road mix seal at Tallandcon, from 85·93 to 88·81 miles | 2·85 | .. |
| " | Construction of large double cell pipe culvert at 101·45 miles | — | .. |
| " | Patrol maintenance from Eskdale to Tallangatta, 80·24 to 104·36 miles | .. | 24·12 |
| | Carried forward | 83·52 | 487·84 |

STATEMENT SHOWING MILEAGE, LOCALITY, ETC., OF HIGHWAYS RECONSTRUCTED, ETC.—*continued.*

| Name of Highway and Section. | Nature and Locality of Work. | Works Re-constructed. | Maintenance Works Carried Out. |
|--|---|-----------------------|--------------------------------|
| | | Miles. | Miles |
| UNDER MUNICIPALITIES—<i>continued.</i> | | | |
| | Brought forward | 83·52 | 487·84 |
| UPPER MURRAY SHIRE— Murray Valley Highway— Section 1 | Construction of 5-span timber bridge with steel girders over Jeremal Creek, 102·85 miles from Wodonga | ·03 | .. |
| " | Construction of 3-span timber bridge with steel girders, and approaches, at Thowgla Creek, from 109·82 to 110 miles | ·18 | .. |
| " | Erection of guard posts from 103 to 111·92 miles | — | .. |
| " | Construction of twin cell 24-in. diameter reinforced concrete pipe culvert at 109·27 miles | — | .. |
| " | Construction of twin cell 24-in. diameter reinforced concrete pipe culvert at 109·38 miles | — | .. |
| " | Regrading and construction of double cell 18-in. diameter reinforced concrete pipe culvert near Cudgewa Creek and between 97·53 and 97·78 miles | ·02 | .. |
| | Patrol maintenance throughout from 90·8 to 111·92 miles | .. | 21·12 |
| WODONGA SHIRE— Murray Valley Highway— Section 1 | Patrol maintenance from ·75 to 11·87 miles from Wodonga | .. | 11·12 |
| " | Replacing existing open crossing with precast box culvert at 2·8 miles | ·05 | .. |
| " | Replacing existing open crossing with precast box culvert at 3·7 miles | ·03 | .. |
| " | Priming and sealing near Kiewa River from 4·5 to 4·56 miles | ·06 | .. |
| " | First seal on floodway, Kiewa River, from 4·9 to 5·3 miles | ·4 | .. |
| " | First seal on floodway near Kiewa River from 5·6 to 5·72 miles | ·12 | .. |
| WYCHEPROOF SHIRE— Calder Highway— Section 4 | Double coat sealing from Dumosa to Nullawil, from 190·5 to 191·35 miles, 191·52 to 197·76 miles and 198·12 to 198·9 miles | 7·87 | .. |
| " | Reconditioning from Boigbeat to Sea Lake, from 225·45 to 229·4 miles | 3·95 | .. |
| " | Re-alignment north and south of Dumosa from 190·99 to 191·16 miles and 191·35 to 191·52 miles | ·34 | .. |
| " | Patrol maintenance from Wycheproof to Sea Lake, from 182·28 to 229·44 miles | .. | 47·16 |
| Section 5 | Reconditioning from Sea Lake to Shire Boundary, from 231·25 to 231·81 miles, 232·33 to 232·57 miles, 232·75 to 233 miles, 233·83 to 237 miles, 237 to 237·1 miles, 237·35 to 241·5 miles, 235·52 to 235·92 miles, 238 to 239·5 miles and 240·4 to 240·5 miles | 10·47 | .. |
| " | Patrol maintenance from Sea Lake to Shire Boundary from 230·02 to 241·52 miles | .. | 11·5 |
| | Total | 107·04 | 578·74 |

APPENDIX H.

COUNTRY ROADS BOARD.

UNEMPLOYMENT RELIEF ACT, No. 4097.

