



1964

PARLIAMENT OF NEW SOUTH WALES

REPORT
OF THE
COMMISSIONER FOR MAIN ROADS
FOR THE
Year ended 30th June, 1964

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DEPARTMENT OF MAIN ROADS, N.S.W.

THIRTY-NINTH ANNUAL REPORT

of the

COMMISSIONER FOR MAIN ROADS

For Year ended 30th June, 1964

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DEPARTMENT OF MAIN ROADS

Commissioner: J. A. L. SHAW

Assistant Commissioner: R. J. S. THOMAS

PRINCIPAL OFFICERS

HEAD OFFICE

Special Administrative Assistant to Commissioner: C. A. Hawkins

Chief Engineer: T. M. Coulter

<i>Assistant Chief Engineer:</i> R. E. Johnston	<i>Deputy Chief Engineer:</i> G. V. Fawcner	<i>Assistant Chief Engineer:</i> N. F. Hatcher
<i>Bridge Engineer:</i> F. C. Cook	<i>Executive Engineer:</i> G. B. Cranna	<i>Highways Engineer:</i> A. H. Kemp
<i>Plant Engineer:</i> P. H. Matthews	<i>Investigations Engineer:</i> L. W. Burgess	<i>Urban Design and Planning Engineer:</i> M. V. Douglas
<i>Principal Land Surveyor and Property Officer:</i> G. S. Aplin	<i>Advance Planning Engineer:</i> H. James	<i>Traffic Service Engineer:</i> M. B. Fairlie
<i>Engineer for Road Widenings:</i> A. H. Moroney	<i>Engineer for Specifications and Technical Instructions:</i> J. C. Rudd	<i>Materials and Research Engineer:</i> L. R. Browne
<i>Engineer for Country Councils Works:</i> J. L. Allan	<i>Inspecting Engineer-Design:</i> E. F. Mullin	<i>Supply Officer:</i> E. J. Mollett
<i>Deputy Secretary:</i> C. W. Mansfield	<i>Secretary:</i> W. W. Weir	<i>Personnel Officer:</i> H. W. Llewellyn

Principal Legal Officer: J. A. McCaffrey

Chief Accountant: R. W. Cairns

Accountant: R. G. Barton

DIVISIONAL OFFICES

<i>Division</i>	<i>Headquarters</i>	<i>Divisional Engineer</i>
Metropolitan	Milson's Point	R. W. P. Hirt
Central	Parramatta	T. S. Hope
Illawarra	Wollongong	G. J. King
Lower Northern	Newcastle	W. J. C. Orr
North Eastern	Grafton	R. E. Playford
Upper Northern	Glen Innes	E. M. Brown
North Western	Tamworth	D. C. Jacob
Central Western	Parkes	H. J. Vant
Central Northern	Bourke	H. B. Korff
Murray Darling	Broken Hill	G. A. Thompson
Central Murray	Deniliquin	V. E. Minus
South Western	Wagga Wagga	G. G. Corner
South Coast	Bega	R. Fitzhardinge
Southern	Goulburn	K. Jordan

DEPARTMENT OF MAIN ROADS, NEW SOUTH WALES

Sydney, 9th December, 1964.

THE HONOURABLE THE DEPUTY PREMIER AND MINISTER FOR
HIGHWAYS, SYDNEY.

Section 6 of the Main Roads Act requires that the Commissioner for Main Roads shall present an annual report and statement of accounts to Parliament through the Minister.

I now have pleasure in submitting through you the Thirty-ninth Annual Report, including statement of accounts.

The report covers the period from the 1st July, 1963, to 30th June, 1964, though a few matters referred to are carried beyond the latter date for convenience and completeness of record.

J. A. L. SHAW,
Commissioner for Main Roads.

ANNUAL REPORT

of the

COMMISSIONER FOR MAIN ROADS

Year ended 30th June, 1964

GENERAL REVIEW

PROGRESS WITH ROAD AND BRIDGE WORKS

During the year, a further 714 miles of Main Roads were provided with a bitumen surface by the Department of Main Roads and Municipal and Shire Councils. Of this new bitumen surfacing, 252 miles were provided on State Highways and 462 on Trunk and Ordinary Main Roads.

The total length of dustless surface on Main Roads is now 10,760 miles, of which 3,200 miles, or almost 30 per cent, have been sealed in the last five years.

The total mileage of Main Roads in New South Wales is 22,286, of which 11,526 have yet to be provided with a dustless surface.

Major road works completed during the year were:—

Phillips Avenue-Ghost Creek section of the north-south arterial road between North Wollongong and Ghost Creek by-passing the principal shopping and business centre of Wollongong. (See also page 17.)

New road route between Calga and Ourimbah via Peat's Ridge. (See also page 25.)

Karuah-Bulahdelah section of the new route of the Pacific Highway between Twelve Mile Creek, near Raymond Terrace, and Taree. (See also page 14.)

New route, $6\frac{3}{4}$ miles, of the Pacific Highway between Wardell and the Bruxner Highway near Ballina. Together with the bridge over the Richmond River at Wardell, this deviation eliminated the ferry crossing at Burn's Point from the route of the highway and also the ferry crossing at Wardell on the Wardell-Goonellabah Main Road.

River Road-Belmore Road section of Henry Lawson Drive across Little Salt Pan Creek and Salt Pan Creek between Picnic Point and Peakhurst. (See also page 17.)

Completion of the bitumen surfacing of the Wilberforce-Putty-Singleton Road. (See also page 59.)

Major road works in hand at the end of the year were:—

Construction of two lengths totalling 5.8 miles, between the Hawkesbury River and Mount White, of the Sydney-Newcastle Expressway. (See also page 23.)

Construction of four tunnels to carry public utilities under the first section of the Warringah Expressway from the northern end of Sydney Harbour Bridge to Cammeray. (See also page 23.)

Reconstruction and bitumen surfacing of the Prince's Highway south of Eden.

Rebuilding lengths of heavily trafficked State Highways, especially the Hume Highway, Pacific Highway and New England Highway to provide stronger and wider carriageways.

Reconstruction and bitumen surfacing of State Highways in the western areas of the State.

In the County of Cumberland (Sydney Metropolitan area), road works in progress consisted mainly of reconstruction and pavement widening to provide additional lanes for traffic, approaches to bridges, installation of median strips in six-lane carriageways and channelisation of intersections.

One hundred and eighteen (118) new bridges and box culverts of bridge size were built on Main Roads, Developmental Roads and at sites on unclassified roads where the Department was responsible for construction of crossings.

At the end of the year, a further 97 bridges and culverts of bridge size were under construction on Main and Developmental Roads.

The larger bridges completed during the year included structures over:—

Richmond River at Wardell on the Pacific Highway—to replace a ferry.

Richmond River at Lismore on the Bruxner Highway—a new facility.

Lane Cove River—Fig Tree Bridge—in replacement of an old two-lane bridge.

Darling River at Pooncarie—to replace a ferry.

Darling River at Tilpa—to replace a ferry.

Sportsman's Creek on the Grafton-Casino Trunk Road—in replacement of a low-level bridge subject to flooding.

Hunter River at Maitland—Belmore Bridge—in replacement of an old narrow iron bridge.

Towamba River at Towamba—in replacement of an old low-level bridge subject to flooding.

Large bridges under construction at the 30th June, 1964, were over:—

Clarence River at Harwood near Maclean on the Pacific Highway—to replace a ferry.

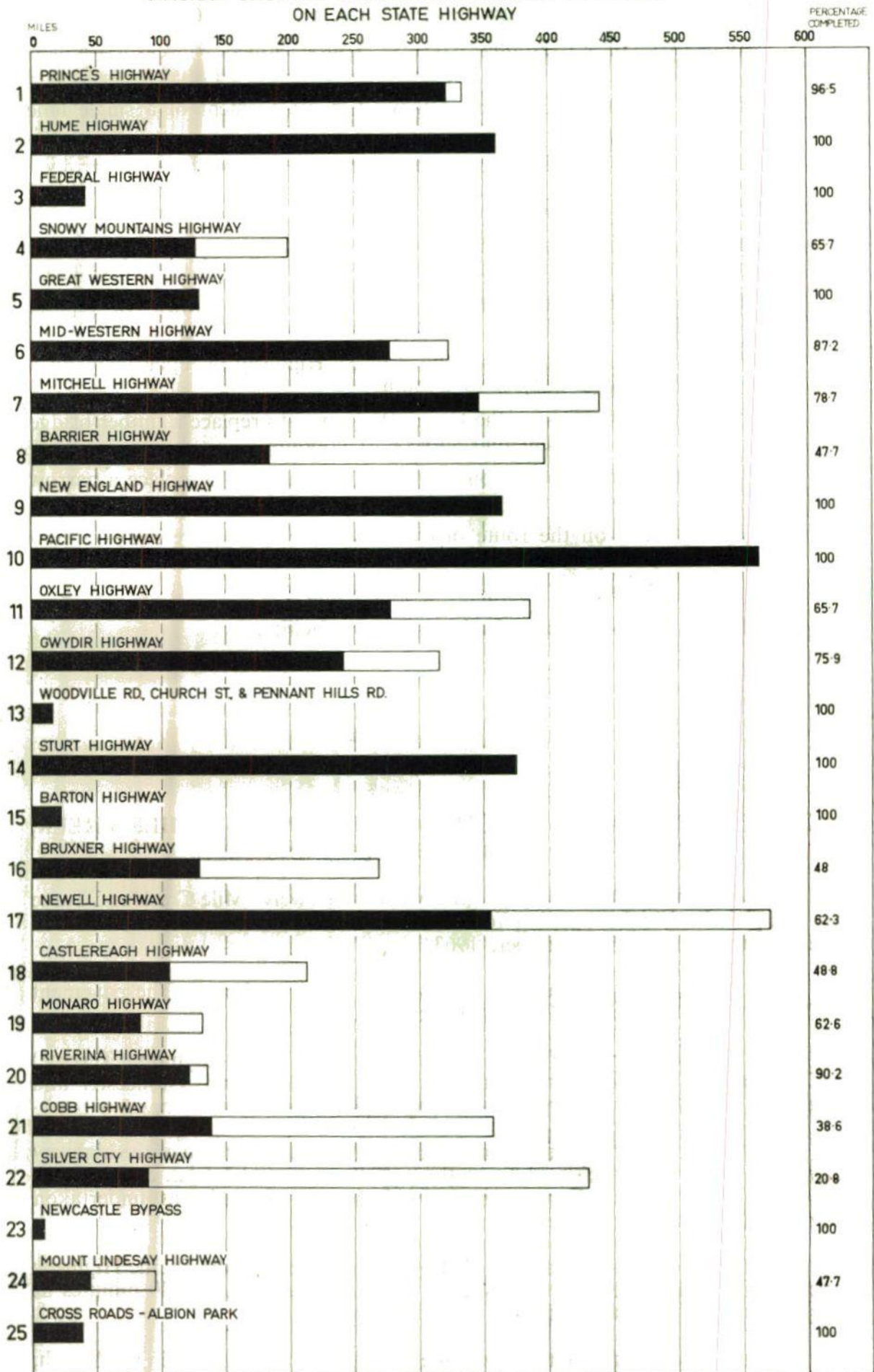
Clyde River at Nelligen on the Canberra-Bateman's Bay Trunk Road—in replacement of a ferry.

Parramatta River between Gladesville and Drummoyne on Victoria Road—to replace an old two-lane opening bridge. (This bridge was subsequently opened to traffic on 2nd October, 1964—see also page 17.)

Darling River at Louth—in replacement of a ferry.

George's River at Taren Point—to replace a ferry. (See also page 20.)

DIAGRAM SHOWING TOTAL LENGTH BITUMEN SURFACED
ON EACH STATE HIGHWAY



North-Western Expressway at Huntley's Point—to give access to the new Gladesville Bridge for traffic travelling towards the City from Gladesville, Ryde and other areas to the west. (This overpass was subsequently made available to traffic on the 2nd October, 1964.)

South Arm of the Hunter River at Tourle Street, Newcastle—a new facility.

Jugiong Creek on the Hume Highway in replacement of a single lane bridge.

Salt Pan Creek on Henry Lawson Drive—a new facility. (This bridge was subsequently opened to traffic on the 11th September, 1964.) (See also page 17.)

Peel River at Tamworth on the New England Highway—in replacement of an old narrow bridge.

Minnamurra River at Minnamurra on the Prince's Highway—to replace a single lane bridge.

Moruya River at Moruya on the Prince's Highway in replacement of a timber bridge subject to flooding.

Yass River near Yass on the Hume Highway—to replace a timber bridge on poor alignment and subject to flooding.

Orara River at Ramornie on the Gwydir Highway—to replace a narrow low-level bridge on poor alignment.

Tarban Creek on the route of the North-Western Expressway—a new facility.

Hawthorne Canal, Haberfield—a new facility.

Murrumbidgee River at Jugiong—a new facility.

PACIFIC HIGHWAY—NEW ROUTE BETWEEN TWELVE MILE CREEK, NEAR RAYMOND TERRACE, AND TAREE

The new route of the Pacific Highway between Twelve Mile Creek and Taree was completed with the opening to traffic of the section between Karuah and Bulahdelah on the 24th December, 1963.

The section was designed for speeds of 50 miles per hour. The pavement width is 24 feet and has a dustless surface.

The Pacific Highway from Twelve Mile Creek (near Raymond Terrace) to Taree originally followed the route through Booral, Stroud, Gloucester and Krambach, a distance of 96 miles, and traversed much hilly country.

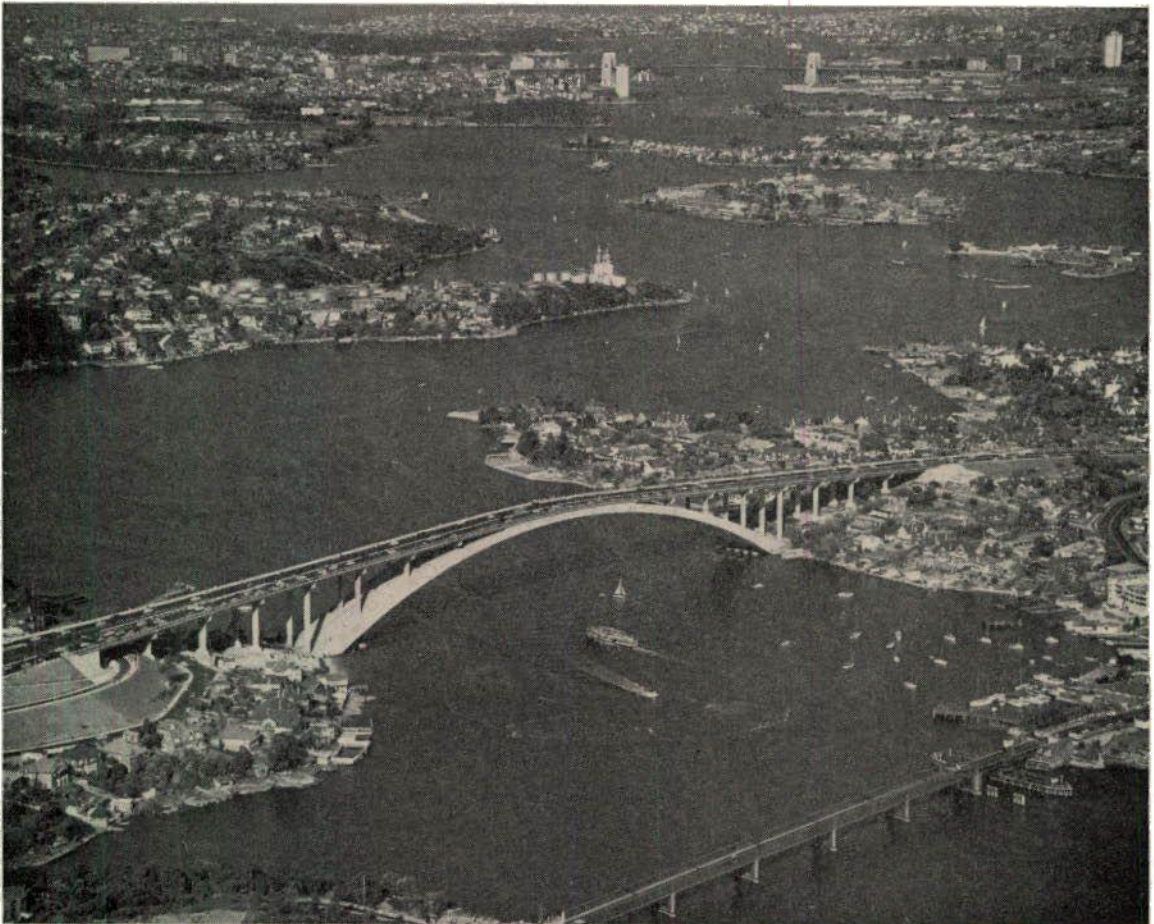
Some years ago, the Department decided to relocate the route of the highway between Twelve Mile Creek and Taree through Karuah, Bulahdelah and Nahiack, a distance of 79 miles. Construction of this length of road was undertaken progressively by the Department as funds became available.

The improved conditions provided by the new route of the Pacific Highway enable traffic to travel from Newcastle to Taree in about 2 hours 30 minutes as compared with 3 hours 10 minutes on the old route.

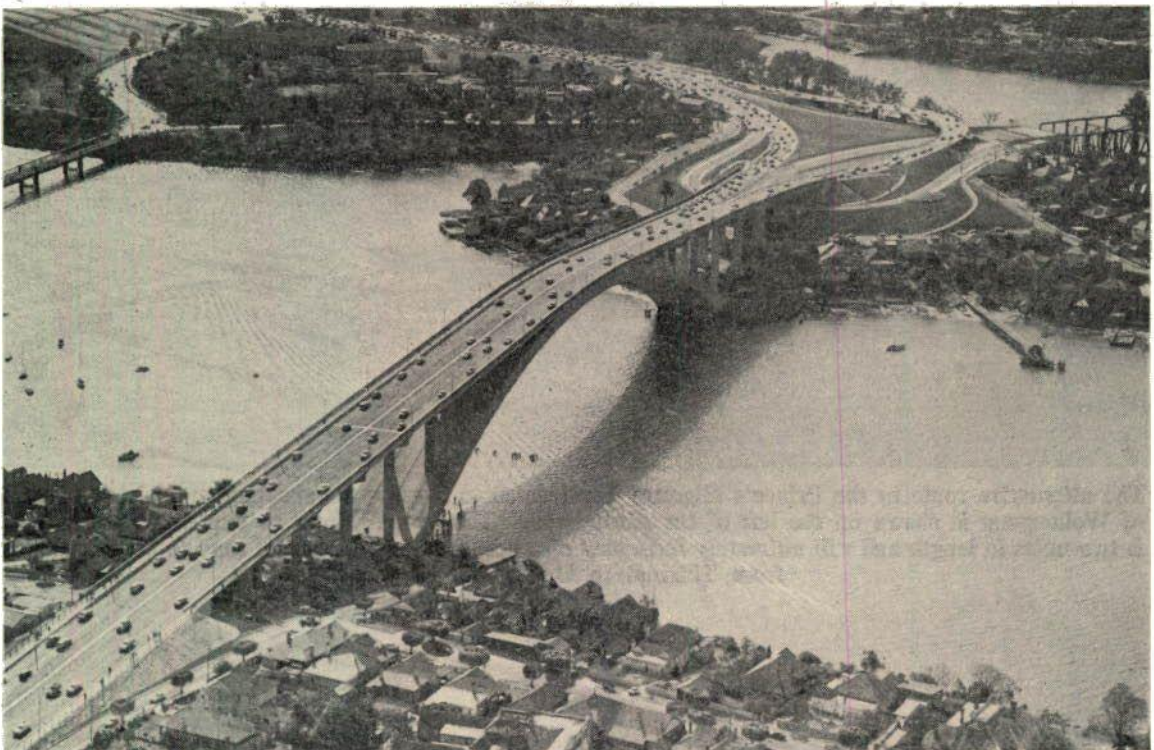
An article dealing with the new route of the highway appeared in the March, 1964, number of the Department's Journal "Main Roads".



The alternative route to the Prince's Highway constructed to by-pass the shopping and business centre of Wollongong is shown on the left of the photograph. The by-pass, built to expressway standards, is two miles in length and will ultimately form part of a new north-south arterial road to be constructed from Thirroul to Dapto and beyond



The new Gladesville Bridge over the Parramatta River which was officially opened by Her Royal Highness Princess Marina, Duchess of Kent, on the 2nd October, 1964



Traffic travelling over the new Gladesville Bridge on the 4th October, 1964

WOLLONGONG BY-PASS

During the year, the Department completed the construction of a new road to by-pass the principal shopping and business centre of Wollongong and thereby reduce traffic congestion on the Prince's Highway through the City.

The by-pass commences from the Prince's Highway at North Wollongong and rejoins it at Ghost Creek, a little south of the junction with Mount Keira Road.

Construction of a direct connection from the by-pass to Mount Ousley Road was also completed.

The by-pass, two miles in length, is part of a new north-south arterial road to be completed ultimately from Thirroul to Dapto.

A two-lane pavement has been provided on the by-pass, but wider earthworks and bridges have been constructed over most of the length to allow for the provision later of another two traffic lanes.

An article dealing with the construction of the by-pass appeared in the September, 1964, number of the Department's Journal "Main Roads".

COMPLETION OF HENRY LAWSON DRIVE

The bridge over Salt Pan Creek, completed in September, 1964, provided the final link in Henry Lawson Drive which connects Peakhurst and Lansdowne via Padstow, Picnic Point, East Hills and Milperra.

This circumferential route (designated Ring Road No. 5), which for the greater part of its length follows the George's River, is facilitating the movement of traffic between Illawarra Suburbs and the South-Western and Western Suburbs of Sydney.

NEW BRIDGE OVER THE PARRAMATTA RIVER BETWEEN GLADESVILLE AND DRUMMOYNE

The new bridge over the Parramatta River between Gladesville and Drummoyne was officially opened on the 2nd October, 1964, by Her Royal Highness Princess Marina, Duchess of Kent.

The new bridge is 1,901 feet 6 inches long overall. It includes a four-ribbed concrete arch with a span of 1,000 feet, and at each end of the arch there are four pre-stressed concrete girder spans each 100 feet long.

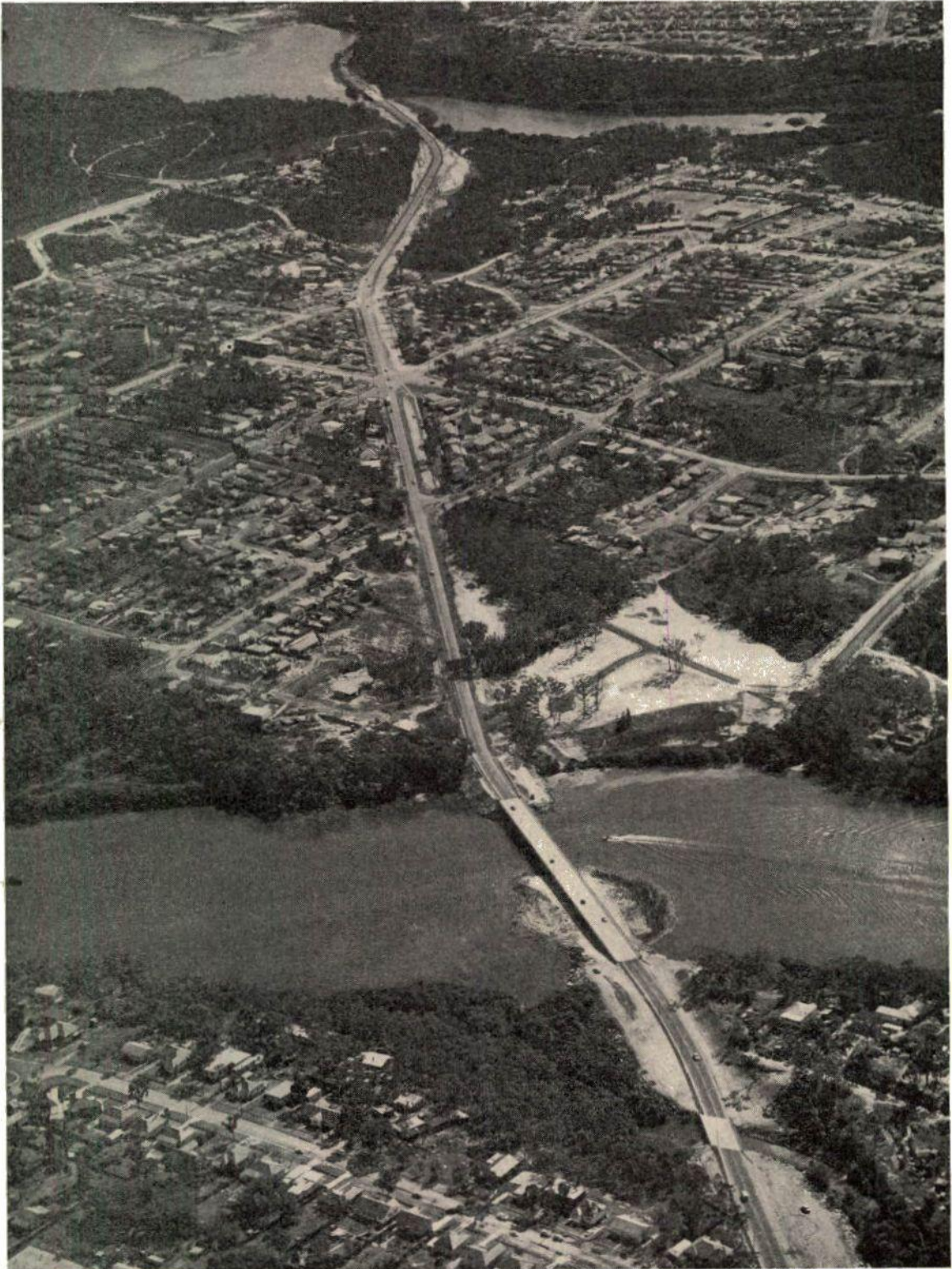
The arch with its clear span of 1,000 feet is the longest concrete arch span yet constructed in the world.

The arch is supported by massive concrete blocks, known as "thrust blocks", founded on sandstone on each side of the river.

The roadway is 72 feet between kerbs and is flanked by a footway, 6 feet wide, on each side of the bridge. At the Gladesville (or northern end) of the bridge, the roadway widens gradually over the approach spans from 72 feet to 120 feet to provide for the smooth routing of traffic.

The roadway rises on a grade of 6 feet in each 100 feet from each side of the river and the grades are connected by a vertical curve 300 feet long over the centre of the structure.

The arch has a clearance of not less than 120 feet above water level for a width of 200 feet in the centre of the stream, the maximum clearance at the crown of the arch being 134 feet above water level.



The bridge over Salt Pan Creek in the foreground provided the final link in Henry Lawson Drive which connects Peakhurst and Lansdowne via Padstow, Picnic Point, East Hills and Milperra

The bridge was constructed for the Department by the contracting partnership of Stuart Bros., builders, of Sydney and Reed and Mallick, engineering contractors, of Salisbury, England, to a design undertaken for them by consulting engineers, Messrs. G. Maunsell and Partners of London and Melbourne. After acceptance by the Department of the tender for the bridge, an amended design, differing somewhat from that originally proposed, was submitted by the contractors. The design was checked both by the Department of Main Roads and the Civil Engineering Department of the University of Sydney. Subsequently, the advice of the Societe Technique pour l'Utilisation de la Précontrainte was obtained on certain aspects of the design.

The cost of the new bridge and the road and bridge works comprising the approaches will be of the order of £4.5m.

An article dealing with the construction of the bridge will be published in the December, 1964, number of the Department's Journal "Main Roads".

ROAD IMPROVEMENTS BETWEEN THE NEW GLADESVILLE BRIDGE AND THE CITY

The benefit which the new Gladesville Bridge, over the Parramatta River gives to traffic will not be fully realised until the bridge over the nearby Tarban Creek, which will provide a direct link between the new Gladesville Bridge and the recently completed Fig Tree Bridge over the Lane Cove River is completed by September, 1965.

To assist in handling the increased volume of traffic using the new bridge, the Department of Main Roads had already widened and reconstructed Victoria Road to provide a six-lane divided carriageway from the southern end of the new bridge to White Bay nearer the City. The cost of this work was of the order of £400,000.

In addition, the Department, in conjunction with the Sydney City Council and Leichhardt Municipal Council, has carried out or is undertaking a number of other works to provide increased road capacity for through traffic between Drummoyne and the City.

These works comprise:—

- (a) erection of large advance direction signs advising traffic of alternative routes by-passing the City at:—
 - (i) Lyons Road, Drummoyne;
 - (ii) Dowling Street, Rozelle; and
 - (iii) Commercial Road, White Bay.
- (b) provision of an additional lane in the median strip to facilitate right-turning movements at Moodie Street, Rozelle.
- (c) improvement of the intersection of Victoria Road and Commercial Road by providing additional lanes on both the Rozelle and City approaches and by providing an easier left-turn for traffic in Victoria Road proceeding towards the City.
- (d) widening of the western approach to the Glebe Island bridge to provide a separate right-turn lane for traffic turning into Somerville Road.
- (e) widening of the bridge over White's Creek on Commercial Road at the western end of Rozelle Bay.

- (f) construction of a new road, including a bridge over Johnston's Creek, to connect Commercial Road, The Crescent and Crescent Street to Ross Street, Glebe, around the southern side of Harold Park.

These works will cost about £200,000.

In addition to the works mentioned, the Department of Main Roads, in conjunction with other authorities concerned, is investigating means of improving traffic conditions between Glebe Island Bridge and the City on the route over Pyrmont Bridge.

TAREN POINT BRIDGE OVER GEORGE'S RIVER

The bridge over the George's River near its mouth between Rocky Point, Sans Souci, and Taren Point, is expected to be completed about the end of March, 1965.

The structure, which is being built by John Holland (Constructions) Pty. Ltd. to a design prepared by the Department is 1,662 feet long and will accommodate six lanes of traffic and two footways.

The contract price for the construction of the bridge is £1,454,146.

The bridge and its immediate approaches will form the first section of the Southern Expressway (see also page 22.)

The new crossing of the George's River will replace a ferry service and will relieve peak hour and weekend traffic congestion at Tom Ugly's Bridge which is about one mile upstream.

The approaches are being constructed by the Department by day labour.

NEW BRIDGE OVER MIDDLE HARBOUR AT ROSEVILLE

In June, 1964, the Department accepted a tender for the construction of a new prestressed concrete bridge, 1,229 feet long over Middle Harbour at Roseville.

The successful tenderer is John Holland (Constructions) Pty. Ltd. who contracted to complete the bridge in 74 weeks.

The new Roseville bridge, which will be about a quarter of a mile upstream of the existing bridge, will replace a narrow two-lane bridge. The carriageway will be 67 feet wide between kerbs, providing in the first place for five lanes of traffic, with a footway on the upstream side.

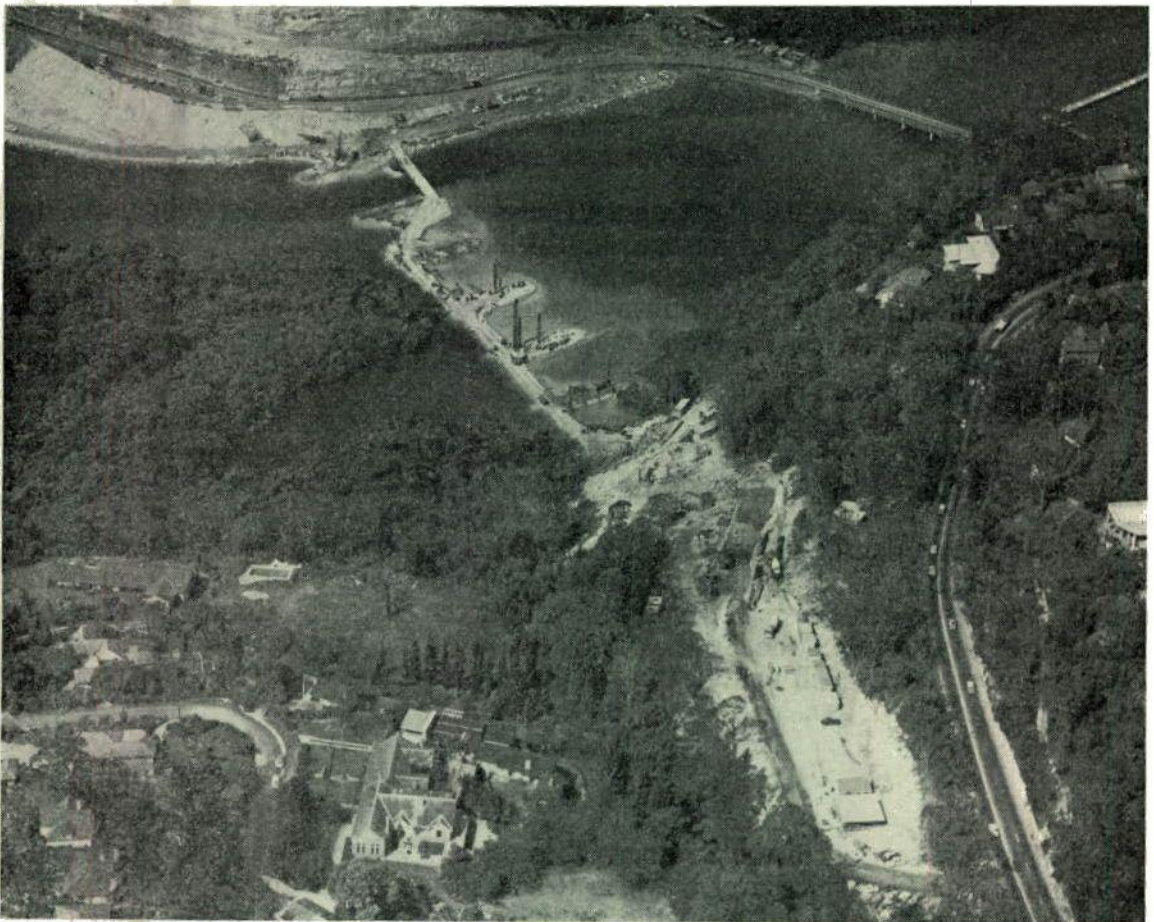
The new bridge was designed by the Department which had sought advice from a consulting architect to ensure that the general appearance of the bridge would be in harmony with its surroundings.

The alignment of the new route between East Roseville and Forestville will be of a high standard. To secure this, the bridge itself will be curved both horizontally and vertically.

The approaches are being constructed by the Department by day labour. The northern or Forestville side of Middle Harbour presents especial difficulties and the approach involves heavy excavation work through a steep rocky hillside.



An aerial photograph taken on the 24th June, 1964, of the bridge being built over the George's River to connect Taren Point and Rocky Point, Sans Souci



Construction in progress on 1st November, 1964, on the new bridge over Middle Harbour at Roseville. The existing two-lane bridge may be seen in the top right-hand corner of the photograph

METROPOLITAN EXPRESSWAYS

Engagement of Consultants

In 1960 the Department engaged the firm of De Leuw, Cather and Company, consulting engineers, of Chicago and San Francisco, to advise on the layout of sections of the expressway system in the inner Sydney Metropolitan area.

In a report to the Department in November, 1961, on the layout of sections of the expressway system in the inner Sydney Metropolitan area, the consultants advised that, while there should be some modification in detail of the Department's proposed expressway system, the expressway routes planned should be retained.

The consultants suggested that the system of expressways and surface roads proposed by the Department might be augmented by:—

A north-south expressway between Naremburn and Tempe involving another crossing of Sydney Harbour.

An east-west expressway from Woollahra, through Waterloo, to Fivedock with an extension north to Drummoyne.

In December, 1962, the consultants were instructed to make more detailed investigations in regard to their suggestions.

The consultants have advised that their report on the proposed additional east-west and north-south expressways will be submitted to the Department in December, 1964.

In April, 1964, the consultants were asked by the Department to undertake the additional task of preparing the geometric design of:—

The Western Distributor between Sydney Harbour Bridge and the City markets area.

The major interchange at Ultimo between the Western Distributor and the Southern Expressway.

North-Western Expressway

In September, 1963, the Deputy Premier and Minister for Highways, the Hon. P. D. Hills, M.L.A., announced that it had been decided to proceed with the construction of the section of the North-Western Expressway from Druitt Street, City, across Darling Harbour railway goods yard to Fig Street, Pyrmont, and over Wentworth Park to Bridge Road, Glebe, a distance of approximately one mile.

The detailed design of this length of expressway is being undertaken by the Department. It is expected that construction will be completed within four years and extended to Annandale, by tunnel, a year later.

With the opening to traffic of the new Gladesville Bridge over the Parramatta River in October, 1964, further progress was made with the construction of the length of the North-Western Expressway between Victoria Road, Drummoyne and Burns Bay Road, Lane Cove. Completion of the bridge over Tarban Creek by September, 1965, will enable the full length of this section of the expressway to be brought into use.

Southern Expressway

The first section of the Southern Expressway will comprise the bridge now being built over George's River between Rocky Point, Sans Souci, and Taren Point and a short length of road from the southern end of the bridge to Taren Point Road near Toorak Avenue. This length will include an overpass across the expressway to link Woodlands Avenue with Taren Point Road.

Warringah Expressway

The first section of the Warringah Expressway extends from the northern end of Sydney Harbour Bridge to Miller Street, Cammeray, a distance of $1\frac{1}{2}$ miles.

Work on the construction of this section of the expressway commenced during the year following the acceptance in May, 1964, of a tender of £255,292 1s. 0d. submitted by Thiess Bros. Pty. Ltd., for the construction of four tunnels to carry public utilities under the route of the expressway.

Electricity, telephone cables, gas and waterpipes, etc., will be accommodated in the tunnels.

Plans and specifications for the construction of the expressway formation, pavement and bridges have been completed by the Department's consultants, De Leuw, Cather and Company, and tenders for the work will be invited in November, 1964. Construction of this length of the expressway is expected to take about three years.



An aerial view on 15th July, 1964, of the area which will be used at the northern end of Sydney Harbour Bridge in constructing the first section of the Warringah Expressway. The existing approach to the bridge along the Pacific Highway is on the right of the photograph

SYDNEY-NEWCASTLE EXPRESSWAY

A tender for the construction of the first section of the Sydney-Newcastle Expressway was accepted by the Department of Main Roads in March, 1963.

The amount of the accepted tender was £2,011,996 18s. 2d. and was submitted by K. D. Morris and Sons Pty. Ltd., of Brisbane, who contracted to complete construction in April, 1965.

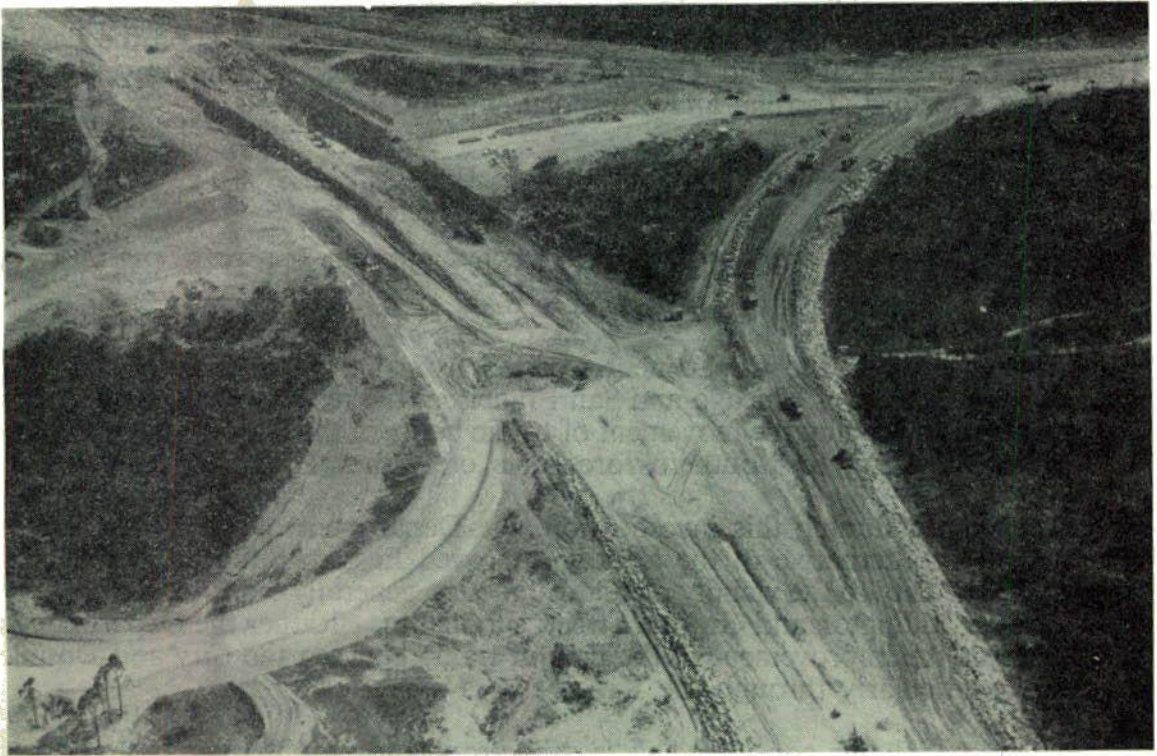
The contract price is subject to variations from time to time due to alterations in wage rates and material costs and to any changes which may be ordered during the course of the work.

The work covered by the contract extended from the northern end of the Peat's Ferry Bridge over the Hawkesbury River to a point approximately 1.5 miles south of Mount White, a distance of 4.8 miles. Of this length 0.6 miles was for a temporary connection to join the expressway route to the existing dual carriage-way near Mount White on the route of the Pacific Highway.

Resulting from a decision to proceed quickly with the construction of the expressway route through the Mount White area, the Department undertook with its own day labour forces, construction of a length of 1.6 miles with the object of completing it concurrently with the length under construction by contract. This eliminated the need for the temporary connection mentioned above.



Looking north from the Hawkesbury River along the line of the first section of the Sydney-Newcastle Expressway. (Photograph taken on 28th September, 1964)



The interchange being constructed at Mount White on the second section of the Sydney-Newcastle Expressway. This will be the first location, north of the interchange at the Hawkesbury River, at which vehicles will be able to join or leave the expressway. (Photograph taken on 28th September, 1964)

This section of 1.6 miles, estimated to cost £872,000 includes the construction of an interchange at Mount White which will be the first point north of the interchange at Mooney Mooney where vehicles will be able to join or leave the expressway route.

Plans and specifications for the next section of the expressway from the interchange at Mount White to Calga, a distance of 3.55 miles, are being prepared and this work will be proceeded with at an early date.

It is expected that the length of the Expressway between the Hawkesbury River and Calga, a distance of nearly ten miles, will be completed by December, 1966.

The next major section of the Sydney-Newcastle Expressway to be put in hand will be south of the Hawkesbury River on the length from Peat's Ferry Bridge to a point between Berowra and Mount Ku-ring-gai. This will be commenced by day labour in the first half of 1966.

North of Calga conditions for traffic have already been considerably improved by the completion of a new road route between Calga and Ourimbah via Peat's Ridge.

Portion of the new route follows an existing road from Calga to Peat's Ridge, 9.2 miles, which was reconstructed by the Department to provide a wider two-lane carriageway, easy curves and good visibility. The balance of the road from Peat's Ridge to Ourimbah, a distance of 11 miles, was constructed to expressway standards by the Department by day labour and contract.

The new route, 20 miles in length, enables through traffic to by-pass the winding section of the Pacific Highway on each side of Mooney Creek and also to avoid the closely settled areas from Gosford to Ourimbah.

The new route is not only of benefit to through traffic by saving about 20 minutes in travelling time, but also reduces the volume of traffic on the Pacific Highway between Calga and Gosford with advantage to drivers travelling to Woy Woy, Gosford, Terrigal and other places in the area.

IMPROVEMENT OF TRAFFIC MOVEMENT BETWEEN THE CITY AND DOUBLE BAY

In June, 1964, the Department received from De Leuw, Cather and Co., consulting engineers, of Chicago and San Francisco, the results of an investigation into means of improving the movement of traffic between the City and Double Bay and Rose Bay along the southern foreshores of Sydney Harbour.

In commissioning this investigation, the Department of Main Roads was not seeking an alternative to the already approved Eastern Suburbs Expressway route from the City to the vicinity of Bondi Junction generally on the line of Moore Park Road, Paddington and Grafton Street, Woollahra. Rather the Department's objective was the improvement of the flow of traffic between the City and Double Bay, and particularly through the King's Cross area.

The consultants considered six possible routes to Double Bay and reported favourably upon two, viz.:—

A road, partly in tunnel and partly over the waters of Elizabeth and Rushcutter's Bays, commencing at Cowper Street Wharf Road, Woolloomooloo and terminating in William Street, Double Bay.

Tunnelling under King's Cross to provide for four lanes of traffic.

The Department decided to adopt the scheme for tunnelling under King's Cross from the eastern end of William Street to New South Head Road near McLachlan Avenue. Associated with the construction of the twin bore tunnel facility will be the further widening of New South Head Road (Main Road No. 173) from Rushcutter's Bay to Edgecliff Post Office.

ROADS OF ACCESS TO KINGSFORD SMITH AIRPORT (SYDNEY INTERNATIONAL AIRPORT)

(i) Access Roads in the Immediate Vicinity of the Airport

The Department has undertaken to improve access at the northern boundary of the Airport, and proposes to complete this work by 1968 to coincide with the establishment of the international passenger terminal on its new site.

The Department also has in hand detailed investigations in regard to the provision of access from the south to the new passenger terminal area with the object of providing a road link from General Holmes Drive at Kyeemagh to West Botany Street, Arncliffe, with a spur road and bridge across Cook's River into the terminal area.

(ii) Route from the City to the Airport

Investigations have been commenced into the location and levels of an improved road to run from the City to the Airport. The route is along Dowling Street, then along the western side of the Australian and The Lakes Golf Courses, to Wentworth Avenue which is followed to the Airport. There will be a divided carriageway over most of the length and overpasses at some of the intersections.

LEVY ON COUNCILS IN THE COUNTY OF CUMBERLAND FOR WORKS ON MAIN ROADS

The Main Roads Act provides for Municipal and Shire Councils in the County of Cumberland to contribute to the cost of constructing and maintaining Main Roads in that area.

Until December, 1963, the provisions of the Main Roads Act required these Councils to pay to the Department a contribution as levied by the Commissioner on the unimproved capital value of rateable land in their respective areas, but not exceeding one-half penny in the pound.

In December, 1963, the terms of the Main Roads Act were varied to provide the Commissioner with an alternative power to fix a ceiling for contributions by Councils within a range of percentages, from 10 per cent to 15 per cent of Councils' rate incomes.

For the calendar years 1963 and 1964, the Commissioner decided that the percentage would be 12 per cent.

As a result of this limit, a number of Councils in the County of Cumberland are now contributing less to the Department than in recent years. The reductions in contributions by these Councils range from £800 to £43,000 for the year 1963.

ROADS IN THE INNER AREA OF THE CITY OF SYDNEY

In December, 1963, the provisions of the Main Roads Act were extended to the inner area of the City of Sydney (i.e., the "original" city).

The effect of the amendment of the Act is to:—

- Permit proclamation of existing and proposed expressways in the inner area of the City of Sydney as Main Roads.

- Allow extension of certain Main Roads in the outer area of the City of Sydney towards the centre and bring the Main Roads system to significant junction points within the City; and

- Place the Sydney City Council on the same basis as other Councils in the County of Cumberland in respect of contributions for the construction and maintenance of Main Roads.

The approval of the Executive Council will be sought in the near future to the proclamation of certain existing roads in the inner area as Main Roads.

LOAN FUNDS

An amendment of the Main Roads Act which became operative in December, 1963, confers on the Commissioner for Main Roads the power to borrow money for specified works and to provide for the repayment of such loans from the County of Cumberland Main Roads Fund and the Country Main Roads Fund.

The power conferred on the Commissioner is similar to that already vested in other Government Authorities and Instrumentalities.

Some loans have already been obtained this year from banks and other lending organisations and the funds so obtained will assist the Department to carry out some important works earlier than would otherwise be practicable.