STATEMENT SHOWING DETAILS OF UNEMPLOYMENT RELIEF WORKS PUT IN HAND
DURING THE YEAR ENDING 30TH JUNE, 1936.

| Municipality and Road. | Particulars of Work. | Grant. | Expenditure. | |
|--|-----------------------------------|--------|--------------|-------|
| | | £ | £ | s. d. |
| ALBERTON SHIRE— | | | | |
| Madalya-Hiawatha Road | Forming | 4,100 | 4,096 | 4 11 |
| Tarra Valley Road | Forming | 1,810 | 1,810 | 0 0 |
| Albert River Road | Forming and surfacing | 1,675 | 1,675 | 0 0 |
| Carrajung-Woodside Road | Forming and surfacing | 2,000 | 1,459 | 16 0 |
| Upper Albert River Road | Forming and surfacing | 825 | 817 | 19 16 |
| ALEXANDRA SHIRE— | | | | |
| Rubicon Lane | Forming and surfacing | 1,000 | 1,000 | 0 0 |
| Taggerty-Thornton Road | Forming and surfacing | 2,100 | .. | .. |
| Maintongoon Road | Forming | 10,750 | 10,406 | 12 1 |
| Devil's River Road | Forming | 3,500 | 3,358 | 14 11 |
| ARAPILES SHIRE— | | | | |
| Goroke-Natimuk Road | Forming and surfacing | 375 | .. | .. |
| AVON SHIRE— | | | | |
| Closer Settlement Roads | Forming and surfacing | 1,300 | 12 | 9 4 |
| BASS SHIRE— | | | | |
| Koetsveldts Road | Forming | 2,550 | 359 | 15 11 |
| BALLAN SHIRE— | | | | |
| Ballan-Daylesford Road | Forming and surfacing | 2,200 | 2,165 | 1 7 |
| BEECHWORTH SHIRE— | | | | |
| Everton-Myrtleford Road | Forming and surfacing | 1,100 | .. | .. |
| Beechworth-Myrtleford Road | Forming and surfacing | 1,500 | .. | .. |
| BENALLA SHIRE— | | | | |
| Devenish-Thoona Road | Forming and surfacing | 2,000 | 1,643 | 5 2 |
| BIRCHIP SHIRE— | | | | |
| Donald-Birchip-Sealake Road | Forming and surfacing | 4,850 | 1,817 | 12 5 |
| Mallee Roads (Sand Drift) | Clearing sand and metalling | 750 | 747 | 14 8 |
| Warracknabeal-Birchip Roads | Forming and surfacing | 1,500 | 1,341 | 8 3 |
| BOBUNG SHIRE— | | | | |
| Donald-Warracknabeal Road | Forming and surfacing | 4,100 | 2,632 | 2 6 |
| Warracknabeal-Birchip Road | Forming and surfacing | 1,500 | 1,303 | 14 4 |
| Mallee Roads (Sand Drift) | Clearing sand and surfacing | 500 | 499 | 5 11 |
| BRIGHT SHIRE— | | | | |
| Bright-Omeo Road | Widening | 5,100 | 3,564 | 19 4 |
| BULN BULN SHIRE— | | | | |
| Toorong Valley Road | Forming and surfacing | 1,035 | 237 | 9 0 |
| Duggan North Road | Forming and surfacing | 705 | 690 | 18 0 |
| Loch Valley Road | Forming and surfacing | 760 | 719 | 2 5 |
| BUNINYONG SHIRE— | | | | |
| Old Melbourne Road | Forming and surfacing | 4,000 | 3,911 | 17 7 |
| CHARLTON SHIRE— | | | | |
| Lake Marnal Road | Forming and surfacing | 1,750 | 987 | 7 5 |
| CHILTERN SHIRE— | | | | |
| Barnawatha-Beechworth Road | Forming and surfacing | 450 | .. | .. |
| CHILTERN, YACKANDANDAH, AND WODONGA SHIRES— | | | | |
| Beechworth-Wodonga Road | Forming | 1,500 | 1,447 | 7 5 |
| COLAC SHIRE— | | | | |
| Barongarook-Irrewillipe Road | Forming and surfacing | 2,000 | 1,986 | 2 7 |
| Closer Settlement Roads | Forming and surfacing | 1,300 | 862 | 9 2 |
| Tomahawk Creek Road | Forming and surfacing | 2,000 | 2,000 | 0 0 |
| CRANBOURNE SHIRE— | | | | |
| Tyabb-Tooradin Road | Forming and surfacing | 3,000 | 3,000 | 0 0 |
| DIMBOOLA SHIRE— | | | | |
| Pepper's Plains Road | Forming and surfacing | 1,000 | 482 | 17 7 |
| Mallee Roads (Sand Drifts) | Clearing sand and metalling | 500 | 500 | 0 0 |
| Detpa-Hindmarsh Road | Forming and surfacing | 1,000 | 998 | 14 8 |
| Warracknabeal Road | Forming and surfacing | 375 | .. | .. |
| | Carried forward | 78,460 | 58,536 | 3 0 |

STATEMENT SHOWING DETAILS OF UNEMPLOYMENT RELIEF WORKS, ETC.—*continued.*

| Municipality and Road. | Particulars of Work. | Grant. | Expenditure. | |
|--|-----------------------------------|---------|--------------|-------|
| | | £ | £ | s. d. |
| | Brought forward .. | 78,460 | 58,536 | 3 0 |
| EAST LODDON SHIRE— | | | | |
| Prairie-Borong Road | Forming and surfacing | 4,000 | 722 | 19 4 |
| Bendigo-Serpentine Road | Forming and surfacing | 1,825 | 1,805 | 18 8 |
| ELTHAM SHIRE— | | | | |
| Kinglake-Glenburn Road | Forming | 2,100 | 2,048 | 4 2 |
| FRANKSTON AND HASTINGS SHIRE— | | | | |
| Tyabb-Fooradin Road | Forming and surfacing | 1,000 | 993 | 3 2 |
| GLENELG SHIRE— | | | | |
| Casterton-Penola Road | Forming and surfacing | 3,100 | 1,995 | 14 8 |
| Wando Vale-Chetwynd Road | Forming and surfacing | 1,500 | 1,478 | 17 9 |
| GLENLYON SHIRE— | | | | |
| Castlemaine-Daylesford Road | Forming and surfacing | 5,500 | 5,494 | 15 9 |
| GORDON SHIRE— | | | | |
| Durham Ox-Pyramid Road | Forming and surfacing | 3,000 | 3,000 | 0 0 |
| Charlton-Boort Road | Forming and surfacing | 3,000 | 2,408 | 7 1 |
| Kerang-Boort Road | Forming and surfacing | 2,000 | 1,950 | 2 10 |
| Pyramid-Leitchville Road | Forming and surfacing | 1,500 | .. | .. |
| Wycheproof-Boort Road | Forming and surfacing | 1,250 | 1,215 | 5 5 |
| GRENVILLE SHIRE— | | | | |
| Mount Bute Road | Forming and surfacing | 625 | 384 | 8 10 |
| Geelong-Portland Road | Forming and surfacing | 375 | 375 | 0 0 |
| Piggoreet Road | Forming and surfacing | 1,000 | 1,000 | 0 0 |
| HEYTESBURY SHIRE— | | | | |
| Glenfync-Digney's Bridge Road | Forming | 1,900 | 759 | 18 10 |
| Digney's Bridge-Curdie's River Road | Grubbing and clearing | 1,000 | .. | .. |
| Curdie's River Road | Forming and surfacing | 2,800 | 1,580 | 11 7 |
| Heytesbury Settlement Road | Forming and loaming | 10,000 | 9,603 | 7 4 |
| Scott's Creek-Carpenteit Road | Forming and loaming | 4,000 | 2,888 | 1 8 |
| HUNTLY SHIRE— | | | | |
| Bendigo-Tennyson Road | Forming and surfacing | 550 | 5 | 15 7 |
| KARA KARA SHIRE— | | | | |
| Marnoo-St. Arnaud Road | Forming and surfacing | 3,000 | 2,445 | 16 6 |
| St. Arnaud-Moliagul | Forming and surfacing | 2,000 | 715 | 15 10 |
| KARKAROOC SHIRE— | | | | |
| Rainbow-Beulah-Birchip Road | Forming and surfacing | 2,000 | 1,426 | 18 4 |
| Mallee Roads (Sand Drift) | Clearing sand and metalling | 2,000 | 2,000 | 0 0 |
| Woomelang-Tempy Road | Forming and surfacing | 2,000 | 1,309 | 7 11 |
| Woomelang-Ouyen Road | Forming and surfacing | 1,125 | .. | .. |
| KARKAROOC AND BORUNG SHIRES— | | | | |
| Galaquil East Road | Forming and surfacing | 750 | .. | .. |
| KERANG SHIRE— | | | | |
| Kerang-Boort Road | Forming and surfacing | 4,000 | 3,619 | 1 7 |
| KORONG SHIRE— | | | | |
| Korong Vale-Wedderburn Road | Forming and surfacing | 150 | .. | .. |
| St. Arnaud-Moliagul Road | Forming and surfacing | 2,000 | 1,703 | 3 4 |
| Korong Vale-Wedderburn Junction-Inglewood Road | Forming and surfacing | 600 | .. | .. |
| Wedderburn-Boort Road | Forming and surfacing | 300 | .. | .. |
| KORUMBURRA SHIRE— | | | | |
| Loch-Bena Road | Forming | 7,700 | 6,915 | 17 0 |
| KOWREE SHIRE— | | | | |
| Goroke-Natimuk Road | Forming and surfacing | 375 | .. | .. |
| LILLYDALE SHIRE— | | | | |
| Mount Dandenong Road | Widening and surfacing | 10,790 | 8,538 | 6 8 |
| Monbulk-Woori Yallock Road | Forming | 850 | 288 | 4 0 |
| MAFFRA SHIRE— | | | | |
| Licola Road | Widening | 7,600 | 7,519 | 1 8 |
| MALDON SHIRE— | | | | |
| Maldon-Eddington Road | Forming and surfacing | 1,100 | .. | .. |
| MANSFIELD SHIRE— | | | | |
| Mansfield Road | Forming | 3,500 | .. | .. |
| Mansfield East Road | Forming and surfacing | 4,800 | 4,721 | 4 7 |
| Eildon Weir-Jamieson Road | Forming | 5,300 | 3,814 | 16 9 |
| McIVOR SHIRE— | | | | |
| Heathcote-Elmore Road | Forming and surfacing | 1,000 | 799 | 18 6 |
| | Carried forward .. | 193,425 | 144,064 | 8 4 |