CLEARWAYS

In the annual report for the year ended 30th June, 1963, the Department expressed concern that the best traffic value was not being obtained from the more important arterial Main Roads in the Sydney Metropolitan area.

The opinion was put forward that consideration would need to be given to ensuring that these roads are freed of all standing vehicles, not only in peak hours, but also during other hours of the day and night when traffic is heavy.

It was stated that, with a view to subsequent discussion with other Authorities concerned with the movement of traffic, the Department of Main Roads was carrying out investigations as to the desirability of declaring certain roads as "clearways" to ensure that the smooth flow of traffic over the full width of the roads is not impeded by standing vehicles.

Following an extensive investigation of traffic volumes, journey times and conditions, preparation of a schedule of Main Roads, which it is considered should be declared "clearways", is nearing completion.

Following completion, the schedule will be discussed with the Traffic Advisory Committee.

TRAFFIC ADVISORY COMMITTEE

In September, 1964, following discussions with the Minister for Highways, the Hon. P. D. Hills, M.L.A., it was announced by the Minister for Transport the Hon. J. M. A. McMahon, M.L.A., that the State Government had set up a Traffic Advisory Committee.

The Commissioner for Main Roads is a member of the new Committee. The other members of the Committee are:—

The Commissioner for Motor Transport (Chairman); Mr. D. R. Coleman.

The Commissioner of Government Transport; Mr. S. B. Berry.

The Commissioner of Police; Mr. N. T. W. Allen.

The Committee is to meet regularly and has power to co-opt or consult any other authority concerned with problems under consideration.

The functions of the Committee will be State-wide. In the first place, its activities will be chiefly directed to investigation of ways and means to ensure the best use of existing roadways.

STATE PLANNING AUTHORITY

On the 1st June, 1964, the Cumberland and Northumberland County Councils and the Town and Country Planning Advisory Committee were replaced by the State Planning Authority. The Commissioner for Main Roads was a member of the Advisory Committee.

The Authority, established by the State Government under the State Planning Authority Act, 1963, has control of town and country planning throughout New South Wales. The Commissioner for Main Roads is a member of the Authority.

The other members of the Authority are:—

Mr. N. A. W. Ashton, Chairman;

Mr. R. J. Thomson, Deputy Chairman;

Professor J. H. Shaw, Associate Professor of Town Planning, University of New South Wales;

Mr. E. C. Holt, Under-Secretary, Ministry of Transport;

Mr. C. J. Barnett, Assistant Under-Secretary, Department of Local Government;

Mr. E. L. Beers, Secretary, Metropolitan Water, Sewerage and Drainage Board;

Alderman R. S. Luke and Alderman H. G. Coates, Local Government Association of New South Wales;

Councillor J. R. Black and Councillor E. K. Vickery, Shires Association of New South Wales;

Alderman H. Jensen, Lord Mayor of Sydney.

The Chairman and Deputy Chairman are full-time members of the Authority and the other ten are part-time members.

HELICOPTER FOR MAIN ROADS PROJECTS

During the year arrangements were made by the Department for the purchase of a helicopter to facilitate certain phases of the Department's field and design activities.

The helicopter, a four-seater Bell Machine (model 47J2A) was received from the United States of America in October, 1964. It is orange in colour, as are all plant items owned by the Department, and has the identification letters of VH-DMR.



The helicopter purchased by the Department for use on Main Road projects

The machine will be used primarily for technical projects requiring observation by senior engineering officers to determine or check road requirements in the inner City and urban areas of Sydney, Newcastle and Wollongong.

It will be used also to investigate and examine routes for new roads in difficult country.

At times, the helicopter will be used for aerial photography and for short distance transport.

COMMONWEALTH AID ROADS ACT

The Premiers of the Australian States met the Prime Minister and other representatives of the Commonwealth Government in conference in March, 1964, to discuss the re-enactment of the Commonwealth Aid Roads Act as from the 1st July, 1964.

Proposals put forward by New South Wales for incorporation in the new Act were designed to:—

- (i) obtain a total amount for all States more realistically related to the expenditure required to meet the road needs of Australia as determined by the needs survey carried out by the National Association of Australian State Road Authorities;
- (ii) ensure that the proportions in which the total amount granted by the Commonwealth to the States were related as closely as possible to the needs of the individual States.

The proposal by New South Wales to amend the formula for the division of Commonwealth Aid amongst the States was not accepted by the Commonwealth Government. The old formula was retained and this means that some States will continue to receive from the Commonwealth a greater percentage of their estimated road needs than Victoria and New South Wales.

The terms of the new Act provide for a basic grant of £330m. to be paid to the States over the five years commencing on 1st July, 1964. In addition, the Commonwealth will allocate an additional £45m. in that period provided the States make matching contributions.

The total amount to be made available by the Commonwealth to the States over these five years, i.e., £375m. will be £25m. more than it is estimated would have been paid in the same five year period had the provisions of the previous Act been continued. So far as New South Wales is concerned, the share of this £25m. will be an additional £1.4m. per annum for expenditure on roads, including Main Roads, in the State. Actually, in total money terms, New South Wales will receive approximately £105m. in the five year period of the new Act which is £35.5m. more than was received in the previous five years.

It has been estimated that in the five years commenced 1st July, 1964, the Commonwealth Government will receive about £421m. as proceeds of fuel taxes. Of this amount £375m. will be allocated to the States and £28m. will be spent on roads in Commonwealth Territories and £17m. in grants to the States for special works such as "beef" roads; a total of £420m. i.e., practically the whole of the fuel taxes.

However, the amounts available under the new Act, together with funds received by the States from other sources, such as State Motor Vehicle Taxation, will be approximately two-thirds only of the amount required to meet Australia's road needs.

NEEDS OF THE MAIN ROADS SYSTEM

As indicated earlier in this Review, progress has been made in the improvement of Main Roads by the extension of dustless surfaces; by rebuilding, strengthening, widening and deviating long lengths of pavement; and by the construction of bridges to replace old bridges, to provide new crossings and to replace ferries.

These improvements have removed many "trouble" spots which have impeded the flow of traffic on Main Roads in the past, and while many favourable comments have been received from the travelling public in regard to the widespread activities of the Department throughout the State, it is nevertheless true that many more works ought to be put in hand to meet present needs and those expected to arise in the near future.

In country areas there are many miles of gravel or earth roads which need to be reconstructed and provided with a dustless surface; hundreds of bridges are required at sites not previously bridged; hundreds of existing bridges are too narrow or have badly aligned approaches; many roads require widening, re-aligning or regrading to provide safer travelling conditions and reduce transport costs; existing bitumen and concrete pavements need strengthening in order to carry the increasing volume of heavy loads, and railway level-crossings on roads carrying heavy volumes of traffic need to be eliminated.

Similarly, in order to cope with traffic congestion in the Sydney metropolitan area there are many pavements which need widening to the full width between kerbs; some roads need widening beyond their present boundaries; expressways are necessary to carry the main streams of through traffic; wider bridges are needed at some water crossings and additional bridges or viaducts are required both over land as well as water.

It may well be said that the Department is concerned both with "lifting the farmer out of the mud and getting the urban dweller out of the muddle".

Programmes of works required to meet road needs must be planned over a period of years and must be based on a factual statement of their nature, cost and related priority. In other words, expenditure and investment of resources should be related to needs.

The needs of the Main Roads System for the ten year period, 1964-1974, have already been established by actual survey.

To meet the assessed needs of traffic on the Main Roads System during the ten year period, an amount of £907m. would be required. This amount includes provision for the construction of expressways in and between the urban areas of Wollongong, Sydney and Newcastle.

The continued growth in the number of registered motor vehicles and the increase by the State Government in December, 1962, of one-third in the rate of motor vehicle taxation have provided a significant increase in the funds available to the Department. However, despite this, the funds which currently appear likely to be available from the normal sources are estimated at £530m. (including Commonwealth Aid).

Thus, the deficiency in funds over the ten year period is seen to be £377m.

Through traffic surveys and land-use and population studies, etc., the Department is fully aware of the dimensions of the road problem in this State. It has forecast what will be needed. It has comprehensive plans for road and bridge works and knows the priorities of them, but it must have the assurance of substantially increased income over a reasonably long period.

Given this, the Department could proceed boldly to construct good roads to eliminate the costly maintenance, hazard and high operating costs of bad roads.

FINANCE

RECEIPTS AND PAYMENTS

The tables hereunder provide a summary of the financial operations of the Roads Funds during the year ended 30th June, 1964. Details appear in Appendices 1 to 3 of this Report.

(A) General Purposes

Heading	County of Cumber- land Main Roads Fund	Country Main Roads Fund	Develop- mental Roads Fund	Total	Compara- tive Total for 1962-63
RECEIPTS	£	£	£	£	£
Motor vehicle taxation (State)	2,719,612	10,878,448	..	13,598,060	10,696,878
Transfer from the Road Transport and Traffic Fund under the Transport Act, 1930-63 (State) .....	..	1,126,835	..	1,126,835	461,223
Charge on heavy commercial goods vehicles under Road Maintenance (Contribution) Act, 1958 (State)	923,221	3,692,880	..	4,616,101	4,005,201
Grant under the Commonwealth Aid Roads Act, 1959	1,923,782	7,417,129	..	9,340,911	8,573,984
Grant under the Commonwealth Aid Roads Act, 1959, for expenditure on rural roads .....	..	..	699,652	699,652	701,613
Levy on councils under Section 11 of Main Roads Act, 1924-63	2,636,731	..	..	2,636,731	2,253,070
Contributions by Councils	230,035	14,827	..	244,862	114,281
Other	491,206	97,419	..	588,625	175,673
Total Receipts	£ 8,924,587	23,227,538	699,652	32,851,777	26,981,923
PAYMENTS					
Maintenance and minor improvement of roads and bridges	1,444,734	6,658,420	..	8,103,154	6,276,866
Construction and reconstruction of roads and bridges ..	5,329,927	13,574,726	706,846	19,611,499	14,404,217
Land acquisition	1,383,726	220,617	..	1,604,343	1,083,470
Administrative expenses	354,865	1,055,066	..	1,409,931	1,315,814
Purchase of land and buildings for administration and operation	152,996	313,340	..	466,336	435,494
Interest, exchange, management and flotation expenses on loans	55,760	437,373	..	493,133	282,872
Other	61,578	159,974	..	221,552	185,397
Total Payments	£ 8,783,586	22,419,516	706,846	31,909,948	23,984,130

Statement A above sets out those receipts which constituted the Department's regular sources of revenue and which were available for carrying out the normal purposes of the Main Roads Act.

Total receipts at £32,851,777 compared with £26,981,923 for 1962-63, the increase of £5,869,854 being equal to 21.7 per cent. All principal items of receipt were at a higher level in 1963-64. Individual items are commented on the next page.

State Motor Vehicle Taxation—This continued to be the principal item of the Department's revenue and receipts from this source during the year amounted to £13,598,060 compared with £10,696,878 for the previous year. The increase of £2,901,182 represented 27.1 per cent and was due principally to the receipt for a full year of the higher rate of taxation, which was increased by approximately one-third on the 1st January, 1963.

Motor vehicle registrations in New South Wales increased by 6.5 per cent over the registrations for the previous year.

Road Maintenance (Contribution) Act, 1958—The charge on heavy commercial vehicles under this Act yielded £4,616,101 compared with £4,005,201 the previous year, an increase of 15.2 per cent.

Road Transport and Traffic Fund—The revenue of this fund is derived principally from the proceeds of motor vehicle registration fees, and drivers and riders' license fees. The fund meets the administration costs of the Department of Motor Transport, the cost of Police services in the control of traffic and the cost of certain traffic facilities. The balance then remaining in the fund at 30th June each year is transferred to the Country Main Roads Fund. The amount transferred in respect of 1963-64 was £1,126,835, i.e., £665,612 more than the preceding year. This was due principally to the receipt for a full year of the higher rate of fees which was increased by 100 per cent on the 1st January, 1963.

Commonwealth Aid Roads Act—The grant available for expenditure on Main Roads amounted to £9,340,911 compared with £8,573,984 for 1962-63. The increase of £766,927 represented 8.9 per cent. Part of the grant to New South Wales for expenditure on rural roads, which are not Main Roads, was allocated to Developmental Roads in an amount of £699,652, i.e., £1,961 less than in the previous year. The State qualified for the Supplementary Grant by the Commonwealth Government in 1963-64. Part of the total Commonwealth Aid Roads Grant also appears in the Special Purposes section on page 35.

Levy on Councils under Section XI of the Main Roads Act and Contributions by Councils—Contributions by land owners through Councils, principally to the County of Cumberland Main Roads Fund, totalled £2,636,731 in 1963-64 compared with £2,253,070 in 1962-63. The increase of £383,661 (17 per cent) was mainly due to higher land values in the County of Cumberland to which the rate levy under Section XI of the Main Roads Act applies.

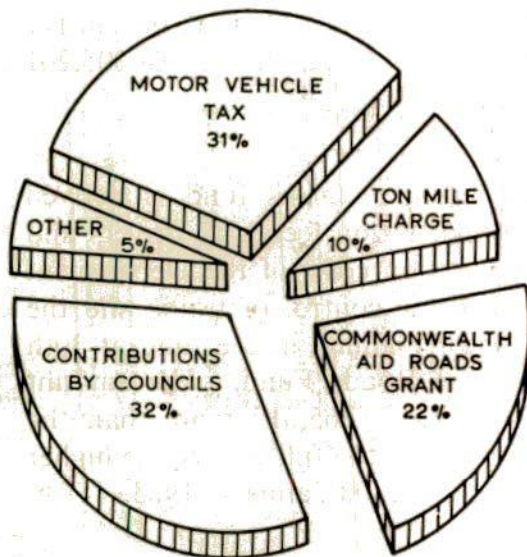
In December, 1963, legislation was passed to limit a Council's contribution to a percentage of its rate income, or a rate calculated at one-half penny in the pound on the unimproved capital value of the rateable land in the Council's area, whichever is the lesser. The percentage fixed for 1964 was 12 per cent. (See also page 27.)

Payments—Total payments from all three funds, County of Cumberland, Country and Developmental Roads Funds amounted to £31,909,948 and were £7,925,818 greater than in the previous year.

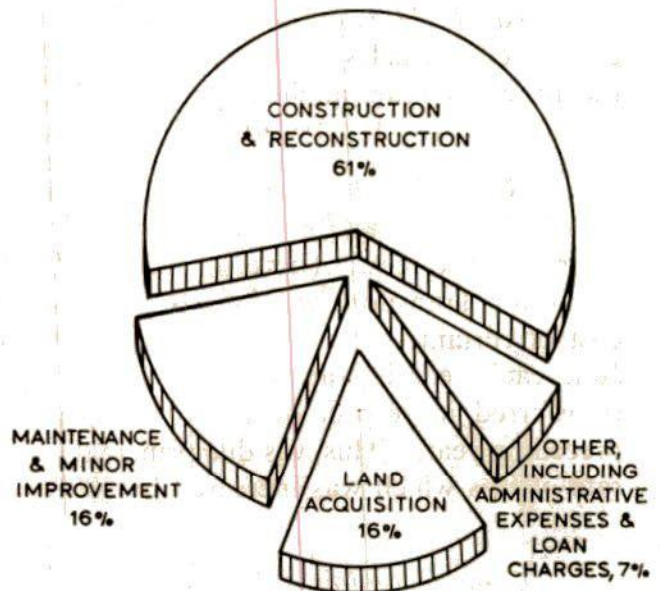
Diagrams below show the source of receipts and distribution of payments of the two Main Roads Funds for the year 1963-64. In the case of the Country area, contributions by Councils towards the cost of Main Roads works do not pass through the Department's books, and thus are not shown on the corresponding diagram.

COUNTY OF CUMBERLAND MAIN ROADS FUND 1963-64

RECEIPTS

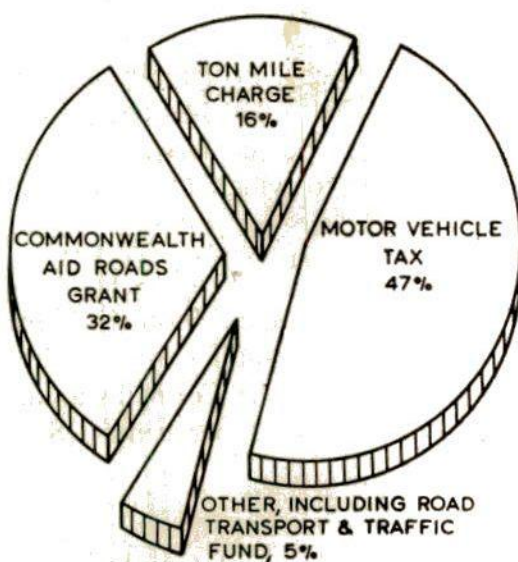


PAYMENTS

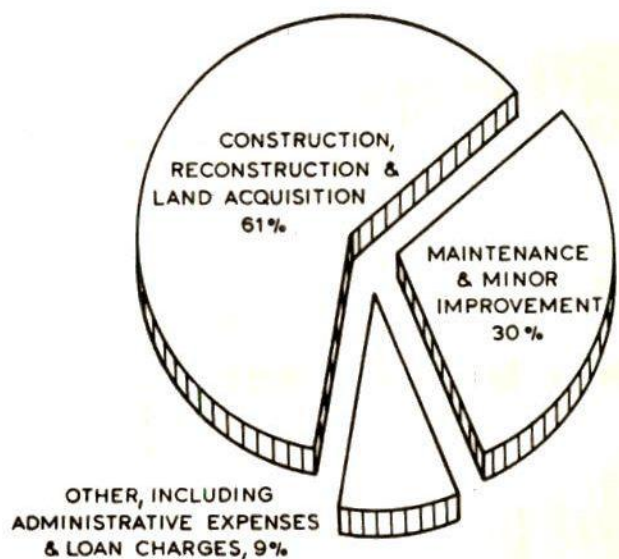


COUNTRY MAIN ROADS FUND 1963-64

RECEIPTS



PAYMENTS



Special Purposes

Statement (B) shows the moneys received during the year for special purposes. These funds came to the Department for the purpose of carrying out special works or for work which could not be normally undertaken from ordinary revenue.

(B) Special Purposes

Heading	County of Cumberland Main Roads Fund	Country Main Roads Fund	Total	Compara- tive Total for 1962-63
RECEIPTS	£	£	£	£
State Government—Loan Funds—repayable	100,000	1,000,000	1,100,000	830,000
Loan Borrowings—under Section 42A of the Main Roads Act, 1924-63	500,000	..	500,000	..
Expressways—				
State Government—contribution from Loan Funds—				
Cahill Expressway from the Conservatorium to				
Sir John Young Crescent .....	..	..	..	126,000
Sydney Harbour Bridge Account—				
Cahill Expressway from the Conservatorium to				
Sir John Young Crescent	44,000	..	44,000	207,500
Warringah Expressway—Resumptions	670,000	..	670,000	..
Warringah Expressway—Construction	825,000	..	825,000	1,873,500
Commonwealth Government—Unemployment Relief				
Grant .....	..	75,000	75,000	25,000
State and Commonwealth Governments—Grant to provide				
employment in the City of Greater Cessnock (M.R.				
No. 218) .....	..	23,600	23,600	36,400
Commonwealth Government—Captains Flat road (M.R.				
No. 270) .....	..	..	..	50,000
Commonwealth Government—Portion of Grant under				
Commonwealth Aid Roads Act, 1959, for—				
(a) Works connected with transport by water and				
for research	1,000	282,000	283,000	281,000
(b) Public Vehicles Fund	21,800	87,200	109,000	109,000
(c) Rural roads, bridges and ferries other than				
Main Roads	76,669	191,479	268,148	264,188
Other departments and bodies—Contributions .....	..	95,880	95,880	133,698
Total Receipts	£ 2,238,469	1,755,159	3,993,628	3,936,286
PAYMENTS				
Maintenance of roads, bridges and ferries—Other than				
Main Roads .....	..	1,112	1,112	53,693
Construction and reconstruction—				
Main Roads and bridges	676,669	249,058	925,727	432,595
Roads and bridges—Other than Main Roads ....	..	994,371	994,371	657,497
Expressways—				
Cahill Expressway—Construction from the Con-				
servatorium to Sir John Young Crescent	144,000	..	144,000	233,500
Warringah Expressway—Resumptions	654,197	..	654,197	1,962,526
Warringah Expressway—Construction	25,245	..	25,245	..
City Expressways—Survey, investigation, planning				
and design	111,633	..	111,633	210,496
Maintenance and construction of unclassified roads in the				
Western Division .....	..	28,491	28,491	15,456
Department of Motor Transport—For Public Vehicles Fund				
Department of Public Works—For expenditure on works				
connected with transport by water and for research ..	1,000	282,000	283,000	281,000
State Treasury—Repayment of principal and Sinking Fund				
on loans	3,420	58,576	61,996	57,088
Repayment of advance to Treasury for rural roads .....	..	49,015	49,015	..
Total Payments	£ 1,637,964	1,749,823	3,387,787	4,012,851

Cash received for the year was £3,993,628 compared with £3,936,286 received during 1962-63. The various items of receipt are commented on as follows:—

Provision by the State Government—The State Government provided £1,100,000 from loan moneys to assist the Department in financing the cost of the following works:—

	£
Sydney-Newcastle Expressway	1,000,000
Bridge over Tarban Creek	100,000

During the year further work was carried out by the Sydney City Council on the Cahill Expressway in the City of Sydney, between the Conservatorium and Sir John Young Crescent. The cost is being shared as to one-half by the Sydney Harbour Bridge Account and as to one-quarter each by the State Government and the Sydney City Council. To the 30th June, 1964, cash amounting to £3,222,500 had been received for this work—£1,074,000 from the State Government and £2,148,500 from the Sydney Harbour Bridge Reserve Account. The Sydney City Council is contributing its share directly to the cost. The final cost has not yet been determined, but to 1st May, 1964, amounted to £4,353,361.

An amount of £75,000 provided by the State Government during the year for the stimulation of employment, was applied to works on Main Road No. 270—Captain's Flat road (£40,000) and Main Road No. 181 Wollombi to Bucketty (£35,000).

Warringah Expressway—A further sum of £670,000 was transferred from the Sydney Harbour Bridge Account for the acquisition of land for the Warringah Expressway, making a total of £3,698,500 provided for this purpose at 30th June, 1964.

An amount of £825,000 was also transferred from the Sydney Harbour Bridge Account for the construction of the Warringah Expressway between the Sydney Harbour Bridge and Miller Street, Cammeray.

Grants to provide employment—An amount of £23,600 was received during the year in respect of a grant of £91,000 made available in 1961-62 for employment of Cessnock miners on Main Road No. 218 in the City of Greater Cessnock.

Grants by the Commonwealth Government—Except for special items which appear in the statement, the Department's share of the State's grant for expenditure under Section 7 (1) of the Commonwealth Aid Roads Act, 1959, is shown in the General Purposes statement. The special items referred to consist of amounts allocated—£283,000 for works connected with transport by water and research and £109,000 for the Public Vehicles Fund. Payments to the Public Vehicles Fund were made during the years 1957-58 and 1958-59 from the State's receipts under the Commonwealth Aid Roads (Special Assistance) Act 1957, but when this Act expired on 30th June, 1959, the State Government decided that the Department of Main Roads should make the annual contribution of £109,000 from Commonwealth Aid Roads Grants during the five years commencing on the 1st July, 1959. Under Section 7 (2) of the Act a sum of £268,148 was received for expenditure on unclassified roads in the unincorporated area of the Western Division and on rural roads (including bridges and ferries) which are not Main Roads.

Loan Borrowings by the Department—In December, 1963, legislation was passed giving the Commissioner for Main Roads power to obtain loan moneys from private lenders. Subsequently a loan of £500,000 was obtained and used to assist in financing the construction of the bridge over the Parramatta River at Gladesville.

Miscellaneous—The remaining money received during the year (£95,880) covered the cost of road and bridge works carried out for other Departments and Authorities, the main works being on Main Roads No. 295 and No. 568 (Spring Hill Road and Five Islands Road) to which the Department of Public Works and the Department of Railways are also contributing (in connection with the establishment of Port Kembla Inner Harbour) and a bridge over the South Arm of the Hunter River at Tourle Street, Mayfield, to which the Department of Public Works is contributing part of the cost.

SYDNEY HARBOUR BRIDGE

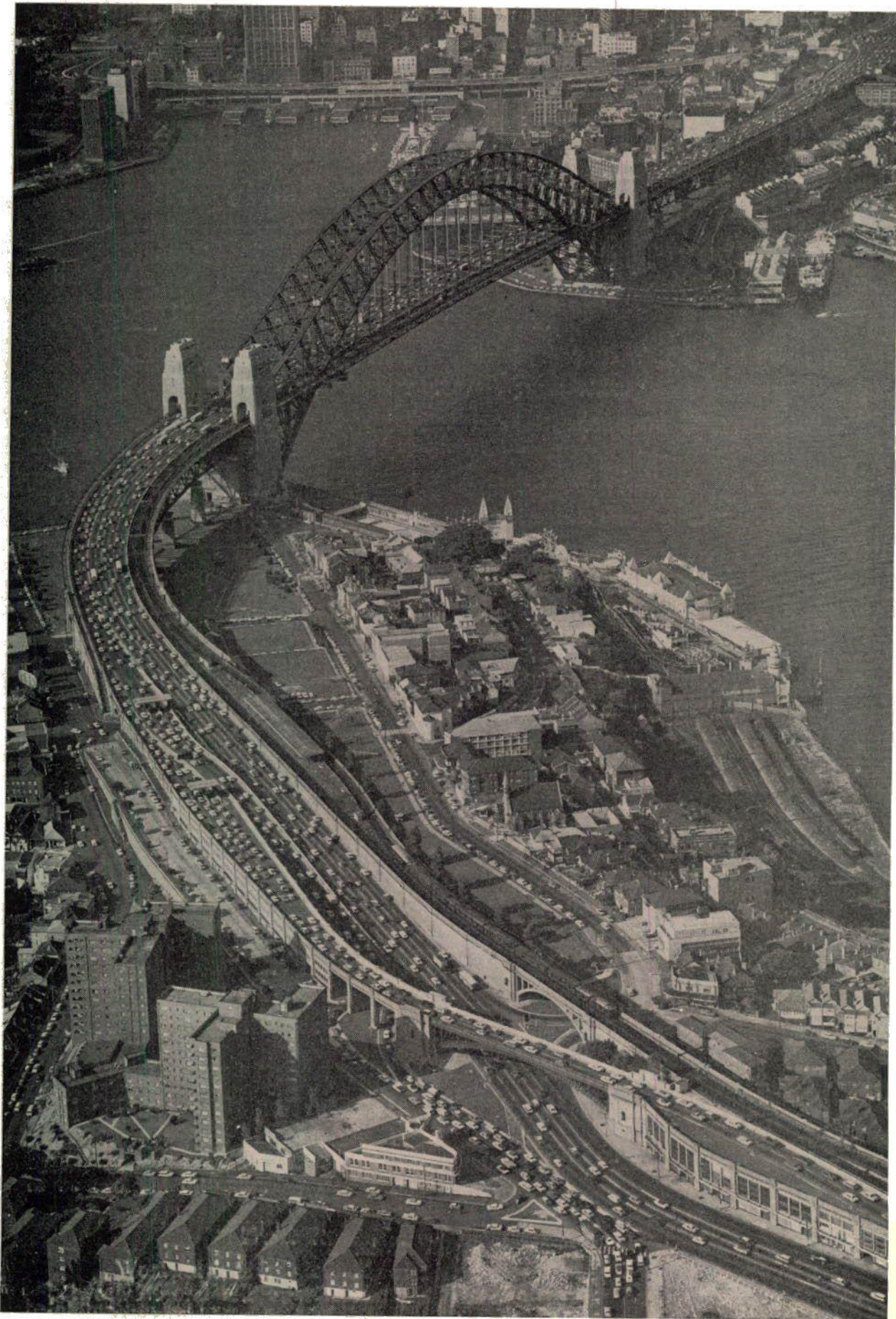
Financial Position

The complete accounts relating to the Sydney Harbour Bridge for the year 1963-64 are set out in Appendix No. 4. The result of the operations during the year is summarised as follows:—

	£
Income from 1st July, 1963, to 30th June, 1964 ..	2,006,974
Expenditure from 1st July, 1963, to 30th June, 1964	1,146,067
Excess of income over expenditure for the year 1963-64	860,907

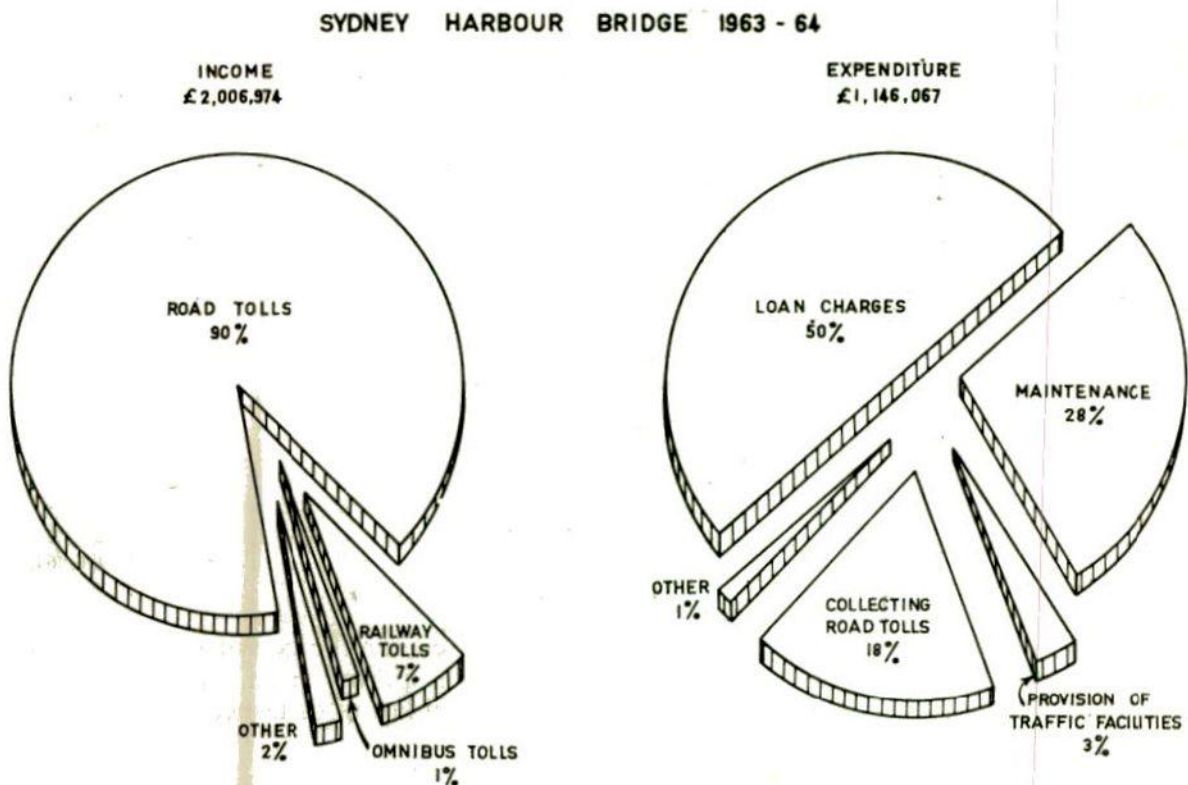
This result may be compared with the results of the previous four years from the following table:—

Item	1959-60	1960-61	1961-62	1962-63	1963-64	Total since Bridge was opened on 19th March 1932
INCOME	£	£	£	£	£	£
Road tolls on vehicles	1,079,311	1,470,760	1,575,180	1,691,787	1,803,442	18,365,877
Railway passenger tolls (nett)	146,335	141,149	143,285	139,321	140,839	3,911,485
Omnibus passenger tolls	17,911	16,125	15,804	15,369	15,301	925,352
Rents	22,125	25,504	38,463	85,108	46,787	532,810
Contributions by Councils .....	..	..	..	..	..	734,405
Other	525	905	1,971	1,009	605	13,659
Total Income	£ 1,266,207	1,654,443	1,774,703	1,932,594	2,006,974	24,483,608
EXPENDITURE						
Loan Charges—						
Interest	258,900	790,690	371,970	374,170	378,120	9,583,740
Exchange	12,620	43,650	19,030	20,080	19,300	1,003,864
Sinking Fund	112,920	164,520	133,850	140,330	146,720	2,282,728
Management expenses	690	3,080	1,250	1,190	1,120	57,395
Flotation expenses	41,340	46,110	34,590	31,220	28,810	312,147
Total loan charges	£ 426,470	1,048,050	560,690	566,990	574,070	13,239,874
Maintenance, lighting and cleaning bridge and approaches	183,719	252,900	288,133	278,528	318,387	2,967,244
Widening roadway on the western side of Bradfield Highway at the southern toll-gates .....	..	..	..	..	..	34,672
Improvement at intersection of Alfred and Kent streets with Bradfield Highway ..	..	..	..	..	..	8,900
Provision of traffic facilities	31,176	29,297	40,329	30,442	30,113	228,156
Cost of collecting road tolls	150,691	161,860	179,400	188,776	204,256	1,750,690
Provision of new toll-offices and toll-gates, including alteration of existing structures	64,291	7,292	879	1,499	1,323	184,085
Alterations to archways for occupation by tenants	1,547	14,789	4,364	839	2,172	167,465
Other	12,830	14,813	34,875	18,362	15,746	241,136
Total Expenditure	£ 870,724	1,529,001	1,108,670	1,085,436	1,146,067	18,822,222
Surplus for the year	£ 395,483	125,442	666,033	847,158	860,907	5,661,386



An aerial photograph of Sydney Harbour Bridge taken at 8.30 a.m. on Tuesday, 17th March, 1964

The proportions of the several items of income and expenditure for the year 1963-64 are shown in the following diagrams:—



Compared with the year 1962-63, the total income increased by £74,380 (3.8 per cent).

Road tolls increased by £111,655 or 6.6 per cent because a larger volume of traffic used the bridge.

Rents showed a reduction of £38,321 due to demolition of properties to allow construction of the Warringah Expressway to proceed.

Expenditure at £1,146,067 for 1963-64 compares with £1,085,436 for 1962-63, an increase of £60,631, due mainly to increases of £39,859 in the cost of maintenance, lighting and cleaning and £15,480 in the cost of collecting road tolls.

The surplus for the year, i.e., £860,907, was the highest since the bridge was opened in 1932.

Appropriations for expressway work were made during the year from the Sydney Harbour Bridge Account and Reserve Account. These consisted of £44,000 for work on the Cahill Expressway from the Conservatorium to Sir John Young Crescent; £670,000 for resumptions for the Warringah Expressway; and £825,000 (including £150,000 loan money provided by the State Government) for construction of the Warringah Expressway.

The amount of cash and securities held in the Reserve Account at the beginning of the year was £428,415. Interest received and accrued through the year from investments amounted to £21,082. The total of accumulated funds was thus £449,497. Withdrawal of the full amount was made during the year as a contribution towards the cost of the two expressways.

Capital Cost

The capital cost of the Sydney Harbour Bridge to 30th June, 1964, and the sources of finance were as follows:—

Capital Cost		Sources of Finance	
	£		£
Main and approach spans ...	7,135,804	Repayable loan funds provided by the State	10,260,751
Contribution to expenditure on Circular Quay Overhead Roadway	1,218,997	Contributions by Councils to the date the bridge was opened	1,327,466
Contribution to expenditure on Cahill Expressway ..	1,037,474	Interest accrued on the Councils' contributions to the date the bridge was opened	337,978
Contribution to expenditure on Warringah Expressway Approach	150,000	Miscellaneous	10,669
Acquisition of land and property	854,153		
Less: Transfer to Department of Railways ..	47,613		
	806,540		
Capitalised interest and exchange in respect of loan moneys spent to the date the bridge was opened	1,494,988		
Miscellaneous expenses	93,061		
	£11,936,864		£11,936,864

The loans funds amounting to £10,260,751 used for the construction of the bridge and approach roads are being repaid by the sinking fund method. The expenditure on construction and funds applied in liquidation of the capital debt to 30th June, 1964, were as follows:—

EXPENDITURE ON CONSTRUCTION		FUNDS APPLIED IN LIQUIDATION OF CAPITAL DEBT			
			To 30th June, 1963 £	To 30th June, 1964 £	Total £
General Loan Account	£ 10,260,751	Contributions by shires and municipalities together with interest accrued thereon, to the date the bridge was opened	1,665,444	..	1,665,444
Unemployment Relief Fund	10,664	Sinking Fund	2,003,309*	24,081	2,027,390
Public Works Fund	5				
	<hr/> 1,676,113				
	<hr/> £11,936,864				<hr/> £3,692,834

* Sinking Fund payments due for the years 1958-59 to 1962-63 inclusive totalling £658,220 were deferred.

Volume of Traffic

It is estimated that during 1963-64 road vehicle crossings of the Bridge totalled 36,695,000 including 596,000 crossings by omnibuses.

The approximate number of rail and omnibus passengers and the proportion of revenue provided by the users of each class of transport were as follows:—

Particulars	Number		Toll Revenue	Percentage of Total Toll Revenue
	Vehicles	Passengers		
Road vehicles (excluding omnibuses and exempt vehicles)	35,353,591	..	£ 1,803,442	Per cent. 91.90
Railway passengers .....	..	25,798,000	143,539	7.32
Omnibus passengers .....	..	13,955,000	15,301	0.78

RATES OF FINANCIAL ASSISTANCE TO COUNCILS

The rates at which financial assistance is granted by the Department to Municipal and Shire Councils for approved road and bridge works are as follows:—

County of Cumberland

The Department meets the full cost of all works of both maintenance and construction on the carriageways of proclaimed Main Roads.

On proclaimed Tourist Roads and declared Secondary Roads, the cost of maintenance and construction is normally shared equally between the Department and the Councils concerned.

Country

The Department meets the full cost of all works of both maintenance and construction on the carriageways of State Highways.

In respect of work on the carriageways of other classes of Main Roads the Department assists Councils to the following extent:—

	Trunk Roads per cent.	Main Roads per cent.	
For road construction and maintenance and bridge maintenance a grant of ..	75	66 $\frac{2}{3}$	of the approved cost
For bridge construction a grant of ..	100	75	of the approved cost

In towns the Department's responsibility in respect of Main Roads is generally limited to a carriageway width of 20 feet.

The Department normally meets the full cost of construction of proclaimed Developmental Roads and Developmental Works, Councils accepting responsibility for subsequent maintenance.

On proclaimed Tourist Roads, the cost of construction and maintenance is generally shared equally between the Department and the Council concerned.

LEGISLATION

The Main Roads and Sydney Harbour Bridge (Administration) Amendment Act, 1963, which received assent on 19th December, 1963:—

- (a) Provided the Commissioner for Main Roads with an alternative power to fix a ceiling for contributions by Municipal and Shire Councils in the County of Cumberland towards the cost of constructing and maintaining Main Roads.

Previously these Councils were required to pay the Department a contribution as levied by the Commissioner on the unimproved capital value of rateable land in their respective areas but not exceeding one half-penny in the pound.

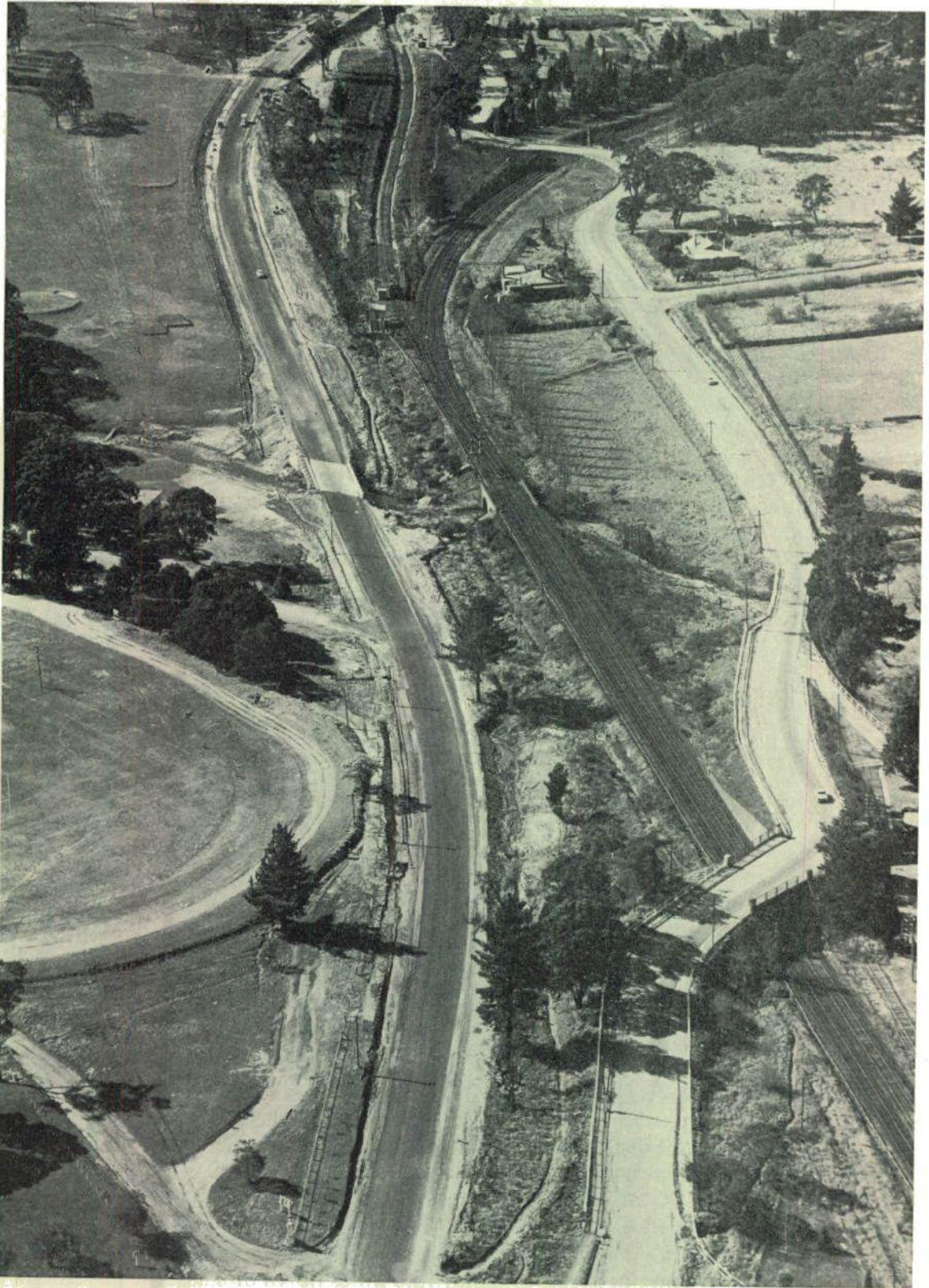
The alternative power allows the Commissioner to limit Councils' contributions within a range of percentages, from 12 to 15, of Councils' rate incomes.

- (b) Extended the provisions of the Main Roads Act to the inner area of the City of Sydney.

- (c) Conferred on the Commissioner for Main Roads the power to borrow moneys for the construction of works under the Main Roads Act and the Warringah Expressway approach to Sydney Harbour Bridge.

The Public Service and Other Statutory Bodies (Extended Leave) Amendment Act, 1963, which was assented to on 13th December, 1963:—

Entitled officers with five years' service but less than fifteen years' service to a proportionate amount of leave on the basis of three months for fifteen years' service.



This deviation (left) immediately north of Mittagong eliminated sharp curves and narrow bridges from the route of the Hume Highway

OPERATIONS

COUNTRY ROAD CONSTRUCTION

State Highways

Details of road construction expenditures in the Country during the past year are listed in Appendices Nos. 8 and 8A.

The principal construction works on Country State Highways during the year were as follows:—

North-South Arterial Road—Wollongong

The Department completed the construction of a new road to by-pass the principal shopping and business centre of Wollongong. It commences from the Prince's Highway at North Wollongong and rejoins the Highway south of Wollongong at Ghosts Creek. At the commencement of the year the section of the road from North Wollongong to Phillips Avenue was in use by traffic and during the year the section between Phillips Avenue and Ghosts Creek was completed. A road to connect this by-pass with Mt. Ousley Road was also completed. An article in regard to this work appeared in the September, 1964, number of "Main Roads". (Photograph on Page 15.)

State Highway No. 1—Prince's Highway

Between Tilba Tilba and Cobargo, selected lengths of pavement totalling 2.2 miles were strengthened and provided with a new bitumen surface.

The Department continued reconstruction of the Highway between Eden and the Victorian Border and sections totalling 14 miles were provided with a bitumen surface.

State Highway No. 2—Hume Highway

General improvement and strengthening of this highway were continued.

Climbing lanes were constructed south of the subway under the railway line at Picton and between 7.61 and 8.41 miles south of Mittagong.

Construction of a deviation between 0.26 and 1.15 miles north of Mittagong was in progress (Photograph on Page 43) and a deviation at Hanging Rock between 21.29 and 22.17 miles south of Berrima was completed.

Two deviations between 15.0 and 25.0 miles north of Goulburn, one in the vicinity of Mt. Otway, 20.0 miles north of Goulburn, and the other near Marulan, 16.0 miles north of Goulburn, were under construction. Improvements, principally pavement and formation widening, were in hand in the vicinity of Governor's Hill, two miles north of Goulburn. Through Goulburn the pavement was widened to 24 feet over a length of 4.3 miles. Wider shoulders were also provided on this length.

Near Gunning Gap, between 11.0 and 15.0 miles north of Yass, the pavement of the highway was reconstructed, widened and bitumen surfaced. Similar work was carried out on a length of 0.7 miles about 17.0 miles north of Gundagai.

The Department completed by day labour reconstruction and bitumen surfacing between 0.3 and 3.6 miles north of Tarcutta and reconstruction was in progress between 0.4 and 2.2 miles south of Tarcutta. (Photograph on Page 46.)

South of Holbrook, the Department commenced reconstruction between 7.6 and 12.9 miles.

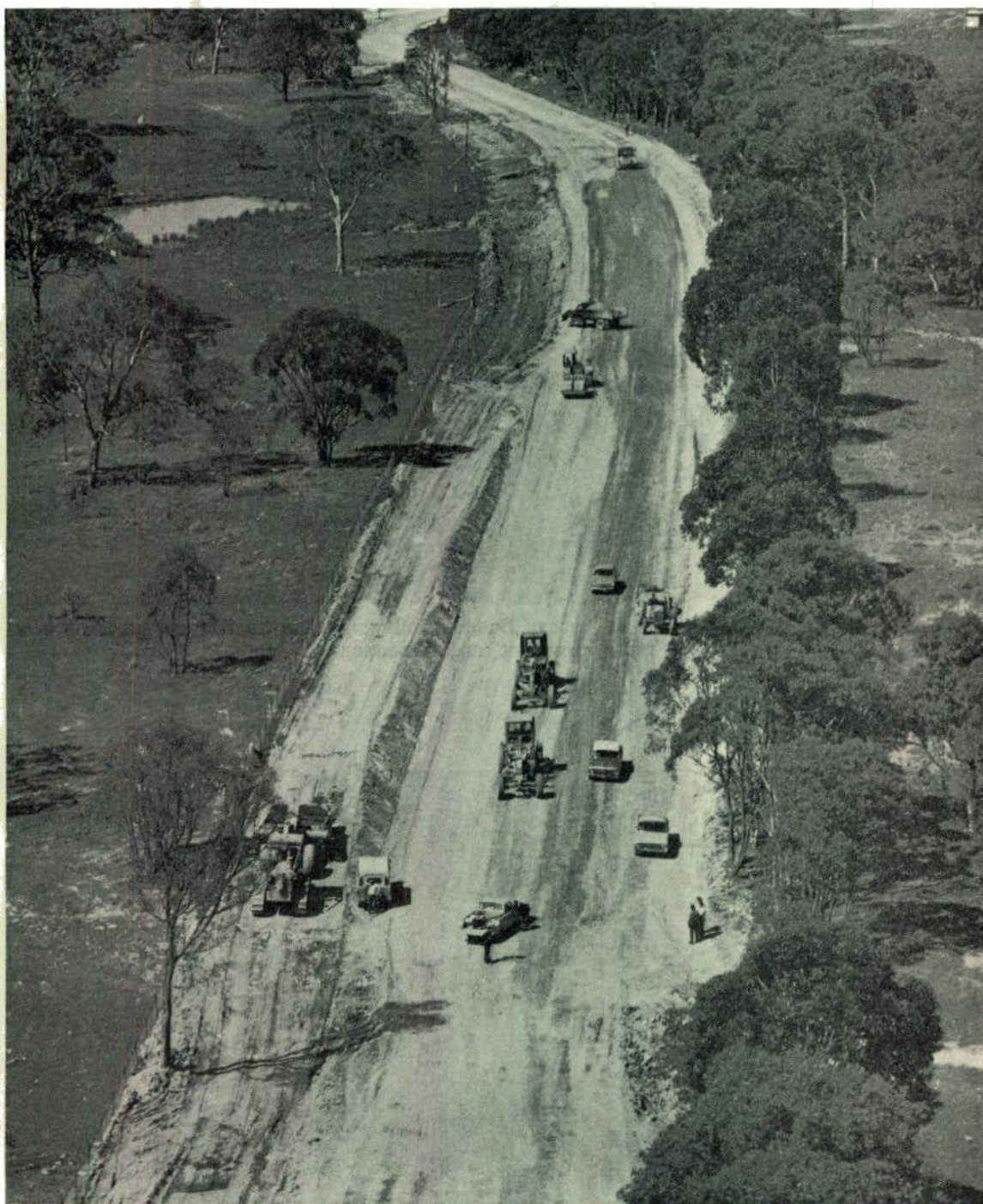
State Highway No. 3—Federal Highway

Work commenced during the year on reconstruction and pavement widening between 46.0 and 49.7 miles south of Goulburn, near the Australian Capital Territory Boundary. (Photograph below.)