STATEMENT SHOWING DETAILS OF UNEMPLOYMENT RELIEF WORKS, ETC.—*continued.*

| Municipality and Road. | Particulars of Work. | Grant. | Expenditure. | |
|---|---|---------|--------------|-------|
| | Brought forward | £ | £ | s. d. |
| | | 193,425 | 144,064 | 8 |
| MARONG SHIRE— | | | | |
| Beudigo—Serpentine Road | Forming and surfacing | 2,175 | 1,955 | 2 6 |
| MILDURA SHIRE— | | | | |
| Murray Valley Highway | Forming and rubbling | 3,000 | 2,895 | 14 6 |
| Mallee Roads (Sand Drifts) | Clearing sand and metalling | 1,500 | 821 | 18 10 |
| MORWELL SHIRE— | | | | |
| Campbell's Road | Forming | 1,500 | 1,406 | 16 4 |
| NARRACAN SHIRE— | | | | |
| Walballa—Matlock Road | Widening and realigning | 4,760 | 4,633 | 6 4 |
| OMEQ SHIRE— | | | | |
| Benambra—Limestone Road | Forming | 2,600 | 915 | 1 9 |
| Buchan—Ensay Road (Sandy Creek) | Forming | 1,500 | 593 | 19 9 |
| Buchan—Ensay Road (Watts' Creek) | Forming | 500 | .. | .. |
| ORBOST SHIRE— | | | | |
| Marlo Road | Forming and flood protection | 2,050 | 2,050 | 0 0 |
| Orbost—Bendoc Road | Forming | 5,500 | 5,095 | 18 10 |
| Prince's Highway East (Mount Raymond) | Widening and realigning | 3,500 | 3,500 | 0 0 |
| OTWAY SHIRE— | | | | |
| Barramunga—Gellibrand Road | Forming | 2,600 | 2,599 | 14 7 |
| Lower Gellibrand Road | Forming | 6,050 | 4,033 | 11 8 |
| Lardner's Track | Forming | 3,000 | 2,927 | 17 7 |
| Gellibrand Valley Road | Forming | 3,000 | 2,965 | 15 5 |
| Johanna River Road | Forming | 2,000 | 2,000 | 0 0 |
| Sunnyside Road | Forming | 2,500 | 2,500 | 0 0 |
| Wonga Road | Forming | 1,900 | 1,820 | 15 8 |
| OXLEY SHIRE— | | | | |
| Upper Rose River Road | Forming | 850 | 362 | 5 11 |
| Rose River Road | Forming | 1,850 | 1,750 | 17 0 |
| PORTLAND SHIRE | | | | |
| Portland—Nelson Road | Forming and surfacing | 1,500 | 916 | 11 8 |
| Nelson Road | Forming and surfacing | 1,500 | 1,350 | 4 9 |
| Drik Drik—Nelson Road | Forming and surfacing | 3,000 | 2,521 | 9 3 |
| ROCHESTER SHIRE— | | | | |
| Kamarooka—Temyson Road | Forming and surfacing | 550 | .. | .. |
| ROSEDALE SHIRE— | | | | |
| Callignee—Gormandale Road | Forming | 4,990 | 4,212 | 3 2 |
| Willung—Stradbroke Road | Forming | 2,500 | 2,363 | 13 5 |
| Willung South Road | Forming | 1,700 | 280 | 8 3 |
| SHEPPARTON SHIRE— | | | | |
| Fruit Growers' Outlet Roads | Forming, surfacing, and sealing | 3,000 | 1,277 | 3 6 |
| Dookie—Devenish Road | Forming and surfacing | 1,000 | 955 | 14 2 |
| SOUTH GIPPSLAND SHIRE— | | | | |
| Woomera Valley Road | Forming | 2,000 | 404 | 8 9 |
| Fish Creek—Waratah Road | Forming | 4,000 | 1,873 | 18 5 |
| Buffalo—Stony Creek Road | Forming and surfacing | 1,500 | 828 | 18 3 |
| Woorarra West—Dollar Road | Forming | 3,200 | 3,134 | 15 6 |
| SWAN HILL SHIRE— | | | | |
| Ultima—Sealake Road | Forming and surfacing | 5,000 | 4,431 | 0 10 |
| Woorincee—Swan Hill Road | Forming and surfacing | 3,000 | .. | .. |
| Culgoa—Ultima Road | Forming and surfacing | 3,000 | 2,903 | 14 7 |
| Annuello—Robinvale Road | Forming and surfacing | 1,500 | .. | .. |
| Mallee Roads (Sand Drifts) | Clearing sand and metalling | 1,000 | 1,000 | 0 0 |
| Piangil—Manangatang Road | Forming and surfacing | 1,000 | 701 | 11 6 |
| TALBOT SHIRE— | | | | |
| Maryborough—Ballarat Road | Forming and surfacing | 2,000 | 1,981 | 19 4 |
| TALBOT AVOCA AND LEXTON SHIRES— | | | | |
| Caralulup—Bung Bong Road | Forming and surfacing | 5,000 | 3,438 | 9 4 |
| TAMBO SHIRE— | | | | |
| Orbost—Buchan Road | Forming | 4,250 | 513 | 16 7 |
| Bonang—Gelantipy Road | Forming | 6,950 | 3,821 | 4 5 |
| Buchan—Ensay Road (Timbarra) | Forming and bridge | 3,000 | 2,943 | 18 4 |
| TOWONG SHIRE— | | | | |
| Guy's Forest Road | Widening | 1,300 | 188 | 5 6 |
| Oneco Highway (Lightning Creek) | Widening | 3,000 | 2,903 | 2 5 |
| Murray Valley Highway | Widening | 2,500 | 2,498 | 4 8 |
| TRARALGON SHIRE— | | | | |
| Traralgon—Jeeralang Road | Forming | 3,200 | 3,094 | 8 1 |
| | Carried forward | 321,900 | 239,432 | 9 8 |