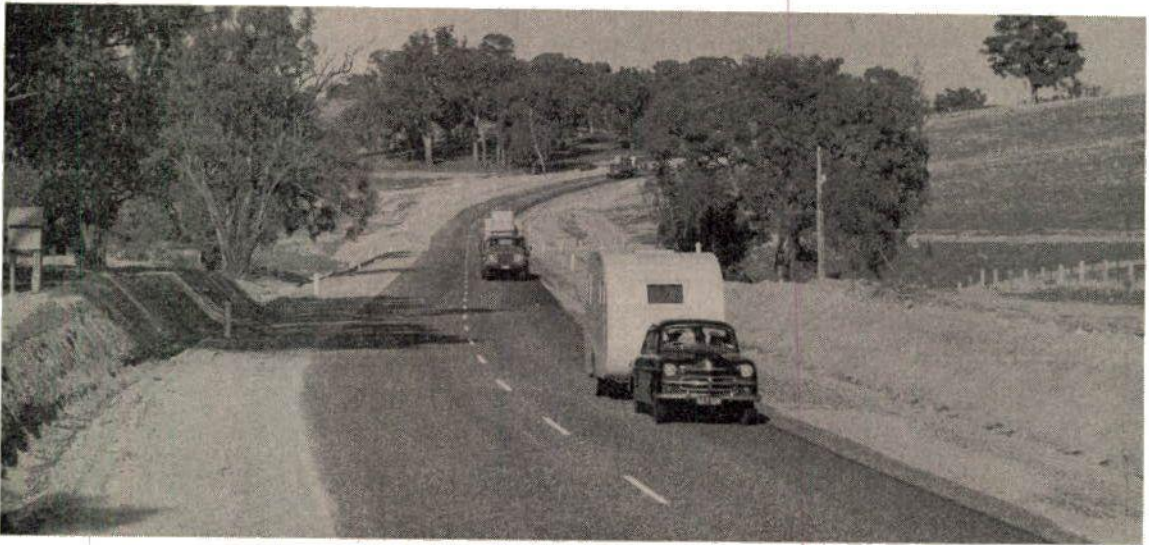
State Highway No. 4—Snowy Mountains Highway

Reconstruction and bitumen surfacing were extended from 3.5 to 4.7 miles west of the junction with the Prince's Highway near Bega. The section at the foot of the Brown Mountain between 23.3 and 25.2 miles from the junction with the Prince's Highway was reconstructed in preparation for bitumen surfacing.

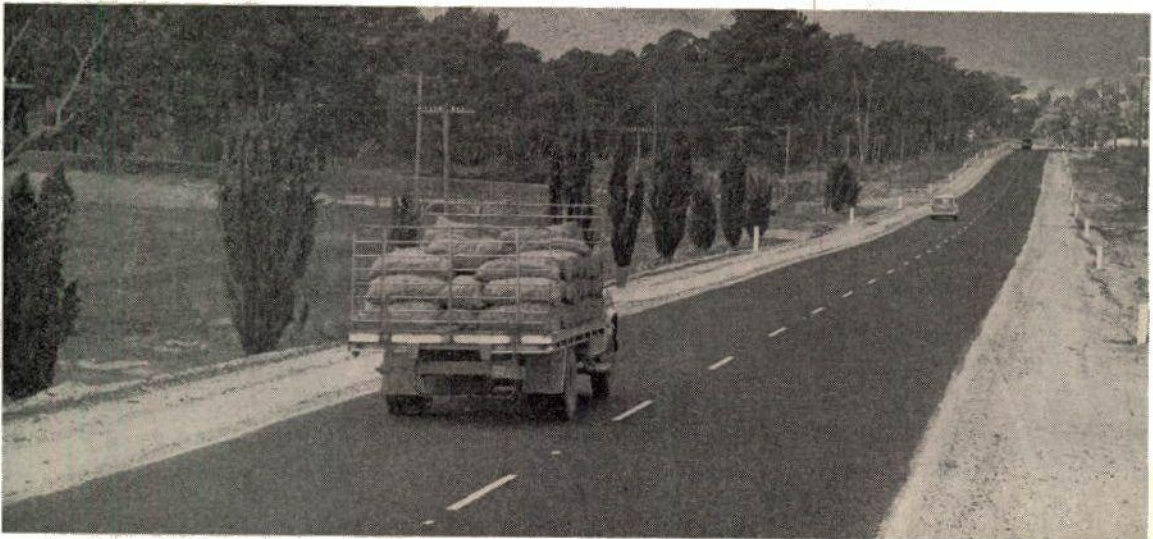
Tumut Shire Council completed reconstruction and bitumen surfacing for the Department between Inspiration Point and Talbingo, a distance of 5.1 miles.



Reconstruction and widening of the pavement in progress on the Federal Highway near the boundary of the Australian Capital Territory



Reconstructed length of the Hume Highway four miles north of Tarcutta



The Great Western Highway eight miles east of Bathurst following reconstruction and provision of a wider pavement and formation



Reconstructed and bitumen-surfaced pavement on the Mitchell Highway 46 miles south of Bourke

Tumut Shire Council also completed reconstruction and bitumen surfacing for the Department between Talbingo and Blowering, a distance of 14.0 miles.

The Water Conservation and Irrigation Commission was constructing a deviation six miles long around Blowering Mountain to replace a length of the highway which will be affected by the construction of the Blowering Dam.

State Highway No. 5—Great Western Highway

At Hartley, 15.0 miles west of Katoomba, a winding section of the highway 1.5 miles long was being reconstructed to provide a wider pavement on an improved alignment.

Between 3.0 and 8.0 miles east of Bathurst, the Department was reconstructing the Highway and providing a wider pavement and formation. (Photograph on Page 46.)

State Highway No. 6—Mid-Western Highway

Bland Shire Council completed by day labour and contract reconstruction and bitumen surfacing for the Department between 40.5 and 47.1 miles west of West Wyalong. The full length of the highway in Bland Shire now has a dustless surface.

West of Rankin's Springs, Carrathool Shire Council continued reconstruction and bitumen surfacing for the Department and work was completed to 28.0 miles.

The Department commenced reconstruction, preparatory to bitumen surfacing, from 35.6 miles east of Hay towards Goolgowi, and work was in progress over a length of 12.6 miles.

State Highway No. 7—Mitchell Highway

North of Nyngan, the Department extended the bitumen surface from 30.0 to 48.6 miles and reconstruction, preparatory to bitumen surfacing, was in progress between 48.6 and 60.0 miles.

South of Bourke, the bitumen surface was extended by the Department from 32.5 to 47.4 miles. Reconstruction between 47.4 and 63.0 miles was also in progress. (Photograph on Page 46.)

State Highway No. 8—Barrier Highway

Bogan Shire Council extended the bitumen surface for the Department from 26.0 to 32.0 miles west of Nyngan. Reconstruction, preparatory to bitumen surfacing, was also in progress between 32.0 and 38.9 miles west of Nyngan.

West of Cobar, the Department continued its programme of reconstruction and bitumen surfacing towards Broken Hill. The bitumen surface was extended from 35.0 to 45.0 miles and reconstruction, in preparation for bitumen surfacing, was in hand on a further length of 10 miles. (Photograph on Page 48.)

Reconstruction of the highway between 8.25 and 13.50 miles east of Wilcannia was commenced during the year.

The Department also continued reconstruction between 49.9 and 54.0 miles and between 73.0 and 87.6 miles east of Broken Hill.



Forty-five miles west of Cobar on the Barrier Highway following reconstruction and bitumen surfacing

State Highway No. 9—New England Highway

Construction of a deviation of the highway to eliminate the railway level crossing at Hexham was commenced during the year. The work, located between 10.6 and 11.5 miles north of Newcastle, included the construction by the Department of Railways of an overbridge immediately south of Tarro railway station.

The Department completed reconstruction between 37.0 and 39.9 miles north of Murrurundi and reconstruction of a further length of 2.0 miles was in hand.

Calga-Peat's Ridge-Ourimbah Road

Between Calga, 10.8 miles north of Peat's Ferry Bridge over the Hawkesbury River, and Ourimbah 7.4 miles north of Gosford, the Department completed construction of an alternative road to the existing route of the Pacific Highway. Portion of the alternative route follows an existing road from Calga to Peat's Ridge, 9.2 miles of which was reconstructed by the Department to provide a wider carriageway, easy curves and good visibility. The balance of the road from Peat's Ridge to Ourimbah, a distance of 11 miles, was constructed to expressway standards by the Department by day labour and contract. (Photograph below.)



The Peat's Ridge-Ourimbah section of the alternative route to the Pacific Highway between Calga and Ourimbah

State Highway No. 10—Pacific Highway

Between Marks Street and Victoria Street, Belmont, construction of a divided six-lane carriageway was in progress.

Between Newcastle and Hexham, construction of a four-lane divided carriageway was continued. A further 1.2 miles was completed during the year.

The new route of the Pacific Highway between Twelve Mile Creek and Taree was completed with the opening to traffic of the section between Karuah and Bulahdelah, a distance of 27 miles, on the 24th December, 1963.

The Pacific Highway from Newcastle to Taree originally followed the route through Booral, Stroud, Gloucester and Krambach, and traversed much hilly country for a distance of 96 miles.

Some years ago, the Department decided to relocate the route of the highway between Twelve Mile Creek and Taree through Karuah, Bulahdelah and Nahiack.

The relocation of the highway route involved the construction or reconstruction of 79 miles of road.

Construction of a deviation between 0.5 and 1.8 miles south of Macksville was commenced by the Department.



Deviation of the Pacific Highway between Wardell and the Bruxner Highway near Ballina

A deviation (6 $\frac{3}{4}$ miles long) of the Pacific Highway between Wardell and the Bruxner Highway near Ballina was opened to traffic. The deviation, together with the new bridge over the Richmond River at Wardell, eliminated the ferry crossing at Burn's Point from the route of the Highway. It also eliminated the ferry crossing at Wardell on the Wardell-Goonellabah Main Road. (Photograph above.)

The Department commenced construction of a deviation between Emigrant Creek Bridge and the turn-off to Burn's Point.

Reconstruction of a four-lane divided carriageway was in progress at Sexton's Hill 14.5 miles north of Murwillumbah. The new carriageway will replace a narrow length of 1.5 miles.

State Highway No. 11—Oxley Highway

West of Port Macquarie, the Department continued reconstruction of the highway. Bitumen surfacing was completed between 22.0 and 23.0 miles and for two miles eastward from Long Flat at 30.0 miles west of Port Macquarie.

Walcha Shire Council, on behalf of the Department, continued reconstruction of the highway between Walcha and the New England Highway at Bendemeer. Bitumen surfacing was carried out between 17.7 and 21.6 miles west of Walcha and a dustless surface now extends from Walcha to Bendemeer.

The Department completed reconstruction and bitumen surfacing between 33.9 and 36.7 miles east of Gilgandra towards Belar Creek, and Gilgandra Shire Council, on behalf of the Department completed similar work on a length of 4.38 miles east of Gilgandra towards Bidden Creek at 13.3 miles. There is now a dustless surface on the Oxley Highway between Tamworth and Gilgandra. (Photograph on Page 51.)

West of Gilgandra towards Collie, the Department completed reconstruction and bitumen surfacing of the section between 1.0 and 8.0 miles. Reconstruction of a further length between 10.0 and 15.0 miles west of Gilgandra was also in progress.

Warren Shire Council, on behalf of the Department, completed reconstruction and bitumen surfacing between 7.5 and 8.44 miles and 10.24 and 12.03 miles east of Warren.

State Highway No. 12—Gwydir Highway

Between 32.0 and 44.5 miles east of Glen Innes, the Department completed strengthening and bitumen surfacing of the highway. Strengthening, prior to bitumen surfacing, was proceeding between 30.0 and 32.0 miles and reconstruction and bitumen surfacing were also in hand between 11.45 and 14.86 miles east of Glen Innes. (Photograph on Page 51.)

Yallaroi Shire Council, on behalf of the Department, completed widening of the existing bitumen-surfaced pavement from 12 to 22 feet between 10.3 and 12.7 miles west of Warialda.

West of Moree, Boomi Shire Council on behalf of the Department completed reconstruction and extended the bitumen surface from 20.0 to 22.9 miles.

State Highway No. 14—Sturt Highway

Reconstruction and bitumen surfacing were in progress between 37.0 and 39.0 miles west of Wagga Wagga.

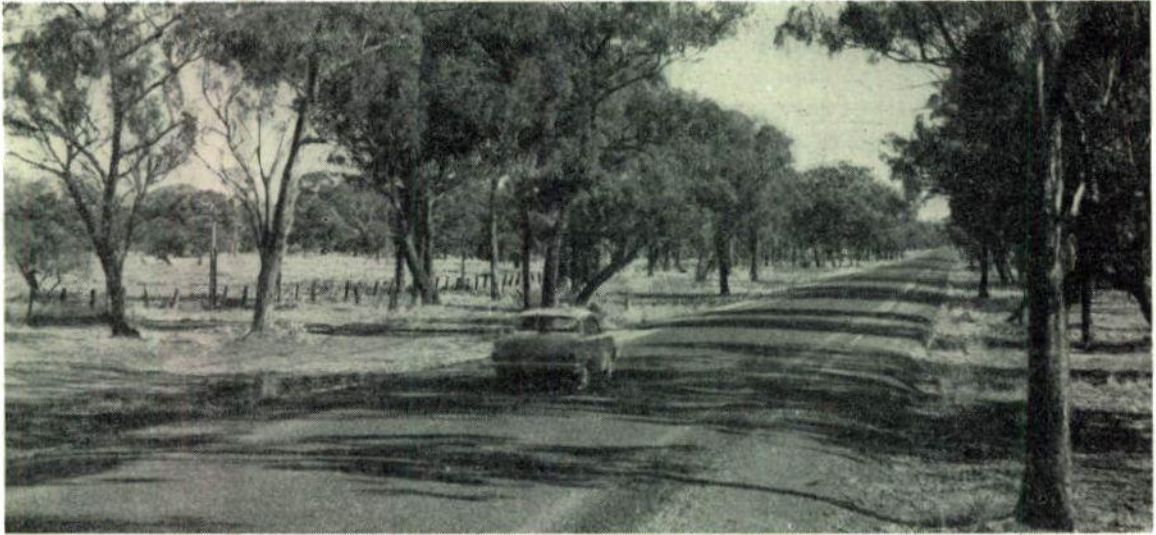
Reconstruction of the junction with the Newell Highway at Gillenbah was in progress.

Waradgery Shire Council, on behalf of the Department, completed improvements to the junction with the Cobb Highway at Hay.

The Department completed reconstruction and bitumen surfacing between 47.0 and 49.0 miles east of Euston.

State Highway No. 16—Bruxner Highway

East of Tenterfield, reconstruction and bitumen surfacing were continued by Tenterfield Shire Council for the Department and a bitumen surface now extends to 28.5 miles, an additional 2.17 miles having been completed during the year.



The Oxley Highway 6 miles west of Gilgandra following reconstruction and bitumen surfacing



Reconstructed and bitumen-surfaced pavement on the Gwydir Highway 14 miles east of Glen Innes

State Highway No. 17—Newell Highway

Construction of a deviation between 43.8 and 49.1 miles north of Jerilderie at Morundah was in progress. This deviation, together with an overbridge, will eliminate a railway level-crossing from the route of the highway.

The Department continued reconstruction north of Narrandera and during the year the bitumen surface was extended from 15.5 to 20.6 miles.

The Department commenced reconstruction between 4.9 and 12.0 miles north of Ardlethan. At the close of the year 2.3 miles had been bitumen surfaced and further work was in progress.

The Department completed by day labour reconstruction and bitumen surfacing between 3.5 and 12.6 miles north of the junction with the Mid-Western Highway at Marsden.

Jemalong Shire Council, on behalf of the Department, completed a further 7.3 miles of bitumen surfacing between Forbes and the Weddin Shire Boundary at 30.0 miles.

South of Narrabri, reconstruction and bitumen surfacing were completed on sections totalling 4.84 miles and further work was in progress on a length of 8.8 miles.

The Department completed reconstruction and bitumen surfacing between 28.75 and 31.07 miles and 31.34 and 33.93 miles north of Narrabri.

The Department continued reconstruction of the highway south of Moree. Bitumen surfacing was completed between 8.86 and 14.68 miles and further work was in progress. (Photograph below.)



Completed reconstruction and bitumen surfacing 10 miles south of Moree on the Newell Highway

State Highway No. 18—Castlereagh Highway

On behalf of the Department, Gilgandra Shire Council completed the reconstruction and bitumen surfacing between 16.19 and 23.05 miles north of Gilgandra.

The Department continued reconstruction and bitumen surfacing north of Coonamble and sections totalling 5.84 miles between 23.71 and 35.0 miles were completed.

North of Walgett, the Department extended the bitumen surface from 0.91 to 4.91 miles.

State Highway No. 19—Monaro Highway

South of Cooma, Monaro Shire Council, on behalf of the Department, carried out further reconstruction and extended the bitumen surface from 16.8 to 19.0 miles towards Nimmitabel. Council also commenced reconstruction between 19.0 and 22.7 miles at Nimmitabel.

On behalf of the Department, Bibbenluke Shire Council completed reconstruction and bitumen surfacing between 20.7 and 22.1 miles south of Nimmitabel and commenced reconstruction between 19.0 and 20.6 miles south of Nimmitabel.

State Highway No. 20—Riverina Highway

The Department continued reconstruction and bitumen surfacing from Berrigan towards Albury and during the year lengths totalling 8.1 miles were provided with a bitumen surface. With the exception of a length of two miles, a dustless surface now extends to 25.9 miles east of Berrigan.

State Highway No. 21—Cobb Highway

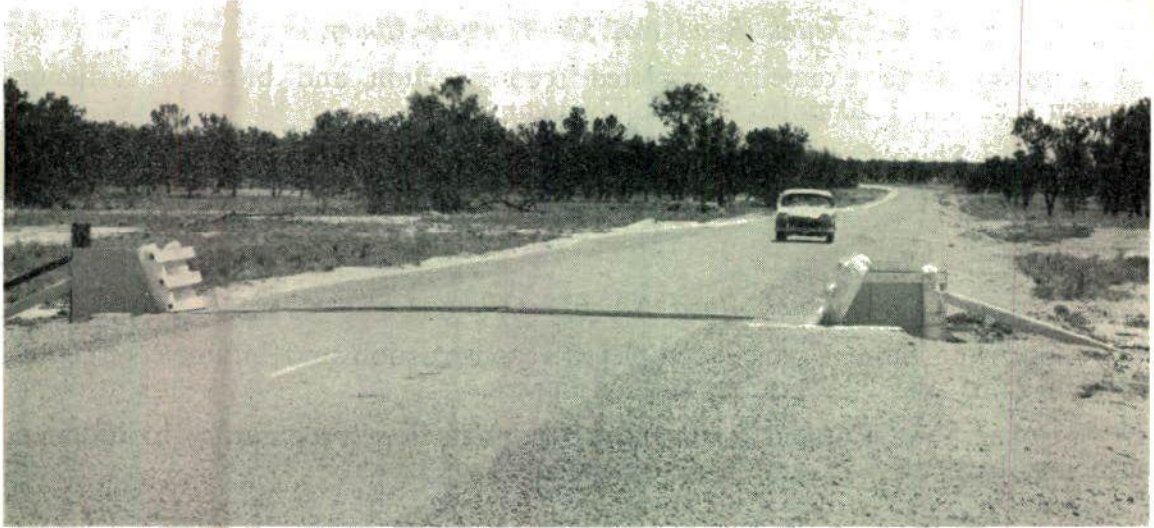
Windouran Shire Council, on behalf of the Department, extended the bitumen surface from 41.14 to 48.75 miles north of Deniliquin towards Hay.

Waradgery Shire Council, on behalf of the Department, extended the bitumen surface from 11.5 to 19.0 miles south of Hay towards Deniliquin.

The Department continued reconstruction of the highway north of Hay towards Booligal. During the year the bitumen surface was extended from 13.0 to 24.0 miles.

State Highway No. 22—Silver City Highway

The Department continued reconstruction and bitumen surfacing of the highway south of Broken Hill and during the year work on the section between 34.45 and 44.0 miles was completed. Further south, work was in progress between 93.6 and 110.0 miles. (Photograph below.)



Ninety-six miles south of Broken Hill on the Silver City Highway

State Highway No. 25

Widening and strengthening between 2.9 and 4.1 miles from the Prince's Highway were completed by the Department.

The Department commenced widening and strengthening between 1.0 and 3.49 miles west of Moss Vale.

Trunk and Ordinary Main Roads

Details of expenditure on these roads in the country are listed in Appendices Nos. 8 and 8A.

The principal works undertaken during the year were as follows:—

Trunk Road No. 52—Queanbeyan-Sutton

Yarrowlumla Shire Council completed reconstruction and bitumen surfacing between 8.5 and 10.5 miles from Queanbeyan.

Trunk Road No. 54—Goulburn-Ilford

Mulwaree Shire Council completed reconstruction and bitumen surfacing between 8.1 and 9.1 miles from Goulburn.

Trunk Road No. 55—Marrangaroo-Mullaley

Coolah Shire Council completed reconstruction and bitumen surfacing south of Coolah between 21.72 and 23.00 miles and between 25.83 and 26.38 miles. There is now a dustless surface on this Trunk Road between Marrangaroo and Coolah.

Trunk Road No. 56—Yass-Forbes

Goodradigbee Shire Council commenced reconstruction and bitumen surfacing of the length between 5.3 and 7.9 miles from Yass. Further north, Boorowa Shire Council extended reconstruction and bitumen surfacing from 4.4 to 6.6 miles north of Boorowa.

Waugoola Shire Council completed reconstruction and bitumen surfacing between 2.0 and 3.4 miles south and between 10.0 and 14.0 miles north of Cowra. Jemalong Shire Council completed similar work between 9.3 and 14.6 miles south of Forbes.

Trunk Road No. 57—Nyngan-Albury

Bogan Shire Council completed reconstruction and bitumen surfacing between 4.62 and 6.20 miles south of Nyngan.

Bland Shire Council commenced reconstruction between 9.40 and 13.35 miles north of West Wyalong.

Trunk Road No. 61—Orange-Cobar

Goobang Shire Council completed reconstruction and bitumen surfacing between 28.05 and 32.99 miles west of Parkes.

Cobar Shire Council commenced reconstruction, preparatory to bitumen surfacing, between 8.75 and 13.00 miles south of Cobar.

Trunk Road No. 63—Tamworth-Yetman

Manilla and Barraba Shire Councils continued reconstruction and bitumen surfacing during the year. Work by Manilla Shire Council was in progress between 8.76 and 9.19 miles and between 10.85 and 13.19 miles north of Manilla. Further north, Barraba Shire Council was carrying out reconstruction between 11.4 and 14.32 miles north of Barraba.

Yallaroi Shire Council completed reconstruction and bitumen surfacing between 12.0 and 19.5 miles north of Wyallda and Ashford Shire Council completed similar work between 11.3 and 13.7 miles south of Yetman.

Trunk Road No. 67—Ivanhoe-Swan Hill

Balranald Shire Council completed bitumen surfacing between 14.5 and 19.4 miles south of Balranald. North of Swan Hill, Wakool Shire Council completed similar work between 31.30 and 33.65 miles.

Trunk Road No. 68—Wentworth-Mungindi

Wentworth Shire Council completed reconstruction and bitumen surfacing between 9.5 and 11.8 miles north of Wentworth and was proceeding with similar work between 11.8 and 16.5 miles. (Photograph on page 55.)

Brewarrina Shire Council completed reconstruction and bitumen surfacing between 1.1 and 5.4 miles east of Brewarrina.



The Wentworth-Mungindi Trunk Road 11 miles north of Wentworth following reconstruction and bitumen surfacing by Wentworth Shire Council

Trunk Road No. 70—Byrock-Queensland Border near Hebel

Brewarrina Shire Council commenced reconstruction, preparatory to bitumen surfacing, between 4.1 and 6.9 miles south of Brewarrina.

Trunk Road No. 72—Willowtree-Narrabri

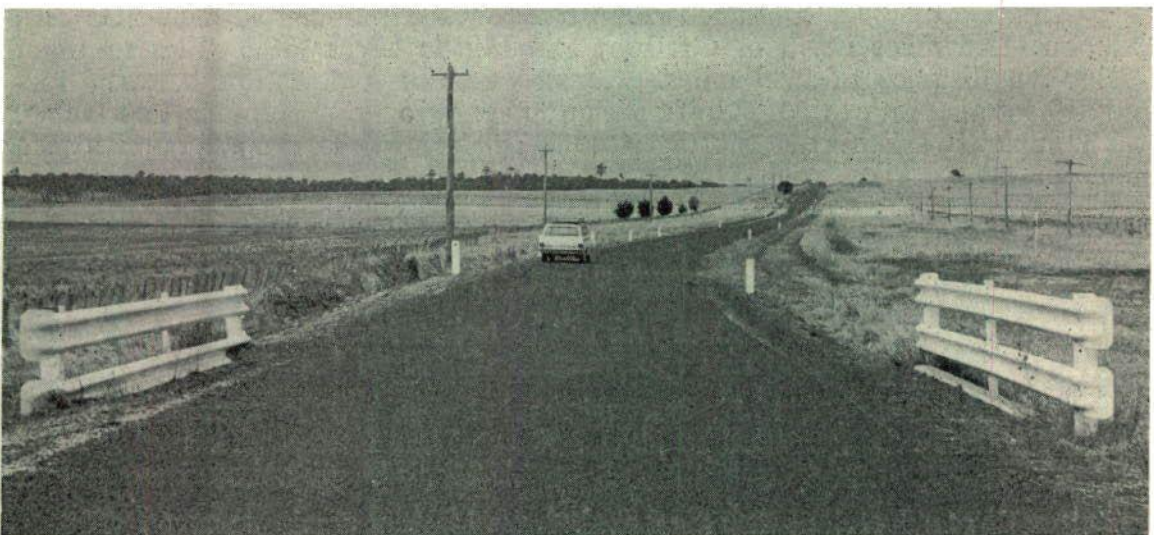
South of Gunnedah, Liverpool Plains Shire Council completed reconstruction and bitumen surfacing between 19.7 and 22.3 miles and between 23.50 and 25.38 miles. A dustless surface now extends from Gunnedah to Breeza. Further south, construction was in progress between Breeza at 27.5 miles and the southern Shire boundary at 34.5 miles.

Namoi Shire Council completed construction of a deviation between Narrabri and Turravan with the exception of the approaches to the bridges over Jack's and Sandy Creeks and the railway overbridge at Tibberina.

Trunk Road No. 73—Inverell-Walcha

Macintyre Shire Council completed reconstruction and bitumen surfacing south of Inverell between 7.25 miles and the Shire boundary at 10.2 miles.

Uralla Shire Council extended reconstruction and bitumen surfacing south of Uralla from 10.2 to 13.5 miles. (Photograph below.)



Reconstruction and bitumen surfacing carried out by Uralla Shire Council 10 miles south of Uralla on the Inverell-Walcha Trunk Road

Trunk Road No. 74—Armidale-Grafton

Dumaresq Shire Council completed reconstruction and bitumen surfacing between 30.5 and 34.3 miles east of Armidale and commenced reconstruction between 34.3 and 37.8 miles.

Nymboida Shire Council completed reconstruction and bitumen surfacing between 56.00 and 57.35 miles from Grafton and completed bitumen surfacing between 47.65 and 49.75 miles, reconstruction of which was carried out in the previous year.

Trunk Road No. 75—Wollomombi-Kempsey

Macleay Shire Council completed reconstruction and bitumen surfacing between 7.5 and 12.0 miles west of Kempsey.

Trunk Road No. 77—Gilgandra-Craboona

Coolah Shire Council completed reconstruction and bitumen surfacing between 4.8 and 6.4 miles south of Mendooran.

Construction of a deviation between 7.81 and 9.90 miles to eliminate two railway level-crossings was in progress. Council also commenced reconstruction and bitumen surfacing from Dunedoo towards Mendooran and during the year various sections totalling 5.0 miles between 1.7 and 7.8 miles north of Dunedoo were completed.

Trunk Road No. 79—Doughboy-Goulburn

Tallaganda Shire Council completed reconstruction and bitumen surfacing between 22.5 and 24.8 miles north of Braidwood. A dustless surface now extends over the full length of this road.

Trunk Road No. 80—Narrandera-Mossgiel

Reconstruction and bitumen surfacing were completed by Carrathool Shire Council between 4.5 and 7.5 miles south of Hillston.

Trunk Road No. 83—Grafton-Woodenbong

The Department continued reconstruction and bitumen surfacing between Dilkoon (15.5 miles north of Grafton) and Myrtle Creek (19.3 miles south of Casino), a distance of 29.0 miles. Construction of a deviation between 15.9 and 19.5 miles north of Grafton, in preparation for bitumen surfacing, was completed and further north, bitumen surfacing was carried out between 36.05 and 37.05 miles.

Tomki Shire Council commenced reconstruction between 48.3 and 51.1 miles north of Grafton.

Trunk Road No. 84—Bowling-Temora

West of Murrumburrah, Jindalee Shire Council completed reconstruction and bitumen surfacing between 31.5 and 34.0 miles and commenced reconstruction between 12.2 and 15.0 miles.

Reconstruction by Narraburra Shire Council was in progress between 11.6 and 14.9 miles east of Temora.

Trunk Road No. 85—Gilmore-Jingellic

Reconstruction by Tumut Shire Council was in hand between 3.1 and 6.4 miles south of Gilmore. North of Tumbarumba, Tumbarumba Shire Council continued reconstruction between 6.4 and 14.5 miles. South of Tumbarumba, Holbrook Shire Council commenced reconstruction between 25.16 and 27.80 miles.

Trunk Road No. 90—Pacific Highway-Gloucester-Taree

Reconstruction and bitumen surfacing were extended from 5.32 to 9.15 miles east of Gloucester by Gloucester Shire Council and Manning Shire Council completed similar work between 15.8 and 17.0 miles west of Purfleet.

Main Road No. 211—Wagga Wagga-Holbrook

Kyeamba Shire Council completed reconstruction and bitumen surfacing between 26.0 and 30.4 miles south of Wagga Wagga. The full length of this road now has a dustless surface.

Main Road No. 218—Wollombi-Cessnock-West Maitland

Reconstruction and bitumen surfacing were completed by Greater Cessnock City Council between 13.7 and 18.0 miles south of Cessnock and a dustless surface now extends over the full length of this road.

Main Road No. 243—Grong Grong-Gundagai

Coolamon Shire Council completed reconstruction and bitumen surfacing between 3.22 and 9.05 miles east of Coolamon. This work eliminated two railway level crossings from the route of the road. The full length of the road in Coolamon Shire now has a dustless surface.

Main Road No. 253—Hartley-Jenolan Caves-Bathurst

Reconstruction and bitumen surfacing between 11.5 and 14.75 miles from the Great Western Highway at Hartley were completed and reconstruction was in progress between 14.75 and 18.5 miles. (Photograph below.)



Reconstructed and bitumen-surfaced pavement on the Jenolan Caves Main Road, 14 miles south of the Great Western Highway

Main Road No. 261—Moss Vale-Bomaderry

Reconstruction and bitumen surfacing between 3.0 and 4.4 miles from State Highway No. 25 (Cross Roads-Albion Park Road) were completed by Wingecarribee Shire Council. The full length of this road now has a dustless surface.

Main Road No. 270—Queanbeyan-Captains Flat-Braidwood

Yarrowlumla Shire Council continued with reconstruction and bitumen surfacing between Queanbeyan and Captain's Flat. During the year a further 6.7 miles were bitumen surfaced to give a total length of dustless surface of 14.5 miles. Reconstruction was in progress over other sections totalling 8.6 miles. On the total length of 24.7 miles work had been completed or was in hand except on a length of 1.6 miles adjacent to Captain's Flat.

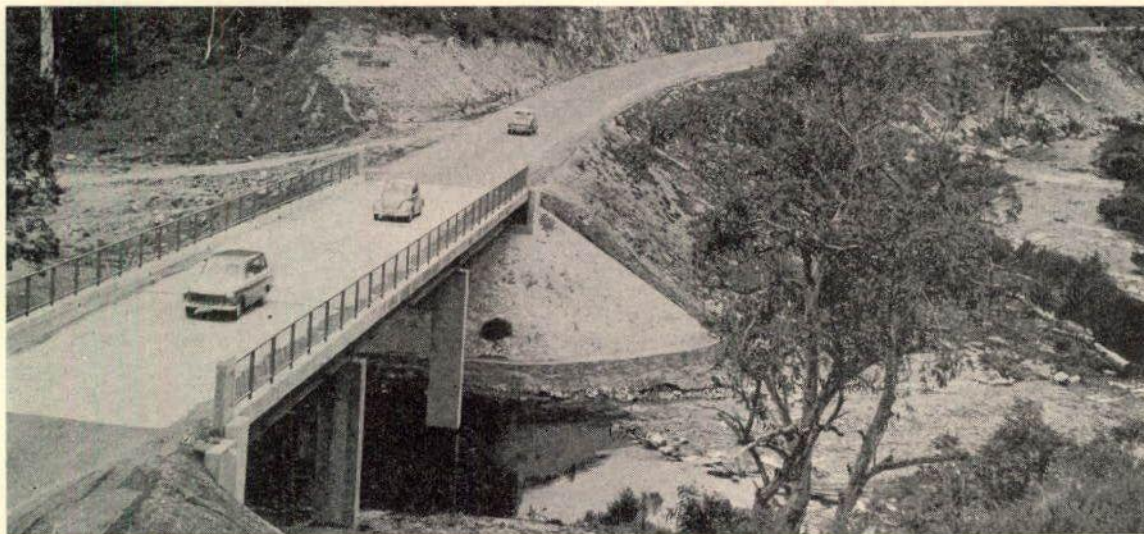
Main Road No. 284—Tumbarumba-Little Billabong

Holbrook Shire Council completed reconstruction and bitumen surfacing between 11.00 and 13.05 miles west of the Tumbarumba Shire boundary. Completion of this section provides a continuous dustless surface between Tumbarumba and the Hume Highway.

Main Road No. 286—Mount Kosciusko Road

Construction of a deviation, 7.7 miles in length, west of New Jindabyne to replace a section which will be affected by the construction of Jindabyne Dam, was completed by the Snowy Mountains Hydro-Electric Authority. Gravelling and bitumen surfacing between 0.9 and 7.7 miles were carried out by the Department. (Photograph below.)

Reconstruction by the Department was also in progress between 7.7 and 17.0 miles west of New Jindabyne and 3.8 miles of this section was bitumen surfaced.



Deviation of Mount Kosciusko Road five miles from New Jindabyne

Main Road No. 296—Pretty Pine-Yanga Tank

Windouran Shire Council completed reconstruction and bitumen surfacing between 61.5 miles and Wakool Shire boundary at 64.8 miles west of Deniliquin.

Wakool Shire Council completed reconstruction and bitumen surfacing between 0.45 and 1.82 miles east of Moulamein at Windouran Shire Boundary.



The Wilberforce-Singleton Main Road, 30 miles south of Singleton following reconstruction and bitumen surfacing

Main Road No. 321—Jerilderie-Griffith-Rankin Springs

Reconstruction and bitumen surfacing between 5.1 and 30.4 miles north of the Newell Highway were completed by Jerilderie Shire Council.

Construction and bitumen surfacing of a deviation between 12.4 and 20.4 miles south of Darlington Point were completed by Murrumbidgee Shire Council.

Wade Shire Council completed reconstruction and bitumen surfacing between 8.02 and 12.02 miles north of Griffith. Reconstruction of a further length between 12.02 and 14.25 miles was also in progress.

Reconstruction and bitumen surfacing were completed by Carrathool Shire Council between 2.6 and 5.6 miles south of the Mid-Western Highway.

There is now a dustless surface over the full length of the road between Jerilderie and Griffith.

Main Road No. 387—Temora-Yenda

Narrandera Shire Council completed reconstruction and bitumen surfacing between 20.31 and 29.36 miles west of the Coolamon Shire boundary. Reconstruction was also in progress between 4.7 and 12.4 miles.

Main Road No. 503—Wilberforce-Putty-Singleton

During the year the Department completed reconstruction and bitumen surfacing of a length of 10.9 miles. There is now a dustless surface over the full length of this road.

Developmental Roads

Details of works and expenditure on Developmental Roads and Developmental Works are listed in Appendix No. 9.

Tourist Roads

During the year nine roads were proclaimed as Tourist Roads, four in the County of Cumberland and five in the Country. The total number of proclaimed Tourist Roads in the State is now 30. Particulars of Tourist Roads proclaimed during the year are given in Appendix No. 12A. Details of work and expenditure on all Tourist Roads are listed in Appendices Nos. 7 and 8.

COUNTY OF CUMBERLAND ROAD CONSTRUCTION

State Highways, Main and Secondary Roads

Details of road construction expenditure in the County of Cumberland in the past twelve months are listed in Appendix No. 7.

The principal works undertaken in the County of Cumberland during the year were:—

State Highway No. 1—Prince's Highway

The area formerly occupied by tram tracks in City Road between Cleveland Street and Carillon Avenue was reconstructed by the Sydney City Council.

Pavement widening to provide a divided six-lane carriageway between Banksia Avenue and Bay Street Rockdale, was completed. (Photograph below.)

Pavement widening to provide a divided six-lane carriageway between Port Hacking Road and Young Street, Sylvania, was continued by the Department.

Construction of a climbing lane between 28.80 and 29.35 miles from Sydney and a deviation south of Helensburgh between 32.3 and 33.9 miles was commenced.

State Highway No. 2—Hume Highway

Pavement widening to provide a divided six-lane carriageway at Strathfield, between Mintaro Avenue and Cook's River Bridge, was completed. (Photograph on Page 61.)

Right-turn lanes were provided at the intersection with Rookwood Road, Bankstown North.

Construction of a divided six-lane carriageway between Liverpool and the Cross Roads was completed. (Photograph on Page 62.)



Widened pavement of the Prince's Highway through Rockdale shopping and business centre



Six-lane divided carriageway on the Hume Highway between The Boulevarde, Strathfield, and Cook's River, Enfield



Pavement widening on the Pacific Highway between Asquith and Mount Colah

State Highway No. 5—Great Western Highway

Reconstruction, following burning and removal of the existing bitumen pavement, was completed from Railway Street to West Street, Leichhardt.

Widening of the pavement between Raymond Street and Early Street, Parramatta, to provide a six-lane carriageway was in progress.

Pavement widening, reconstruction and the provision of a narrow median were completed between Chester Street and Bridge Road, May's Hill.

Reconstruction, pavement widening and the provision of a wide median were completed between Wyena Road, Pendle Hill, and Blacktown Road, Prospect.

State Highway No. 10—Pacific Highway

Pavement widening to provide a divided six-lane carriageway was completed between Mowbray Road and Boundary Street, Roseville and at Bent Street, Lindfield.

Widening, reconstruction and the provision of a narrow median were in progress between Heydon Avenue and Woodville Avenue, Warrawee.

Pavement widening was in progress between Asquith and Mount Colah to provide a four-lane carriageway. (Photograph above.)

State Highway No. 13—Woodville Road, Church Street and Pennant Hills Road

Widening of pavement to provide a divided six-lane carriageway was commenced between the Hume Highway and Chiltern Road.

Widening of the pavement to provide for four lanes of traffic was completed between Bellevue Street and Duffy Avenue, Thornleigh. Similar work was also in progress between Railway Street, Pennant Hills, and Bellevue Street, Thornleigh.

Main Road No. 139—Blaxland Road

Ryde Municipal Council completed channelisation at intersection with Balaclava Road and Vimiera Avenue.



Looking towards Liverpool from Cross Roads along the recently completed six-lane divided carriageway

Main Road No. 164—Miller Street, Falcon Street, Military Road, Spit Road, Manly Road, Condamine Street, Pittwater Road and Barrenjoey Road

Widening of the approaches to Manly Creek to provide a divided six-lane carriageway was completed by the Department.

Pavement widening to provide a divided six-lane carriageway was in progress between Kentwell Road, North Manly and Pittwater Road, Brookvale.

Reconstruction of the southern intersection with Old Pittwater Road by Warringah Shire Council was in progress.

Construction of acceleration and deceleration lanes adjacent to the new Mona Vale Hospital was completed.

Main Road No. 165—Victoria Road

Reconstruction was carried out between Glebe Island Bridge and Commercial Road.

Construction of the approach roads connecting Victoria Road to the northern end of the new Gladesville Bridge was in progress.

Reconstruction and pavement widening to provide six lanes for traffic between the commencement of the Victoria Road connection to the new Gladesville Bridge and Old Punt Road, Gladesville, were in progress. (Photograph below.)

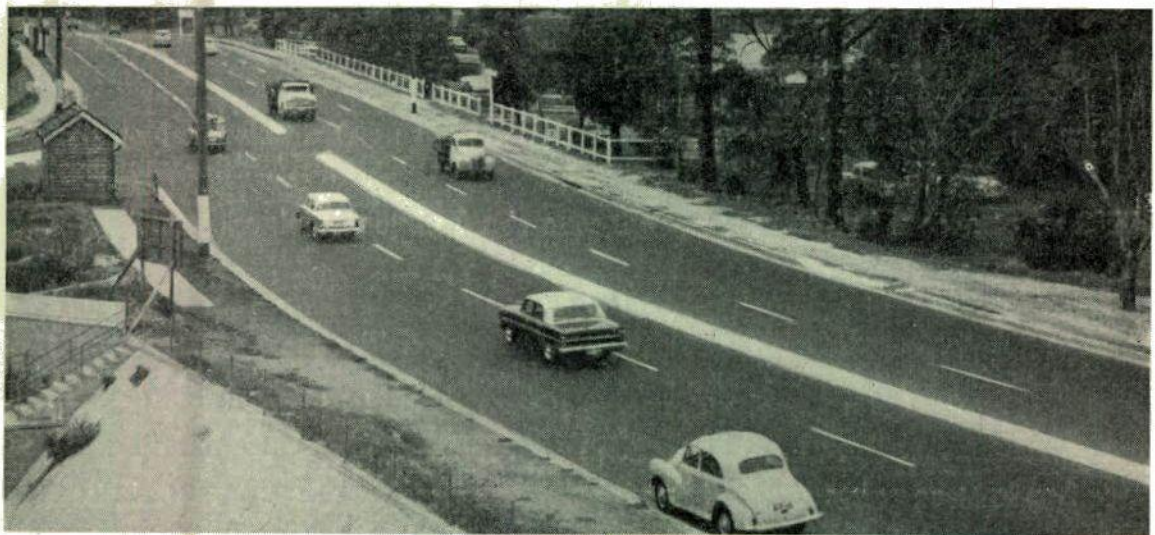
Reconstruction and pavement widening to provide a divided six-lane carriageway were in progress between Marsden Road and Spurway Street, Ermington. (Photograph on Page 64.)

Reconstruction and widening to provide a divided six-lane carriageway between Gammell Street and Clyde Street, Rydalmere, were in progress.

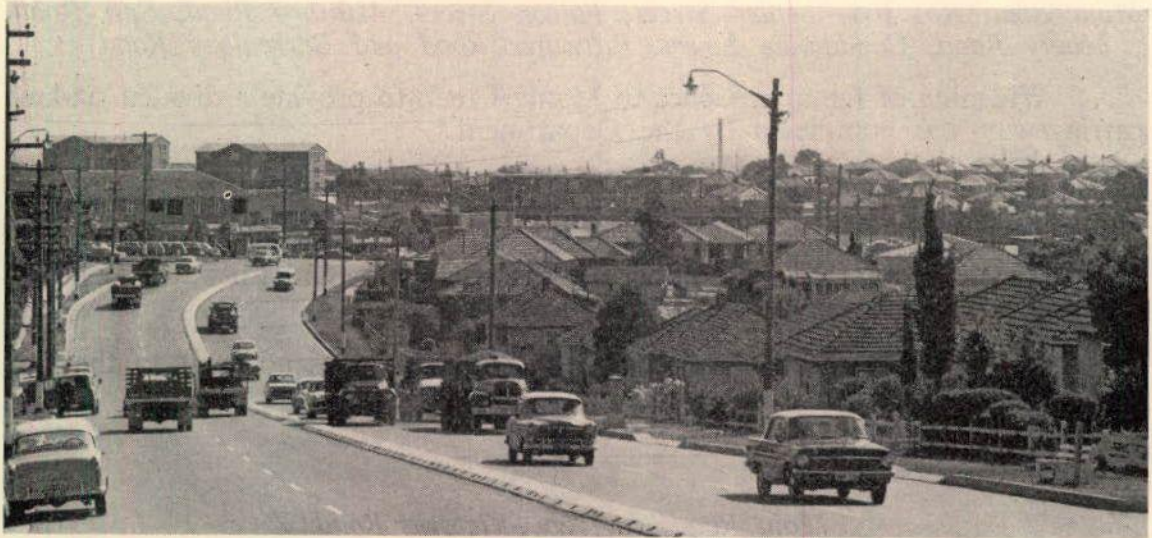
Construction of approaches to the railway overbridge at Rydalmere and to Subiaco and Vineyard Creek Bridges was in progress.