STATEMENT SHOWING DETAILS OF UNEMPLOYMENT RELIEF WORKS, ETC.—*continued.*

| Municipality and Road. | Particulars of Work. | Grant. | Expenditure. | | |
|--|-----------------------------------|---------|--------------|----|----|
| | | £ | £ | s. | d. |
| | Brought forward .. | 321,900 | 239,432 | 9 | 8 |
| TUNGAMAH SHIRE— | | | | | |
| Benalla-Tocumwal Road | Forming and surfacing | 5,000 | 2,862 | 3 | 4 |
| Benalla-Yarrowonga Road | Forming and surfacing | 3,000 | 3,000 | 0 | 0 |
| UPPER YARRA SHIRE— | | | | | |
| Powelltown-Nayook Road | Forming and surfacing | 2,000 | 1,728 | 4 | 5 |
| WALPEUP SHIRE— | | | | | |
| Ouyen-Tempy Road | Forming and surfacing | 375 | 2 | 0 | 7 |
| Linga North Road | Forming and surfacing | 300 | .. | .. | .. |
| Mallee Roads (Sand Drifts) | Clearing sand and metalling | 2,750 | 2,414 | 8 | 7 |
| WANNON SHIRE— | | | | | |
| Closer Settlement Roads | Forming and surfacing | 439 | .. | .. | .. |
| WARANGA SHIRE— | | | | | |
| Heatcote-Elmore Road | Forming and surfacing | 1,420 | 1,348 | 6 | 0 |
| Closer Settlement Roads | Forming and surfacing | 4,300 | 4,133 | 3 | 2 |
| Goornong-Colbinabbin Road | Forming and surfacing | 580 | 526 | 10 | 1 |
| Mount Camel-Corop Road | Forming and surfacing | 266 | 261 | 10 | 0 |
| Rushworth-Tatura Road | Forming and surfacing | 2,500 | 1,639 | 9 | 11 |
| Shepparton-Corop-Elmore Road | Forming and surfacing | 4,000 | 2,512 | 10 | 4 |
| WARANGA AND ROCHESTER SHIRES— | | | | | |
| Mount Camel Estate Road | Forming and surfacing | 1,734 | 1,667 | 11 | 11 |
| WERRIBEE SHIRE— | | | | | |
| Closer Settlement Roads | Forming and surfacing | 4,050 | .. | .. | .. |
| WIMMERA SHIRE— | | | | | |
| Dimboola-Warraeknabeal Road | Forming and surfacing | 3,000 | 3,000 | 0 | 0 |
| Horsham-Warracknabeal Road | Forming and surfacing | 375 | .. | .. | .. |
| WINCHELSEA AND COLAC SHIRES— | | | | | |
| Barwon Downs-Forrest Road | Forming and surfacing | 3,000 | 2,940 | 14 | 0 |
| WOORAYL SHIRE— | | | | | |
| Allambee Estate-Tarwin Valley Road | Forming | 1,200 | 664 | 3 | 1 |
| Buffalo-Waratah Road | Forming and surfacing | 2,000 | 1,063 | 4 | 3 |
| West Tarwin Valley Road | Forming | 850 | 846 | 3 | 0 |
| WYCHEPROOF SHIRE— | | | | | |
| Dumosa-Swan Hill Road | Forming and surfacing | 4,500 | 2,934 | 4 | 7 |
| Glenloth-Wycheproof Road | Forming and surfacing | 1,250 | 1,162 | 9 | 4 |
| Mallee Roads (Sand Drifts) | Clearing sand and metalling | 1,000 | 979 | 6 | 9 |
| YARRAWONGA SHIRE— | | | | | |
| Tungamah-Peechelba Road | Forming and surfacing | 3,000 | 1,770 | 1 | 9 |
| YEA SHIRE— | | | | | |
| Seymour-Molesworth Road | Forming and surfacing | 1,500 | 1,255 | 18 | 6 |
| VARIOUS SHIRES— | | | | | |
| Roads for Isolated Settlers | Forming and surfacing | 10,000 | 7,592 | 7 | 2 |
| | Total | 386,280 | 285,737 | 0 | 5 |