Main Road No. 166—Manning Road, Gladesville Road, Joubert Street, Burns Bay Road and Longueville Road

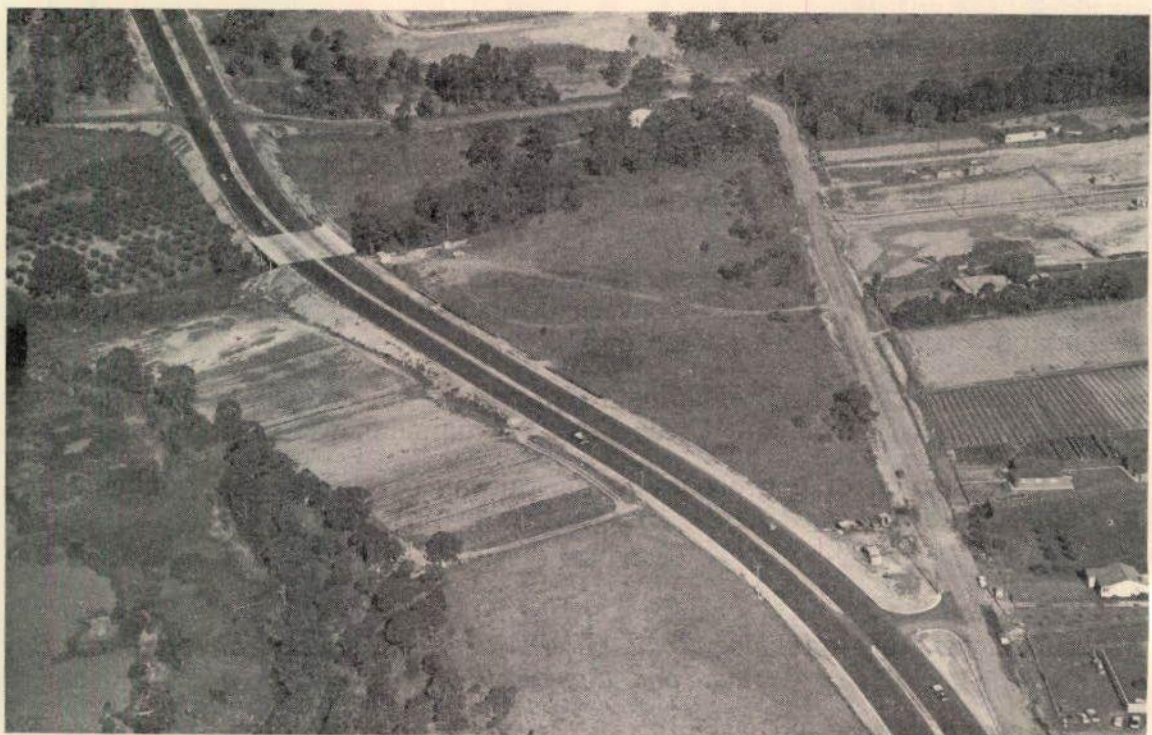
Reconstruction and widening of the northern approaches to the new Fig Tree Bridge were in progress.



Widened pavement in Victoria Road between Crown Street and Hillcrest Avenue, Gladesville



Six-lane divided carriageway in Victoria Road, Ermington



Deviation of Epsom Road, Liverpool, to eliminate right-angle turn and narrow bridge

Main Road No. 167—Enmore Road, Stanmore Road, New Canterbury Road, Canterbury Road, Milperra Road, Newbridge Road and Epsom Road

Reconstruction from Jeffrey Street to Fore Street was completed by Canterbury Municipal Council.

Bankstown Municipal Council commenced widening of the concrete pavement between Salt Pan Creek and Chapel Road, Bankstown.

Construction of a divided six-lane carriageway between Newbridge Road and Bridge Road, Liverpool, was in progress. (Photograph above.)

Main Road No. 172—Oxford Street, Bondi Road and Campbell Parade

Widening of the southern carriageway alongside Centennial Park, from Lang Road to Ocean Street, was completed.

Reconstruction of the intersection with Ocean Street and Wallis Street at Woollahra was completed.

Main Road No. 173—New South Head Road, Hopetoun Avenue, Robertson Place and Military Road

Reconstruction of broken pavement slabs and provision of asphaltic concrete surface course were carried out between Bellevue Road and Rose Bay Avenue, Double Bay.

Main Road No. 175—Little Bay Road

Widening and reconstruction of the pavement at the intersection with Woomera Road were completed.

Main Road No. 177—Hume Highway at Cross Roads via Campbelltown and Appin to Prince's Highway

Wollondilly Shire Council commenced widening of the pavement from 18 to 22 feet between 1.3 and 3.9 miles and 5.75 and 5.95 miles east of Appin.

Main Road No. 199—Rocky Point Road, Taren Point Road

Construction of a deviation to connect with the northern end of the new Taren Point Bridge was commenced by the Department.

Reconstruction and pavement widening to provide a divided six-lane carriageway in Taren Point Road between Toorak Avenue and The Kingsway (Main Road No. 227) were in progress by Sutherland Shire Council.

Main Road No. 227—Port Hacking Road, Kingsway, Cronulla Street, Waratah Street and Ewos Parade

Widening and reconstruction to provide a divided six-lane carriageway were completed by Sutherland Shire Council in Port Hacking Road between the "Sixways" and Kareena Road, Miranda.

Main Road No. 315—Concord Road, Cooper Street, Everton Road, Manson Road, Moseley Street, Strathfield Square, The Boulevarde, Coronation Parade, Punchbowl Road, King George's Road

Reconstruction of the four-lane pavement in Concord Road from Parramatta Road to Cooper Street was in progress by Concord Municipal Council.

Widening in King George's Road near Cronin Avenue to provide four lanes for traffic was completed by Kogarah Council.

Main Road No. 328—Boundary Street, Babbage Road and Warringah Road

Ku-ring-gai Municipal Council completed improvements to the intersection with Clive Street by contract.

Construction of a climbing lane between Rowe Street and Malga Avenue, Roseville, and between Allard Avenue and Roseville Bridge, was completed by the Department.

Provision of a climbing lane between Allambie Road and Courtley Road, Beacon Hill, was completed by the Department.

Main Road No. 330—Cleveland Street

Restoration of the area previously occupied by tram tracks between Regent Street and Dowling Street was completed by the Sydney City Council.

Main Road No. 339—Old South Head Road

Reconstruction to provide four lanes for traffic between Cambridge Avenue, Vaucluse and Salisbury Street, Watson's Bay, was completed by Woollahra Municipal Council.

Main Road No. 344—Wentworth Avenue

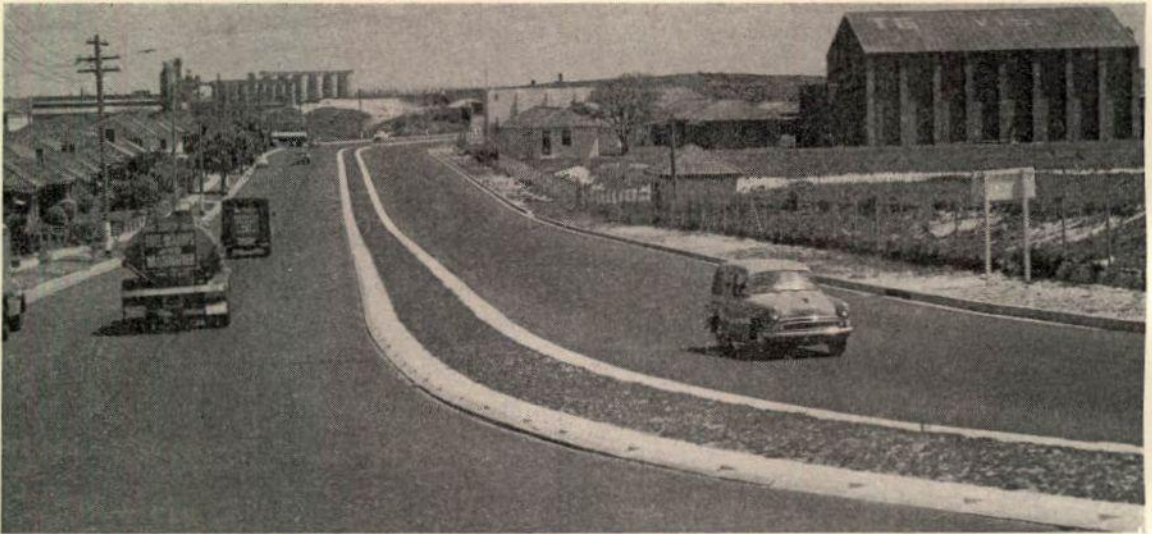
Pavement widening to provide a divided six-lane carriageway from Smith Street to Bunnerong Road, East Botany was completed. (Photograph below.)

Main Road No. 397—Sydney Road, French's Forest Road and Wakehurst Parkway

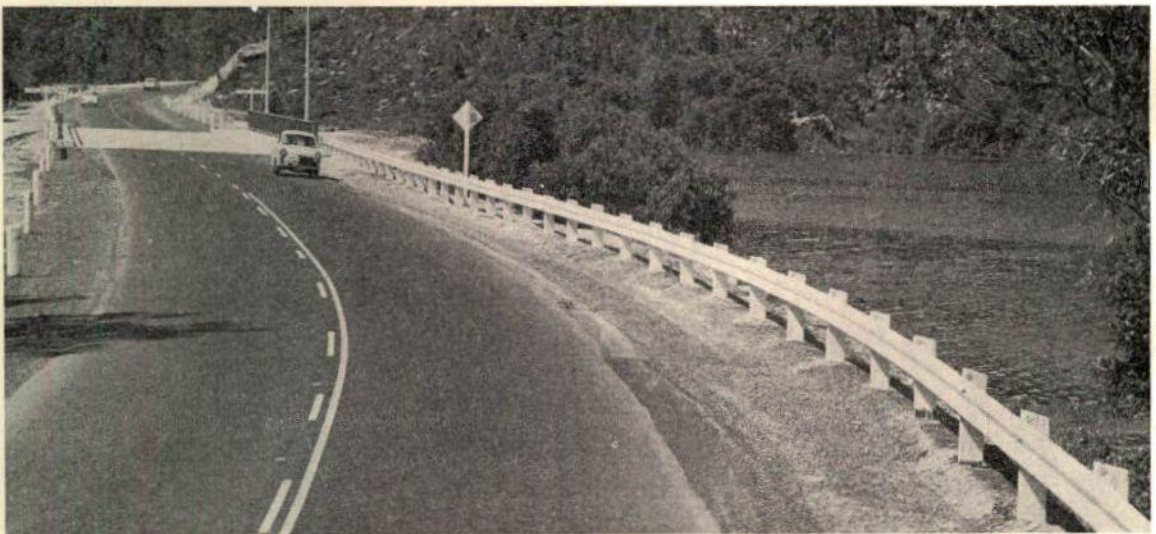
A climbing lane was constructed at Oxford Falls.

Main Road No. 508—Henry Lawson Drive

Bankstown Municipal Council continued construction between River Road and the bridge under construction over Salt Pan Creek. (Photographs on page 18 and below.)



Widened pavement in Wentworth Avenue between Bunnerong Road and Smith Street, East Botany



Henry Lawson Drive at Little Salt Pan Creek



Deviated section of New Line Road (Secondary Road No. 2035), West Pennant Hills

Main Road No. 530—Oliver Road, Bennett Street, Adams Street, Griffen Road, The Strand and Howard Avenue

Warringah Shire Council completed construction of a deviation between Pittwater Road and Cavill Street.

Main Road No. 570—Hawkesbury Road

Reconstruction and bitumen surfacing from Shaw's Creek to Mahon's Creek (2.0 to 4.6 miles from Castlereagh Road) were completed by the Department by day labour.

Main Road No. 574—Kissing Point Road and Stewart Street

An additional carriageway was constructed by the Parramatta City Council between Summers Street and Stewart Street.

Secondary Road No. 2007—Railway Road, Buckley Street, Sydenham Road, Park Road, Shaw Street, Crystal Street

Marrickville Municipal Council completed reconstruction of Buckley Street.

Secondary Road No. 2018—Old Canterbury Road

Reconstruction from Parramatta Road to Railway Terrace was completed by Marrickville Municipal Council.

Secondary Road No. 2035—Boundary Road and New Line Road

A deviation 0.8 of a mile long was completed by Hornsby Shire Council at Greek's Creek. (Photograph on this page.)

Secondary Road No. 2041—Stoney Creek Road

Rockdale Municipal Council completed reconstruction between Forest Road and Kingsgrove Road.

Secondary Road No. 2043—Arterial Road

Ku-ring-gai Municipal Council constructed a deviation over Cowan Creek to connect Killeaton Street with Spurwood Road.

Secondary Road No. 2057—Arthur Street

Auburn Municipal Council carried out reconstruction between Church Street and the boundary with Strathfield Municipality.

Secondary Road No. 2068—The River Road

Bankstown Municipal Council completed reconstruction and bitumen surfacing between Sandakan Road and Henry Lawson Drive.

Secondary Road No. 2070—River Road

Lane Cove Municipal Council commenced reconstruction of narrow and badly aligned lengths of pavement within the Municipality.

BRIDGE CONSTRUCTION

During the year, 61 new bridges and 57 "bridge size" concrete box culverts, i.e., with a waterway width of 20 feet or more, were made available to traffic.

The 118 structures are situated generally on Main and Developmental Roads, but a few are on unclassified roads at locations where the Department was responsible for the bridging.

At the end of the year, 79 bridges and 18 bridge-size concrete box culverts were under construction on Main and Developmental Roads.

The classifications of the roads on which the structures were built are tabled below:—

Expressways	State Highways	Trunk Roads	Ordinary Main Roads	Developmental and Unclassified Roads	Total
Bridges—1	12	8	25	15	61
Bridge size culverts	33	3	20	1	57
Totals: 1	45	11	45	16	118

Of the completed bridges, 22 were built by the Department (6 by day labour and 16 by contract) and 34 by Councils (3 by day labour and 31 by contract).

In addition to these 56 bridges, five other bridges were constructed on Main Roads by other Authorities; two by the Snowy Mountains Hydro-Electric Authority and three by the Department of Railways. In each case, the Department of Main Roads contributed towards the cost of the bridge.

The Department constructed 32 of the concrete culverts (6 by day labour and 26 by contract) and Councils constructed 25 (14 by day labour and 11 by contract).

An old tramway bridge over Cook's River at Undercliffe was reconstructed, lengthened and converted for road use and the road bridge alongside was also being widened. When completed, these two bridges will provide four lanes for traffic with a median and two footpaths.

The bridge over Cook's River at Kyeemagh was widened to provide for six lanes of traffic instead of four. Widening of bridges over Subiaco Creek on Victoria Road (Main Road No. 165), Charcoal Creek on the Prince's Highway (State Highway No. 1) and Myall Creek on the Grafton-Casino Trunk Road (Trunk Road No. 83) was also completed. Widening of eight bridges was in progress at the end of the year.

Principal Bridge Works Completed During the Year

Bluff River—State Highway No. 9—New England Highway

A five-span reinforced concrete bridge, 260 feet long and 28 feet between kerbs, was constructed by the Department over Bluff River, 10.8 miles south of Tenterfield. The approaches involved construction of a deviation 1.2 miles long and provision of a climbing lane on the ascent from each side of the river. The bridge replaced an old timber bridge on poor alignment. (Photograph below.)



Reinforced concrete bridge over Bluff River, 11 miles south of Tenterfield, on the New England Highway

Wyang Creek—State Highway No. 10—Pacific Highway

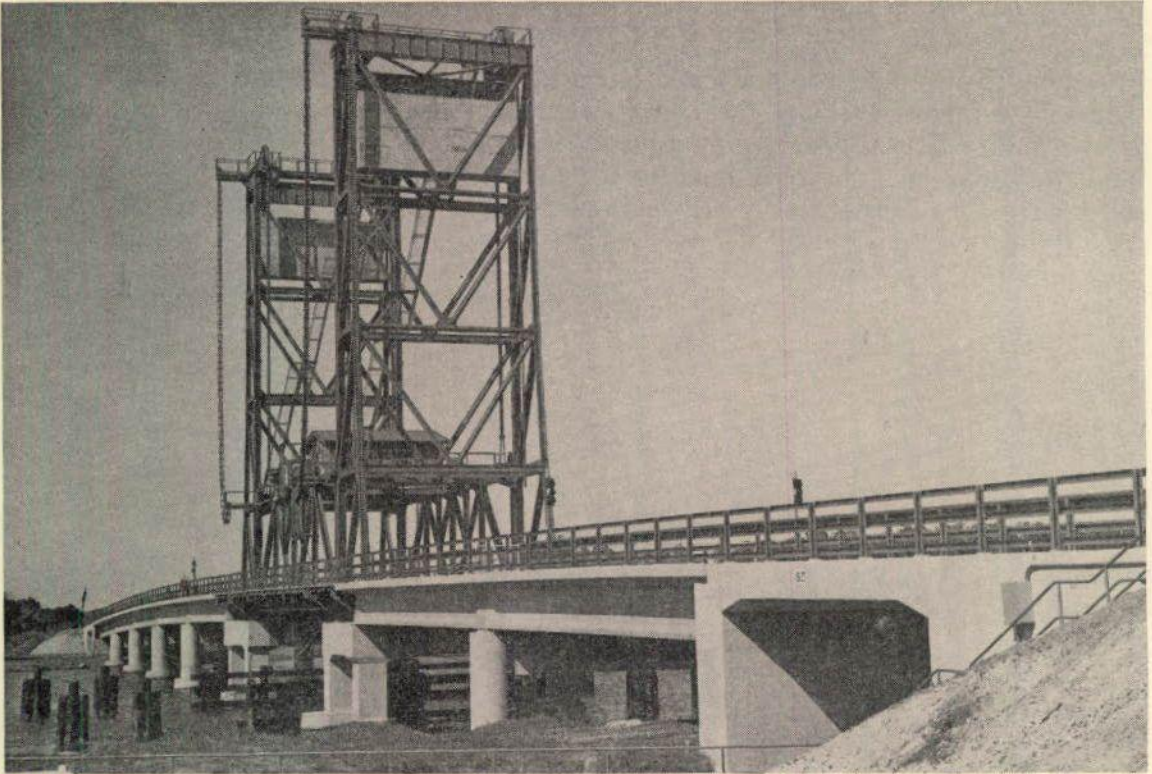
The Department converted to road use, by day labour, a disused railway bridge over Wyong Creek. The converted structure has five spans, is 314 feet long and carries two lanes of traffic. It replaces an old single lane timber bridge 268 feet long. (Photograph below.)

Richmond River—State Highway No. 10—Pacific Highway

This bridge, built by contract to the Department is an eight-span prestressed concrete and steel bridge 736 feet long including a lift span. The bridge forms part of a major deviation of the highway which eliminated the Burn's Point Ferry from the route of the highway as well as the Wardell Ferry crossing on the Wardell-Goonellabah Main Road. (Photograph on Page 70.)



Dissused railway bridge converted for road traffic on the Pacific Highway at Wyong



Steel and concrete bridge over the Richmond River at Wardell on the new route of the Pacific Highway between Wardell and the Bruxner Highway near Ballina



Concrete and steel bridge over Duck Creek near Ballina on the new route of the Pacific Highway between Wardell and the Bruxner Highway

Duck Creek near Burn's Point—State Highway No. 10—Pacific Highway

A six-span steel and reinforced concrete bridge, 363 feet long, was constructed by the Department by day labour and forms part of a major deviation of the Highway between Wardell and Burn's Point. (Photograph above.)

Richmond River, Ballina Street, Lismore—State Highway No. 16—Bruxner Highway

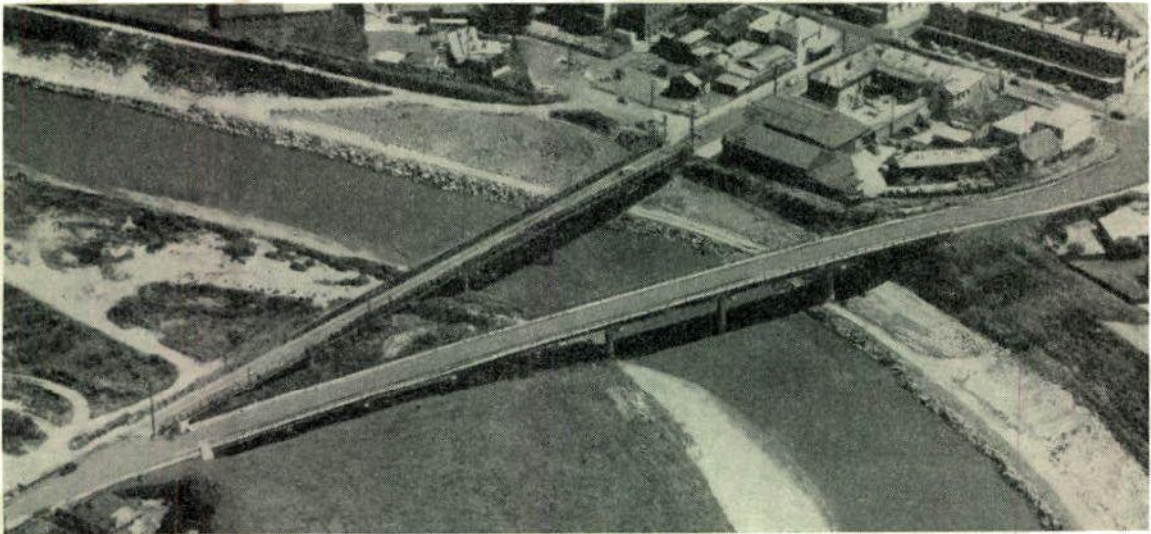
This bridge, which was built by contract to the Department, is an eight-span steel truss and steel girder bridge 688 feet long. It is situated on the new route of the Bruxner Highway through the City of Lismore.

Sportsman's Creek—Trunk Road No. 83

Built by contract to the Department, this bridge is a 14-span steel girder and prestressed concrete bridge 552 feet long and forms part of a deviation of the Grafton-Casino Trunk Road between 15.5 and 19 miles north of Grafton. The deviation eliminates a railway level-crossing and underpass and a low-level timber bridge over Sportsman's Creek.

Hunter River—Main Road No. 101

An eight-span, two-lane, steel girder and concrete bridge, 643 feet long, was completed at Maitland. The new structure, which was built by the Department by contract, replaced an old lattice girder bridge 600 feet long, known as Belmore Bridge. (Photograph below.)



New steel and concrete bridge, Belmore Bridge, over the Hunter River at Maitland

Lane Cove River connecting Hunter's Hill and Lane Cove—Main Road No. 166

A steel girder and concrete bridge of seven spans with a total length of 749 feet over the Lane Cove River was completed by the Department by contract. The new four-lane Fig Tree Bridge replaced an old narrow two-lane steel girder bridge 380 feet long.

Cook's River at Kyeemagh—Main Road No. 194

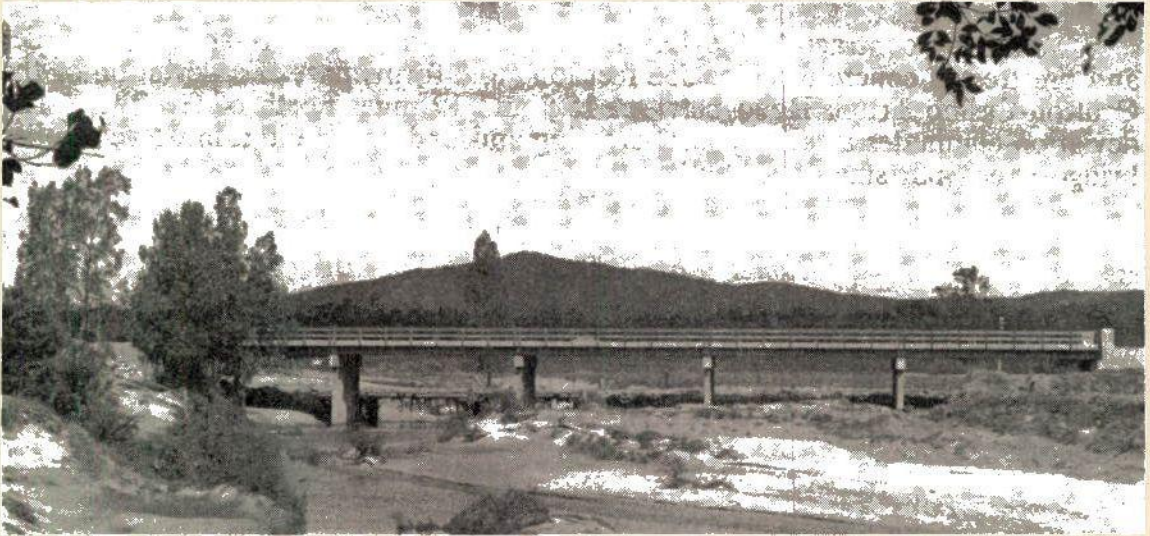
Widening of the Endeavour Bridge to provide six lanes for traffic, an increase of two lanes, was completed by the Department by day labour. The bridge has eight spans totalling 504 feet in length.

Wallis and Surveyor's Creek—Main Road No. 223

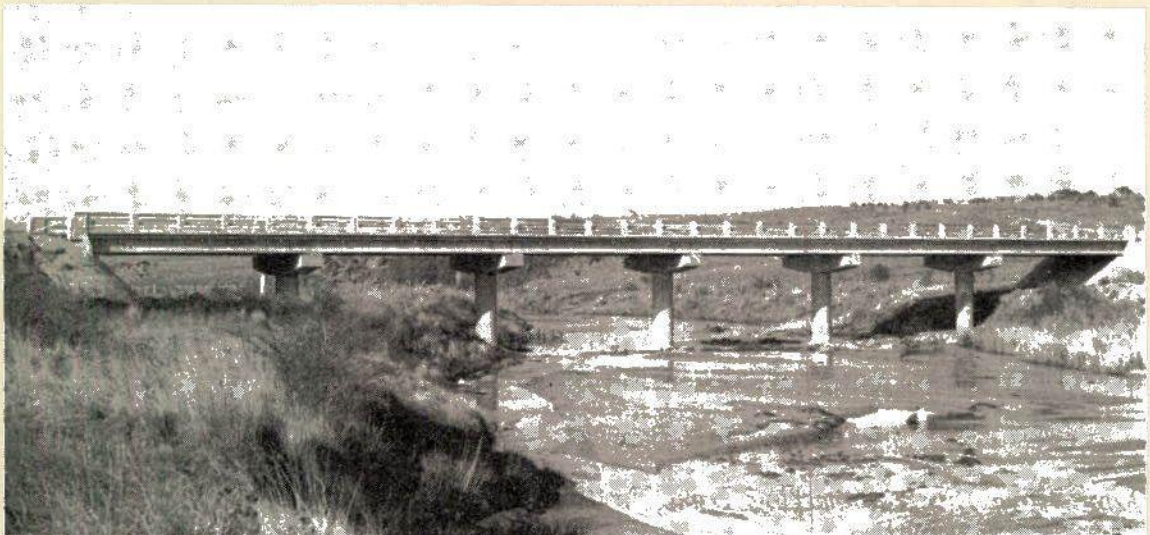
Greater Cessnock City Council completed construction by contract of a two-lane five span steel and concrete bridge, 226 feet long, over Wallis Creek and a two-lane single span steel and concrete bridge 40 feet long, over adjacent Surveyor's Creek. The bridges replaced old timber structures. (Photograph on Page 72.)

Lachlan River—Main Road No. 249

A six-span prestressed concrete bridge, 300 feet long, built under contract with Gunning Shire Council, was completed during the year. The new bridge, known as Inglewood Bridge, is four miles north of Gunning and replaced a timber beam bridge destroyed by floodwaters. (Photograph on Page 72.)



Five-span steel and concrete bridge over Wallis Creek three miles east of Kurri Kurri



Concrete bridge, Inglewood Bridge, over the Lachlan River, four miles north of Gunning on the Gunning-Crookwell Main Road

Eden Creek at Ettrick—Developmental Road No. 1141

This bridge, constructed by contract with Kyogle Shire Council is a four-span steel and concrete structure 281 feet long. It replaced a low-level timber beam bridge.

Gwydir River—Developmental Work No. 3156

A reinforced concrete low-level bridge was constructed over the Gwydir River by Bingara Shire Council. The bridge is 240 feet long and replaced an old concrete causeway.

Towamba River at Towamba—Unclassified Road

An old low-level structure over the Towamba River at Towamba, on the Towamba-Pericoe Road, was replaced by a bridge 326 feet long with steel piers and laminated timber deck. The new bridge was built by the Department by day labour.

Darling River at Tilpa—Unclassified Road

A seven-span steel girder Callender-Hamilton truss and reinforced concrete bridge, 407 feet long, was constructed by the Department by contract to replace a ferry crossing. (Photograph above.)

Warrego River at Enngonia—Unclassified Road

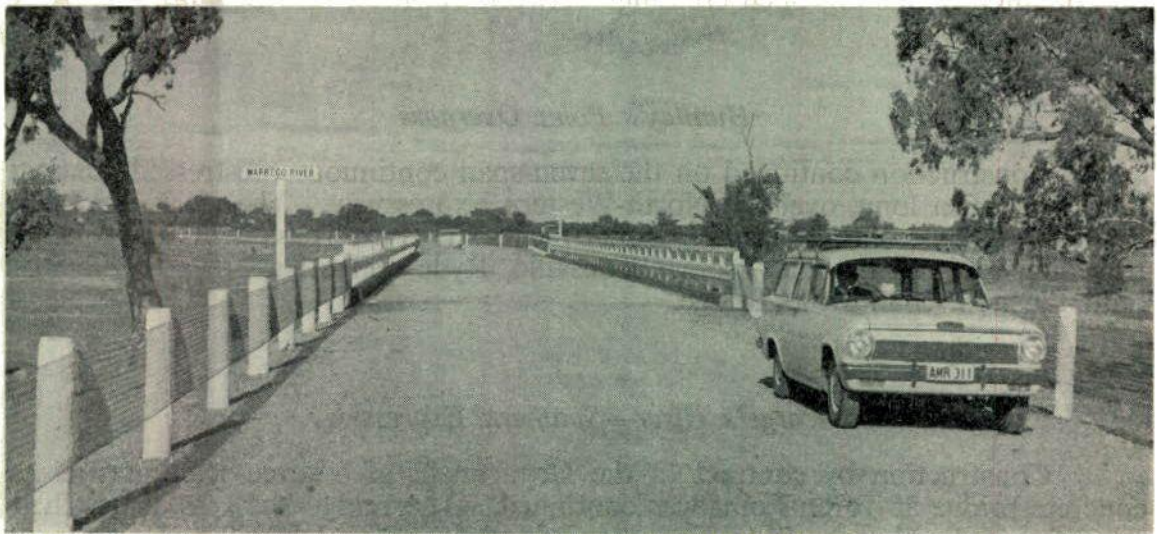
A six-span, steel girder bridge with reinforced concrete wearing surface, 240 feet long, was constructed by the Department by contract. The new structure replaced an old timber beam bridge. (Photograph above.)

Darling River at Pooncarie—Unclassified Road

A five-span steel girder, Callender-Hamilton truss and reinforced concrete bridge, 314 feet long, was constructed by the Department by contract. This bridge replaced a ferry.



Steel and concrete bridge over the Darling River at Tilpa



Six-span bridge over the Warrego River at Enngonia

Principal Bridge Works in Progress at the Beginning of the Year and not Completed

Jugiong Creek—State Highway No. 2—Hume Highway

A five-span reinforced and prestressed concrete bridge, 395 feet long, was being constructed over Jugiong Creek by the Department by contract, to replace a single lane bridge.

Peel River—State Highway No. 9—New England Highway

A six-span prestressed concrete four-lane bridge, 386 feet long was being constructed at Tamworth by contract to the Department. The new bridge will replace an old two-lane steel truss bridge.

Clarence River, Harwood Bridge—State Highway No. 10—Pacific Highway

This bridge, being constructed by contract to the Department is a 34-span steel and concrete bridge 2,918 feet long. It will eliminate the last ferry from the route of the Pacific Highway between Sydney and Brisbane and from the State Highway System of New South Wales.

Yanga Creek—State Highway No. 14—Sturt Highway

Construction of an eight-span reinforced concrete bridge, 280 feet long with precast pretensioned bridge units, replacing an old single-lane timber beam bridge, was continued by Wakool Shire Council by contract.

Pelican Creek—State Highway No. 16—Bruxner Highway

This bridge, a seven-span reinforced concrete bridge 210 feet long, was being constructed by contract to the Gundurimba Shire Council. It is located on the reconstructed length of the highway, Bugden's Hill to Pelican Flat, and will eliminate a low-lying section subject to flooding.

Myall Hollow Creek—State Highway No. 17—Newell Highway

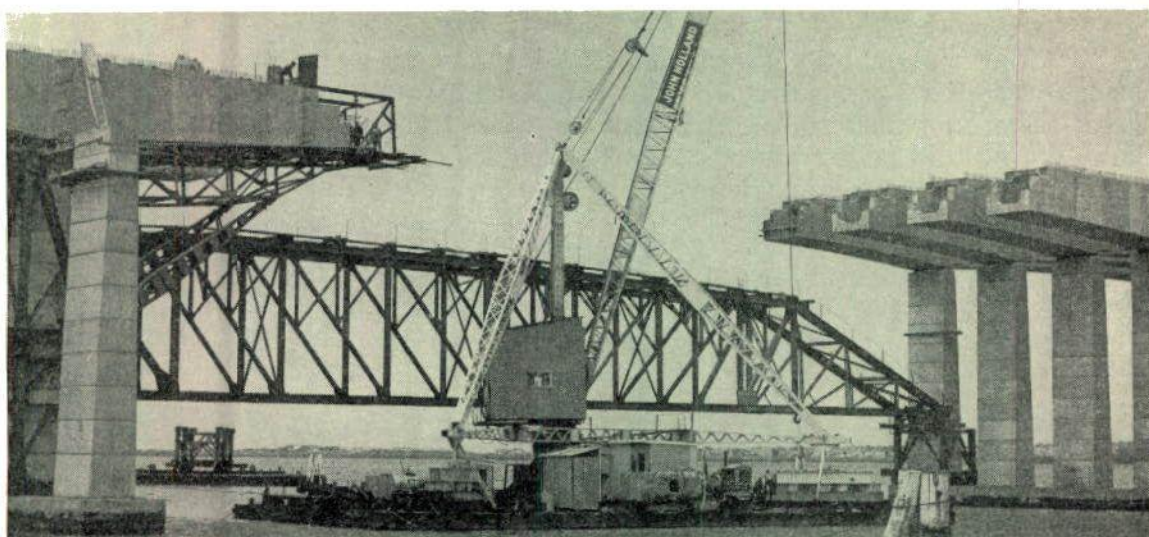
The Department was constructing by contract a 12-span reinforced concrete bridge, 240 feet long, at approximately 28 miles north of Narrabri, to eliminate one of three remaining open crossings between Narrabri and Bellata.

Huntley's Point Overpass

Construction continued on the seven-span continuous prestressed concrete bridge, 626 feet long, over the North-Western Expressway. The work was being carried out by contract to the Department. This overpass will carry traffic travelling towards the City from Gladesville, Ryde and other areas to the west onto the new Gladesville Bridge.

George's River—Southern Expressway

Construction by contract to the Department of a seven-span prestressed concrete bridge at Taren Point was continued. The bridge has a total length of 1,662 feet and will carry six traffic lanes and two footways. It will replace a ferry. (Photographs on pages 21 and 75.)



Concrete bridge under construction over the George's River between Taren Point and Rocky Point, Sans Souci. (Photograph taken October, 1964)

Mongarlowe River—Trunk Road No. 51

A four-span reinforced and prestressed concrete bridge, 233 feet long, was being built by contract by the Department over the Mongarlowe River, ten miles east of Braidwood. This bridge will replace an old timber beam bridge. (Photograph below.)



Concrete bridge over the Mongarlowe River on the Canberra-Bateman's Bay Trunk Road

Clyde River at Nelligen—Trunk Road No. 51

The construction of a seven-span prestressed and reinforced concrete bridge, 827 feet in length over the Clyde River was continued by contract. This structure will replace a ferry.

Myrtle Creek—Trunk Road No. 83

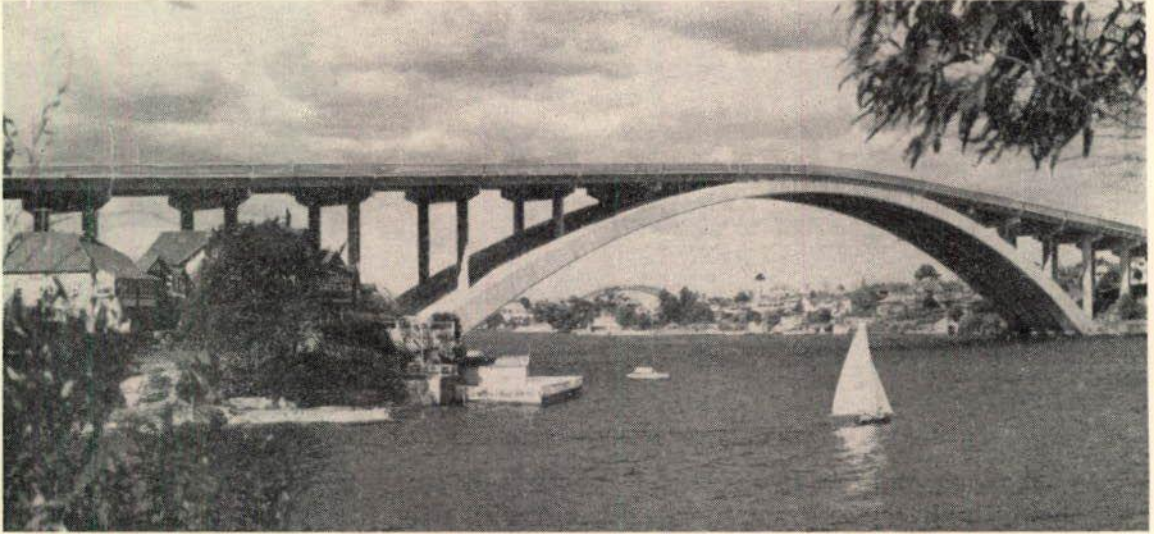
This bridge was being constructed by contract to Tomki Shire Council. It is a four-span prestressed concrete girder bridge 240 feet long and will replace an old narrow timber bridge.

Tourle Street Bridge over the South Arm of the Hunter River at Newcastle

The Department constructed, by day labour, the foundations for a seven-span steel and concrete bridge, 978 feet long. The superstructure was being erected by contract.

Parramatta River—Main Road No. 165

Construction by contract with the Department of the new concrete arch bridge over the Parramatta River at Gladesville was continued. The length is 1,901.5 feet and includes an arch span of 1,000 feet. There is provision for six lanes of traffic and two footways. The bridge will replace an old two-lane opening-span bridge. (Photograph below.)



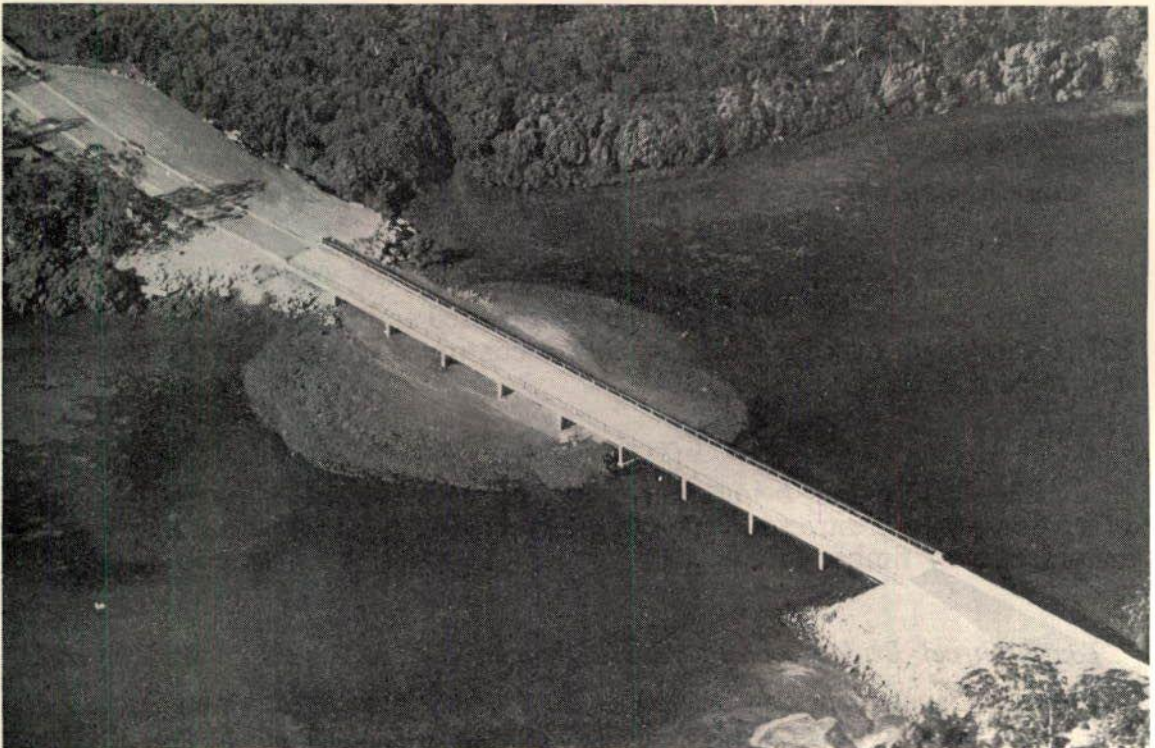
Concrete arch bridge over the Parramatta River between Gladesville and Drummoyne

Wolumla Creek at Kanoona—Main Road No. 275

Imlay Shire Council continued the construction by contract of a three-span reinforced concrete bridge with steel girders over Wolumla Creek at Kanoona to replace an old low-level timber bridge. It will be 211 feet in length.

Salt Pan Creek—Main Road No. 508

Construction continued on this bridge of ten spans, 600 feet long, over an arm of the George's River. The superstructure of the prestressed concrete bridge was being constructed by contract with the Department. The substructure was constructed by the Department. (Photographs on page 18 and below.)



Concrete bridge over Salt Pan Creek on Henry Lawson Drive

Murrumbidgee River—Developmental Work No. 3096

A ten-span low-level steel and concrete bridge, 343 feet long, was being constructed at Jugiong by Demondrille Shire Council by contract.

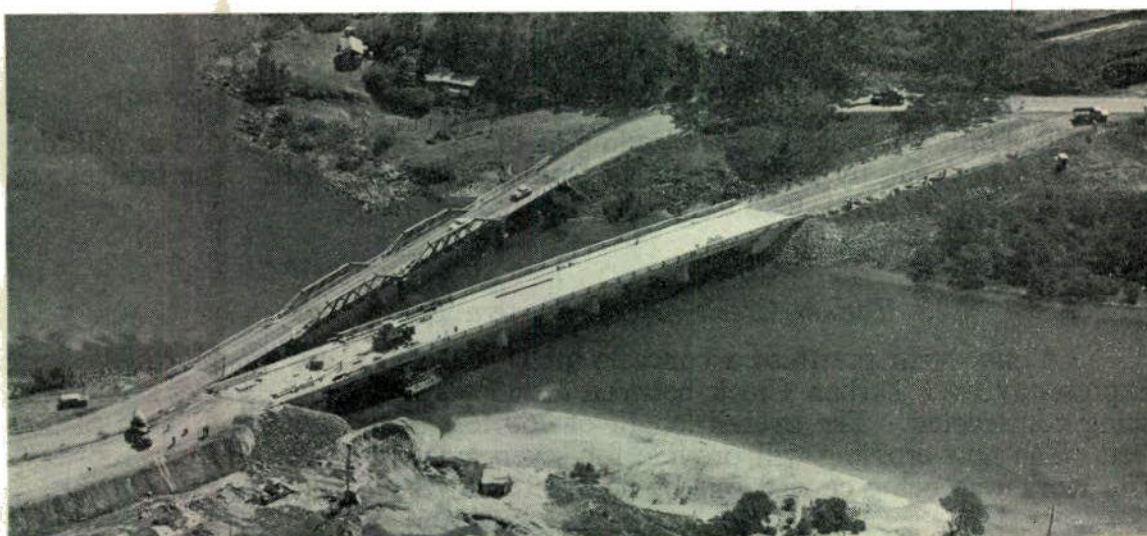
Darling River at Louth—Unclassified Road

A six-span, steel girder, steel truss and reinforced concrete bridge, 469 feet long, was being constructed by the Department by contract to replace a ferry.

Principal Bridge Works Commenced During the Year and Not Completed

Minnamurra River—State Highway No. 1—Prince's Highway

Construction of a five-span concrete bridge, 371 feet long, to replace an old single lane timber truss bridge was commenced by contract to the Department. (Photograph below.)



Concrete bridge under construction over the Minnamurra River near Kiama on the Prince's Highway

Moruya River at Moruya—State Highway No. 1—Prince's Highway

Work was commenced by the Department on the construction of the substructure of a steel and reinforced concrete bridge over Moruya River at Moruya. The new structure 892 feet long, will replace a timber bridge subject to flooding.

Towamba River at Kiah—State Highway No. 1—Prince's Highway

Construction was commenced by contract with the Department, of a nine-span reinforced concrete bridge, 916 feet long over the Towamba River at Kiah to replace an old single-lane, low-level timber bridge.

Yass River—State Highway No. 2—Hume Highway

A four-span steel and concrete bridge, 336 feet long, was being constructed over the Yass River, north of Yass, by the Department by contract. The new bridge will replace an old timber bridge (Pearse's Bridge) on poor alignment.

Keajura Creek—State Highway No. 2—Hume Highway

The Department was constructing by contract, a 5-span steel and reinforced concrete bridge over Keajura Creek 1.3 miles south of Tarcutta. This bridge, 225 feet long, will replace an old timber beam bridge.

Tenterfield Creek—State Highway No. 9—New England Highway

A six-span reinforced concrete bridge, 234 feet long over Tenterfield Creek 7 miles north of Tenterfield was being constructed by the Department by day labour. It will replace a low-level timber beam bridge.

Orara River at Ramornie—State Highway No. 12—Gwydir Highway

Construction of this bridge was being carried out by contract with the Department. It comprises a seven-span steel and concrete structure, 735 feet long and will replace a narrow low-level timber beam bridge on poor alignment.

Great Anabranh of Darling River at Bunneringee—State Highway No. 22—Silver City Highway

A contract was let by the Department for construction of two bridges, one 11 spans, 528 feet long, and the other five spans, 240 feet long, over the Great Anabranh of the Darling River. These bridges are on a major deviation of the Silver City Highway.

Murray River at Mildura—State Highway No. 14—Sturt Highway

The four approach bridges leading to the Murray River Bridge at Mildura were being widened by the Department from 18 feet to 22 feet. The bridges are 315, 411, 194 and 411 feet long respectively.

Tarban Creek—North-Western Expressway

A nine-span prestressed concrete arch bridge to carry the North-Western Expressway over Tarban Creek between Huntley's Point and Hunter's Hill was being constructed. The overall length of 750 feet includes an arch span of 300 feet. The new crossing will provide for seven lanes of traffic and one footway. The work was being carried out by contract with the Department.

Bogan River at Beemery—Trunk Road No. 68

A five-span steel bridge 200 feet long, with concrete wearing surface on the deck was being constructed by the Department by contract to replace a timber bridge 26 miles north-east of Bourke.

Carabost Creek—Main Road No. 284

Holbrook Shire Council commenced by contract construction of a five-span reinforced concrete bridge over Carabost Creek. It is 225 feet long and will replace an old timber beam bridge.

Murray River at Barmah—Main Road No. 391

Construction of a seven-span prestressed beam and reinforced concrete bridge, 551 feet long, was commenced by the Country Roads Board, Victoria, by contract to replace the ferry over the Murray River at Barmah. The Department of Main Roads will contribute half of the cost.

Lachlan River at Darby's Falls—Main Road No. 576

Waugoola Shire Council, by contract, was constructing a low-level seven-span prestressed concrete bridge, 233 feet long, to replace a low-level timber structure on the Main Road to Wyangala Dam.

Hawthorne Canal—Secondary Road No. 2056

Construction commenced on a five-span prestressed concrete bridge to provide a new crossing of Hawthorne Canal. With a total length of 359 feet, the bridge will carry four traffic lanes and two footways. The work was being carried out under contract to the Department.

Mooball Creek at Pottsville—Tourist Road No. 4028

This bridge was being constructed by contract with the Tweed Shire Council. It consists of an eight-span prestressed concrete bridge, 280 feet long.

Williams River at Raymond Terrace—Unclassified Road

A five-span prestressed concrete bridge, 864 feet long, was commenced in September 1963. The structure, which will replace a ferry is being built by contract for the Department.

BITUMEN SURFACE TREATMENT

The total length of bitumen or other dustless surface on the Main Roads System at 30th June, 1964, was 10,760 miles.

Bitumen or tar surface treatment was carried out during the year by Councils and the Department on a total of 1,589 miles of Main Roads. This work comprised:—

- (i) initial surfacing of 714 miles of road pavement including 74 miles of new priming or light sealing with tar preparatory to bitumen sealing at a later date.
- (ii) resurfacing of 780 miles of existing bitumen-surfaced roads.
- (iii) restoration of the bitumen surface on 95 miles of road pavement after reconstruction.

Distribution of these mileages over the various classes of Main Roads is as follows:—

Nature of Work	State Highways	Other Main Roads	Declared Secondary Roads	Total
1. New bitumen surfacing.....	207	432	1	640
2. New tar priming or light sealing.....	45	29	..	74
3. Bitumen resurfacing—				
(a) Flush resurfacing	332	411	..	743
(b) Plant mix resurfacing	9	22	6	37
4. Restoration of bitumen surface on pavements after reconstruction.....	54	38	3	95
Totals	647	932	10	1,589

MAINTENANCE OF ROADS**Country Main Roads**

Although moderate climatic conditions were experienced generally throughout most of the State during 1963-64, extreme conditions in some parts created maintenance problems. An extremely dry summer in the western portions of the State made the maintenance of gravel pavements more difficult than usual and cyclonic conditions in the northern area resulted in damage and destruction of some bridges.

Heavy rains and floods experienced during the first half of 1963 resulted in a large programme of restoration works during 1963-64. Similarly, but to a lesser extent, damage by storm and flood during June, 1964, will need to be repaired under the 1964-65 maintenance programme.

In those parts of the State where favourable conditions were experienced, there were improvements in the riding conditions of Main Roads.

In the north-western area of the State, where black soil pavements make maintenance difficult, some improvements were made by surfacing with gravel. On other lengths, formations were raised to improve conditions for traffic during wet weather.

Throughout the State, but more particularly in lower north coast and south coast areas, attention was concentrated on improvement of drainage of road pavements. Apart from the improvement of road pavements the replacement of old timber culverts and other drainage improvements, such as the elimination of open waterways on roads in western areas, contributed towards better conditions for the road-user.

Reduced shoulder and pavement edge wear was apparent on heavily trafficked rural pavements which have been widened to 24 feet, but on narrower pavements, the increasing volume of traffic was accelerating edge wear.

Control of roadside grass and weeds by mechanical and chemical methods was continued.

Although 780 miles of bitumen surfaced pavement were resurfaced during the year, a larger programme could have been undertaken if funds had been available.

At several locations on the Great Western Highway, particularly near Mt. Lambie and Yetholme where polishing of the aggregate produced slippery conditions, resurfacing with petroleum tar and coarse sand was carried out with satisfactory results.

In addition to the snow falls on the Southern Alps, there were also falls on the Blue Mountains and in the Glen Innes area. In the vicinity of Glen Innes and Guyra, an unusually heavy fall in July, 1963, caused a temporary closure of the New England and Gwydir Highways.

With a view to reducing inconvenience to traffic on the Great Western Highway between Katoomba and Bathurst, arrangements were made to obtain from the Weather Bureau, advance warning of conditions likely to result in falls of snow. Snow and ice were removed from the pavement by grader and calcium chloride and grit were applied to the pavement to improve conditions for traffic.

During the year the Department's snow-clearing organisation in the Snowy Mountains area was strengthened with the object of maintaining access to the snowfields at all times.

County of Cumberland Main Roads

Throughout the County heavy rains during the year caused damage to Main Roads, thereby delaying programmed maintenance and improvement works.

Landslides occurred on Lawrence Hargrave Drive (Main Road No. 185) and on the Bulli Pass section of the Prince's Highway. There was also a landslide near Bell on the Bell-Kurrajong Road (Main Road No. 184). The restoration of flood and storm damage on Main Roads was continuing at the close of the year.

Increasing traffic on all roads was continuing to accentuate the edge wear of pavements and shoulders of roads with widths of 20 feet and less.

The increasing volume of traffic was also adversely affecting old concrete pavements, necessitating additional maintenance.

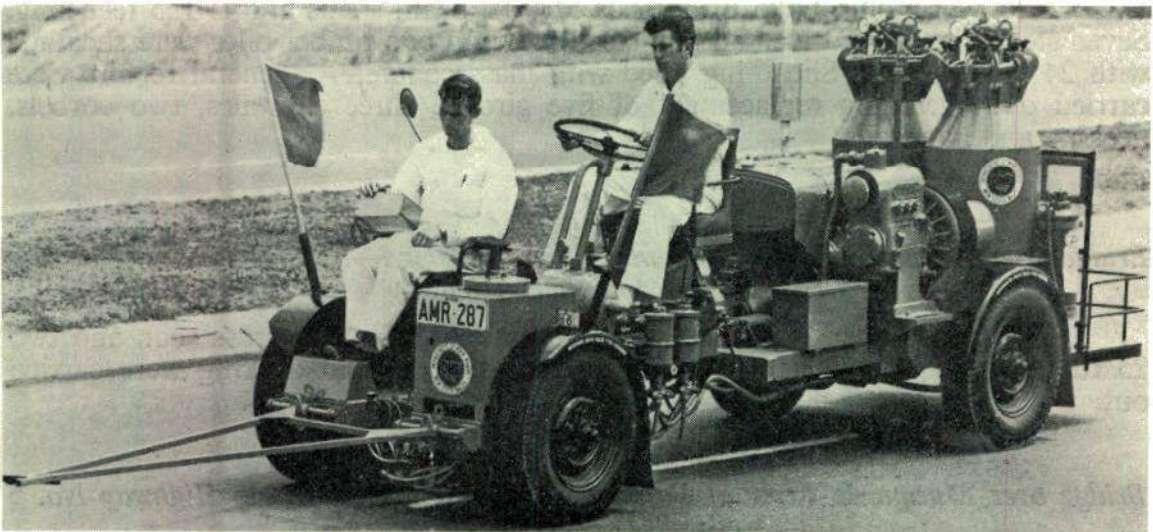
Further use was made of a heater-planer machine to remove old bitumen-surface courses from road pavements.

A special gang was formed to undertake tree planting and to maintain the increasing area of medians, traffic islands, etc., on Main Roads. A marked improvement in the appearance of these was evident.

Traffic Linemarking

During the year, the Department undertook the marking of more than 6,000 miles of traffic lines on State Highways and other Main Roads throughout the State. The more heavily trafficked roads were marked twice.

Because of wet weather in the first half of 1963, there was an extensive programme of line marking to be undertaken at the commencement of the year under review. Two linemarking units were then in operation, but in November, 1963, a third unit was brought into use to assist in completing the programme. (Photograph on this page.)



One of the Department's new self-propelled road line-marking machines

The use of spherical glass beads as retro-reflecting material to improve the appearance of the lines for night driving was continued.

Small hand-operated machines were used for urgent marking of short lengths of line when motorised units were not available.

Bridges and Ferries

Among the major bridge and ferry repairs carried out during the year were the following:—

Bridge over George's River at Tom Uglys Point—State Highway No. 1—Prince's Highway

This is a steel truss and a plate girder bridge of nine spans, with a total length of 1,638 feet. During the year, complete repainting of the bridge by day labour was finished. The footway was resurfaced with asphaltic concrete.

Nowra Bridge over Shoalhaven River at Nowra—State Highway No. 1—Prince's Highway

Work on three spans to replace cracked or broken steel troughing was completed and an extra thickness of asphaltic concrete laid over these spans. A start was also made with the painting of the steel superstructure.

Temporary Bridge over Moruya River—State Highway No. 1—Prince's Highway

The temporary bridge over Moruya River has 23 steel girder spans supported on timber piers and is 805 feet long. Fourteen new piles were driven to replace those weakened by marine organisms. General repairs were carried out also on a number of piers.

Bridge over Dry River at Quaama, 18 miles north of Bega—State Highway No. 1—Prince's Highway

This bridge has 1/90 ft. timber truss span, 2/30 ft. and 1/35 ft. beam spans. Three false piers were erected on the approach spans to eliminate sags in the deck. General repairs were carried out on piles, cross girders, braces and walings.

Bridge over Merimbula Lake at Merimbula—State Highway No. 1—Prince's Highway

The Merimbula Lake Bridge has 5/30 ft. beam spans and is 153 feet long. Seven steel piles were driven and all steel piles and two timber piles were sheathed with 24 in. R.C. Pile Sheathing filled with mass concrete. General repairs were carried out, including replacement of five girders, three capwales, two corbels, decking and handrails.

Bridge over Nunnock River, 26.5 miles west of Bega—State Highway No. 4—Snowy Mountains Highway

The bridge over Nunnock River has one 70 ft. timber truss span and two 25 ft. beam spans. General repairs to trusses, piers and decking were carried out.

Bridge over Macquarie River at Bathurst—Denison Bridge—State Highway No. 5—Great Western Highway

Extensive repairs to the deck and superstructure of this bridge were commenced during the year.

Bridge over Clarence River at Tabulam—State Highway No. 16—Bruxner Highway

This bridge comprises 5 composite truss spans and 13 timber beam spans and has a total length of 976 ft. General repairs carried out during the year included the replacement of piles and girders and painting of the structure.

Bridge over Darling River at Wentworth—State Highway No. 22—Silver City Highway

This structure comprises five timber truss spans and six timber beam spans and is 595 feet in length. It was found necessary during the year to strengthen four more of the 90 ft. trusses by undertrussing. Consideration was being given to the early replacement of the bridge.

Bridge over Blinks River at 52.42 miles from Grafton—Trunk Road No. 74

This bridge has 2 timber truss spans and 3 timber beam spans and has a total length of approximately 227 ft. It was necessary to undertruss and provide additional piers to the truss spans. General repairs were also carried out including painting.

Hampden Bridge over Murrumbidgee River at Wagga Wagga—Trunk Road No. 78

This structure consists of 3/110 ft. timber truss spans and 9 timber beam spans. Extensive repairs to both substructure and superstructure were completed during the year. Temporary Bailey bridging was used to enable several truss members to be replaced.

Bridge over Tweed River at Murwillumbah—Main Road No. 142

This lift-span bridge is 524 ft. long and consists of 4 timber truss spans and 3 timber beam spans. Major repairs were carried out to this bridge which included the replacement of some truss members, girders, piles and abutment sheeting.

Bridge over Middle Harbour at The Spit, Sydney—Main Road No. 164

This bridge has six steel plate girder fixed spans and a bascule opening span, and is 745 ft. long. During the year replacement of the four roadway gates for the bascule span by a lighter and more efficient type was completed. The operator's position in the control cabin while lifting or lowering these gates was also improved in order to give him a clear, uninterrupted view of the whole carriageway on the bridge.

Bridge over Parramatta River at Uhr's Point (Ryde Bridge)—Main Road No. 200

This is a steel bridge with lift span, comprising three truss spans and eight plate girder spans, and is 1,075 feet in length. In the year, the asphaltic concrete wearing surface of the bridge was removed by the heater-planer method and new asphaltic concrete laid in its place.

Bridge over the Murray River at Cobram—Main Road No. 226

This bridge is 606 feet long and consists of 2/104 ft. timber and steel truss spans, 1/58 ft. lift span and 10/35 ft. timber beam spans. Major repairs to the truss and beam spans were completed during the year.

Bridge over Bullanginya Lagoon at Barooga—Main Road No. 226

This bridge is 630 feet long and consists of 21/30 ft. timber beam spans. Extensive repairs and replacement of girders, piles and wales, commenced in the previous year were completed.

Bridge over Bega River at Tarranganda—Main Road No. 272

This structure is 1,101 feet long, made up of 5/90 ft. timber truss spans and nineteen timber beam spans. General repairs were carried out to the timber trusses and piers.

Bridge over Snowy River at Jindabyne—Main Road No. 286

This bridge is 273 feet long and consists of 3/90 ft. timber truss spans. Repairs were carried out on the lower chord flitches to replace those flitches weakened by dry rot.

Bridge over Lakes Entrance at Windang—Main Road No. 522

This bridge, consisting of 33 spans and 993 ft. long, was fitted with longitudinal sheeting to reduce noise. Kerbs and footpath were repaired and the superstructure was painted.

Bridge over Parramatta River at Silverwater—Main Road No. 532

This structure measures 620 feet between end bearings at abutments and comprises five spans of prestressed, post-tensioned concrete box girders. During the year a thick coating of tar epoxy compound was painted onto the grout encased tensioning cables to make certain moisture cannot gain entry to the steel cables through any fine cracks occurring in the encasing grout.

Victoria Bridge over Nepean River at Picton

This bridge was redecked with new transverse decking and new longitudinal sheeting. Repairs were also carried out to kerbs, stringers and cross girders.

Ferry Service over Hawkesbury River at Wiseman's Ferry—Main Road No. 225

In May, 1964, a 16-vehicle ferry vessel was transferred from the North Coast to Wiseman's Ferry to take up duty as the permanent duplicate ferry. This ferry service is operated by the Colo Shire Council by contract.

Ferry Service over Murray River at Wymah—Main Road No. 369

This two car diesel powered ferry vessel was beached for extensive hull and superstructure repairs.

SYDNEY HARBOUR BRIDGE MAINTENANCE**Painting**

A total area of 108,127 sq. yds. of steelwork was painted during the year, almost all of which was normal two-coat work. The paint used on the bridge is red lead followed by two coats of grey micaceous iron oxide.

The third repainting of the bridge was completed.

The fourth repainting was continued and approximately 25 per cent was completed by the end of the year.

The testing of new paints and materials was continued during the year both in the accelerated weathering machine in the Bridge Workshop and also in the test racks at Pyrmont Bridge.

Steelwork

Maintenance and checking of steelwork, rivets, cranes, expansion joints, etc., were carried out during the year.

Fire-fighting Services

Work continued during the year on extension of the fire hydrant service. The training of two fire-fighting squads of the Department's employees was undertaken by the Board of Fire Commissioners.

Roofing of Centre Cells of Pylons

Work commenced during the year on the roofing of the centre cells of the North and South Pylons to provide additional weather-proof working space.

Maintenance of Road Surface

Complete resheeting in asphaltic concrete of the centre six-lane carriageway of the bridge was carried out following removal of the old asphaltic surface by heater-planer methods.

Traffic Facilities

During the year, 1921 vehicles were removed from the Bridge, its approaches and the Cahill Expressway. Details of breakdowns were as shown below:—

	Week days	Weekends and Public Holidays	Total	Percentage
Lack of petrol	522	111	633	33
Mechanical breakdown	768	170	938	49
Flat tyres	141	53	194	10
Accidents	128	16	144	7
Abandoned vehicles	11	1	12	1
	1,570	351	1,921	100

RAILWAY LEVEL CROSSINGS ON MAIN ROADS

Elimination of Level Crossings

During the year, five railway level-crossings were eliminated from Main Roads. Particulars of these are:—

Bruxner Highway (State Highway No. 16)

As a result of an alteration in the route of the highway to cross the bridge constructed over the Richmond River at Ballina Street, Lismore, a railway level-crossing in Union Street, Lismore, has been eliminated from the route of the highway.

Forbes-Cowra-Yass Trunk Road (Trunk Road No. 56)

A level-crossing at Boorowa Gates was eliminated by the construction of an overbridge, the cost of which was shared by the Department of Railways and Department of Main Roads.

Victoria Road, Rydalmere (Main Road No. 165)

The level-crossing at Rydalmere was eliminated by the completion of an overbridge, the cost of which was shared by the Department of Railways, and the Department of Main Roads. (Photograph on page 86.)

Grong Grong-Coolamon-Junee-Gundagai Main Road (Main Road No. 243)

Two level-crossings west of Marrar were eliminated by the construction of a deviation, the cost of which was shared by Coolamon Shire Council and the Department of Main Roads.

Progress was made with the construction of overbridges to eliminate three level-crossings, one on the New England Highway (State Highway No. 9) at Hexham, one on the Stroud-Gloucester Road (Trunk Road No. 90) at Ward's River, and one on the Wallacia-Windsor Road (Main Road No. 154) at Kingswood. On the last mentioned road, the overbridge is being constructed on a deviation and the level-crossing will no longer be on the route of the Main Road.

At the end of the year, there were 430 level crossings on Main Roads, comprising 362 on New South Wales Government railways, 58 on privately owned railways and 10 on Victorian Government railways.

A total of 131 level crossings has been eliminated from Main Roads since the Main Roads Act came into effect in 1925.



Bridge over the railway line at Rydalmere on Victoria Road

Improvement of Safety Conditions at Level-Crossings

During the year, the Department of Railways installed automatically-operated flashing lights at Moree on the Gwydir Highway (State Highway No. 12) at Eltham on the Lismore-Bangalow Road (Trunk Road No. 65), at Wiangaree on the Casino-Kyogle Road (Trunk Road No. 83), at Five Island Road, Port Kembla (Main Road No. 295) and at Tuggerah on the Tuggerah-The Entrance Road (Main Road No. 335). The cost of this work, which was initially met from the Level Crossing Fund, was shared by Councils, the Department of Railways and the Department of Main Roads.

Seven level-crossings were improved by widening and by re-alignment of the road approaches.

With a view to providing additional safety, signs and pavement markings additional to those included in the Australian Road Signs Code were provided at several level-crossings.

TRAFFIC SERVICE

To improve traffic flow and to provide greater safety and convenience for vehicular traffic the following action was taken directly by the Department or in conjunction with Municipal and Shire Councils and other Departments.

Median Strips

The Department's programme of providing median strips on heavily trafficked Main Roads with a width of 60 feet or more was continued throughout the year. Twelve miles of new median strips were constructed, 92 per cent in the Sydney Metropolitan area and the balance in the Wollongong, Maitland and Orange districts.

Channelisation of Intersections

Conditions for traffic were improved at 31 intersections by channelisation during the year.

Some of the locations were:—

State Highway No. 1—Prince's Highway-Darlington—at the intersection with Cleveland Street and Darlington Road.

State Highway No. 2—Hume Highway-Bankstown North—at the intersection with Rookwood Road.

State Highway No. 10—Pacific Highway-Newcastle—at the intersection with Glebe Road.

State Highway No. 11—Oxley Highway-Tamworth—at the intersection with Main Road No. 130—Tamworth-Werris Creek-Quirindi Road.

State Highway No. 12—Gwydir Highway-Inverell—at the intersection with Main Road No. 187—Inverell-Oakwood-Graman-Wallangra-Yetman Road. (Photograph below.)

Main Road No. 108—Brunker Road and Belford Street-Broadmeadow—at the intersection with Main Road No. 223-Lambton Road and Main Road No. 326-Broadmeadow Road. (Photograph on page 88.)

Main Road No. 139—Blaxland Road-Eastwood—at the intersection with Secondary Road No. 2024—Balaclava Road and Vimiera Avenue.

Main Road No. 165—Victoria Road-Ermington—at the intersections with Main Road No. 532—Silverwater Road and also Kissing Point Road. (Photograph on page 88.)

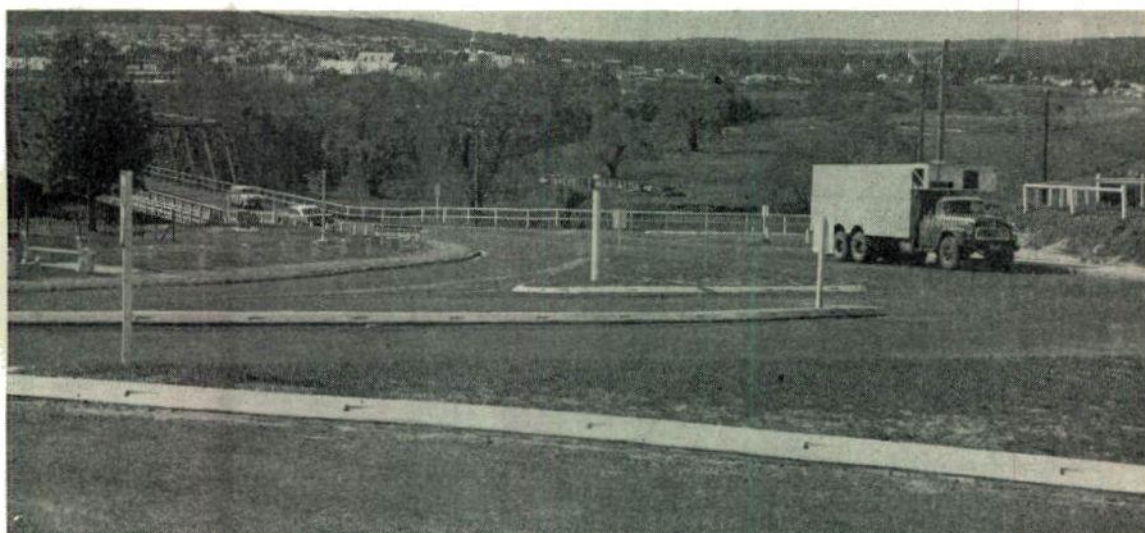
Channelisation of a further six intersections throughout the State was also in progress.

Designs for channelisation were also completed for a further 41 intersections, the majority being located in the Sydney Metropolitan Area. Some of the locations were:—

State Highway No. 5—Great Western Highway-Parramatta—at the intersection with State Highway No. 13—Church Street and Secondary Road No. 2049-Parkes Street.

State Highway No. 5—Great Western Highway-Bathurst—at the intersection with State Highway No. 6—Mid-Western Highway and State Highway No. 7—Mitchell Highway.

Main Road No. 165—Victoria Road-Drummoyne—at the intersection with Wolseley Street and Hythe Street.



Intersection of the Gwydir Highway and the Inverell-Yetman Main Road at Inverell following channelisation



Channelised intersection of Brunker Road, Belford Street, Lambton Road, Broadmeadow Road, Young Road, Chatham Road and Denison Road, Broadmeadow



Channelised intersection of Victoria Road and Kissing Point Road, Ermington

Bus Stops

On Main Roads without a full width pavement, 46 additional bus bays were provided to permit buses to stop clear of moving traffic. Twenty-seven of these were provided on Metropolitan Main Roads including Victoria, Burns Bay, Epping and Cabramatta Roads.

The locations at which the remaining 19 bus bays were provided included the Prince's Highway near Wollongong, the New England Highway at Beresfield and the Pacific Highway and Hannell Street in Newcastle.

Climbing Lanes on Hills

A third lane for traffic was added to two-lane carriageways at a number of additional locations where slower vehicles obstructed the free passage of faster moving traffic. Some of these locations were the Prince's Highway at Bombo Hill near Kiama, the Hume Highway in the vicinity of Berrima, Picton, Paddys River and Yass, and the Mid-Western Highway at Fitzgerald's Hill near Bathurst.

Signposting

On the new road route between Calga and Ourimbah via Peat's Ridge, large fully reflectorised signs with white lettering on a green background were erected on the Peat's Ridge-Ourimbah section which was built to expressway standards. Lower case lettering was used for the names of destinations and upper case for other messages. The standard of signs adopted for this expressway type of road was based largely on practice in the United States of America.

A design of markers to guide traffic around the more congested inner areas of the City of Sydney via "ring" road routes was being prepared.

Co-operation in Traffic Matters

Conferences throughout the State with Police and other Government Departments resulted in the solution of many problems relating to the movement and safety of traffic.

Accident Analysis and Investigations

The Department of Motor Transport commenced the issue to the Department of comprehensive quarterly records of traffic accidents which occurred on all roads.

The information will be used in investigations into the need for improved traffic facilities.

Sighting Screens

Sighting screens were erected at a number of "T" junctions in rural areas during the year.

The sighting screens consist of reflectorised white boards 20 ft. long and 2 ft. wide and bearing black bands 9 inches wide. They are erected on the through road facing the side road to give drivers warning of the junction.

Advisory Speed Signs

The erection of advisory speed signs on State Highways and other Main Roads was continued.

During the year advisory speed signs were erected on the following roads:—

State Highway No. 1—Prince's Highway—Nowra to the Victorian Border.

State Highway No. 4—Snowy Mountains Highway—Bega to Tathra.

Main Road No. 585—Berridale to Rhine Falls.

Surveys were also completed for the erection of these signs on the following roads within the County of Cumberland:—

Main Road No. 162—Mona Vale to Ryde.

Main Road No. 164—Mosman to Palm Beach.

Main Road No. 397—Balgowlah to Narrabeen.

Main Road No. 177—Bulli to Liverpool.

Main Road No. 178—Campbelltown to Narellan.

Main Road No. 179—Campbelltown to Picton and Appin.

MATERIALS TESTING AND RESEARCH

Divisional and Field Testing

Substantial increases occurred during the year in the amount of control testing carried out in the field. Approximately 4,350 density-in-situ and 3,300 moisture content determinations were made in the course of pavement construction, and 550 precast concrete culvert units were tested.

The number of samples tested in Divisional and field laboratories was 39,700. Of these, 28,000 were samples of soils and gravels, the remainder being samples of aggregates, concrete and bitumen-aggregate mixtures.

In Central Division, the laboratory at Chatswood was closed and a new Divisional Office laboratory at Parramatta commenced operations in April, 1964. Field laboratories at Mooney Mooney and Ourimbah were amalgamated and transferred to new premises at Mooney Mooney in May, 1964.

In connection with the construction of the new road route between Peat's Ridge and Ourimbah and the Sydney-Newcastle Expressway between the Hawkesbury River and Mount White, approximately 3,000 density-in-situ, moisture content and compaction tests were carried out as well as nearly 200 density tests using a nuclear surface density testing device.

In Central Northern Division a new laboratory incorporated in the new Divisional Office building was equipped and commissioned in June, 1964. A mobile laboratory was used for control testing at Nyngan and Cobar. A similar mobile laboratory was supplied also to the South Western Division.

A number of the Divisions has been supplied with California Bearing Ratio apparatus for testing stabilised materials and Compacting Factor apparatus for concrete mix design.

Central Testing Laboratory

There was an increase in the amount and nature of testing carried out at the Central Testing Laboratory and at Gladesville laboratory during the year, the total number of samples processed being 32,673 which included 854 from outside bodies and persons. Substantial increases occurred mainly in the numbers of samples of concrete, steel and rubber bearings for bridges. Other materials tested comprised soils and gravels, aggregates, bitumen, bitumen-aggregate mixtures, paints and miscellaneous materials such as tars, emulsions, oils, chemicals, epoxy resins, water, joint fillers for concrete pavements, etc.

The range of field work undertaken by the staff at the Central Testing Laboratory was extensive and included control testing of subgrades and pavements, skid resistance tests, calibration, checking and installation of laboratory equipment throughout the State, in-situ load deflection tests at bridge works, test loading of precast concrete culvert units and calibration of stressing equipment.

The capacity for testing steel was greatly improved with the installation of a Mohr and Federhaff 440,000 lb. horizontal tension testing machine which, because of its size, was located temporarily in the north pylon of Sydney Harbour Bridge. A Vickers Hardness testing machine, a bend testing machine, and equipment for testing high tensile bolts and nuts have extended considerably the scope for testing of steel. Another major item of equipment obtained during the year was the Gyrotory Compactor, which was manufactured at the Department's Central Workshop to the design requirements of the Laboratory. The machine incorporates some unique features and was being used for research into the design of asphaltic concrete mixes.

A comprehensive series of refresher courses, each lasting four weeks, was attended by a total of forty experienced Testing Operators from all Divisions. The courses were formal and in addition to the revision of techniques, and instruction in new procedures, demonstrated the scope and direction of the activities carried out in the Central Testing Laboratory. An informal course lasting one week was also conducted and was attended by the Engineering Analysts from all Divisions.

Research

There were no major research works in progress but some of the items investigated were as follows:—

- (a) Experimental work with cationic surface active agents of the fatty amine type led to the development of a solution which enables the attainment of a higher degree of compaction in sand than that obtained by inundation. The procedure was applied to the compaction of backfilling in narrow trenches and also eliminated problems sometimes associated with inundation in confined spaces.
- (b) Field and laboratory tests were being carried out with the object of determining an efficient means of conserving or reducing the quantity of water required for compacting pavements during construction in dry areas.
- (c) Equipment was purchased and a Research Fellowship established at the Institute of Highway and Traffic Research to further investigations into the petrological nature of low grade rocks, such as shales, used in road pavements.
- (d) Reasonably good correlations between field and laboratory polishing of aggregates used in bitumen surfacing work were obtained and the investigations were being continued to determine the extent of polishing which was occurring and the types and sources of supply of aggregates which were prone to polish. It was found that aggregate prone to polishing may still be used successfully in densely graded asphaltic concrete, provided that a suitable quartz sand and not crusher fines is used in the mix.
- (e) Investigations were conducted into the problems of deterioration of bituminous seals in western areas, oxidation tests on bitumens from various sources and properties of refinery prepared cut-backs. An important part of the investigation was into the effects of chlorinated solvents and Thiophene in Benzol to determine the most suitable solvent to be used for the recovery of the bitumen.
- (f) Improved correlation between field and laboratory drying times for road marking lacquers resulted from experimental work on air drafts over the paint surface in the laboratory tests. A coating with low frictional characteristics, polytetrafluorethylene, was tested for use on bridge railings as an anti-suicide measure. Other research on paints was continuing, in connection with water resistance (with particular reference to alkyd resins), drying times, red lead formulations and polyurethane paint.
- (g) The Institute of Highway and Traffic Research co-operated with the Department in preliminary tests of highway pavements using the Institutes Bump Integrator with a view to determining roughness—age characteristics.

PLANT AND MOTOR VEHICLES

Plant items purchased during the year included 36 motor graders, 23 crawler tractors, 29 wheeled tractors, 25 road rollers, 18 loaders, 12 scrapers including 2 self-propelled, 5 snow plows, 13 air compressors including 4 tractor-mounted units, 6 back hoes and 3 asphalt patch mixers. (Photograph on Page 92.)

Included in the pneumatic-tyred road rollers were five 30-ton machines fitted with means of varying tyre pressures whilst rolling.

In addition, an order was placed for a 4-place helicopter for use on Main Road projects. (Photograph on Page 29.)



Four-wheel drive vehicle fitted with reversing trip-type snow plough



Four-wheel drive vehicle fitted with a "V"-type snow plough

A total of 131 motor vehicles was purchased, the majority being replacements for units beyond economical repair.

Plant and motor vehicles which were beyond economical repair were disposed of at four auction sales held at the Department's Central Workshop at Granville.

Plant requirements beyond the capacity of the Department's fleet were satisfied by hire from contractors.

Field Workshops

The Department's field workshops throughout the State number 35.

Plant Inspectors carried out regular inspections of plant throughout the State and assisted field staff with general plant maintenance problems.

Central Workshop

The numerical strength of the workshop personnel increased from 226 to 254 during the year.

Thirty-nine overhaul, repair and manufacture jobs of a major nature were completed in the workshop and six ferry vessels were overhauled at Mortlake Slipway and in the field.

Twenty-three men were transferred temporarily to the field to assist in repair and overhaul work at various periods during the year.

INSTRUCTIONS IN PLANT MAINTENANCE AND OPERATIONS

To train plant operators and others in the maintenance and operation of plant, the Department's Plant Instructors visited each of its maintenance and construction works during the year.

Because of the growing volume of work being undertaken by the Department there was an increased need for training and to meet this, a fifth instructor was appointed.

About 550 plant operators were employed by the Department throughout the State and each was given instruction in the care, operation and maintenance of the plant item he normally operated. In the course of this work, Plant Instructors visited 50 centres. Centres were revisited when additional instruction was considered necessary due to new operators being engaged or additional types of plant being introduced. This particularly applied in the Snowy Mountains Area where the Department's Snow Clearing operations were increased.

In all there were 673 occasions on which operators received instruction, the main groups being as follows:—

Grader operators	..	..	..	..	..	..	201
Tractor-dozer operators	..	..	..	..	..	..	178
Vehicle drivers	..	..	..	..	..	..	53
Compressor operators	..	..	..	..	..	..	35
Roller drivers	..	..	..	..	..	..	80
Loader operators	..	..	..	..	..	..	126

REGULATION OF WEIGHTS OF LOADS ON MAIN ROADS

Ordinance No. 30c under the Local Government Act, 1919, limits the gross load and individual axle loads imposed on road pavements and structures and on ferry vessels by vehicles using Main Roads.

The following statement summarises action taken during the year in the administration of the Ordinance. Action taken during the year ended 30th June, 1963, is shown in brackets:—

Vehicles stopped for checking	41,358	(40,053)
Vehicles reported as overloaded	5,994	(5,137)
Notices of overloading issued	1,391	(2,831)
Prosecutions authorised	3,540	(2,877)
Number of cases heard by Courts	3,270	(2,354)
Number of convictions recorded	3,228	(2,343)
Total penalties inflicted	£96,597	(£60,138)
Maximum penalty (£200)	5	(2)
Average penalty including all costs required to be met by the defendant per case £29 18s. 6d. £25 13s. 5d.		
Permits issued for individual non-divisible loads exceeding Ordinance limitations, involving a gross tonnage of 130,327 (100,362)	3,516	(2,598)
Permits issued for series of non-divisible loads exceeding Ordinance limitations involving a gross tonnage of 165,000 (142,600)	92	(76)

Of the total number of vehicles stopped, 5,994 or approximately 14.5 per cent were found to be overloaded in contravention of the prescribed load limitations.

The following summarises the extent of overloading found in these 5,994 vehicles:—

Percentage Overload	0-10 Per cent	10-20 Per cent	20-30 Per cent	30-50 Per cent	Over 50 Per cent
No. of vehicles reported—					
(i) Vehicles travelling interstate	932	956	301	161	24
(ii) Vehicles travelling within the State	1,250	1,489	541	292	48

The Department continued to supply information regarding application of the Ordinance limits to particular types of vehicles, and many vehicle operators, transport interests, manufacturers, and importers availed themselves of this service during the year. Numerous copies of a "Guide to Load Limitations under Ordinance No. 30c" were distributed, while assessments of the carrying capacity of eighteen vehicles were issued on the application of owners.

The installation of new plant for heavy industry, power stations, etc., continued to result in many problems in the movement of the equipment to its destination. Applications for permission to transport non-divisible loads over Main Roads have increased greatly over the past few years, and the 3,608 permits issued during the year represent an increase of 934 over the previous twelve months.

Permits to exceed Ordinance limits are issued only for non-divisible loads, and then only if transportation by sea or rail is not practicable. The motor vehicles used must be fitted with axle arrangements especially designed to spread the weight of the load, and with engines governed to a slow speed so as to reduce or eliminate impact on structures. Other factors taken into consideration are the route to be traversed and the ability of structures to support the axle weights and gross load for each individual movement. (Photograph below.)



Movement of transformer weighing 180 tons from Garden Island to Cook's River railway goods yard, on a special transporter with 12 axles, 12 ft. 6 ins. wide, and 96 load-carrying tyres. It was the heaviest load to be transported by road in New South Wales

Arrangements were in hand at the end of the year for the appointment of sixteen additional Field Inspectors based on country centres. Six Inspectors will operate from Wagga Wagga, four from Dubbo and six from Grafton. It is expected that the closer supervision of traffic in these areas will help to reduce the incidence of overloading to and from other States and will also permit more frequent checking by Sydney-based Inspectors in the heavily-trafficked metropolitan areas of Newcastle, Sydney and Wollongong-Port Kembla.

Discussions continued during the year with the Road Authorities of Victoria and Queensland with a view to obtaining uniformity of practice in the administration of regulations governing the load limitations of vehicles.

EMPLOYMENT AND INDUSTRIAL

The number of wages employees (including contractors' employees) engaged on maintenance and construction of all Main Roads and construction of Developmental Roads by the Department of Main Roads and Councils, at the 30th June, 1964, was 8,892, as compared with 7,952 as at 30th June, 1963.

No major industrial dispute occurred during the year.

STAFF TRAINING

During 1963-64, the Department maintained its policy of sponsoring selected officers to attend full-time or part-time Post-graduate courses. The courses were:—

- (i) Post-graduate Research leading to the Degree of Master of Engineering Science at the University of Sydney;
- (ii) Courses at the University of New South Wales leading to the Degree of Master of Technology in either Highway Engineering, Traffic Engineering or Engineering Construction;
- (iii) Course leading to the Diploma in Town and Country Planning at the University of Sydney.

In addition, selected officers were sent to the Australian Administrative Staff College, Victoria, or to the Institute of Administration, University of New South Wales.

Lectures conducted by the University of New South Wales in "Modern Developments in Soil Mechanics" also were attended by a number of officers.

As in previous years the Department awarded a number of Traineeships to youths for full-time Degree Courses in Civil Engineering and Surveying. On this occasion a number of Science Traineeships were awarded also.

The Department continued to sponsor members of its junior staff to attend the school conducted by the Australian Outward Bound Memorial Foundation at Fisherman's Point on the Hawkesbury River.

During the year, the Department commenced a programme of sponsorship of selected junior clerical officers to full-time degree courses in Economics and Arts.

Following the establishment of a training centre at the Department's Head Office, formal "in service" training in costing procedures was commenced for clerical officers required to take up duties on field works.

LIBRARY SERVICE

A technical library is maintained by the Department at its Head Office and at each Divisional Office. All material is arranged by the Universal Decimal Classification.

The Head Office and Divisional Office Libraries hold a total of 15,312 publications and receive regular issues of 231 periodicals.

OFFICE PREMISES AND HOUSING FOR STAFF

During the year construction of new premises at Parramatta for the Department's Central Division and at Bourke for the Central Northern Division was completed. In addition, substantial extensions were made to the offices at Bega and at Tamworth for the South Coast and the North Western Divisions respectively.

Continued expansion of activities during the year increased the need for office accommodation for staff of the Department's Head Office. To assist in meeting this need, a property fronting Campbell Street was purchased and was being converted as a temporary measure, to provide additional office accommodation. This building will be replaced ultimately with a new building.

Owing to the scarcity of privately-owned houses available for renting in country centres, the Department found it necessary to purchase or build a number of cottages for the accommodation of transferred male staff and their families.

PLANNING

CLASSIFICATION OF ROADS

The mileage of proclaimed Main Roads in the State at the 30th June, 1964, totalled 22,286, made up as follows:—

State Highways	6,533
Trunk Roads	4,163
Ordinary Main Roads	11,590

Details of these mileages are shown in Appendix No. 16.

During the year, nine roads were proclaimed as Tourist Roads and seven as Developmental Roads or extensions of them. Eight works were proclaimed as Developmental Works. Particulars of these are shown in Appendices Nos. 12A 14 and 15.

Following application by the Councils concerned, thirteen Developmental Roads were deproclaimed, wholly or in part, during the year. Construction of these roads to the stage necessary for developmental purposes was completed some time previously and the Councils desired subsequently to improve them further. Three Developmental Works were also deproclaimed during the year. Details of these roads and works are shown in Appendices Nos. 14 and 15.

The system of Main Roads at the 30th June, 1964, and the boundaries of the Department's Divisions are shown on the map at the back of this report.

ADVANCE PLANNING

Activities by the Department during the year were centred largely on analysis of the results obtained from the Road Needs Survey for the ten-year period from 1964 to 1974 which was carried out by the Department during the year ended 30th June, 1964, to assess the needs of all roads in New South Wales. Information obtained from the needs survey was used in connection with preparation of submissions by the State Government to the Commonwealth Government in regard to renewal of the Commonwealth Aid Roads Act, and for review of details of the Department's Six-Year (1962-68) Construction Plan which was announced by the Minister for Highways towards the end of 1962 and which was outlined in the Department's report for the year ended 30th June, 1963.

The results of investigations previously carried out by the Department into the economics of road improvements were used on several occasions during the year to assist in determining the merits of alternative road improvement proposals. Further investigation is proceeding with a view to the use of economic or other criteria, such as road sufficiency ratings, to assist in deciding upon the relative priority of road construction proposals.

Increasing use by the Department of electronic data processing for technical purposes continued throughout the year. The rate at which electronic computer use increased was stimulated by:—

- (i) Regular use by the Department of the I.B.M. 1620 Computer at the Institute of Highway and Traffic Research at the University of New South Wales, for development and testing of computer programmes;
- (ii) The experience gained during the year by a Departmental engineer who visited the United States of America to study the use of computers by State Highway Departments in that country.

Average computer time used throughout the year was approximately ten hours per month, as compared with about four hours per month in the previous year, but the increase in the volume of work performed during the year was greater in proportion than the increase in time used because of the employment of improved programmes and faster computers.

ROAD TRAFFIC SURVEYS

Permanent and Semi-Permanent Stations

The year commenced with traffic being counted mechanically at 99 locations. In addition, returns of traffic volumes were being obtained from 24 ferries and the Sydney Harbour Bridge Toll Office.

During the year the installation and removal of semi-permanent stations used in connection with divisional traffic surveys were continued. Counters in the Department's Lower Northern and South Coast Divisions were removed and counters were installed in the Central, Illawarra and North Eastern Divisions. Ferry returns from Tilpa and Pooncarie ceased with the opening of bridges. A counter was installed on the new route of State Highway No. 10 (Pacific Highway) between Wardell and the Bruxner Highway near Ballina.

All Annual Average Daily Traffic Volumes obtained from Permanent and Semi-Permanent Stations for the calendar year 1963 are shown in the table below. They include returns from ferries and the Sydney Harbour Bridge Toll Office. The corresponding volumes for 1962 and the percentage changes are also shown where available:—

Location	Annual Average Daily Traffic		Percentage Change
	1962	1963	
<i>Bradfield Highway—</i>			
Sydney Harbour Bridge	92,207	96,563	+ 5
<i>North-South Arterial Road (North Wollongong—Ghost's Creek Section)—</i>			
Wollongong—Gipps Street Overbridge	6,316	7,177	+ 14
<i>State Highway No. 1—Prince's Highway—</i>			
Tempe—Cook's River Bridge	40,983	42,446	+ 4
Sylvania—George's River Bridge	48,564	52,002	+ 7
Loftus—Railway Overbridge	11,610	12,774	+ 10
Wollongong—North of Mt. Ousley Road	6,863	7,736	+ 13
Wollongong—South of Smith Street	19,817	19,492	— 2
Kiama—One mile south of Post Office	3,305	3,855	+ 17
Bateman's Bay—Clyde River Bridge	1,591	1,720	+ 8
One mile north of Snowy Mountains Highway	639	667	+ 4
Eden—Two miles north of Post Office .....	....	660	....
<i>State Highway No. 2—Hume Highway—</i>			
Ashfield—east of Bruce Street	18,095	19,152	+ 6
Lansdowne—east of State Highway No. 13 (Woodville Road)	25,710	26,903	+ 5
Cross Roads—East of York Street	15,887	18,051	+ 14
Mittagong—Two miles north-east of Post Office..... (E)	3,490	4,603	+ 32
Yass—Four miles west of Post Office	2,273	2,453	+ 8
Holbrook—Two miles north of Post Office	1,318	1,468	+ 11
<i>State Highway No. 4—Snowy Mountains Highway—</i>			
West of Prince's Highway	386	345	— 11
East of Cooma—Berridale Road .....	....	2,390	....
Adaminaby—0.8 of a mile east of Adaminaby—Rosedale Road.....	....	620	....
<i>State Highway No. 5—Great Western Highway—</i>			
Ashfield—East of Dalhousie Street	37,472	36,677	— 2
Clyde—Railway level crossing	39,601	40,829	+ 3
Wallgrove—Eastern Creek Bridge	13,415	15,060	+ 12
Penrith—Nepean River Bridge	8,736	9,657	+ 11
Meadow Flat—West of Blaxland Shire boundary	2,129	2,303	+ 8
<i>State Highway No. 7—Mitchell Highway—</i>			
Dubbo—1.2 miles east of East Dubbo railway level-crossing.....	1,328	1,257	— 5
<i>State Highway No. 8—Barrier Highway—</i>			
East of Orange—Cobar Trunk Road..... (E)	223	273	+ 22

(E) Estimated owing to counter or other irregularities

Location	Annual Average Daily Traffic		Percentage Change
	1962	1963	
<i>State Highway No. 9—New England Highway—</i>			
Maitland—Wallis Creek Bridge .....	.....	13,103	.....
Bridge over Doughboy Hollow 2·9 miles east of Singleton—			
Gostwyck Road	2,165	2,335	+ 8
Tamworth—3·4 miles south of Post Office	1,096	920	— 16
Glen Innes—South of Municipal boundary	1,068	1,186	+ 11
<i>State Highway No. 10—Pacific Highway—</i>			
Brooklyn—Hawkesbury River Bridge	8,069	9,102	+ 13
Swansea—Two miles south of Lake Macquarie Bridge	5,722	5,836	+ 2
Charlestown—South of Smart Street .....	.....	23,688	.....
Tighe's Hill—South-east of Ingall Street .....	.....	22,570	.....
Hexham—Hunter River Bridge	6,026	6,486	+ 8
Karuah—Karuah River Bridge	645	937	+ 45
South of Booral—Bulahdelah Road	1,701	1,769	+ 4
Nabiac—Wollomba River Bridge	1,578	1,673	+ 6
Hastings River Bridge (north-West of Port Macquarie)	1,400	1,484	+ 6
South Grafton—Two miles south of South Grafton	1,256	1,096	— 13
Harwood—Clarence River Ferry	1,162	1,355	+ 17
Burns Point—Richmond River Ferry	974	1,008	+ 3
<i>State Highway No. 10.A.—Parry and King Streets, Newcastle—</i>			
Newcastle—East of Auckland Street .....	.....	8,458	.....
<i>State Highway No. 11—Oxley Highway—</i>			
East of Pacific Highway .....	.....	1,417	.....
Wauchope—1·6 miles south west of Buckwood Road .....	.....	769	.....
Tamworth—five miles west of Tamworth—Werris Creek Road	859	1,061	+ 24
<i>State Highway No. 12—Gwydir Highway—</i>			
Gibraltar Range Tick Gate	140	130	— 7
Glen Innes—6·0 mile north-east of Municipal boundary	199	207	+ 4
<i>State Highway No. 13—Woodville Road, Church Street and Pennant Hills Road—</i>			
Villawood—Railway level-crossing	18,881	18,285	— 3
<i>State Highway No. 14—Sturt Highway—</i>			
East of Alfred Town—Kyeamba Road	888	(E) 806	— 9
<i>State Highway No. 17—Newell Highway—</i>			
Parkes—2·1 miles north of Post Office	618	766	+ 24
<i>State Highway No. 19—Monaro Highway—</i>			
Bunyan—Cooma Creek Bridge .....	.....	1,070	.....
Nimmitabel—North of Snowy Mountains Highway .....	.....	530	.....
Bombala—North of Iris Street .....	.....	400	.....
<i>State Highway No. 20—Riverina Highway—</i>			
Deniliquin—East of Main Road No. 552 Deniliquin-Jerilderie Road	621	768	+ 24
<i>State Highway No. 22—Silver City Highway—</i>			
Broken Hill—Eight miles south of Post Office	118	141	+ 19
<i>State Highway No. 25—Cross Roads—Albion Park Road—</i>			
Macquarie Pass	924	945	+ 2
<i>Trunk Road No. 51—Canberra-Bateman's Bay Road—</i>			
Nelligen—Clyde River Ferry	388	490	+ 22
<i>Trunk Road No. 83—Grafton-Casino-Woodenbong Road—</i>			
Grafton—Clarence River Bridge	7,685	7,681	.....
<i>Trunk Road No. 90—Stroud-Gloucester Road—</i>			
Weismantels—South of West Maitland-Weismantels Road .....	.....	303	.....
<i>Trunk Road No. 91—Pambula-Bombala Road—</i>			
Pambula—West of Prince's Highway .....	.....	180	.....
<i>Main Road No. 101—West Maitland-Weismantels Road—</i>			
Paterson—Paterson River Bridge .....	.....	769	.....
<i>Main Road No. 104—East Maitland-Raymond Terrace Road—</i>			
Raymond Terrace—Hunter River Ferry	282	276	— 2
<i>Main Road No. 108—Adamstown-Newcastle-Stockton-Nelson Bay Road—</i>			
Broadmeadow—South-west of Samdon Street .....	.....	22,761	.....
Stockton—Hunter River Ferry	3,388	3,426	+ 1
Williamtown—North of Hexham-Williamtown Road .....	.....	2,962	.....
<i>Main Road No. 111—Kappinghat Creek-Tuncurry-Forster-Bulahdelah Road—</i>			
Forster—Wallis Lake Bridge	2,499	2,635	+ 5

(E) Estimated owing to counter or other irregularities

Location	Annual Average Daily Traffic		Percentage Change
	1962	1963	
<i>Main Road No. 112—Burrell Creek-Wingham-Comboyne Road—</i> Cedar Party Creek Bridge.....	....	227	....
<i>Main Road No. 147—Woodburn-Lismore Road—</i> Woodburn—Richmond River Ferry	172	171	— 1
<i>Main Road No. 149—Casino-Coraki-Buckendoon Road—</i> Coraki—Richmond River Ferry	132	131	— 1
<i>Main Road No. 152—Lawrence-Maclean-Yamba Road—</i> Buff Point—Clarence River Ferry	118	124	+ 5
<i>Main Road No. 162—Mona Vale Road—</i> Gordon—North of Pacific Highway	12,261	12,858	+ 5
<i>Main Road No. 164—Spit Road—</i> The Spit—Middle Harbour Bridge.....	35,040	37,453	+ 7
<i>Main Road No. 165—Commercial Road—Victoria Road—</i> Glebe Island—Blackwattle Bay Bridge	33,073	34,546	+ 4
Gladesville—Parramatta River Bridge	34,803	36,134	+ 4
<i>Main Road No. 167—Newbridge Road—</i> Milperra—George's River Bridge	14,060	15,588	+ 11
<i>Main Road No. 168—Forest Road—</i> Lugarno—George's River Ferry	1,030	1,119	+ 9
<i>Main Road No. 181—McGrath's Hill—Webb's Creek Road—</i> Webbs Creek—Hawkesbury River Ferry	116	142	+ 22
<i>Main Road No. 182—Windsor-Sackville Reach Road—</i> Sackville Reach—Hawkesbury River Ferry	144	126	— 13
<i>Main Road No. 184—Windsor Road—</i> Kellyville—North of Showground Road.....	8,064	8,633	+ 7
<i>Main Road No. 188—Glebe Road—Maud Street, Newcastle—</i> Glebe—West of Henry Street .....	....	8,901	....
Waratah—North-east of Lorna Street.....	....	8,908	....
<i>Main Road No. 192—Wingham-Taree Road—</i> Wingham—Railway level-crossing .....	....	1,533	....
<i>Main Road No. 194—General Holmes Drive—</i> Kyeemagh—Cook's River Bridge	35,113	37,151	+ 6
<i>Main Road No. 198—Kempsey-South West Rocks Road—</i> Kempsey—North of Sullivan Street.....	....	974	....
<i>Main Road No. 119—Rocky Point Road—Taren Point Road—</i> Taren Point—George's River Ferry	1,137	1,218	+ 7
<i>Main Road No. 200—Concord Road—</i> Uhr's Point—Parramatta River Bridge	34,374	32,602	— 5
<i>Main Road No. 209—Muswellbrook—Merriwa Road—</i> Denman—North of Post Office.....	....	549	....
<i>Main Road No. 217—Cockle Creek-Teralba Road—</i> Boolaroo—North of First Street.....	....	10,067	....
<i>Main Road No. 218—Wollombi—West Maitland Road—</i> Wollombi—East of McGrath's Hill-Wiseman's Ferry-Wollombi- Broke Road .....	....	173	....
Neath—Railway level-crossing .....	....	4,310	....
<i>Main Road No. 220—Glendon Brook-Cessnock-Brunkerville-Toronto</i> <i>Road—</i> Brunkerville—Post Office .....	....	1,597	....
<i>Main Road No. 223—West Wallsend-Kurri Kurri Road—</i> New Lambton Heights—North of Ridgeway Road.....	....	12,226	....
Buchanan—Wallis Creek Bridge .....	....	2,872	....
<i>Main Road No. 225—Wiseman's Ferry—Spencer—Mangrove Road—</i> Wiseman's Ferry—Hawkesbury River Ferry.....	243	276	+ 14
<i>Main Road No. 272—Tilba-Bega Road—</i> Bermagui—South of Paraboon Street.....	....	170	....
<i>Main Road No. 275—Kanoona-Candelo Road—</i> Candelo—West of Candelo Creek Bridge .....	....	160	....

Location	Annual Average Daily Traffic		Percentage Change
	1962	1963	
<i>Main Road No. 286—Jindabyne—Kosciusko Road—</i> Jindabyne—Ten miles north-west of Post Office .....	....	600	....
<i>Main Road No. 295—Five Islands Road—</i> Cringilla—East of Springhill Road	17,975	19,413	+ 8
<i>Main Road No. 316—Hannell Street</i> Wickham—North of Church Street .....	....	10,637	....
<i>Main Road No. 325—Dudley Road—Warner's Bay Road—</i> Redhead—North of Collier Street .....	....	2,277	....
Mount Hutton—South of Wilson's Road .....	....	3,181	....
<i>Main Road No. 326—Turton Road—</i> Hamilton North—South of Crescent Road .....	....	7,952	....
<i>Main Road No. 328—Babbage Road—</i> Roseville—Middle Harbour Bridge	18,389	20,055	+ 9
<i>Main Road No. 332—Berowra Waters Road—</i> Berowra Waters—Berowra Waters Ferry	105	113	+ 8
<i>Main Road No. 335—Tuggerah—Entrance Road—</i> The Entrance—North of Wyong Road .....	....	5,458	....
<i>Main Road No. 369—Wymah Ferry Road—</i> Wymah—Murray River Ferry	13	14	+ 8
<i>Main Road No. 391—Barmah Ferry Road—</i> Barmah—Murray River Ferry	57	70	+ 23
<i>Main Road No. 503—Wilberforce—Singleton Road—</i> Howes Valley—3.5 miles north of Post Office	574	565	— 2
<i>Main Road No. 527—Belmont—Warner's Bay Road—</i> North Belmont—North-west of Stump Street .....	....	3,407	....
<i>Main Road No. 532—Silverwater Road—</i> Silverwater—Parramatta River Bridge .....	....	15,174	....
<i>Main Road No. 556—Gladstone—Smithtown—Seven Oaks Road—</i> Smithtown—Macleay River Ferry	342	319	— 7
<i>Main Road No. 575—Wauchope—Telegraph Point Road—</i> Telegraph Point—West of Pacific Highway .....	....	159	....
<i>Other than Main Road—</i> Louth—Darling River Ferry	25	23	— 8
Mortlake—Parramatta River Ferry	193	217	+ 12
Pymont—Darling Harbour Bridge	40,487	43,306	+ 7
Raymond Terrace—Williams River Ferry	275	249	— 9
Speewa—Murray River Ferry	57	51	— 11
Tilpa—Darling River Ferry	17	14	— 17
Ulmarra—Clarence River Ferry	29	27	— 7

(E) Estimated owing to counter or other irregularities

At the end of June, 1964, 106 mechanical counting stations were in operation and returns of traffic volumes were being received from 21 ferries and the Sydney Harbour Bridge Toll Office.

Classification Surveys

In order to obtain a wider coverage, it was decided to carry out annual vehicle classification counts at 60 locations throughout the State. The first counts were undertaken in February, 1964.

Classification counts were also carried out concurrently with mechanical traffic counts, at the more important Main Road intersections in each of the Department's Divisions.

The quarterly classification counts previously carried out at five set locations were discontinued.

Automatic Data Processing

Computer programmes designed to calculate from, tabulate, list and graphically present data automatically translated on to punch cards from punched tape were tested and run on the computer at the Public Service Board's Data Processing Bureau in Sydney. In addition, results from surveys in the Department's Lower Northern and South Coast Divisions were summarised on punch cards in such a manner as to be suitable for listing on a high speed printer and updating on a computer.

Publication of Data

Traffic volume data obtained in the City of Greater Wollongong and the Municipalities of Shellharbour and Kiama were published in book form listing counting stations with their annual average daily traffic volumes and containing flow maps.

Traffic Surveys

Surveys in three of the Department's Divisions were completed during the year. The survey in the Lower Northern Division was completed in October, 1963, and in the South Coast and Illawarra Divisions in December, 1963, and April, 1964, respectively. A survey in Central Division was in progress at the end of the year.

Special Purpose Traffic Counts

Counters were installed for the Department of Civil Aviation for periods of two weeks at Mascot and Bankstown Aerodromes.

Before and after the opening of the alternative route between Calga and Ourimbah via Peat's Ridge in January, 1964, 15 counters were placed on roads between Mount White and Ourimbah to ascertain changes in traffic movements following the opening of the new road.

Since March, 1964, recording counters were used on special counts at various locations within the County of Cumberland. These counts provided data in regard to hourly distribution of traffic.

Design and Installation of Traffic Counters

Improved counters were installed at all permanent counting locations in New South Wales and greater accuracy should result.

During the year 100 punch tape recording counters and a translator to convert the tape output to punch cards for data processing were ordered. The translator and 45 counters were delivered. The translator was brought into operation in March, 1964 and 22 counters were installed in the County of Cumberland. The balance of the counters received was being tested.

PLANNING FOR DEVELOPMENT OF MAIN ROADS SYSTEM IN SYDNEY, NEWCASTLE AND WOLLONGONG

Sydney

Prior to World War II the Department commenced a study of future Metropolitan Main Road needs on a more comprehensive basis than had been previously attempted. Following the War, the investigation was resumed and resulted in the development of a Main Road Development Plan for the County of Cumberland.

The plan which, in general, was incorporated in the County of Cumberland Planning Scheme, included the establishment of new routes as well as the widening of existing roads. The new routes comprise both surface roads and expressways.

Since incorporation of the Plan in the County Scheme, the Department has found it necessary, in consequence of land-use zoning, continuing growth of traffic and improvement in road designs, to make a number of alterations in its original proposals. These alterations included an increase in the length of expressways from 88 to 150 miles.

As mentioned on page 22 of this report, the Department retained the firm of De Leuw, Cather and Co., Consulting Engineers, of Chicago and San Francisco to advise on certain aspects of the expressway system of the City of Sydney and adjacent areas.

During the year the Department gave written advice to 72,000 enquirers in regard to the effect of road proposals on individual properties.

Newcastle

The Department's proposals for the development of the Main Roads system in the Newcastle area are included in the Northumberland County District Planning Scheme and provide both for the establishment of new routes and for the widening of existing roads.

The Department is responsible for fixing of boundaries, for widening over a length of about 66 miles of existing State Highways and a Trunk Road and for determining the location and boundaries for approximately 43 miles of new routes, a total of 109 miles.

New boundaries for the 66 miles of existing roads and 33 miles of new route have been determined. However, the boundaries over about six miles of proposed new route were under review having regard to increased traffic volumes expected in the area.

Wollongong

Proposals by the Department for the development of the Main Roads system in the Wollongong-Port Kembla area are included in the Illawarra Planning scheme and provide for the establishment of 20.6 miles of new route and for the widening of 38 miles of existing roads.

The Department is responsible for 42.6 miles of the total length and the Council of the City of Greater Wollongong for the remaining 16 miles.

During the year the Department determined the future boundaries over an additional length of 8.3 miles of existing road to reach a total of 39 miles of the 42.6 miles for which it is responsible. Investigation was proceeding on the remaining 3.6 miles.

Council has fixed the boundaries for 10.7 miles of the total of 16 miles for which it is responsible.

WIDENING OF RURAL ROAD RESERVES

Progress continued during the year with the preparation of proposals for widening of road reserves of State Highways and other Main Roads in the Country and of Main Roads in predominantly rural areas in the County of Cumberland. As in the previous year, many of the lengths dealt with were either in rugged country or in built-up areas.

The objective is to secure a width of road reserve which will accommodate future carriageway requirements with associated earthworks and roadside drainage. Additional width is provided, where desirable, for the preservation of roadside trees or for future treeplanting, for erosion prevention works, or for roadside parking.

A width of 132 feet has been adopted generally but is varied to meet special circumstances. For example, the width is reduced to a minimum, usually 99 feet, to provide only for essential requirements on lengths through settled areas and highly developed land, and may be increased to 198 feet or more where the country is rugged and future traffic requirements may call for the provision of divided carriageways.

The early determination of future road boundaries, preparatory to the later acquisition of land for widening of the road reserve, is resulting in a better co-ordination of land development proposals with the requirements of the road system.

During the twelve months under review, widening proposals were approved covering a total length of 47 miles of Main Roads.

WIDENING OF METROPOLITAN MAIN ROADS

During the past year the principal roads on which property was being acquired by the Department for widening purposes were as follows:—

Prince's Highway from Rockdale shopping area to President Avenue in the Municipality of Rockdale.

Victoria Road in the Municipalities of Drummoyne and Hunter's Hill and in the City of Parramatta.

New South Head Road in the Municipality of Woollahra at Rose Bay shopping centre.

Pacific Highway at Herbert Street, St. Leonards and Leonard Street, Hornsby in the Municipality of Willoughby and Shire of Hornsby.

Mona Vale Road in the Municipality of Ku-ring-gai and Shire of Warringah.

Boundary Street and Babbage Road, East Roseville in the Municipality of Ku-ring-gai.

Military Road, Mosman in the Municipality of Mosman.

Sydney Road, Balgowlah between French's Forest Road and Angle Street in the Municipality of Manly.

Barrenjoey Road, Mona Vale, to Newport Beach in the Shire of Warringah.

Warringah Road, Beacon Hill in the Shire of Warringah.

Botany Road at Mascot shopping centre in the Municipality of Botany.

General Holmes Drive from Henson Street to Bay Street, Brighton-le-Sands in the Municipality of Rockdale.

Great Western Highway at Wattle Street in the Municipality of Ashfield.

Woodville Road, Granville in the City of Parramatta.

Hume Highway in the Municipality of Strathfield and City of Liverpool.

Epsom and Newbridge Roads, Liverpool, in the City of Liverpool.

Erskineville Road and Swanson Street, Erskineville in the City of Sydney.

Port Hacking Road and Kingsway from Sylvania to Caringbah in the Shire of Sutherland.

Southern Expressway between Taren Point and Port Hacking Road, Miranda in the Shire of Sutherland.

COUNTRY ROAD LOCATION, AERIAL PHOTOGRAPHY AND PHOTOGRAMMETRY

Large scale aerial photography was obtained during the year of lengths totalling 443 miles and use was made of aerial photography of a further 58 miles made available by other Government Departments. Of the total of 501 miles, 119 miles were over lengths not previously covered.

Photography is now available over a length of 10,358 miles of Main Roads.

The purpose in obtaining this coverage was to aid the investigation of realignment proposals, for photogrammetric use in preparing contour plans or to record floodings on and adjacent to Main Roads.

Photogrammetry was completed for the Department over a total length of 49.5 miles of country roads. This work was carried out partly by the Department of Lands and partly by private photogrammetric firms. Ground control was obtained by Departmental staff surveyors. Contour plans were also completed of part of the Sydney area for use in connection with planning of Metropolitan Expressway routes. Of these, plan coverage of $24\frac{1}{4}$ square miles was obtained by photogrammetry. Existing Council and public utility plan information was used to compile a further 77 square miles of contour maps.

Preliminary investigations of roads were completed over lengths totalling $44\frac{1}{2}$ miles in connection with new bridge sites, improvement of the location of Highways and by-pass routes.

MISCELLANEOUS

PUBLICATIONS

The Department's Journal "Main Roads" describes Main and Developmental Road and Bridge works, supplies explanations of policy and finance, records quarterly income and expenditure and acts as a medium to publish technical articles on roadmaking practice and road research. It also contains from time to time articles dealing with the history of road development in New South Wales.

"Main Roads" is distributed widely throughout Australia and overseas. Included in the distribution are all Members of the New South Wales Parliament, Members of the Commonwealth Parliament representing electorates in New South Wales, Municipal and Shire Councils throughout the State, universities, libraries and road-user organisations. It is also distributed to the press, including country newspapers in cities and towns. There are also over 550 paying subscribers to "Main Roads". Included in the countries from which subscriptions are received are Great Britain, United States of America, New Zealand, India South Africa and Malaya.

Technical and administrative instructions and guides are prepared and issued by the Department to its staff and to Municipal and Shire Councils. These include standard specifications and drawings, details of which are listed in each issue of "Main Roads", administrative bulletins and Manuals.

The bulletins and manuals are:—

Bulletins—

- General Conditions of Assistance to Councils.
- Miscellaneous Activities on Main Roads.
- Guide to Main Roads Administration.
- Proclaimed Main Roads—Schedule of gazetted descriptions.

Manuals—

- No. 1—Plant.
- No. 2—Survey and Design.
- No. 3—Materials.
- No. 4—Roadside Trees.
- No. 5—Explosives.
- No. 6—Bridge Maintenance.
- No. 7—Road Maintenance.

In addition to these bulletins and manuals, the Department also issues the following brochures and maps for public relations purposes:—

Brochures—

- How a Road is Built.
- How a Bridge is Built.
- Main Roads of New South Wales.
- Sydney Harbour Bridge.
- Gladesville Bridge.

Maps—

- Main Roads System of New South Wales.
- Sydney and Suburbs.
- Sydney and Surrounding Districts.
- Times of Travel on Main Roads.
- Types of Pavement on Main Roads.

NATIONAL ASSOCIATION OF AUSTRALIAN STATE ROAD AUTHORITIES

The National Association of Australian State Road Authorities is an organisation of the Central Road Authorities in the six States together with the Commonwealth Department of Works which is the road constructing authority for the Commonwealth Territories.

The organisation, established in 1934, serves to provide a means of pooling technical and administrative experience; of inaugurating, co-ordinating and rationalising road research projects; of harmonising and co-ordinating standards; of ascertaining and publishing the facts about Australia's principal roads and their financing; and of developing an informed outlook on Australia's road problems.

The technical work of the Association is developed by a committee known as the Principal Technical Committee, comprising the Chief Engineers of the various Authorities. The Principal Technical Committee is assisted by specialist committees of Materials Research, Traffic Engineering, Bridge Design, Advance Planning, Bituminous Pavements and Plant and Equipment.

A Secretarial and Accounts Committee comprising the Secretaries and Chief Accountants of the various State Road Authorities and the road authority for the Commonwealth Territories assists the Association in Administrative matters.

An Engineer-Secretary, assisted by a small staff, carries out the secretarial work of the Association. The Secretariat, for the time being, is located at the Department of Main Roads, New South Wales, and each of the constituent Authorities contributes toward the cost of its operation.

The Association now meets twice each year, the Twenty-sixth and the Twenty-seventh Meetings being held in Melbourne during November, 1963, and March, 1964, respectively.

These meetings were attended by the heads of the State Road Authorities of the six States and the head of the Commonwealth Department of Works. An officer of the Commonwealth Department of Shipping and Transport was also present when matters of special interest to the Australian Transport Advisory Council were being discussed.

At its meetings the Association dealt with matters which had come forward during the year from its Principal Technical Committee and arranged for further action to be taken by the Specialist Committees on additional aspects of road and bridge works and planning. Important matters considered included the presentation of information on the question of additional finance for roads; the reference of items to the Australian Standards Association; the numbering and marking of National Routes; and progress made with the preparation of proposed publications concerning the principles and practice of bituminous surfacing, highway bridge design specification, a guide to traffic engineering practice and a specification for bitumen sprayers and field testing of bitumen sprayers.

The Association also assisted the Commonwealth Government in the exercise of its membership of the Permanent International Association of Road Congresses.

During the year the Association issued "Technical Road Notes" No. 7 containing information on current road research and practices developed; "Bridge Construction Practice" a publication for the guidance of engineers supervising the construction of highway bridges by direct labour; "Specification for Mechanical Sprayers of Bituminous Materials"; and a revised edition of the publication "Main Roads Legislation and Practice".

AUSTRALIAN ROAD RESEARCH BOARD

The Australian Road Research Board was established in 1960 by the National Association of Australian State Road Authorities. Control of the Board's activities is vested in a Board of seven members, comprising the Executive Heads of the six State Road Authorities and the Commonwealth Department of Works. A director is responsible to the Board for the management of operations, and he is assisted by a staff of engineering and scientific personnel.

The members comprising the Board at the present time are:—

- I. J. O'Donnell, O.B.E., E.D., B.C.E., A.M.I.E. Aust. (Chairman).
- J. A. L. Shaw, D.S.O., B.E., M.I.E., Aust., F.A.P.I.
- C. N. Barton, O.B.E., E.D., B.E., M.I.E. Aust., F.A.I.M.
- F. D. Jackman, C.M.G., B.E., A.M.I.E. Aust., M. Inst. T.
- J. J. G. Punch, B.E., M.I.E. Aust., M. Inst. T.
- R. C. Sharp, B.E., A.M.I.C.E., A.M.I.E. Aust., M.A.P.I.
- G. D. Maunder, O.B.E., B.E., B.Ec., M.I.E. Aust.

The Director of the Board is Mr. D. F. Glynn, B.C.E., A.M.I.E. Aust.

The administrative offices of the Board are now located in the new Laboratory Building adjacent to the Head Office of the Country Roads Board in Melbourne.

Apart from the Director, the main research staff appointed so far are those to take charge of the Research Divisions of Pavements, Physical Testing, Traffic Flow and Operations, Traffic Structure and Statistics and Bituminous Materials. Invaluable part-time assistance was also being obtained from a number of eminent retired engineers working as Research Associates and from groups of students working as Research Assistants.

In May, 1964, Mr. A. J. Scala, Chief of the Pavement Research Division attended the Conference held by the Permanent International Association of Road Congresses in Rome and commenced a visit through France, Holland, England, Canada and the United States of America (including Hawaii) to establish contact with co-workers in the field of Highway Research.

Research projects being undertaken or considered during the year can be grouped broadly into such classifications as Human Factors; Traffic Structure and Statistics; Traffic Flow and Operation; Economic Planning; Data Processing; Pavements; Structures; Construction and Maintenance Practices; Materials and Physical Testing.

Human factors research projects were being carried out dealing with colour coding of traffic signals; road and vehicle lighting; a study of vehicle-driver-road interaction; and several road accident studies.

Traffic, Structure and Statistics Division projects were being carried out on Australian accident rates for the last 30 years; time-variations of road accidents in Australia between 1950 and 1960; the interrelation of road accidents and weather; traffic patterns in New South Wales; traffic growth in Victoria between 1939 and 1959; a recommended practice for traffic counts in Australia; Brisbane road accidents in 1961; Melbourne road accidents in 1961; and a sample survey of road traffic in Queensland.

In the soils field, there was a stabilisation project at the Queensland University and a field trial at Longreach. A survey of current practice in compaction was completed and published as a bulletin.

Dynamic Modulus studies are to be carried out by the staff of the Board and at the Institute of Highway and Traffic Research at the University of New South Wales. A Benkelman Beam study being carried out by the staff may be extended to the University of Tasmania. Other investigations included those on repetitive loading in Melbourne; materials selection and pavement design in Sydney; and sealing procedures at the University of Western Australia.

Projects were initiated in the Structural Research Division into soft foundations and bridge abutments; deep foundations; brittle fracture in structural steel; reinforced members in combined torsion; bending and shear; and the action of composite beams and slabs under abnormal loading.

The Traffic Flow and Operations Research Division was supporting Fellowships at the Universities of New South Wales and Adelaide and was engaged in studies of traffic capacity, as well as an investigation into traffic measuring instruments at the Institute of Highway and Traffic Research.

VISITORS FROM OVERSEAS

This year, as in previous years, the Department in co-operation with Commonwealth authorities agreed to provide study facilities for Fellows nominated to visit Australia under the Colombo Plan.

The visiting Fellows were:—

Mr. Othman bin Kalong: Junior Technical Assistant, Department of Public Works, Brunei.

Mr. S. M. Rizwan Abidi: Senior Engineer (Design) West Pakistan Water and Power Development Authority, Pakistan.

During his visit, Mr. Abidi inspected the Department's Central Testing Laboratory and discussed various specifications for compaction.

Mr. Othman spent three months studying the various methods used at Central Testing Laboratory for testing a variety of materials used in roadworks.

ARMY SUPPLEMENTARY RESERVE UNIT ROYAL AUSTRALIAN ENGINEERS

The 21 Construction Regiment, sponsored jointly by the Department of Main Roads, Metropolitan Water Sewerage and Drainage Board and Department of Public Works, held its Annual Camp at Singleton from 4th to 17th April, 1964. This occasion marked the commencement of the Regiment's fourteenth year of service.

In camp the Regiment received intensive military training which included anti-guerilla warfare, watermanship, construction of water points, and the use of heavy infantry weapons. 108 Plant Squadron completed a road project during the camp.

Assistance in training recruits was provided by the parent unit 11 C.E. (Works) in a special Recruit Training Wing which also included recruits from other engineer units under command. This was of particular value in developing a uniform standard of basic training.

During the year selected Officers and Non-Commissioned Officers attended special courses of training to assist them in qualifying for examinations for promotion and to improve the standard of instruction prior to the Annual Camp.

In addition, 4 Officers and 81 Other Ranks attended a 14-day camp at Wewak in New Guinea where a bridge and a retaining wall were constructed. Great benefit was derived from this work, which was undertaken in tropical service conditions.

MISSIONS ABROAD

In April, 1964, the Commissioner for Main Roads, Mr. J. A. L. Shaw, attended the Second South Pacific Regional Conference of the International Road Federation, which was held in Tokyo. Whilst in Japan, Mr. Shaw also inspected highway, expressway, bridge and subway projects.

During the year, the Deputy Chief Engineer, Mr. G. V. Fawkner, was sent abroad to study the control and direction of construction works, particularly in respect of contracts for the construction of modern expressways in city and urban areas. During his tour Mr. Fawkner visited the United States of America, England and Europe.

Mr. E. R. Jefferay, Urban Design and Planning Engineer, was also sent overseas during the year. Mr. Jefferay visited the United States of America, England and Europe to study current developments in expressway design.

In September-October, 1963, Mr. N. L. Ings, an engineer-officer of the Department, visited the United States of America to undertake training and studies in electronic data processing and computation for road engineering works.

In May, 1964, the Department's Advance Planning Engineer, Mr. H. James, attended the Twelfth World Roads Congress conducted in Rome by the Permanent International Association of Road Congresses.

ACKNOWLEDGEMENTS

In concluding this report of the activities of the Department of Main Roads for the financial year ended 30th June, 1964, I desire to thank the Hon. P. D. Hills, M.L.A., Deputy Premier and Minister for Highways, for his continued consideration and support.

For their co-operation and assistance in maintaining Trunk Roads, Ordinary Main Roads and Developmental Roads, I wish, on behalf of the Department, to thank all Municipal and Shire Councils throughout the State. To those Councils which have undertaken maintenance and other works on the Department's behalf on Country State Highway and on State Highways and Ordinary Main Roads in the County of Cumberland, I extend a special thanks.

I desire also to place on record the Department's appreciation of the co-operation and assistance given by State Instrumentalities and Government Departments, Executive Committees of the Local Government and Shires Associations, the former Cumberland County Council and the State Planning Authority and the Road Authorities of other States.

For their assistance in publicising the work carried out by Councils and the Department in improving the State Highways, Trunk Roads and Ordinary Main Roads of the State, I thank the Press, both country and metropolitan, and Broadcasting and Television Organisations.

Finally, I express my appreciation of the co-operation and able assistance given by officers and employees of the Department during the year.

J. A. L. SHAW,
Commissioner for Main Roads.

APPENDICES

Appendix No. 1

COUNTY OF CUMBERLAND MAIN ROADS FUND

STATEMENT OF RECEIPTS AND PAYMENTS FOR THE YEAR ENDED 30TH JUNE, 1964

(A) General Purposes

RECEIPTS		PAYMENTS	
	£	£	£
To Motor vehicle taxation (State) in accordance with the Main Roads Act, 1924-63	2,719,612	By Maintenance and minor improvement of roads and bridges—	
„ Charge on heavy commercial goods vehicles under the Road Maintenance (Contribution) Act, 1958 (State)	923,221	Work by Councils	188,555*
„ Grant under the Commonwealth Aid Roads Act, 1959	1,923,782	„ „ Department	1,256,179†
„ Contributions by Councils in accordance with Section 11 of the Main Roads Act, 1924-63	2,636,731	„ Construction and reconstruction of roads and bridges—	1,444,734
„ Contributions by Councils towards maintenance and construction of Main and Secondary Roads	230,035	Work by Councils	434,995
„ Contributions by other departments and bodies towards the maintenance and construction of Main and Secondary Roads	40,932	„ „ Department	4,894,932
„ Temporary Advance from State Treasury	350,000	„ Land acquisition	5,329,927‡
„ Other	100,274	„ Administrative expenses	1,383,726
		„ Purchase of land and buildings for administration and operation	354,865
		„ Interest, exchange, management and flotation expenses on loans	152,996
		„ Other	55,760
			61,578
Total Receipts	8,924,587	Total Payments	8,783,586
		Less Transfers to and refunds from Special Purposes Accounts in respect of finance for Operating Accounts, Suspense Accounts and Reserve Accounts	210,421
			8,573,165
Balance at 1st July, 1963	121,447	Balance at 30th June, 1964	472,869
	£9,046,034		£9,046,034

* For details see Appendix No. 10.

† For details see Appendix No. 10A.

‡ For details see Appendix No. 7.

(B) Special Purposes

RECEIPTS		PAYMENTS	
	£		£
To State Government—Loan Funds—Repayable	100,000	By Construction and reconstruction—Main Roads and bridges—	
„ Loan borrowings under Section 42A of the Main Roads Act 1924-63	500,000	Work by Department	676,669*
„ Expressways—		„ Expressways—	
Sydney Harbour Bridge Account—		Cahill Expressway—construction from the Conservatorium to Sir John Young Crescent—Work by Sydney City Council	144,000*
Cahill Expressway from the Conservatorium to Sir John Young Crescent	44,000	Warringah Expressway—Land acquisition	654,197
Warringah Expressway—Resumptions	670,000	Warringah Expressway—Construction	25,245*
Warringah Expressway—Construction	825,000	City Expressways—Survey, investigation, planning and design	111,633
	1,539,000	„ Department of Motor Transport—For Public Vehicles Fund	935,075
„ Commonwealth Government—Portion of grant under Commonwealth Aid Roads Act, 1959	22,800	„ Department of Public Works—Expenditure on culvert drainage research	21,800
„ Commonwealth Government—Portion of grant paid to the State under Commonwealth Aid Roads Act, 1959 for expenditure on rural roads	76,669	„ State Treasury—Payment of Sinking Fund on loans	1,000
			3,420
Total Receipts	2,238,469	Total Payments	1,637,964
Less net transactions of Operating Accounts, Suspense Accounts, and transfers to and from the County of Cumberland Main Roads Fund in respect of finance for Reserve Accounts and investigations etc., City Expressways	416,763		
	1,821,706		
Balance at 1st July, 1963	1,501,284	Balance at 30th June, 1964	1,685,026
	£3,322,990		£3,322,990

* For details see Appendix No. 7A.

J. A. L. SHAW,
Commissioner for Main Roads.

R. W. CAIRNS,
Chief Accountant, Department of Main Roads.

The books and accounts of the Department of Main Roads have been audited in accordance with the provisions of the Audit Act, 1902-53.

The above statement, in my opinion, is a correct record of the receipts and payments of the County of Cumberland Main Roads Fund during the year ended 30th June, 1964.

Sydney, 25th November, 1964.

W. G. MATHIESON,
Auditor-General of New South Wales.

Appendix No. 2

COUNTRY MAIN ROADS FUND

STATEMENT OF RECEIPTS AND PAYMENTS FOR THE YEAR ENDED 30TH JUNE, 1964

(A) General Purposes

RECEIPTS		PAYMENTS	
	£		£
To Motor vehicle taxation (State) in accordance with the Main Roads Act, 1924-63	10,878,448	By Maintenance and minor improvement of roads and bridges—	
„ Charge on heavy commercial goods vehicles under the Road Maintenance (Contribution) Act, 1958 (State)	3,692,880	Work by Councils	3,255,044*
„ Grant under Commonwealth Aid Roads Act, 1959	7,417,129	Work by Department	3,403,376†
„ Transfer from the Road Transport and Traffic Fund under the Transport Act, 1930-63 (State)	1,126,835	„ Construction and reconstruction of roads and bridges—	
„ Contributions by councils towards maintenance and construction of Main Roads	14,827	Work by Councils	4,067,939
„ Contributions by other departments and bodies towards maintenance and construction of Main Roads	26,185	Work by Department	9,506,787
Other	71,234	„ Land acquisition	13,574,726‡
Total Receipts	23,227,538	„ Administrative expenses	220,617
		„ Purchase of land and buildings for administration and operation	1,055,066
		„ Interest, exchange, management and flotation expenses on loans	313,340
		„ Other	437,373
			159,974
		Total Payments	22,419,516
		„ Transfers to and refunds from Special Purposes Accounts in respect of finance for Operating Accounts, Suspense Accounts and Reserve Accounts	248,195
„ Balance at 1st July, 1963	101,851		22,667,711
	£23,329,389	„ Balance at 30th June, 1964	661,678
			£23,329,389

* For details see Appendix No. 11.

† For details see Appendix No. 11A.

‡ For details see Appendix No. 8.

(B) Special Purposes

RECEIPTS		PAYMENTS	
	£		£
To State Government—Loan Funds—Repayable ..	1,000,000	By Maintenance of roads, bridges and ferries—	
„ Commonwealth Government—Unemployment Relief Grant—		Other than Main Roads—	
Main Road No. 181—Wollombi-Bucketty	35,000	Work by Councils	1,112
Main Road No. 270—Captain's Flat Road	40,000	„ Construction and reconstruction—	
„ State and Commonwealth Governments—Grants to provide employment in the City of Greater Cessnock (M.R. No. 218) ..	75,000	Main Roads and bridges—	
„ Commonwealth Government—Portion of grant under Commonwealth Aid Roads Act, 1959	23,600	Work by Councils	249,021
„ Commonwealth Government—Portion of grant paid to the State under Commonwealth Aid Roads Act, 1959 for expenditure on rural roads, bridges and ferries	369,200	Work by Department	37
„ Other departments and bodies—Contributions	191,479	„ Roads and bridges—Other than Main Roads—	
	95,880	Work by Councils	10,512
		Work by Department	983,859
Total Receipts	1,755,159	„ Maintenance and construction of unclassified roads in the Western Division	994,371*
		„ Department of Motor Transport—For Public Vehicles Fund ..	28,491
Less Net transactions of Operating Accounts, Suspense Accounts, and transfers to and from the Country Main Roads Fund in respect of finance for Reserve Accounts	232,534	„ Department of Public Works—Expenditure on works connected with transport by water and on research work	87,200
	1,522,625	„ State Treasury—Repayment of principal and payment of Sinking Fund on loans	282,000
		„ Repayment of Advance to Treasury for Rural Roads	58,576
			49,015
		Total Payments	1,749,823
Balance at 1st July, 1963	2,955,218		
	£4,477,843	Balance at 30th June, 1964	2,728,020
			£4,477,843

* For details see Appendix No. 8A.

J. A. L. SHAW,
Commissioner for Main Roads.

R. W. CAIRNS,
Chief Accountant, Department of Main Roads.

The books and accounts of the Department of Main Roads have been audited in accordance with the provisions of the Audit Act, 1902-53.

The above statement, in my opinion, is a correct record of the receipts and payments of the Country Main Roads Fund during the year ended 30th June, 1964.

Sydney, 25th November, 1964.

W. G. MATHIESON,
Auditor-General of New South Wales.

Appendix No. 3

DEVELOPMENTAL ROADS FUND

STATEMENT OF RECEIPTS AND PAYMENTS FOR THE YEAR ENDED 30TH JUNE, 1964

RECEIPTS		PAYMENTS	
	£	£	£
To Receipts under Section 7 (2) of the Commonwealth Aid Roads Act, 1959	699,652	By Construction and reconstruction of Developmental Roads and Works—	
„ State Government—Repayable advance	60,000	Work by Councils	517,060
		Work by Department	189,786
			706,846*
		„ State Government—Repayment of advance	10,985
„ Balance at 1st July, 1963	10,985	„ Balance at 30th June, 1964	52,806
	£770,637		£770,637

* For details see Appendix No. 9.

J. A. L. SHAW,
Commissioner for Main Roads.

R. W. CAIRNS,
Chief Accountant, Department of Main Roads.

The books and accounts of the Department of Main Roads have been audited in accordance with the provisions of the Audit Act, 1902-1953.

The above statement, in my opinion, is a correct record of the receipts and payments of the Developmental Roads Fund during the year ended 30th June, 1964.

Sydney, 25th November, 1964.

W. G. MATHIESON,
Auditor-General of New South Wales.

Appendix No. 4

SYDNEY HARBOUR BRIDGE ACCOUNT

(Section 7 (1) of the Sydney Harbour Bridge (Administration) Act, 1932-63)

INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 30TH JUNE, 1964

EXPENDITURE		INCOME	
	£		£
To Maintenance, lighting and cleaning bridge and approaches ..	318,387	By Road tolls	1,803,442
„ Provision of traffic facilities	30,113	„ Railway tolls	140,839
„ Cost of collecting road tolls	204,256	„ Omnibus tolls	15,301
„ Provision of new toll offices and toll-gates including alterations to existing structures	1,323	„ Net rents from properties	46,787
„ Loan charges	574,070	„ Other	605
„ Administrative expenses	15,746		
„ Alteration to archways for occupation by tenants	2,172		
	1,146,067		
„ Balance being excess of income over expenditure transferred to Appropriation Account	860,907		
	£2,006,974		£2,006,974

APPROPRIATION ACCOUNT FOR THE YEAR ENDED 30TH JUNE, 1964

EXPENDITURE		INCOME	
	£		£
To County of Cumberland Main Roads Fund (Special Purposes Account) for—		By Excess of income over expenditure transferred from Income and Expenditure Account	860,907
Contribution towards cost of construction of Cahill Expressway from the Conservatorium to Sir John Young Crescent	44,000	„ Transfers from Reserve Account	449,497
Warringah Expressway Approach—Resumptions	670,000		1,310,404
Warringah Expressway Approach—Construction	675,000		
	1,389,000		
„ Balance at 30th June, 1963—Accumulated deficiency	852,917	„ Balance at 30th June, 1964—Accumulated deficiency	931,513
	£2,241,917		£2,241,917

LOAN WORKS, 1963-64

	£		£
To County of Cumberland Main Roads Fund (Special Purposes Account) for—		By State Government—Loan Funds Repayable	150,000
Warringah Expressway Approach—Construction	150,000		
	£150,000		£150,000

Appendix No. 4—continued

SYDNEY HARBOUR BRIDGE RESERVE ACCOUNT

(Section 9 of the Sydney Harbour Bridge (Administration) Act, 1932-63)

INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 30TH JUNE, 1964

EXPENDITURE		INCOME	
	£		£
To Sydney Harbour Bridge Account	449,497	By Interest accrued during 1963-64 on Investments	21,082
		„ Balance at 30th June, 1963	428,415
	<u>£449,497</u>		<u>£449,497</u>

SYDNEY HARBOUR BRIDGE ACCOUNT

(Section 7 (1) and 9 of the Sydney Harbour Bridge (Administration) Act, 1932-63)

BALANCE SHEET AS AT 30TH JUNE, 1964

LIABILITIES		ASSETS	
	£		£
Sundry Creditors—		Cash in hand	11,184
State Treasury—Sinking Fund and Flotation Expenses ..	972,080	Cash at State Treasury	<u>4,938</u>
Other	<u>51,441</u>		16,122
		Sundry Debtors—	
		Commissioner for Railways on account of	
		railway tolls	16,177
		Commissioner for Government Transport on	
		account of omnibus tolls	<u>4,513</u>
		Other	<u>6,736</u>
			27,426
		Stock on hand	26,461
		Furniture, fittings and equipment	29,337
		Less Depreciation	<u>7,338</u>
			21,999
		Accumulated deficit at 30th June, 1964	<u>931,513</u>
	<u>£1,023,521</u>		<u>£1,023,521</u>

J. A. L. SHAW,
Commissioner for Main Roads.

R. W. CAIRNS,
Chief Accountant, Department of Main Roads.

The books and accounts of the Sydney Harbour Bridge have been audited in accordance with the provisions of the Audit Act, 1902-1953.

In my opinion the balance sheet as at 30th June, 1964, and supporting income and expenditure, appropriation and reserve accounts for the year then ended set out a true and fair view of the financial position of the Sydney Harbour Bridge Account and operations for the year, according to the best of my information and the explanations given to me and as shown by such books and accounts.

Sydney, 25th November, 1964.

W. G. MATHIESON,
Auditor-General of New South Wales.

Appendix No. 5

STATEMENT OF REVENUE AND EXPENDITURE FOR THE FIVE YEARS ENDED 30TH JUNE, 1964

COUNTY OF CUMBERLAND MAIN ROADS FUND

(A) General Purposes

Heading	1959-60	1960-61	1961-62	1962-63	1963-64
	£	£	£	£	£
REVENUE					
Motor vehicle taxation (State)	1,705,479	1,783,331	1,816,131	2,139,377	2,719,612
Charge on heavy commercial goods vehicles under Road Maintenance (Con- tribution) Act, 1958 (State)	629,007	703,132	720,516	801,040	923,221
Commonwealth Aid Roads Acts	1,440,388	1,522,637	1,647,074	1,768,797	1,923,782
Contributions by councils	1,547,046	1,824,190	2,211,924	2,347,527	2,866,766
Other	134,930	129,199	221,732	104,361	141,206
Advance from State Treasury (Repayable)					350,000
Total	<u>£ 5,457,050</u>	<u>5,962,489</u>	<u>6,617,377</u>	<u>7,161,102</u>	<u>8,924,587</u>
EXPENDITURE					
Maintenance and minor improvement of roads and bridges	1,010,769	1,054,493	1,174,505	1,040,139	1,444,734
Construction and reconstruction of roads and bridges	3,683,315	3,997,813	3,663,453	4,181,446	5,329,927
Land acquisition	460,565	901,968	1,229,931	885,946	1,383,726
Administrative expenses	209,782	215,150	327,138	439,121	354,865
Purchase of land and buildings for administration and operation	32,956	80,398	76,601	90,565	152,996
Interest, exchange, management and flotation expenses on loans	6,400	16,673	28,365	45,020	55,760
Other	28,349	38,077	51,685	73,611	61,578
Total	<u>£ 5,432,136</u>	<u>6,304,572</u>	<u>6,551,678</u>	<u>6,755,848</u>	<u>8,783,586</u>

Appendix No. 5—continued

STATEMENT OF REVENUE AND EXPENDITURE FOR THE FIVE YEARS ENDED 30TH JUNE, 1964—continued

COUNTY OF CUMBERLAND MAIN ROADS FUND—continued

(B) Special Purposes

Heading	1959-60	1960-61	1961-62	1962-63	1963-64
	£	£	£	£	£
REVENUE					
Commonwealth Government—Grant	.....	.....	150,000	.....	.....
Expressways—					
State Government—Contribution from loan funds	250,000	275,000	373,000	126,000	.....
Sydney Harbour Bridge Account	362,000	768,000	1,822,000	2,081,000	1,539,000
Commonwealth Government—Commonwealth Aid Roads Acts	21,800	23,074	72,943	44,164	99,469
Other departments and bodies—Contributions	16,000	22,000	23,436	.....	.....
Total	£ 649,800	1,088,074	2,441,379	2,251,164	1,638,649
EXPENDITURE					
Construction and reconstruction—					
Main Roads and bridges	93,355	356,645	525,000	21,664	676,669
Roads and bridges other than Main Roads	.....	15,266	56,560	375,000	.....
Construction of Expressways	620,846	1,105,183	2,383,722	2,406,522	935,075
Department of Motor Transport—Public Vehicles Fund	21,800	21,800	21,800	21,800	21,800
Department of Public Works—for research	.....	.....	.....	2,200	1,000
Construction—Other than roads and bridges	8,973	28,971	4,576	.....	.....
Total	£ 744,974	1,527,865	2,991,658	2,827,186	1,634,544

COUNTRY MAIN ROADS FUND

(A) General Purposes

Heading	1959-60	1960-61	1961-62	1962-63	1963-64
	£	£	£	£	£
REVENUE					
Motor vehicle taxation and fees (State)	6,821,916	7,133,325	7,264,524	8,537,501	10,878,448
Transfer from the Road Transport and Traffic Fund	178,048	.....	.....	461,223	1,126,835
Charge on heavy commercial goods vehicles under Road Maintenance (Contribution) Act, 1958 (State)	2,516,027	2,812,528	2,882,063	3,204,161	3,692,880
Commonwealth Aid Roads Acts	5,554,021	5,890,549	6,336,883	6,805,187	7,417,129
Contributions by councils	102,076	34,688	57,630	19,824	14,827
Other	112,805	99,636	95,009	68,517	97,419
Total	£ 15,284,893	15,970,726	16,636,109	19,116,413	23,227,538
EXPENDITURE					
Maintenance and minor improvement of roads and bridges	5,275,140	5,003,462	5,088,022	5,236,727	6,658,420
Construction and reconstruction of roads and bridges	7,915,209	9,858,602	9,161,808	9,491,997	13,574,726
Land acquisition	59,919	112,052	244,855	197,524	220,617
Administrative expenses	614,421	697,525	801,602	876,693	1,055,066
Purchase of land and buildings for administration and operation	231,094	322,884	259,737	344,929	313,340
Interest, exchange, management and flotation expenses on loans	196,039	210,565	224,284	237,852	437,373
Other	49,865	71,797	139,184	111,786	159,974
Total	£ 14,341,687	16,276,887	15,919,492	16,497,508	22,419,516

(B) Special Purposes

Heading	1959-60	1960-61	1961-62	1962-63	1963-64
	£	£	£	£	£
REVENUE					
State and Commonwealth Governments—Grants	388,750	100,000	181,000	111,400	98,600
Commonwealth Government—Commonwealth Aid Roads Acts	587,200	525,801	736,641	610,024	560,679
Other departments and bodies—Contributions	180,422	286,670	56,654	133,698	95,880
Total	£ 1,156,372	912,471	974,295	855,122	755,159
EXPENDITURE					
Maintenance of roads, bridges and ferries—Other than Main Roads	66,105	79,511	80,621	53,693	1,112
Construction and reconstruction—					
Main Roads and bridges	455,124	531,551	477,271	410,931	249,058
Roads and bridges—Other than Main Roads	83,017	310,528	596,070	282,497	994,371
Maintenance and construction—Unclassified roads in the Western Division	56,768	17,025	16,758	15,456	28,491
Department of Motor Transport—Public Vehicles Fund	87,200	87,200	87,200	87,200	87,200
Department of Public Works—Works connected with transport by water and for research	200,000	200,000	206,000	278,800	282,000
Construction—Other than roads and bridges	157	.....	.....	.....	.....
Total	£ 948,371	1,225,815	1,463,920	1,128,577	1,642,232

Appendix No. 5—continued

STATEMENT OF REVENUE AND EXPENDITURE FOR THE FIVE YEARS ENDED 30TH JUNE, 1964—continued

DEVELOPMENTAL ROADS FUND

Heading	1959-60	1960-61	1961-62	1962-63	1963-64
	£	£	£	£	£
REVENUE					
Commonwealth Aid Roads Acts	425,000	586,000	457,924	701,613	699,652
Other	—	—	1,500	2,795	—
Total	£ 425,000	£ 586,000	£ 459,424	£ 704,408	£ 699,652
EXPENDITURE					
Construction and reconstruction of Developmental Roads and Works	£ 455,605	£ 524,929	£ 581,551	£ 730,774	£ 706,846

TOTAL ALL ROADS FUNDS

(A) General Purposes

Heading	1959-60	1960-61	1961-62	1962-63	1963-64
	£	£	£	£	£
REVENUE					
Motor vehicle taxation and fees (State)	8,527,395	8,916,656	9,080,655	10,696,878	13,598,060
Transfer from the Road Transport and Traffic Fund	178,048	—	—	461,223	1,126,835
Charge on heavy commercial goods vehicles under Road Maintenance (Contribution) Act, 1958 (State)	3,145,034	3,515,660	3,602,579	4,005,201	4,616,101
Commonwealth Aid Roads Acts	7,419,609	7,999,186	8,441,881	9,275,597	10,040,563
Contributions by councils	1,649,122	1,858,878	2,269,554	2,367,351	2,881,593
Other	247,735	228,835	318,241	175,673	238,625
Advance from State Treasury (repayable)	—	—	—	—	350,000
Total	£ 21,166,943	£ 22,519,215	£ 23,712,910	£ 26,981,923	£ 32,851,777
EXPENDITURE					
Maintenance and minor improvement of roads and bridges	6,285,909	6,057,955	6,262,527	6,276,866	8,103,154
Construction and reconstruction of roads and bridges	12,054,129	14,381,344	13,406,812	14,404,217	19,611,499
Land acquisition	520,484	1,014,020	1,474,786	1,083,470	1,604,343
Administrative expenses	824,203	912,675	1,128,740	1,315,814	1,409,931
Purchase of land and buildings for administration and operation	264,050	403,282	336,338	435,494	466,336
Interest, exchange, management and flotation expenses on loans	202,439	227,238	252,649	282,872	493,133
Other	78,214	109,874	190,869	185,397	221,552
Total	£ 20,229,428	£ 23,106,388	£ 23,052,721	£ 23,984,130	£ 31,909,948

(B) Special Purposes

Heading	1959-60	1960-61	1961-62	1962-63	1963-64
	£	£	£	£	£
REVENUE					
State and Commonwealth Governments—Grants	388,750	100,000	331,000	111,400	98,600
State Government (contribution from loan funds) and transfer from Sydney Harbour Bridge Account—for Expressways	612,000	1,043,000	2,195,000	2,207,000	1,539,000
Commonwealth Government—Commonwealth Aid Roads Acts	609,000	548,875	809,584	654,188	660,148
Other departments and bodies—Contributions	196,422	308,670	80,090	133,698	95,880
Total	£ 1,806,172	£ 2,000,545	£ 3,415,674	£ 3,106,286	£ 2,393,628
EXPENDITURE					
Maintenance of roads, bridges and ferries—Other than Main Roads	66,105	79,511	80,621	53,693	1,112
Construction and reconstruction—Main Roads and bridges	548,479	888,196	1,002,271	432,595	925,727
Construction and reconstruction—Roads and bridges other than Main Roads	83,017	325,794	652,630	657,497	994,371
Construction of Expressways	620,846	1,105,183	2,383,722	2,406,522	935,075
Maintenance and reconstruction—Unclassified roads in the Western Division	56,768	17,025	16,758	15,456	28,491
Department of Motor Transport—Public Vehicles Fund	109,000	109,000	109,000	109,000	109,000
Department of Public Works—Works connected with transport by water and for research	200,000	200,000	206,000	281,000	283,000
Construction—Other than roads and bridges	9,130	28,971	4,576	—	—
Total	£ 1,693,345	£ 2,753,680	£ 4,455,578	£ 3,955,763	£ 3,276,776

Appendix No. 5A

STATE GOVERNMENT—REPAYABLE
LOAN CAPITAL TRANSACTIONS

Heading	1959-60	1960-61	1961-62	1962-63	1963-64
	£	£	£	£	£
Loan money received from the State Government—					
County of Cumberland Main Roads Fund	300,000	150,000	375,000	375,000	100,000
Country Main Roads Fund	100,000	275,000	200,000	455,000	1,000,000
Repayments—Principal and Sinking Fund—					
County of Cumberland Main Roads Fund	740	320	1,590	2,330	3,420
Country Main Roads Fund	45,241	48,496	51,485	54,758	58,576

Appendix No. 5B

BORROWING UNDER SECTION 42A OF THE MAIN ROADS ACT

LOAN CAPITAL TRANSACTIONS

	1959-60	1960-61	1961-62	1962-63	1963-64
	£	£	£	£	£
Loan money received—					
County of Cumberland Main Roads Fund	500,000

Appendix No. 6

SUMMARY OF LOAN LIABILITIES TO THE STATE TREASURY—MAIN AND DEVELOPMENTAL ROADS FUNDS

Particulars	County of Cumberland Main Roads Fund	Country Main Roads Fund	Developmental Roads Fund	Total
		Section 21 (3, 3A and 3B) of Main Roads Act, 1924-1963	Section 21 (8) of Main Roads Act, 1924-1963	
	£	£	£	£
GROSS LIABILITY ASSUMED—				
Prior to 1st July, 1963	1,200,000	7,142,652	1,724,520	10,067,172
During 1963-64	100,000	1,000,000	.....	1,100,000
Total to 30th June, 1964	£1,300,000	£8,142,652	£1,724,520	£11,167,172
REPAYMENT OF PRINCIPAL AND SINKING FUND CONTRIBUTION—				
Prior to 1st July, 1963—				
By Department	4,980	1,593,890	23,501	1,622,371
„ Commonwealth Government under Financial Agreement and Federal Aid Roads and Works Agreement	4,582	596,481	143,225	744,288
Total prior to 1st July, 1963	£9,562	£2,190,371	£166,726	£2,366,659
During 1963-64—				
By Department	3,420	58,576	.....	61,996
„ Commonwealth Government under Financial Agreement	2,954	14,115	4,225	21,294
Total during 1963-64	£6,374	£72,691	£4,225	£83,290
To 30th June, 1964—				
By Department	8,400	1,652,466	23,501	1,684,367
„ Commonwealth Government under Financial Agreement and Federal Aid Roads and Works Agreement	7,536	610,596	147,450	765,582
Total to 30th June, 1964	£15,936	£2,263,062	£170,951	£2,449,949

Appendix No. 6A

LOANS (IN ORDER OF SERIES), 30TH JUNE, 1964

Series	Maturing	Interest Rate	Amount
1	1979	5%	£ 500,000

Appendix No. 7

COUNTY OF CUMBERLAND MAIN ROADS FUND—GENERAL PURPOSES

SUMMARY OF EXPENDITURE ON CONSTRUCTION AND RECONSTRUCTION WORKS

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Expenditure from Department's Funds		
					To 30th June, 1963	1963-64	To 30th June, 1964
					£	£	£
STATE HIGHWAYS							
PRINCE'S HIGHWAY							
Greater Wollongong	1	Bulli Pass	Realignment and widening	Department	40,040	849	40,889
Do	1	32.28m. to 34m. from Sydney	Improvements	do		22,640	22,640
Do	1	28.8m. to 29.5m. from Sydney	Provision of climbing lane	do		3,256	3,256
Kogarah	1	Northern end of George's River Bridge	Pedestrian Underpass	Council	353	80	433
Marrickville	1	Cook's River Railway Goods Yard	Maintenance of stormwater channel	do		60	60
Marrickville and Rockdale	1	Cook's River Bridge at Tempe	Prestressed concrete bridge	Department	215,837	192	216,029
Do	1	do	Approaches	do	32,499	46	32,545
Rockdale	1	Banksia-avenue to Bay-street	Widening and reconstruction	do	22,196	333,114	355,310
Sutherland	1	George's River Bridge to Port Hacking-road	Second carriageway	do	78,278	22,766*	55,512
Do	1	Port Hacking-road to Young-street	do	do	46,893	144,108	191,001
Do	1	Belgrave-street to Port Hacking-road	Additional lanes and kerb and gutter	do	1,783	22,766	24,549
Do	1	Engadine	Kerb and gutter	Council	562	93*	469
Sydney	1	Newtown Bridge	Improvement to kerb line	do	921	234	1,155
						£504,486	
HUME HIGHWAY							
Bankstown	2	Intersection of Rookwood-road and Chapel-road	Provision of right-turn lanes	Department		6,436	6,436
Do	2	Near Arundle-road, Bass Hill	Kerbing and paving for traffic signals	do		1,134	1,134
Do	2	Bridge over railway line at Yagoona Station	Widening	do	35,184	528	35,712
Do	2	Waterloo-road to Jacobs-street	Kerb and gutter	Council		1,758	1,758
Burwood	2	Heydon-street to Angelo-street	Widening	Department	64	10,125	10,189
Liverpool	2	Terminus-street to Cross-roads	Second carriageway	do	123,556	107,363	230,919
Do	2	Intersection with Main Road No. 177 at Cross-roads	Reconstruction	do	35,490	1,004	36,494
Do	2	Bridge over railway line at Warwick Farm	Widening	do	656	155	811
Strathfield	2	Mintaro-street to Cook's River Bridge	Reconstruction	do	63,775	53,550	117,325
Do	2	Cross-street	Improvement to drainage	Council	337	92	429
						£182,145	
GREAT WESTERN HIGHWAY							
Auburn	5	Intersection with Station-road	Reconstruction	Council	473	7	480
Blue Mountains	5	Springwood to Leura, selected sections	Kerbing and guttering	do		2,000	2,000
Blacktown and Holroyd	5	Wyena-road to Blacktown-road	Second carriageway	Department	151,803	48,260	200,063
Holroyd	5	Chester-street to Bridge-road	Widening and reconstruction	do		40,644	40,644
Do	5	Mays Hill	Field Trial of coloured pavement	do		2,858	2,858
Do	5	Steele-street to Chester-street	Widening and kerbing and guttering	Council	4,328	1,143*	3,185
Leichhardt and Marrickville	5	Taverner's Hill and Johnstone-street	Reconstruction with heater-planer treatment	Department		28,145	28,145
Do	5	Norton-street to Old Canterbury-road and section of Railway-street to West-street	Reconstruction	do		23,171	23,171
Parramatta	5	Marsden-street	Adjustment of public utilities	do		517	517
Do	5	Raymond-street to Early-street	Reconstruction	do	3,897	9,684	13,581
Do	5	Railway level-crossing at Clyde	Improvement	do		3,551	3,551
Do	5	Railway level-crossing at Clyde	Replacement of failed concrete slabs	Department		2,270	2,270
Penrith	5	32.65m. to 32.90m. from Sydney	Side strips including sub-soil drains	do	5,324	90	5,414
Do	5	Between Castlereagh-road and Peach Tree Creek	Adjustment to fencing	Council		205	205
Strathfield	5	Courallie-avenue	Reconstruction of concrete pavement	Department		1,585	1,585
						£161,844	

*Credit

Appendix No. 7—continued

COUNTY OF CUMBERLAND MAIN ROADS FUND—GENERAL PURPOSES—continued
Summary of Expenditure on Construction and Reconstruction Works—continued

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Expenditure from Department's Funds		
					To 30th June, 1963	1963-64	To 30th June, 1964
					£	£	£
STATE HIGHWAYS—continue							
PACIFIC HIGHWAY							
Hornsby	10	Asquith to Mount Ku-ring-gai	Duplicate carriageway	Department		73,058	73,058
Do	10	Main Line and Milson's Point line at Hornsby	Widening railway overbridges	do		17,661	17,661
Do	10	Near Hazelmead-road junction	Drainage	Council		29	29
Do	10	Between bridges over Milson's Point and Main Railway Line at Hornsby	Widening and reconstruction	do	3,500	300*	3,200
Ku-ring-gai	10	Opposite Greengate-road, Killara	Six inch rider main	Department	176	3*	173
Do	10	Ryde-road and Mona Vale-road	Channelisation and additional lane	do		194	194
Do	10	Lindfield Shopping Centre, near Bent-street	Widening and reconstruction	do		4,680	4,680
Do	10	Heydon-avenue to Woodville-avenue	Dual carriageway	do		33,377	33,377
Do	10	Ryde-road to Livingstone-avenue	Reconstruction	do		4,535	4,535
Do	10	Pymble Post Office	Improvement to drainage	Council	300	48	348
North Sydney	10	Near Arthur-street	Reconstruction using heater-planer treatment	Department		5,000	5,000
Willoughby	10	Mowbray-road to Boundary-street	Reconstruction	do	148,027	53,137	201,164
						£191,416	
STATE HIGHWAY No. 13							
Bankstown, Fairfield and Parramatta	13	Chiltern-road to Hume Highway	Dual carriageway	Department		607	607
Hornsby	13	Intersection at Thompson's Corner	Channelisation	Council	29,372	1,752*	27,620
Do	13	Observatory Park to Pennant Hills	Reconstruction	Department	21,389	10	21,399
Do	13	1m. south of Pearce's Corner to Pennant Hills	Widening	do	57,573	66,497	124,070
Do	13	Bridge over railway line at Pennant Hills	do	do		57	1,035
Do	13	Intersection with Main Road No. 373 at Mobbs Hill	Improvement	do	2,399	12,507	14,906
Do	13	Pennant Hills Road, Normanhurst	Adjustment to fence	Council		410	410
Parramatta	13	Church-street, Parramatta	Reconstruction using heater-planer treatment	Department		144	144
						£78,480	
						£1,118,371	
Total—State Highways							
ORDINARY MAIN ROADS							
Auburn	190	Wyatt Park deviation to Parramatta-road	Construction and widening	Council	30,684	4,887	35,571
Do	190	Cutcliffe-avenue, Potts Hill	Omnibus stopping places	do		30	300
Do	532	Parramatta River to Parramatta-road	Reconstruction and widening	Department	58,160	6,878	65,038
Do	532	Fariola-street to Egerton-street	Stormwater drainage	Council	500	1,208	1,708
Bankstown	167	Salt Pan Creek to Chapel-road	Construction	do		26,894	26,894
Do	190	Northern side of Kitchener-parade	Omnibus stopping places	do	490	1	491
Do	508	Little Salt Pan Creek	Reinforced concrete bridge	do	37,768	10,392	48,160
Do	508	The River-road to Salt Pan Creek	Construction	do	55,000	19,655	74,655
Do	508	Salt Pan Creek	Reinforced concrete bridge-piles	Department	46,253	290	46,543
Bankstown and Hurstville	508	Salt Pan Creek	Reinforced concrete bridge and approach bridge	do		100,177	100,177
Baulkham Hills	169	Hill-street to Cross-street	Widening	do		765	765
Do	160	Rogan's Hill near Glenhaven-road	Reconstruction and realignment	do		680	680
Do	160	Rogan's Hill near Glenhaven-road	do	Council		10,210	10,210
Do	184	Kellyville	do	Department	1,910	1,325	3,235
Blacktown	537	Garfield-road	Widening	do		145	145
Do	546	Near McCulloch-street	Regrading of crest	Council	458	1*	457
			Drainage				

* Credit

Appendix No. 7—continued

COUNTY OF CUMBERLAND MAIN ROADS FUND—GENERAL PURPOSES—continued

Summary of Expenditure on Construction and Reconstruction Works—continued

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Expenditure from Department's Funds		
					To 30th June, 1963	1963-64	To 30th June, 1964
					£	£	£
ORDINARY MAIN ROADS—continued							
Botany	171	Loop-road at La Perouse	Construction	Department	24,288	48,261	72,549
Do	344	Bunnerong-road to near Smith-street	Widening	do	7,554	47,226	54,780
Do	344	Between Moore-street and Baker-street	Kerb and gutter	Council		150	150
Burwood, Canterbury and Strathfield.	315	Cook's River at Belfield	Prestressed concrete bridge	do		21,308	21,308
Do	315	Bridge over Cook's River at Belfield	Approaches	do		4,106	4,106
Camden	154	Near State Highway No. 2 at Narellan	Relocation of water mains	do		2,434	2,434
Do	154	Lowes Creek	Reinforced concrete box culvert	Council	10,000	49*	9,951
Campbelltown	177	Junction with Kialba-road	Improvement	Department		494	494
Do	178	Bow Bowing Creek	Timber beam bridge	do	1,288	11,923	13,211
Do	179	Water Race, 2.43m. from Main Road No. 178	Steel and concrete bridge	Council	11,500	5,000*	6,500
Do	179	Bridge over Water Race	Approaches	do	24,300	24,300	24,300
Canterbury	167	Victoria-road to Lyon-avenue Punchbowl	Reconstruction and drainage	do	49,308	660	49,968
Do	167	Jeffrey-street to Fore-street	Reconstruction	do	27,139	3,434	30,573
Do	167	King George's-road to Warren-parade	do	do	62,236	6,706	68,942
Do	167	Lyon-avenue to Salt Pan Creek	Reconstruction and drainage	do	46,515	1,099	47,614
Do	167	Charles-street and Jeffrey-street	do	do		2,000	2,000
Do	315	74 King George's-road, Wiley Park	Kerb and gutter	do		44	44
Colo	184	Wheeny Creek to Kurrajong Deviation	Passing lane	Department		23,002	23,002
Do	184	North Richmond 0.3m. from Hawkesbury River Bridge	Reinforced concrete box culvert and approaches	do	1,420	8,982	10,402
Do	570	2.38m. to 5.2m. from Richmond	Reconstruction	do	28,367	45,012	73,379
Concord	315	Parramatta-road to Cooper-street	do	do		2,033	2,033
Drummoyne	395	Great North-road and Lyons-road	Improvement of intersection	Council	4,953	1,297	6,250
Do	395	Great North-road and Russell-street	Kerbside lanes	do	37,003	248	37,251
Drummoyne and Hunters Hill	165	Parramatta River at Gladesville	Reinforced concrete arch bridge	Department	1,737,678	323,220†	2,060,898
Do	165	Bridge over Parramatta River at Gladesville	Approaches	do	136,350	391,058	527,408
Fairfield	534	Green Valley Creek	Reinforced concrete culvert and diversion channel	Council		1,133	1,133
Greater Wollongong	177	Loddon River	Concrete bridge	Department		14,193	14,193
Do	177	Bridge over Loddon River	Approaches	do		1,357	1,357
Hornsby	139	Langston Place, Epping	Traffic island	Council		109	109
Do	and 373	1m. from State Highway No. 10	Realignment of curves	do	13,481	925	14,406
Do	161	Arcadia-road to Crosslands-road	Widening and improvement	do	10,117	6,994	17,111
Do	161	Calderwood-road	Improvement of intersection	do		7,280	7,280
Do	373	West Epping School	Kerb and gutter	do		72	72
Hunters Hill	165	Gladesville	Reconstruction by heater-planer treatment	Department		1,948	1,948
Do	165	Cowell-street to Junction-street, Gladesville	Improvement of kerb	Council	280	27*	253
Do	166	Nemba-street to Church-street	Construction, kerb and gutter, drainage and subsidiary works	Department	18,831	697	19,528
Do	166	Over North Western Expressway at Huntley's Point	Overpass	do	13,356	94,188	107,544
Do	166	Tarban Creek at Huntley's Point	Prestressed and reinforced concrete bridge	do		79,993	79,993
Do	166	Near Luke-street	Drainage	Council		8	7
Hunters Hill and Lane Cove	166	Lane Cove River at Figtree	Steel and concrete bridge	Department	423,608	48,835	472,443
Do	166	Bridge over Lane Cove River at Figtree	Approaches	do	189,591	139,670	329,261
Hurstville	168	Near Pearce-avenue, Peakhurst	Drainage	Council		196	394
Do	168	Jersey-avenue to Scott-street and Mavis-avenue to Stoney Creek-road.	Widening, kerb and gutter	do	9,386	252	9,638
Do	168	Near Lugarno Ferry	Construction of third lane	do		4,000	4,000
Do	168	Park-street and Samuel-street	Drainage, kerb and gutter	do		730	730
Do	168	Corner of Jersey-avenue	Splay	do		185	185
Do	168	Peakhurst	Omnibus stopping places	do		100	100
Do	508	Clarke-street	Levelling of footway	do	189	14	203
Do	508	Bridge over Salt Pan Creek	Approaches	do		21,500	21,500
Do	508	Intersection with Belmore-road	Improvement	do	100	100*	

* Credit.

† For additional expenditure in Appendix No. 7A

Appendix No. 7—continued

COUNTY OF CUMBERLAND MAIN ROADS FUND—GENERAL PURPOSES—continued

Summary of Expenditure on Construction and Reconstruction Works—continued

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Expenditure from Department's Funds		
					To 30th June, 1963	1963-64	To 30th June, 1964
					£	£	£
ORDINARY MAIN ROADS—continued							
Kogarah	315	Near Cronin-avenue, Penshurst	Widening	Council	7,083	1,026	8,109
Ku-ring-gai	162	Near Shinfield-avenue	do	do	500	2,418	2,918
Do	328	Bridge over Middle Harbour at Roseville	Southern approach	Department	7,856	7,856	7,856
Do	328	Adjacent to No. 54 Babbage-road Roseville	Drainage	Council	44	30*	14
Do	328	Adjacent to No. 58 Babbage-road Roseville	do	do	38	2*	36
Do	366	At Milton-road	Improvement of curves	do	6,362	1,595	7,957
Do	366	Near Keat's-road	Kerb and gutter	do	114	5	119
Do	366	Adjacent to No. 298 Bobbin Head-road, Turramurra	Piping of drainage easement	do	48	48*	367
Ku-ring-gai and Warringah	328	Middle Harbour at Roseville	Prestressed concrete girder bridge	Department	22,840	22,840	22,840
Leichhardt	165	Commercial-road and Victoria-road Rozelle	Reconstruction by heater-planer treatment	do	8,720	8,720	8,720
Do	165	Glebe Island Bridge to Commercial-road	Widening	do	154	154	154
Do	165	Darling-street to Withecombe-street	Heater-planer treatment	do	98*	12,926	12,926
Liverpool	154	Badgery's Creek, 10.1m. from Narellan	Reinforced concrete box culvert and approaches	Council	13,024	73,426	81,246
Do	167	Devil's Elbow	Deviation	Department	7,820	31,848	31,848
Do	167	Devil's Elbow	Reinforced concrete bridge	Department	10,000	10,000	10,000
Do	535	Badgery's Creek	do do do	Council	11,005	11,005	11,005
Do	535	Bridge over Badgery's Creek	Approaches	Department	3,192	6,448	9,640
Do	578	Terminus-street	Reconstruction	Council	500	500	500
Manly	397	Intersection with Dalwood-avenue	Improvement	do	629	113	742
Mosman	400	Mosman Junction	Channelisation	do	8,058	2,451	10,509
North Sydney	164	Cremorne Junction	Reconstruction and channelisation	do	45,286	10,305	55,591
Parramatta	165	Gammel-street to Spurway-street	Widening	Department	43,197	108,040	108,040
Do	165	Hughes-avenue to Marsden-road	do	do	83,895	127,092	127,092
Do	165	Rydalmere Overbridge, Subiaco and Vineyard Creek Bridges	Approaches	do	2,405	80,835	80,835
Do	165	Between Gammel-street and Clyde-street	Dual carriageway	do	2,405	2,405	2,405
Do	165	Church-street to Marsden-road	Kerbing and guttering	do	57,912	8,227	66,139
Do	165	Bridge over railway line at Rydalmere	Construction	do	22,642	43,295	43,295
Do	165	Bridge over Subiaco Creek at Rydalmere	Widening	do	20,653	28,845	28,845
Do	165	Vineyard Creek	Prestressed concrete bridge	do	9,561	9,561	9,561
Do	309	Bridge over A'Becketts Creek	Widening	do	964	964	964
Do	309	Bridge over A'Becketts Creek	Approaches	do	131,900	2,323	134,223
Do	532	Parramatta River to Main Road No. 165	Construction	do	20,203	431	20,634
Do	574	Intersection with Main Road No. 532 to Summers-street	Reconstruction	Council	1,773	1,773	3,039
Do	574	Bridge over Vineyard Creek	Approaches	Department	25,439	29,357	54,796
Penrith	154	Two hundred feet south of Maxwell-street to Nepean District Hospital	Deviation	do	12,400	12,400	12,400
Do	154	Railway Overbridge at Parker-street	Reconstruction	do	108	108	108
Do	154	Parker-street entrance to Nepean District Hospital	Alteration	Council	39,000	1,761	40,761
Do	155	1.35m. to 5.2m. north of State Highway No. 5	Widening, strengthening and surfacing	do	10,312	10,312	10,312
Do	155	5.2m. to 11.6m. north of State Highway No. 5	Reconstruction, widening and surfacing	do	15,172	15,172	15,172
Randwick	175	Near Woomera-road	Construction	Department	500	313	813
Do	327	Near Botany-street	Reconstruction of kerb and gutter	Council	19,304	34,480	53,784
Rockdale	194	Bridge over Cook's River at Mascot	Widening	Department	7,526	7,526	7,526
Botany and Rockdale	194	Between Tancred-avenue and Endeavour bridge	Median strip	Department	2,498	200	2,698
Ryde	139	Intersection with Balacava-road, Vimiera-road and Ball-avenue	Channelisation	Council	78	78	78
Do	139	Between Church-street and Devlin-street	Widening	Department	466	53*	413
Do	139	Between Inkerman-road and Terry-road	Improvement to drainage	Council	52,333	3,729	56,062
Do	162	Bridge-road to Quarry-road	Deviation	do	10,000	10,000	10,000
Do	162	Between Blaxland-road and Quarry-road	Reconstruction and widening	do	1,900	1,470	3,370
Do	162	Near Ford-road, Ryde	Widening	do	1,000	48*	952
Do	162	Cooney-street to Trevitt-road	Excavation and filling	do	300	500	800
Do	191	Second curve west of Fuller's Bridge	Widening and improvement	do	1,520	1,520	1,520
Do	200	Ryde Bridge	Heater-planer treatment	Department	237*	237*	237*
Do	373	Intersection with Main Road No. 162	Improvement	Council	6,500	6,500	6,263

*Credit

Appendix No. 7—continued
COUNTY OF CUMBERLAND MAIN ROADS FUND—GENERAL PURPOSES—continued
Summary of Expenditure on Construction and Reconstruction Works—continued

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Expenditure from Department's Funds		
					To 30th June, 1963	1963-64	To 30th June, 1964
					£	£	£
ORDINARY MAIN ROADS—continued							
Ryde	373	Near Hawkes Pathway	Pedestrian crossing	Council	90	26	116
Do	373	Near Lane Cove-road to intersection with Paul-street	Improvement to omnibus stopping places	do		1,343	1,343
Strathfield	315	State Highway No. 2 to Malvern-street	Cement lining of watermain	Department		669	669
Sutherland	199	Kingsway to Toorak-avenue	Construction of dual carriageway	Council		30,000	30,000
Do	227	Bellangara-road to Parraweena-road	do do do do	do	8,809	15,943	24,752
Do	227	"Six Ways" Caringbah	Reconstruction	do	24,859	15,954	40,813
Do	227	"Six Ways" to Kareena-road	Construction and widening	do		10,212	10,212
Do	227	State Highway No. 1 to near Bellangara-road	Construction of dual carriageway	do	58,123	4,800	62,923
Do	227	Kareena-road to Willarong-road	do do do do	do	61,735	5,402*	56,333
Do	227	Property No. 124 to Property No. 186 (selected properties)	Widening and adjustment	do	2,021	258	2,279
Do	393	Intersection of McKell-avenue, Lady Wakehurst-drive and Stephens-drive	Repairs to causeway	Department		162	162
Sydney	165	Glebe Island overbridge	Construction	do		1,877	1,877
Do	170	Redfern-street to Gardeners-road	Restoration of abandoned tramway area	Council	2,843	259*	2,584
Do	171	Dacey-street and intersection of Anzac-parade and Alison-road, Kensington	do do do do do	do	189	13	202
Do	172	Jersey-road and Dowling-street	do do do do do	do	25,600	9,433*	16,167
Do	193	Binning-street to Bridge-street	Widening	do	44,312	45,725	45,725
Do	159	Property 412 and 414	Kerb and gutter	do		36	36
Warringah	164	Robertson-road to Neptune-street Newport	Construction	Department	20,089	1,258	21,347
Do	164	Beacon Hill	Pavement stabilisation	do	2,588	1,739	4,327
Do	164	Near Mona Vale Hospital	Construction	do		2,678	2,678
Do	164	Kentwell-road to Pittwater-road	do	do		49,860	49,860
Do	164	Bridge over Curl Curl-creek	Approaches	do		26,116	26,116
Do	164	Near Victoria-road	Drainage	Council		200	200
Do	164	Old Pittwater-road and Smith-avenue	Improvement of intersection	do		1,000	1,000
Do	328	Between Darley-street and Cook-street	Conversion of median strip from bitumen to concrete	Department		305	305
Do	328	Roseville Bridge	Northern approach	do		6,760	6,760
Do	328	Lot 30 Cornish-avenue and Lot 19 Tristram-road, Beacon Hill	Piping of drainage easement	Council		100	100
Do	397	Near Dreadnought-street	Pavement stabilisation	Department		783	783
Do	529	Adams-street towards Prince Charles-road	Widening and storm water drainage	Council	1,150	1,001	2,151
Do	530	Pittwater-road to Lawrence-street	Deviation	do	46,850	3,537	50,387
Waverley	172	South carriageway Lang-road to Ocean-street	Widening	Department	15,183	19,493	34,676
Do	172	Bondi-road to Campbell-parade	Restoration of abandoned tramway area	Council	38,461	1,000*	37,461
Do	340	Oxford-street to Albion-street	do do do do do	do	89	1,000	1,089
Do	340	Western approach to Charing Cross	Traffic island	do		150	150
Waverley and Woollahra	339	Edgecliff-road and Bon Accord-avenue	Reconstruction of intersection	do		500	500
Willoughby	191	McLean-avenue to View-street	Kerbside lane and kerb and gutter	do	5,350	429	5,779
Windsor	154	Windsor to Bowman's Corner	Raising formation to provide flood-free route	Department		15,172	15,172
Wollondilly	177	20.6m. to 23.2m. and 25.05m. to 25.25m. from State Highway No. 2.	Strengthening	Council	2,209	6,031	8,240
Do	179	0m. to 1.9m. and 2.8m. to 3.3m. from Main Road No. 177 at Appin.	Widening and strengthening	do	21,500	627*	20,873
Woollahra	173	East of Ocean-street	Widening	Department	9,642	1,066	10,708
Do	173	Intersection of Robertson-place and Military-road, Watsons Bay.	Improvement	Council	1,871	169	2,040
Do	173	Ocean-avenue to Bay-street, Double Bay	Restoration of abandoned tramway area	do	12,000	2,675*	9,325
Do	173	Intersection with Cross-street, Kiora and Bellevue-roads, Double Bay.	Reconstruction	do	510	72	582
Do	173	Cross-street to 0.11m. north of William-street	Restoration of abandoned tramway area	do	596	6	602
Do	173	Newcastle-street to Caledonian-road	Widening	do		1,957	1,957
Do	339	Intersection with Robertson-place, Watsons Bay	Improvement	do	200	32	232
Do	339	Cambridge-road to Salisbury-street	Construction	do		15,000	15,000
Total—Ordinary Main Roads						£2,460,879	

*Credit

Appendix No. 7—continued
COUNTY OF CUMBERLAND MAIN ROADS FUND—GENERAL PURPOSES—continued
Summary of Expenditure on Construction and Reconstruction Works—continued

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Expenditure from Department's Funds		
					To 30th June, 1963	1963-64	To 30th June, 1964
					£	£	£
SECONDARY ROADS							
Ashfield	2013	Hawthorn Canal to Iron Cove Channel	Restoration of abandoned tramway area	Council	40,881	3,888	44,769
Ashfield and Leichhardt	2013	Bridge over Hawthorn Canal	Construction of approaches	Department		7,688	7,688
Do do do	2056	Bridge over Hawthorn Canal	Reconstruction of roads in approach	Council		2,285	2,285
Do do do	2056	Hawthorn Canal at Iron Cove	Prestressed concrete bridge	Department		23,198	23,198
Auburn	2069	Parramatta-road to Hamstead-road	Asphaltic concreting	do		3,001	3,001
Burwood	2027	Intersection with Wentworth-road and Parnell-street	Reconstruction of intersection	Council		145	145
Canterbury	2014	Between Moore and Beamish-streets	Reconstruction	do		2,559	2,559
Do	2021	Opposite Woolcott-street	Improvement to southern shoulder	do	500	671	1,171
Do	2021	Bridge over Cook's River at Undercliffe	Approaches	do		1,000	1,000
Canterbury and Marrickville	2021	Bridge over Cook's River at Undercliffe (Upstream)	Conversion of tramway bridge to roadway and lengthening	Department	19,255	5,735	24,990
Do do do	2021	Bridge over Cook's River at Undercliffe (Downstream)	do do do do do do do do	do		25,529	25,529
Drummoyne	2013	Between Fairlight-avenue and Murralong-avenue	Stormwater drainage	Council		250	250
Hornsby	2016	Bridge-street overbridge	Construction of approaches	do	4,000	2,127	6,127
Hornsby	2035	Greek's Creek	Construction of deviation	do		61,000	61,000
Hurstville	2041	North side, Forest-road to Kingsgrove-road; South side, Forest-road to Croydon-road	Reconstruction and paving shoulders	do	8,537	3,060	11,597
Do	2041	Stoney Creek-road	Surfacing of side strips	do		3,800	3,800
Hurstville and Rockdale	2041	Intersection with Kingsgrove-road and Croydon-road	Improvement	do		1,000	1,000
Lane Cove	2070	South side, Greenwich-road to St Vincents-road	Improvement and widening	do		1,570	1,570
Leichhardt	2042	Intersection with Booth-street	Traffic Island	do	100	119	219
Do	2046	Marion-street to Allen-street	Shoulder reconstruction	do		1,000	1,000
Manly	2025	Commonwealth-parade and The Crescent	Widening	do		500	500
Marrickville	2007	Intersection with Buckley-street	Reconstruction and channelisation	do	1,000	4,427	5,427
Do	2018	Railway Terrace to Parramatta-road	Reconstruction	do		2,289	2,289
Do	2021	Marrickville-road to Renwick-street	Restoration of abandoned tramway area	Department	6,602	748	7,350
Do	2021	Bridge over Cook's River at Undercliffe	Approaches	Council		2,500	2,500
North Sydney	2054	Adjacent to 431 Alfred-street	Improvement to road shoulder	do	225	52	277
Rockdale	2032	Bridge over Muddy Creek	Widening	do	2,941	351	3,292
Do	2041	Kingsgrove-road to Forest-road	Reconstruction	do	5,397	52,649	58,046
Ryde	2024	Intersection with North-road	Improvement	do	500	114	614
Sydney	2008	Between Botany-road and old tramway reserve	Removal and restoration of abandoned tramway area	do		2,877	2,877
Total—Secondary Roads						£216,132	
ROADS OTHER THAN MAIN ROADS							
Auburn and Parramatta		Parramatta River at Silverwater	Prestressed concrete bridge	Department	539,089	1,873	540,962
Camden		Macarthur and Springs-road	Reconstruction	Council		26,000	26,000
Hunters Hill		Church-street	Construction of overpass over North Western Expressway	Department	34,108	24,761	58,869
Do		Approaches to Gladsville Bridge	Prestressed concrete footbridge	do		6,349	6,349
Rockdale		Bridge over Georges River at Taren Point	Northern approach	do	4,011	8,706	12,717
Rockdale and Sutherland		Georges River at Taren Point	Prestressed concrete bridge	do	481,804	618,951	1,100,755
Sutherland		Bridge over Georges River at Taren Point	Southern approach	do	13,568	165,636	179,204
Total—Roads Other Than Main Roads						£852,276	
SUMMARY							
State Highways				£	£		
Ordinary Main Roads				1,118,371			
				2,460,879			
Secondary Roads					3,579,250		
Roads other than Main Roads					216,132		
					852,276		
Survey, design, supervision, planning, etc.					4,647,658		
					682,269		
Total shown in Receipts and Payments Statement—Appendix No. 1(4)					£5,329,927		

Appendix No. 7A
COUNTY OF CUMBERLAND MAIN ROADS FUND—SPECIAL PURPOSES
SUMMARY OF EXPENDITURE ON CONSTRUCTION AND RECONSTRUCTION WORKS

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Expenditure from Department's Funds		
					To 30th June, 1963	1963-64	To 30th June, 1964
					£	£	£
ORDINARY MAIN ROADS							
Drummoyne and Hunters Hill	166	Tarban Creek at Huntleys Point	Prestressed concrete bridge	Department		100,000	100,000
Do do do do	165	Parramatta River at Gladesville	Prestressed concrete arch bridge	do	825,000	500,000†	1,325,000
						600,000	
TOURIST ROADS							
Sutherland	4025	Garie Beach	Widening and bitumen surfacing	Department		17,499	17,499
Warringah	4005	West Head road	do do do do	do	33,205	59,170	92,375
						76,669	
ROADS OTHER THAN MAIN ROADS							
North Sydney		Warringah Expressway	Miscellaneous construction	Department		20,066	20,066
Do		McDougall, Mount, Hampden and Ernest streets	Construction of Public Utility tunnels	do		100	100
Do		Warringah Expressway	Relocation of Bent street at Alfred street	Council		5,079	5,079
Sydney		Conservatorium to Sir John Young Crescent	Extension of Cahill Expressway	do	3,078,500	144,000	3,222,500
						£169,245	
SUMMARY							
Ordinary Main Roads					£	600,000	
Tourist Roads						76,669	
Roads other than Main Roads						169,245	
Total—Road Construction—as shown in Receipts and Payments Statements—Appendix No. 1(B)						£845,914	

† For additional expenditure see Appendix No. 7

Appendix No. 8
COUNTRY MAIN ROADS FUND—GENERAL PURPOSES
SUMMARY OF EXPENDITURE ON CONSTRUCTION AND RECONSTRUCTION WORKS

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Expenditure from Department's Funds		
					To 30th June, 1963	1963-64	To 30th June, 1964
					£	£	£
STATE HIGHWAYS							
PRINCE'S HIGHWAY							
Eurobodalla	1	Moruya racecourse 0.42m. south of Moruya	Reinforced concrete box culvert	Department	7,377	417	7,794
Do	1	Bridge over Wagonga Inlet at Narooma	Footway and approaches	do	9,385	6,190	15,575
Do	1	Moruya River at Moruya	Reinforced concrete and steel bridge	do		18,508	18,508
Eurobodalla and Mumbulla	1	Tilba to Sam's Creek, 11m. to 20.5m. south of Narooma	Reconstruction and bitumen surfacing	do	21,830	2,171	24,001
Do do do	1	Sam's Creek to Cobargo, 20.5m. to 24.2m. south of Narooma	Do do do do	do		11,451	11,451
Greater Wollongong	1 and 513	Intersection at Fairy Meadow	Do do do do	do		618	618
Do do	1	Unanderra	Widening of two railway level crossings	do	4,459	14,183	18,642
Do do	1	Bridge over Towradgi Creek	Widening	do	20,438	7	20,445
Do do	1	Slacks Creek	Reinforced concrete box culvert	do	1,030	9,917	10,947
Do do	1	Charcoal Creek, Unanderra	Extension of culvert	do		6,757	6,757
Do do	1	Balgownie School Lane to Towradgi Creek Bridge	Improvement and widening	Council	12,801	493*	12,308
Do do	1	Towradgi Creek to Bellambi level crossing	Kerbside lane including bitumen surfacing	do	13,530	6,000*	7,530
Do do	1	Collins-street to Bellambi level crossing	Widening	do	6,500	6,525	13,025
Do do	1	Bong Bong-road to Baan Baan-street, Dapto	Kerbside lanes	do	350	20	370
Do do	1	Main Road No. 186 to Highway-avenue	do do	do		3,000	3,000
Do do	1	Bellambi level crossing to Collaery-road	Seal side strips	do		5,500	5,500
Do do	1	Near Central-road, Unanderra	Reinforced concrete box culvert	do		2,672	2,672
Do do	1	Central-road to Victoria-street, Unanderra	Kerbside lanes including bitumen surfacing	do	1,271	33	1,304
Do do	1	Adjacent to Farmborough-road, Unanderra	Construction of bus stop	do		515	515
Do do	1	Near Cordeaux-road, Unanderra	Drainage, improvements and widening	do		2,195	2,195
Do do	1	Park-road, Bulli to Slacks Creek	Construction of sidestrips	do		1,000	1,000
Do do	1	Corrimal, 3.4m. north of Wollongong	Duplicate 72 in. concrete pipe culvert	do		1,168	1,168
Greater Wollongong and Shellharbour.	1	Selected sections within the Council areas	Strengthening with asphaltic concrete	Department	8,325	18,096	26,421
Greater Wollongong and Shellharbour.	1	10.7m. to 12.43m. south of Wollongong	Widening of pavement and formation	do		136	136
Imlay	1	Eden to Victorian Border	Reconstruction and bitumen surfacing	do	315,956	308,520	624,476
Do	1	Scrubby Creek, 19.7m. south of Eden	Prestressed concrete bridge	do		3,609	3,609
Do	1	Old Road Creek, 20.6m. south of Eden	Prestressed and reinforced concrete bridge	do		17,298	17,298
Do	1	Towamba River, 13.7m. south of Eden	Reinforced concrete bridge	do		131,580	131,580
Kiama	1	Bombo Hill	Kerbside lane and bitumen surfacing	do	5,697	15,367	21,064
Do	1	7.15m. south of Kiama	Reconstruction of junction	do		2,741	2,741
Do	1	Minnamurra River, 0.25m. from Minnamurra	Reinforced concrete bridge	do		35,523	35,523
Do	1	Bridge over Minnamurra River, 0.25m. from Minnamurra	Approaches	do		5,295	5,295
Mumbulla	1	Narira Creek at Cobargo	Reinforced concrete bridge	do	105,354	300*	105,054
Shellharbour	1	Dunmore, 18m. south of Wollongong	Acceleration and deceleration lanes	do		5,781	5,781
Shoalhaven	1	20.73m. to 21.4m. south of Kiama	Strengthening of pavement	do	4,174	12,606	16,780
Do	1	Kinghorne-street, Nowra; North-street to Worrigee-street	Reconstruction including drainage	Council		900	900
					£643,506		
NORTH SOUTH ARTERIAL ROAD—WOLLONGONG SECTION							
Greater Wollongong		Gipps-road to Phillips-avenue	Construction	Department	122,920	5,264	128,184
Do do		Northfields-lane to Main Road No. 513	do	do	8,908	40,995	49,903
Do do		Foley's-road to Gipps-road	do	do	45,155	25,312	70,467
Do do		Phillips-avenue to State Highway No. 1	do	do	61,989	15,215	77,204
Do do		Bridge over Gipps-road, Gwynneville	Approaches	do	26,980	1,903	28,883
Do do		Bridge over Main Road No. 186	do	do	4,316	416	4,732
Do do		Loading ramp at Phillips-avenue	Construction	do		3,841	3,841
Do do		Mount Keira-road	Reinforced concrete bridge	do	37,428	97*	37,331
Do do		Mount Keira-road at West Wollongong deviation	do do do	do	6,418	6,418*	
Do do		Mitchell-road to York-road	Construction	Council		1,250	1,250
					£87,681		

* Credit

Appendix No. 8—continued

COUNTRY MAIN ROADS FUND—GENERAL PURPOSES—continued

Summary of Expenditure on Construction and Reconstruction Works—continued

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Expenditure from Department's Funds		
					To 30th June, 1963	1963-64	To 30th June, 1964
					£	£	£
STATE HIGHWAYS—continued							
HUME HIGHWAY							
Albury	2	Young-street to Hume-street, Albury	Deviation	Department	16,287	1,289*	14,998
Do	2 and 20	Wodonga Place, from Nurigong-street to Podman-drive	Reconstruction and bitumen surfacing	do		9,535	9,535
Do	2	Bridge over Murray River at Albury	Temporary approaches	do	16,858	845*	16,013
Do	2	Bridge over Murray River at Albury	Approaches	do		4,017	4,017
Albury and Hume	2	Intersection with Main Road No. 125 at Lavington	Reconstruction	Council	2,227	278	2,505
Camden	2	Camden Filling Station	Curve improvement	do	543	51	594
Demondrille	2	39.44m. to 41.1m. south of Yass	Reconstruction and bitumen surfacing	Department	54,867	59	54,926
Do	2	Bridge over Jugiong Creek, 17m. from Coolac	Reinforced concrete bridge	do		24,043	24,043
Goodradigbee	2	Bridge over Yass River (Pearces Bridge)	do do do	do		981	981
Goulburn	2	0m. to 2m. east and 0.7m. to 3.2m. west of Goulburn	Repair and widen pavement	do		26,144	26,144
Goulburn and Mulwaree	2	Governor's Hill, 127.68m. to 128.98m. south of Sydney	Extension of widening	do		20,311	20,311
Gundagai	2	Hospital Hill, 248.5m. to 249.1m. south of Sydney	Reconstruction and third lane	do	11,943	817	12,760
Do	2	Black Springs Creek	Construction and bitumen surfacing of deviation	do		16,961	16,961
Do	2	Bridge over Muttama Creek at Coolac	Approaches	do	19,285	611	19,896
Do	2	Black Springs Creek	Reinforced concrete box culvert	do	2,714	4,975	7,689
Gundagai and Kyeamba	2	5.47m. to 6.5m. north of Tarcutta	Reconstruction and widening	do	82,989	910	83,899
Gunning	2	Hovell's Creek to Gunning Gap	Reconstruction and bitumen surfacing	do	13,441	121,528	134,969
Holbrook	2	Yarra Yarra Creek	Prestressed concrete bridge	do	28,903	516	29,419
Holbrook and Hume	2	7.6m. to 15.3m. south of Holbrook	Reconstruction and bitumen surfacing	do		29,302	29,302
Kyeamba	2	0.5m. to 3.95m. north of Tarcutta	Realignment and regrading	do	76,695	68,973	145,668
Do	2	0.4m. to 2.9m. south of Tarcutta	Reconstruction and bitumen surfacing	do		51,176	51,176
Do	2	Kcajura Creek, 1.25m. south of Tarcutta	Steel and concrete bridge	do		19,345	19,345
Mittagong	2	37.85m. to 38.66m. from Camden	Deviation including bitumen surfacing	do	4,072	72,148	76,220
Do	2	Berrima Hill, 7.61m. to 8.41m. south of Mittagong	Third lane	do		24,663	24,663
Do	2	Picton Loop railway line	Construction of overbridge	do	12,900	19,583	32,483
Do	2	Culvert over Ironmines Creek, 0.5m. south of Mittagong	Approaches	do		7,684	7,684
Do	2	Gibbergunyah Creek, 1.38m. south of Mittagong	do	do		9,346	9,346
Do	2	Nattai Creek	Reinforced concrete bridge	do	10,840	1,323	12,163
Do	2	Ironmines Creek and Gibbergunyah Creek	Reinforced concrete box culverts	do		13,395	13,395
Mittagong, Wingecarribee and Wollondilly	2	Within the Council areas (selected sections)	Bitumen surfacing and asphaltic concrete strengthening	do	33,910	4,581	38,491
Mulwaree	2	114.68m. to 116.3m. south of Sydney, near Marulan	Reconstruction and bitumen surfacing	do		67,408	67,408
Do	2	110m. to 112.5m. south of Sydney, near Marulan	do do do do	do		17,086	17,086
Do	2	4m. north of Marulan	Deviation	do		231	231
Do	2	112.8m. to 114.68m. south of Sydney, near Marulan	Strengthening and widening	do		1,587	1,587
Do	2	Wologorong Creek, 114.09m. South of Sydney	Reinforced concrete box culvert	do		3,445	3,445
Do	2	Culvert over Wologorong Creek	Approaches	do		2,662	2,662
Wingecarribee	2	5.2m. south of Moss Vale at Hanging Rock	Deviation	do	26,778	28,421	55,199
Do	2	North of Paddys River	Strengthening and provision of third lane	do	5,386	12,035	17,421
Do	2	19.1m. south of Mittagong	Reinforced concrete box culverts	do		6,327	6,327
Do	2	Wingecarribee River at Berrima	Steel and concrete bridge	do	82,532	2,407	84,939
Do	2	Berrima Bridge over Wingecarribee River	Approaches	do	15,074	342	15,416
Wollondilly	2	51.5m. to 52.35m. south of Sydney	Provision of Third lane	do	4,261	17,931	22,192
Do	2	57.95m. to 62.52m. south of Sydney at Bargo	Strengthening	do	30,536	915	31,451
						£711,919	
FEDERAL HIGHWAY							
Yarrowlumla	3	46m. to 49.7m. south of Goulburn	Reconstruction	Department		11,639	11,639
						£11,639	

* Credit

Appendix No. 8—continued

COUNTRY MAIN ROADS FUND—GENERAL PURPOSES—continued

Summary of Expenditure on Construction and Reconstruction Works—continued

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Expenditure from Department's Funds		
					To 30th June, 1963	1963-64	To 30th June, 1964
					£	£	£
STATE HIGHWAYS—continued							
SNOWY MOUNTAINS HIGHWAY							
Mumbulla	4	0m. to 4.74m. from State Highway No. 1	Reconstruction	Department	56,061	27,877	83,938
Do	4	State Highway No. 1 to boundary of Mumbulla Shire	Reconstruction and bitumen surfacing	do .....	.....	34,212	34,212
Snowy River	4	0m. to 2m. west of Kiandra	do do do do	do .....	.....	24,486	24,486
Tumut	4	Mount Talbingo ascent, 57.2m. to 61.58m. from State Highway No. 2	do do do do	Council	51,000	17,861	68,861
Do	4	Intersection with Main Road No. 279 at Tumut	Improvement	do	1,500	1,500	3,000
Do	4	Blowering to Talbingo	Light strengthening, improvement and temporary surfacing	do .....	.....	35,800	35,800
					£141,736		
GREAT WESTERN HIGHWAY							
Bathurst and Turon	5	1m. to 10m. east of Bathurst	Reconstruction and bitumen surfacing	Department .....	.....	96,375	96,375
Blaxland	5	Climbing lane 17.75m. to 18.5m. west of Katoomba	Construction	do	2,295	18,723	21,018
Do	5	Hartley, 78.2m. to 78.8m. west of Sydney	Widening	do .....	.....	7,431	7,431
Do	5	Rosedale Creek at Little Hartley	Reinforced concrete box culvert and approaches	do .....	.....	21,000	21,000
Turon	5	Browns Hill, 9m. east of Bathurst	Deviation	do	6,206	176*	6,030
					£143,353		
MID-WESTERN HIGHWAY							
Abercrombie	6	Fitzgeralds Hill	Improvement	Council	4,000	3,953	7,953
Bland	6	1.0m. to 3.0m. east of West Wyalong	Widening and bitumen surfacing	Department	8,095	2,968	11,063
Do	6	40.5m. to 47.23m. west of West Wyalong	Reconstruction and bitumen surfacing	Council .....	.....	36,000	36,000
Carrathool	6	34.9m. to 67.22m. east of Hay	do do do do	Department .....	.....	45,596	45,596
Do	6	Level crossing at Goolgowl	Improvement	do .....	.....	20	20
Do	6	1.56m. to 4.42m. west of Rankins Springs	Reconstruction and bitumen surfacing	Council	38,150	2,810	40,960
Do	6	11.75m. to 13.75m. west of Rankins Springs	do do do do	do	16,550	6,500	23,050
Do	6	34.13m. to 34.57m. west of Rankins Springs	do do do do	do .....	.....	4,055	4,055
Do	6	22.45m. to 28.0m. west of Rankins Springs	do do do do	do .....	.....	31,750	31,750
Lyndhurst	6	5.21m. to 5.57m. east of Blayney	Elimination of curves	do	3,375	118	3,493
Do	6	Near Kings Plains, east of Blayney	Reinforced concrete box culvert and approaches	do	6,793	124	6,917
Do	6	Bridge over Grubbenbun Creek	Footway	do	1,605	143*	1,462
Waradgery	6	20m. to 35.5m. from Hay Municipal Boundary	Reconstruction and bitumen surfacing	do	105,500	695	106,195
Waugoola	6	Back Creek, 14m. west of Cowra	Reinforced concrete bridges	Department	54,934	630	55,564
Do	6	Bridges over Back Creek, 14m. west of Cowra	Approaches	Council	9,000	4,000	13,000
Weddin	6	38m. to 46.59m. west of Grenfell	Reconstruction and bitumen surfacing	do	53,356	1,428*	51,928
Do	6	Bridge over Murray's Creek	Realignment of approaches	do .....	.....	4,500	4,500
Do	6	272m. to 274.58m. west of Sydney near Marsden	Reconstruction and bitumen surfacing	do .....	.....	35,928	35,928
Do	6 and 17	Boundary of Bland Shire to boundary of Jemalong Shire	do do do do	Department	189,534	87,550	277,084
					£265,626		

* Credit

Appendix No. 8—continued

COUNTRY MAIN ROADS FUND—GENERAL PURPOSES—continued

Summary of Expenditure on Construction and Reconstruction Works—continued

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Expenditure from Department's Funds		
					To 30th June, 1963	1963-64	To 30th June, 1964
					£	£	£
STATE HIGHWAYS—continued							
MITCHELL HIGHWAY							
Abercrombie	7	4m. to 4.6m. west of Bathurst	Improvement to alignment	Council	5,629	211	5,840
Bogan	7	0.9m. to 30m. north of Nyngan	Reconstruction and bitumen surfacing	Department	391,057	1,157*	389,900
Bogan and Nyngan	7	30m. to 55m. north of Nyngan	do do do do	do	58,193	212,545	270,738
Bogan and Darling	7	48m. to 63m. south of Bourke	do do do do	do		40,484	40,484
Darling	7	22.2m. to 48m. south of Bourke	do do do do	do	139,082	155,581	294,663
Do	7	15m. to 22.2m. south of Bourke	do do do do	do	62,191	38	62,229
Do	7	18m. to 23m. north of Bourke	do do do do	do	48,063	741	48,804
Orange	7	Summer-street, Orange	Improvements to level crossing	Council		2,000	2,000
Wellington	7	0.31m. to 1.45m. north of Wellington	Realignment	do	14,498	4,999*	9,499
						£405,444	
BARRIER HIGHWAY							
Bogan	8	26m. to 32m. west of Nyngan	Strengthening and bitumen surfacing	Council	1	57,656	57,657
Do	8	32m. to 38.89m. west of Nyngan	do do do do	do		18,000	18,000
Broken Hill	8	Bromide-street to railway level crossing at Rakow-street	Reconstruction and bitumen surfacing	do	6,019	424	6,443
Cobar	8	20m. to 30m. west of Cobar	do do do do	Department	116,316	2,664*	113,652
Do	8	30m. to 40m. west of Cobar	do do do do	do	108,820	9,668	118,488
Do	8	40m. to 50m. west of Cobar	do do do do	do	7,132	91,421	98,553
Do	8	50m. to 60m. west of Cobar	do do do do	do		14,413	14,413
Central Darling	8	8.5m. to 12m. east of Wilcannia	do do do do	do		8,863	8,863
Murray Darling Division	8	35m. to 50m. east of Broken Hill	do do do do	do	151,386	1,527*	149,859
Do do do	8	50m. to 73m. east of Broken Hill	do do do do	do	7,202	318*	6,884
Do do do	8	73m. to 87.25m. east of Broken Hill	do do do do	do	9,786	99,037	108,823
						£294,973	
NEW ENGLAND HIGHWAY							
Armidale	9	0.4m. to 0.83m. north of Armidale	Reconstruction and bitumen surfacing	Council	15,337	1,077*	14,260
Do	9	Beardy-street to Stephens Bridge	do do do do	do	6,000	1,077	7,077
Cessnock, Maitland and Muswellbrook Municipalities and Muswellbrook and Patrick Plains Shires	9	Within the Council areas	Widening of existing culverts	Department	200	2,661	2,861
Cockburn	9	29.25m. north of Tamworth	Reconstruction of crest	do		3,220	3,220
Do	9	Moonbi Creek, 13m. north of Tamworth	Prestressed reinforced concrete bridge	do	15,379	16,885	32,264
Do	9	Bridge over Moonbi Creek, 13m. north of Tamworth	Approaches	do		5,701	5,701
Dumaresq	9	15.7m. to 16.5m. north of Armidale	Construction of safety ramps	Council	1,488	950	2,438
Glen Innes	9	Church-street between Meade-street and Rusden-street	Alteration of route and reconstruction	Department	25,904	8,133	34,037
Guyra	9	Llangothlin railway level crossing	Widening and realignment	do		6,222	6,222
Do	9	Tubbamurra Turnoff, 11m. north of Guyra	Improvement	do		3,203	3,203
Maitland	9	Eastville	Climbing lanes	do		38	38
Do	9	Intersection at western end of Long Bridge	Reconstruction	Council		519	519
Maitland and Newcastle	9	Beresfield to East Maitland	Provision of non-skid surface	Department	7,772	1,863*	5,909
Murrurundi	9	11.45m. to 12.65m. north of Murrurundi	Reconstruction	do		7,007	7,007
Muswellbrook	9	Bridge over Sandy Creek, 2m. north of Muswellbrook	Approaches	do	21,876	877	22,753

* Credit

Appendix No. 8—continued

COUNTRY MAIN ROADS FUND—GENERAL PURPOSES—continued

Summary of Expenditure on Construction and Reconstruction Works—continued

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Expenditure from Department's Funds		
					To 30th June, 1963	1963-64	To 30th June, 1964
					£	£	£
STATE HIGHWAYS—continued							
NEW ENGLAND HIGHWAY—continued							
Newcastle	9	Hexham level crossing	Deviation	Department	416	103,457	103,873
Do	9	Near Tarro	Railway overbridge	do		28,189	28,189
Nundle	9	37m. to 40m. north of Murrurundi	Reconstruction and bitumen surfacing	do	25,316	68,105	93,421
Do	9	34m. to 37m. north of Murrurundi	do do do do	do		35,926	35,926
Nundle and Peel	9	16.84m. to 26.18m. south of Tamworth	do do do do	do	31,904	4,049	35,953
Patrick Plains	9	Bridge over Mudies Creek, 4.5m. south of Singleton	Approaches	do	28,352	271*	28,081
Do	9	Bridges over Doughboy Hollow, 2m. south of Singleton	do	do	25,736	540*	25,196
Do	9	Black Creek, 1.5m. west of Branxton	Steel and concrete bridge	do	35,697	178*	35,519
Scone	9	4.07m. to 5.35m. north of Scone	Widening of narrow culverts	do		104	104
Tamarang	9	17.6m. north of Murrurundi	Reconstruction of crest	do		90	90
Do	9	29.8m. north of Murrurundi	do do	do		7,195	7,195
Tamworth	9	Peel River at Tamworth	Prestressed concrete bridge	do		70,972	70,972
Do	9	Bridge over Peel River at Tamworth	Approaches	Council		540	540
Tenterfield	9	Bluff River, 11.24m. south of Tenterfield	Reinforced concrete bridge	Department	87,313	6,582	93,895
Do	9	Bridge over Bluff River, 11.24m. south of Tenterfield	Approaches	do	13,998	35,307	49,305
Do	9	Tenterfield Creek, 7.2m. north of Tenterfield	Steel and concrete bridge	do		20,155	20,155
						£433,235	
PACIFIC HIGHWAY							
Ballina	10	Bridge over Emigrant Creek	Approaches	Department		40,399	40,399
Do	10	River-street between Canal Bridge and Kerr-street	Reconstruction	do		5,150	5,150
Do	10	River-street and Cherry-street from Kerr-street to Tamar-street, Ballina.	do	Council	3,000	4,936	7,936
Byron	10	1m. to 2.5m. north of Bangalow	Strengthening and bitumen surfacing	Department	8,156	7,809	15,965
Do	10	17.7m. to 21.6m. north of Bangalow	Reconstruction of damaged pavement	do		3,256	3,256
Do	10	2.6m. to 3.1m. north of Bangalow	Strengthening and bitumen surfacing	do		15,636	15,636
Byron, Tintenbar and Tweed	10	Full length within the Council areas	Reconstruction of damaged pavement	do	611,254	2,725	613,979
Coffs Harbour	10	1.6m. to 3.1m. north of Coffs Harbour	Reconstruction and bitumen surfacing	do	96,012	15*	95,997
Do	10	3.1m. to 4.4m. north of Coffs Harbour	do do do do	do	13,412	17,352	30,764
Do	10	15.9m. to 16.6m. north of Coffs Harbour	do do do do	do		22,984	22,984
Gosford	10	Kendalls Rock and Piles Creek near Gosford	Construction of passing lanes	do	4,821	13,991	18,812
Do	10	Intersection with Developmental Road No. 1160 at Calga	Reconstruction	do	8,299	43,720	52,019
Do	10	Lisarow	Railway overbridge	do	37,431	3,287	40,718
Do	10	Railway overbridge at Lisarow	Approaches	do	83,973	5,630	89,603
Hastings	10	Bridge over Hastings River at Blackmans Point	do	do	239,990	42	240,032
Do	10	Southern approach to Hastings River Bridge	Construction of link road	do	71,073	696	71,769
Do	10	Intersection with Bonny Hills-road	Improvement	do	4,365	1,789	6,154
Do	10	Heron's Creek	Reinforced concrete bridge	do		11,573	11,573
Kempsey	10	Bridge over Macleay River	Approaches	do	82,736	1,586	84,322
Lake Macquarie	10	Marks-street to Vincent-street, North Belmont	Reconstruction and widening	do	106,627	785	107,412
Do	10	Intersections with Warners Bay-road and Dudley-road, Charlestown.	Reconstruction	do	78,907	24,555	103,462
Do	10	Victoria-street to Marks-street Belmont	Construction of four lanes	do		21,801	21,801
Do	10	Diversion of Highfields-parade	Improvement	do		1,446	1,446
Maclean	10	Clarence River at Harwood	Steel and concrete bridge	do	60	338,953	339,013
Do	10	Bridge over Clarence River at Harwood	Approaches	do	7,621	69,070	76,691
Macleay	10	8m. to 14m. north of Kempsey	Reconstruction of damaged pavement	do	849	17,789	18,638
Do	10	1.1m. north of Stumpy Creek	Reinforced concrete box culvert	do		8,530	8,530

* Credit

Appendix No. 8—continued

COUNTRY MAIN ROADS FUND—GENERAL PURPOSES—continued

Summary of Expenditure on Construction and Reconstruction Works—continued

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Expenditure from Department's Funds		
					To 30th June, 1963	1963-64	To 30th June, 1964
					£	£	£
STATE HIGHWAYS—continued							
PACIFIC HIGHWAY—continued							
Manning	10	Bridge over Ghinni Ghinni Creek, 8m. north of Taree	Approaches	Department	62,570	6,976	69,546
Nambucca	10	Macksville Deviation, 0.5m. to 2.5m. south of Macksville	Construction and bitumen surfacing	do		40,865	40,865
Do	10	Upper Warrell Creek, 3.5m. south of Macksville	Reinforced concrete bridge	do	29,775	2,440	32,215
Do	10	Bridge over Upper Warrell Creek, 3.5m. south of Macksville	Approaches	do	39,237	2,440*	36,797
Do	10	Bellwood Creek, 3m. south of Nambucca	Temporary steel and timber bridge	do		4,017	4,017
Do	10	Bridge over Bellwood Creek, 3m. south of Nambucca	Approaches	do		1,525	1,525
Do	10	Wallace-street to Boundary-street, Macksville	Reconstruction	Council		2,263	2,263
Do	10	Cooper-street, between Wallace and Boundary-streets, Macksville.	Deviation	do	6,930	1,220*	5,710
Do	10	Upper Warrell Creek-road	Restoration of flood damage	do		219	219
Newcastle	10	0m. to 0.67m. north of Ironbark Creek	Dual Carriageway	Department	72,425	17,513	89,938
Do	10	Ironbark Creek at Hexham	Steel and concrete bridge	do	124,736	995*	123,741
Do	10	Main Road No. 108 at Adamstown Heights	Channelised intersection	Council		15,000	15,000
Do	10	Railway-street to Scenic-road	Asphaltic concrete sheeting	do		1,438	14,188
Do	10	Railway-street to Gordon-avenue, Merewether	Deviation	do	12,750	1,593	12,418
Do	10	Broadcasting Station to Ironbark Creek	Dual carriageway	do	10,825	32,000	42,000
Do	10	Intersection, Stewart-avenue and Gordon-avenue	Channelisation	do	10,000	5,000	5,000
Port Stephens	10	Bridge over Balickera Channel 8m. north of Raymond Terrace	Approaches	Department	24,189	996	25,185
Do	10	Bourke's Gully	Raising Pavement	do		2,138	2,138
Do	10	12.5m. to 14.5m. north of Newcastle	Reconstruction and widening	do		16,906	16,906
Do	10	Twelve Mile Creek	Reinforced concrete bridge and approaches	do	15,453	58,929	74,382
Do	10	Main Road No. 104 and Main Road No. 517, Raymond Terrace.	Reconstruction of intersection	Council		883	883
Do	10	Kangaroo-street to Richardson-road	Reconstruction	do	10,600	878	11,478
Stroud	10	Karalah to Viney Creek	Reconstruction and bitumen surfacing	Department	487,670	130,312	617,982
Do	10	Viney Creek to Main Road No. 110	Construction and bitumen surfacing	do	343,467	241,385	584,852
Do	10	Between Main Road No. 110 Junction and Myall River	Raising of section subject to flooding	do		33,561	33,561
Taree	10	Chatham Overbridge to Oxley-street	Reconstruction	Council	215	6,500	6,715
Tintenbar	10	Wardell to intersection with State Highway No. 16	Deviation	Department	259,099	78,702	337,801
Do	10	Sneezy's-lane and Moylan's-lane	Construction of box culverts	do		3,631	3,631
Do	10	Duck Creek, 4m. from Ballina	Steel and reinforced concrete bridge	do	55,502	57,590	113,092
Do	10	Emigrant Creek, 19.05m. north of Woodburn	Steel and concrete bridge	do	20,134	20,134	20,134
Do	10	Richmond River at Wardell	do do do	do	331,718	108,995	440,713
Tweed	10	14.52m. to 15.93m. north of Murwillumbah	Reconstruction	do	12,287	127,004	139,291
Do	10	1m. to 4.8m. south of Murwillumbah	Reconstruction and bitumen surfacing	do		3,888	3,888
Wyong	10	5.5m. 12.5m. north of Wyong	Asphaltic concrete sheeting	do	52,143	13,039	65,182
Do	10	Intersection with Main Road No. 509 at Kanwal	Reconstruction	do	26,576	3,707	30,283
Do	10	Bridges over Ourimbah Creek, 4.32m. south of Wyong and Windy Drop Down Creek, 4.19m. south of Wyong.	Approaches	do	68,522	86	68,608
Do	10	Bangalow Creek, 5.5m. south of Wyong	Reinforced concrete box culvert	do	21,752	3,579	25,331
Do	10	Wyong Creek at Wyong	Steel and concrete bridge and approaches	do	803	77,765	78,568
						£1,802,277	

* Credit

Appendix No. 8—continued

COUNTRY MAIN ROADS FUND—GENERAL PURPOSES—continued

Summary of Expenditure on Construction and Reconstruction Works—continued

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Expenditure from Department's Funds		
					To 30th June, 1963	1963-64	To 30th June, 1964
					£	£	£
STATE HIGHWAYS—continued							
OXLEY HIGHWAY							
Coonabarabran	11	37.15m. to 38m. east of Coonabarabran	Reconstruction and bitumen surfacing	Council		13,900	13,900
Coonabarabran and Gilgandra	11	Bidden Creek at 13.15m. to Belar Creek at 53m. east of Gilgandra.	do do do do	Department	492,577	32,827	525,404
Gilgandra	11	Gilgandra to the Boundary of Warren Shire	do do do do	do	10,766	105,186	115,952
Do	11	Gilgandra to Bidden Creek	Strengthening and bitumen surfacing	Council	9,000	17,000	26,000
Do	11	Bridges over Bidden Creek and Hodgkiss Creek	Approaches	do		1,386	1,386
Do	11	Five Mile Creek east of Gilgandra	Reinforced concrete bridge	do	15,440	1,260	16,700
Hastings	11	20m. to 20.64m. west of Port Macquarie	Reconstruction and bitumen surfacing	Department	16,147	86	16,233
Do	11	20.64m. to 29.2m. west of Port Macquarie	do do do do	do		35,999	35,999
Do	11	29.2m. to 30.76m. west of Port Macquarie	do do do do	do	32,855	13,078	45,933
Tamworth	11	Timbumburrie Creek Bridge	Raising of western approaches	Council	21,850	1,000	22,850
Do	11	Intersection with Main Road No. 130	Improvement	do	5,000	1,423	6,423
Walcha	11	10.94m. to 15.76m. west of Walcha	Reconstruction and bitumen surfacing	do	12,000	37,273	49,273
Do	11	Bridge over Wilson's Creek, 14.39m. east of Walcha	Approaches	do	1,200	753*	447
Warren	11	7.44m. to 8.44m. east of Warren	Reconstruction and bitumen surfacing	do		5,000	5,000
Do	11	Junction with Main Road No. 202	do do do do	do		4,000	4,000
Do	11	10.24m. to 12.03m. east of Warren	do do do do	do		8,000	8,000
					£276,665		
GWYDIR HIGHWAY							
Boomi	12	20.2m. to 22.88m. west of Moree	Reconstruction and bitumen surfacing	Council	3,300	16,700	20,000
Do	12	22.88m. to 26.18m. west of Moree	do do do do	do		5,400	5,400
Inverell	12	Intersection on the western approach to the bridge over Macintyre River.	Improvement	do	900	3,654	4,554
Do	12	1.17m. to 2.4m. west of Inverell	Reconstruction and bitumen surfacing	do		4,100	4,100
Moree	12	Bridge over Mehi River at Moree	Approaches	do	8,550	812	9,362
Nymboida	12	Purgatory Creek to Camp Creek	Construction	Department	300,447	21,644	322,091
Do	12	Orara River at Ramornie	Steel and reinforced concrete bridge	do		20,698	20,698
Do	12	Bridge over Orara River at Ramornie	Approaches	do		3,544	3,544
Severn	12	14.90m. to 21.47m. east of Glen Innes	Reconstruction and bitumen surfacing	do	98,820	1,967	100,787
Do	12	47m. to 51m. east of Glen Innes	Drainage on selected sections	do	5,761	3,489	9,250
Do	12	44.7m. to 48.36m. east of Glen Innes	Strengthening and bitumen surfacing	do	25,799	6,769*	32,568
Do	12	11.2m. to 14.9m. east of Glen Innes	Reconstruction and bitumen surfacing	do		15,429	15,429
Do	12	38m. to 44.5m. east of Glen Innes	Strengthening and bitumen surfacing	do		65,790	65,790
Do	12	21.47m. to 32m. east of Glen Innes	do do do do	do		13,809	13,809
Do	12	32m. to 38m. east of Glen Innes	do do do do	do		44,009	44,009
Do	12	Bellbird Gully, 53.9m. east of Glen Innes	Restoration of fill	do		16,898	16,898
Do	12	Rocky Creek, 21.5m. east of Glen Innes	Reinforced concrete bridge	do	142	890	1,032
Walgett	12	Collarenebri to Main Road No. 329	Reconstruction and bitumen surfacing	Council	25,714	13,633	39,347
Yallaroi	12	Through the village of Gravesend	do do do do	do	3,398	529*	2,869
Do	12	10.3m. to 12.7m. west of Wyallda	Widening	do	9,000	1,000	10,000
					£246,168		

* Credit

Appendix No. 8—continued

COUNTRY MAIN ROADS FUND—GENERAL PURPOSES—continued

Summary of Expenditure on Construction and Reconstruction Works—continued

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Expenditure from Department's Funds		
					To 30th June, 1963	1963-64	To 30th June, 1964
					£	£	£
STATE HIGHWAYS—continued							
STURT HIGHWAY							
Bairnald	14	47m. to 49m. east of Euston	Construction of deviation	Department	4,256	18,235	22,491
Mitchell and Narrandera	14	25.4m. to 27.8m., 32.9m. to 42.6m. and 54m. to 55.7m. west of Wagga Wagga.	Reconstruction and bitumen surfacing	do	.....	27,695	27,695
Murrumbidgee	14	24.1m. to 44m. east of Hay	do do do do	do	187,680	681	188,361
Do	14	56m. to 65m. west of Narrandera	do do do do	do	115,369	498	115,867
Narrandera	14	60.25m. to 62.58m. west of Wagga Wagga	do do do do	do	6,958	5,903	12,861
Do	14	Gillenbah Deviation	Construction and bitumen surfacing	do	1,911	35,392	37,303
Do	14	Poisoned Waterholes Creek and Gillenbah Creek	Reinforced concrete bridges	do	.....	4,770	4,770
Wagga Wagga	14	Edward Street, Wagga Wagga	Improvement of level crossing	Council	.....	3,400	3,400
Wakool	14	Yanga Creek, 5m. east of Bairnald	Prestressed reinforced concrete bridge and culverts	do	.....	39,879	39,879
Waradgery	14	4.8m. to 24.1m. east of Hay	Reconstruction and bitumen surfacing	Department	242,101	1,347	243,448
Do	14	Intersection with State Highway No. 21	Reconstruction	Council	1,500	4,225	5,725
Wentworth	14	Through the village of Gol Gol	Reconstruction and bitumen surfacing	Department	1,079	7,016	8,095
Do	14	Buronga to bridge over Murray River at Mildura	do do do do	do	.....	428	428
Do	14	Intersection with State Highway No. 22	Reconstruction	do	.....	4,717	4,717
Do	14	Four approach bridges to bridge over Murray River at Mildura	Widening	do	.....	14,968	14,968
						£169,154	
BARTON HIGHWAY							
Goodradigbee	15	28.5m. to 30.7m. north of Canberra	Reconstruction and bitumen surfacing	Department	49,194	13,311	62,505
Do	15	25m. to 27.7m. north of Canberra	do do do do	do	.....	1,511	1,511
Goodradigbee and Yarrowlumla	15	33.7m. to 35.1m. north of Canberra	do do do do	do	28,313	1,467	29,780
						£16,289	
BRUXNER HIGHWAY							
Ashford	16	Camp Creek, 9m. west of Texas	Timber beam bridge and approaches	Council	18,900	1,760	20,660
Booolooroo	16	9.8m. to 10.38m. east of Goondiwindi	Bitumen surfacing	do	2,300	108*	2,192
Casino	16	Bridge over Richmond River at Casino	Approaches	do	8,208	328	8,536
Gundurimba	16	24.11m. to 24.97m. west of Ballina	Reconstruction and bitumen surfacing	do	.....	2,257	2,257
Do	16	Bugden's Hill, 25.34m. to 27.27m. west of Ballina	Reconstruction	do	4,000	79,724	83,724
Do	16	28.17m. to 29.15m. west of Ballina	do	do	6,000	20,103	26,103
Do	16	29.15m. to 29.76m. west of Ballina	do	do	20,063	1,204	21,267
Do	16	Pelican Creek	Reinforced concrete bridge	do	3,750	16,583	20,333
Lismore	16	Richmond River at Ballina-street, Lismore	Steel and concrete bridge	Department	278,889	26,694	305,583
Do	16	Bridge over Richmond River at Ballina-street, Lismore	Approaches	Council	.....	51,807	51,807
Do	16	Bridge over Richmond River at Ballina-street, Lismore	Construction of retaining wall and stairs	Department	23,787	13,087	36,874
Do	16	Ballina-street, between Molesworth-street and Dawson-street	Strengthening and widening	Council	.....	3,607	3,607
Do	16	Hollingsworth Creek, 1m. west of Lismore	Steel and concrete bridge and approaches	do	43,050	246	43,296
Tenterfield	16	8.6m. to 10.6m. west of Tenterfield	Reconstruction and bitumen surfacing	do	30,450	1,439*	29,011
Do	16	26.8m. to 28.97m. east of Tenterfield	do do do do	do	37,685	30,865	68,550
Tomki	16	34.7m. to 26.5m. west of Ballina	Reconstruction of damaged pavement	do	2,666	21,523	24,189
						£268,241	

* Credit

Appendix No. 8—continued
COUNTRY MAIN ROADS FUND—GENERAL PURPOSES—continued
Summary of Expenditure on Construction and Reconstruction Works—continued

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Expenditure from Department's Funds		
					To 30th June, 1963	1963-64	To 30th June, 1964
					£	£	£
STATE HIGHWAYS—continued							
NEWELL HIGHWAY							
Bland	17	Through the village of Mirrool	Gravelling and bitumen surfacing	Department		3,646	3,646
Boolooroo	17	5m. to 9m. south of Moree	Reconstruction and bitumen surfacing	do	160,460	52,084*	108,376
Do	17	18m. to 26.89m. south of Moree	do do do do	do		13,393	13,393
Do	17	9m. to 14m. south of Moree	do do do do	do		147,177	147,177
Do	17	14m. to 18m. south of Moree	do do do do	do		76,048	76,048
Do	17	Croppa Creek, 42.5m. north of Moree	Reinforced concrete bridge and approaches	Council	22,380	177	22,557
Coolamon	17	4.94m. to 11.95m. east of Ardlethan	Reconstruction and bitumen surfacing	Department		50,136	50,136
Do	17	30.7m. to 36.4m. north of Narrandera	do do do do	do		7,965	7,965
Gilgandra	17	1.5 south of Gilgandra	Improvement of level crossing	do		82	82
Jemalong	17	2.4m. north of Forbes	Reinforced concrete box culverts and raising of embankment	Council		13,100	13,804
Do	17	23m. to 30.3m. south of Forbes	Reconstruction and bitumen surfacing	do	20,000	26,544	46,544
Do	17	17.85m. to 23m. south of Forbes	do do do do	do	26,160	44*	26,116
Namoi	17	Northern boundary of Narrabri Municipality to the southern boundary of Boolooroo Shire	Reconstruction	Department	424,756	1,346*	423,410
Do	17	28.35m. north of Narrabri to the boundary of Boolooroo Shire	Reconstruction and bitumen surfacing	do	40,683	23,232	63,915
Do	17	30.7m. to 31.5m. north of Narrabri	Approaches to railway overbridge	do	5,569	4,326	9,895
Do	17	2.83m. to 16.4 south of Narrabri	Reconstruction and bitumen surfacing	do	4,792	116,705	121,497
Do	17	Pan Creek, 21.28m. north of Narrabri	Reinforced concrete bridge	do		1,168	1,168
Do	17	Bridge over Pan Creek, 21.28m. north of Narrabri	Approaches	do		24	24
Do	17	Myall Hollow Creek, 28m. north of Narrabri	Reinforced concrete bridge	do		6,563	6,563
Do	17	Bridge over Myall Hollow Creek, 28m. north of Narrabri	Approaches	do		12	12
Narrabri	17	Bridge over Namoi River	Provision of footway	do		2,409	2,409
Do	17	Doctor's Creek, 0.5m. west of Narrabri	Steel and reinforced concrete bridge	do		250	250
Narrandera	17	North of Grong Grong	Construction and realignment	do	76,797	21,882	98,679
Do	17	18.66m. to 24m. north of Narrandera	Reconstruction and bitumen surfacing	do	12	31,209	31,221
Do	17	Bridge over Murrumbidgee River at Narrandera	Approaches	do		10,376	10,376
Narrandera and Urana	17	Colombo Creek	Two prestressed concrete bridges	do	790	17,793	18,583
Talbragar	17	Proposed bridge over Talbragar River	Construction of deviation	do		13	13
Urana	17	13m. to 20m. south of Narrandera	Reconstruction and bitumen surfacing	do	108,540	498*	108,042
Do	17	20m. to 25m. south of Narrandera	do do do do	do	8,571	76,548	85,119
Do	17	South of Morundah	Railway overbridge	do	17,672	7,440	25,112
					£591,850		
CASTLEREAGH HIGHWAY							
Coonamble	18	1.25m. to 18.68m. north of Coonamble	Reconstruction and bitumen surfacing	Department	331,020	76,498	407,518
Do	18	Mowlma Creek, 12.4m. north of Coonamble	Prestressed concrete bridge	do		12,066	12,066
Do	18	Bridge over Mowlma Creek, 12.4m. north of Coonamble	Approaches	do	10,567	3,784	14,351
Do	18	24m. to 25.6m. north of Coonamble	Construction and bitumen surfacing	do		28,955	28,955
Do	18	Kennedy's Creek, 24.58m. north of Coonamble	Reinforced concrete box culvert	do		7,835	7,835
Gilgandra	18	16.19m. to 19.1m. north of Gilgandra	Strengthening and bitumen surfacing	Council	13,000	2,000	15,000
Do	18	37.16m. to 41.09m. north of Gilgandra	do do do do	do	5,000	19,500	24,500
Do	18	23.1m. to 24.16m. north of Gilgandra	do do do do	do		3,000	3,000
Walgett	18	38.97m. to 47m. north of Coonamble	Reconstruction and bitumen surfacing	Department	35,274	2,228	37,502
Do	18	47m. to 54m. north of Coonamble	do do do do	do	26,560	3	26,563
Do	18	0.9m. to 4.91m. north of Walgett	do do do do	do	46,163	86,745	132,908
Do	18	15m. south of Walgett to Coonamble Shire Boundary	do do do do	Council	29,233	968	30,201
Do	18	Through the town of Walgett	do do do do	do	31,319	1,459*	29,860
					£242,123		

* Credit

Appendix No. 8—continued
COUNTRY MAIN ROADS FUND—GENERAL PURPOSES—continued
Summary of Expenditure on Construction and Reconstruction Works—continued

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Expenditure from Department's Funds		
					To 30th June, 1963	1963-64	To 30th June, 1964
					£	£	£
STATE HIGHWAYS—continued							
MONARO HIGHWAY							
Bibbenluke	19	26.4m. to 26.68m. south of Nimmitabel	Reconstruction and bitumen surfacing	Council	13,600	1,538	15,138
Do	19	22.11m. to 22.68m. south of Nimmitabel	do do do do	do	9,000	438*	8,562
Do	19	20.68m. to 22.11m. south of Nimmitabel	do do do do	do	15,000	11,678	26,678
Do	19	19m. to 20.68m. south of Nimmitabel	do do do do	do		5,000	5,000
Cooma	19	Cooma Creek at Sharp-street Cooma	Prestressed concrete bridge	Department	17,434	51,716	69,150
Do	19	68.8m. to 70.5m. south of Canberra	Construction of deviation	Council	32,490	199	32,689
Do	19	Bridge over Cooma Creek at Cooma and causeway in Commissioner-street.	Approaches and widening	do		1,500	1,500
Monaro	19	12m. to 14m. south of Cooma	Reconstruction and bitumen surfacing	do	37,260	5,252	42,512
Do	19	9.2m. to 12m. south of Cooma	Reconstruction and bitumen surfacing	do	47,740	4,000	51,740
Do	19	11.39m. and 11.95m. south of Cooma	Reinforced concrete box culverts	do			
Do	19	15m. to 16.81m. south of Cooma	Reconstruction and bitumen surfacing	do	17,500	2,500	20,000
Do	19	16.81m. to 19m. south of Cooma	do do do do	do		34,221	34,221
Do	19	19m. to 22.57m. south of Cooma	do do do do	do		23,000	23,000
Do	19	62.1m. to 62.4m. south of Canberra	Improvement of crest	do		1,000	1,000
						£141,166	
RIVERINA HIGHWAY							
Berrigan and Corowa	20	11.3m. to 12.8m. east of Berrigan	Deviation	Department	16,516	696	17,212
Corowa	20	12.8m. to 25.9m. east of Berrigan	Reconstruction and road widening	do	52,977	111,834	164,811
Hume	20	Township of Howlong	Reconstruction of pavement	Council	150	383	533
						£112,913	
COBB HIGHWAY							
Central Darling	21	Waverley Creek, 14.5m. south of Ivanhoe	Reinforced concrete box culvert	Department		3,043	3,043
Waradgery	21	4m. to 22m. north of Hay	Reconstruction and bitumen surfacing	do	96,537	107,313	203,850
Do	21	One Tree Creek, 23.3m. north of Hay	Precast concrete culvert	do		2,737	2,737
Do	21	0.0m. to 10m. south of Hay	Reconstruction	Council	23,508	2,625*	20,883
Do	21	2.75m. to 7m. south of Hay	Bitumen surfacing	do			
Do	21	11.5m. to 16m. south of Hay	Reconstruction	do	16,800	15,933	32,733
Do	21	7m. to 11.5m. south of Hay	Bitumen surfacing	do			
Do	21	16m. to 19m. south of Hay	Reconstruction	do		30,980	30,980
Do	21	11.5m. to 19m. south of Hay	Bitumen surfacing	do			
Windouran	21	35.55m. to 41.15m. north of Deniliquin	Reconstruction and bitumen surfacing	do	25,811	2,400*	23,411
Do	21	41.5m. to 48.15m. north of Deniliquin	do do do do	do		27,572	27,572
						£182,553	
SILVER CITY HIGHWAY							
Broken Hill	22	39m. to 44m. south of Broken Hill	Reconstruction and bitumen surfacing	Department		48,829	48,829
Murrumbidgee Division	22	30.62m. to 39m. south of Broken Hill	do do do do	do	49,890	20,860	70,750
Wentworth	22	93.6m. to 110m. south of Broken Hill	do do do do	do	32,090	78,322	110,412
Do	22	110m. to 128m. south of Broken Hill	do do do do	do		672	672
Do	22	2.7m. east of Wentworth	do do do do	do	584	13,863	14,447
Do	22	Within the Township of Dareton	do do do do	do	1,904	703	2,607
						£163,249	

* Credit

Appendix No. 8—continued

COUNTRY MAIN ROADS FUND—GENERAL PURPOSES—continued

Summary of Expenditure on Construction and Reconstruction Works—continued

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Expenditure from Department's Funds		
					To 30th June, 1963	1963-64	To 30th June, 1964
					£	£	£
STATE HIGHWAYS—continued							
STATE HIGHWAY NO. 23							
Newcastle	23	Moore-street, Birmingham Gardens	Temporary route	Council	4,500	5,109	9,609
Do	23	Sandgate overbridge to 0.17m. south of State Highway No. 10	do do	do		2,600	2,600
Do	23	Vale-street, Birmingham Gardens (from Sandgate-road to Moore-street)	do do	do		5,500	5,500
Do	23	Southern approach to bridge over the railway lines at Sandgate	Reinforced concrete bridge and approaches	do	8,883	241	9,124
						£13,450	
MOUNT LINDESAY HIGHWAY							
Tenterfield	24	23.5m. north of Tenterfield	Reinforced concrete box culvert and approaches	Council		£6,800	6,800
STATE HIGHWAY NO. 25							
Shellharbour	25	3m. to 4.5m. from State Highway No. 1	Strengthening and widening	Department	2,066	23,930	25,996
Wingecarribee	25	31.47m. to 33.96m. from State Highway No. 1	Reconstruction and widening	do	217	12,385	12,602
						£36,315	
			Total—State Highways			£7,408,325	
TRUNK AND ORDINARY MAIN ROADS							
Abercrombie	54	16.28m. to 17.60m. south of Bathurst	Reconstruction and bitumen surfacing	Council	8,500	58	8,558
Do	54	Mulgunna Creek	Prestressed reinforced concrete bridge and approaches	do		14,000	14,000
Do	54	George's Plains Creek	Precast concrete bridge	do		6,000	6,000
Do	252	14.83m. to 16m. south of Bathurst	Reconstruction and bitumen surfacing	do	2,000	5,300	7,300
Do	252	Sophia Creek 29.5m from Bathurst	Reinforced concrete box culvert and approaches	do		3,265	3,265
Armidale	124	Martin's Gully 1.9m. west of Armidale	Reinforced concrete box culvert	do	1,000	1,000	2,000
Ashford	63	10.42m. to 11.34m. south of Yetman	Reconstruction and bitumen surfacing	do	5,250	713	5,963
Do	63	11.34m. to 14.58m. south of Yetman	do do do do	do		14,708	14,708
Do	137	Frying Pan Creek	Reinforced concrete box culvert and approaches	do	10,300	950	11,250
Do	187	32.7m. to 35.7m. north of Inverell	Reconstruction and bitumen surfacing	do	1,250	1,250*	
Do	187	0m. to 1.95m. south of Wallangra	do do do do	do	8,927	1,250	10,177
Do	187	39.3m. to 41.3m. north of Inverell	do do do do	do	9,750	1,485	11,235
Do	187	Hickey's Plains Creek 7m. north of Graman	Reinforced concrete box culvert and approaches	do		11,500	11,500
Ballina	545	Missingham Bridge	Longitudinal timber sheeting	do	2,200	66	2,266
Bairnald	67	11.3m. to 13.6m. south of State Highway No. 14	Reconstruction and bitumen surfacing	do	11,836	186	12,022
Do	67	13.6m. to 15.4m. south of State Highway No. 14	do do do do	do		84*	9,916
Do	67	15.4m. to 19.4m. south of State Highway No. 14	do do do do	do	10,000	11,584	11,584
Do	67	Box Creek 31.1m. north of State Highway No. 14	Concrete box culvert	do		10,000	10,000
Barraba	63	6.71m. to 10.9m. north of Barraba	Reconstruction and bitumen surfacing	do	31,500	1,269*	30,231
Do	63	11.39m. to 14.32m. north of Barraba	do do do do	do		9,269	9,269
Bellingen	76	4.62m. to 5.36m. west of Thora Bridge over Bellinger River	Improvement and widening	do	6,140	9,360	15,500
Do	76	21.04m. to 22.04m. from State Highway No. 10	Reconstruction and bitumen surfacing	do		776	776
Do	118	24.21m. to 25.71m. north of Macksville	do do do do	do		3,400	3,400
Do	119	5.6m. to 6.65m. west of Dorrigo	Strengthening and bitumen surfacing	do	1,000	2,945	3,945
Do	119	6.65m. to 7.06m. from Trunk Road No. 76	Reconstruction and bitumen surfacing	do		1,600	1,600

* Credit

Appendix No. 8—continued
COUNTRY MAIN ROADS FUND—GENERAL PURPOSES—continued
Summary of Expenditure on Construction and Reconstruction Works—continued

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Expenditure from Department's Funds		
					To 30th June, 1963	1963-64	To 30th June, 1964
					£	£	£
TRUNK AND ORDINARY MAIN ROADS—continued							
Berrigan	226	Flood escape channel at Barooga	Prestressed reinforced concrete bridge	Council		14,674	14,674
Do	226	Bridge over flood escape channel at Barooga	Approaches	do		5,900	5,900
Do	331	4m. to 8m. east of Berrigan	Reconstruction and bitumen surfacing	do	11,666	1,000*	10,666
Do	331	8m. to 11.25m. east of Berrigan	do do do do	do	9,000	594	9,594
Bibbenluke	91	1.46m. to 3.5m. east of Bombala	Reconstruction and graveling	do		4,000	4,000
Do	274	0m. to 0.48m. east of Bombala	Reconstruction and bitumen surfacing	do	6,000	362*	5,638
Do	274	0.48m. to 1.43m. east of Bombala	do do do do	do	2,000	4,363	6,363
Do	288	0m. to 3.02m. from State Highway No. 19	do do do do	do	15,500	502*	14,998
Bingara	63	6.7m. to 11.85m. north of Bingara	do do do do	do	9,100	191	9,291
Do	63	Tea Tree Creek, 10.15m. north of Bingara	Reinforced concrete box culvert	do	3,350	806	4,156
Do	133	0.4m. to 2.5m. west of Bingara	Reconstruction and bitumen surfacing	do	3,934	48	3,982
Do	133	2.5m. to 3.5m. west of Bingara	do do do do	do		2,200	2,200
Do	134	7.5m. to 8.7m. north-east of Bingara	Realignment	do		4,650	4,650
Bland	57	4m. to 9.4m. north of West Wyalong	Reconstruction and bitumen surfacing	do	18,000	3,093	21,093
Do	57	9.4m. to 17.95m. north of West Wyalong	do do do do	do	3,000	17,500	20,500
Blaxland	55	3m. to 17m. from State Highway No. 5	Strengthening and bitumen surfacing of damaged sections	do	10,399	1,780	12,179
Do	253	2.85m. to 12m. from State Highway No. 5	Reconstruction and bitumen surfacing	Department	189,664	1,319	190,983
Do	292	2m. from State Highway No. 5 at South Bowenfels	Restoration of gravel pit	do	201	308	509
Do	292	7.8m. to 10.1m. from State Highway No. 5	Reconstruction and bitumen surfacing	Council	8,100	232*	7,868
Blaxland and Oberon	253	12m. to 14.81m. (Oberon turn-off) from State Highway No. 5	do do do do	Department	55,984	39,354	95,338
Do	253	15m. to 20m. from State Highway No. 5 at Hartley	do do do do	do		28,513	28,513
Bogan	57	3.4m. to 4.6m. south of Nyngan	do do do do	Council	13,000	4,202*	8,798
Do	57	0.75m. to 3.4m. south of Nyngan	do do do do	do	7,000	9,454	16,454
Do	57	4.6m. to 7.0m. south of Nyngan	do do do do	do		12,100	12,100
Boolooroo	232	19.5m. to 26m. north of Moree	do do do do	do	9,828	70*	9,758
Do	507	0m. to 3m. west of Goondiwindi	do do do do	do	9,667	1,515*	8,152
Do	507	28.75m. to 38.75m. east of Boomi	Concrete causeways	do		5,054	5,054
Do	507	44.5m. to 47.5m. east of Boomi	Reconstruction and bitumen surfacing	do		11,019	11,019
Boomi	232	17.77m. to 22.04m. north of Garah	Reconstruction	do	14,250	5,435*	8,815
Do	232	26m. to 30.1m. north of Moree	Reconstruction and bitumen surfacing	do	6,539	5,550	12,089
Do	232	30.1m. to 31m. north of Moree	Realignment and bitumen surfacing	do		3,813	3,813
Do	367	34.24m. to 36.5m. north of Moree	Reconstruction and bitumen surfacing	do		8,187	8,187
Do	367	6.1m. east of Mungindi	Pipe culvert and embankment	do		850	850
Do	507	34.25m. to 42.75m. east of Mungindi	Gravelling	do	6,000	134*	5,866
Do	507	17m. to 34.25m. east of Mungindi	do	do		13,541	13,541
Do	507	0m. to 3.25m. east of Mungindi	Reconstruction and bitumen surfacing	do		600	600
Boorowa	56	1.3m. to 4.4m. north of Boorowa	do do do do	do	14,000	570*	13,430
Do	56	4.4m. to 7.08m. north of Boorowa	Reconstruction	do		15,570	15,570
Do	241	1.35m. to 2.7m. west of Boorowa	Reconstruction to basecourse stage	do		2,000	2,000
Do	241	5.17m. to 5.72m. east of Boorowa	Reconstruction	do		3,380	3,380
Do	241	Dan Ryans Creek, 3.75m. east of Boorowa	Reinforced concrete box culvert and approaches	do		4,000	4,000
Do	248	3.6m. to 5m. east of Boorowa	Reconstruction and bitumen surfacing	do	3,810	81	3,891
Do	248	5.06m. to 5.75m. east of Boorowa	do do do do	do		500	500
Do	248	Saltwater Creek 4.25m. east of Boorowa	Reinforced concrete box culvert and approaches	do		4,797	4,797
Boree	237	35.23m. to 37.14m. from Orange 4.3m. to 6.3m. from Boundary of Waugoolia Shire.	Reconstruction and bitumen surfacing	do	19,000	334*	18,666
Do	237	38.53m. to 39.57m. west of Orange	do do do do	do		6,221	6,221
Do	237	1.24m. to 2.07m. south of Canowindra	do do do do	do	9,000	3,000	12,000
Do	237	Main Road No. 237 to 1.79m. west of Canowindra	do do do do	do		5,000	5,000
Do	238	2.07m. to 2.98m. south of Canowindra	do do do do	do		10,000	10,000
Do	237	15.79m. to 20.8m. west of Canowindra	do do do do	do		334	15,285
Do	377	46.64m. to 56.72m. west of Orange	do do do do	do	14,951	506	31,122
Do	377	Boree Creek at Cudal	Reinforced concrete bridge	do	30,616		

* Credit

Appendix No. 8—continued
COUNTRY MAIN ROADS FUND—GENERAL PURPOSES—continued
Summary of Expenditure on Construction and Reconstruction Works—continued

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Expenditure from Department's Funds		
					To 30th June, 1963	1963-64	To 30th June, 1964
					£	£	£
TRUNK AND ORDINARY MAIN ROADS—continued							
Brewarrina	68	1.1m. to 5.4m. north of Brewarrina	Reconstruction and bitumen surfacing	Council	14,000	10,000	24,000
Do	70	Muckerawa Creek	Steel and concrete bridge and approaches	do	18,500	2,780	21,280
Burrangong	239	9.1m. to 13.1m. north of Young	Reconstruction and bitumen surfacing	do	13,956	340	14,296
Do	239	13.1m. to 16.2m. north of Young	do do do do	do	5,000	6,303	11,303
Do	239	16.2m. to 19.46m. north of Young	do do do do	do		16,000	16,000
Byron	65	12.38m. to 12.68m. and 13.20m. to 13.60m. from Lismore	Realignment widening and bitumen surfacing	do		1,217	1,217
Canobolas	245	6m. to 10m. from Orange	Reconstruction and bitumen surfacing	do	13,000	4,074	17,074
Do	559	State Highway No. 7 to 2.62m. at Whitley's Junction	do do do do	do		9,000	9,000
Do	573	1.94m. to 3.91m. and 6.07m to 8m. north of Orange	do do do do	do	18,192	459*	17,733
Do	573	8m. to 9m. north of Orange	do do do do	do		555	555
Carrathool	80	0m. to 0.5m. west of Hillston	do do do do	do	4,036	10,428	14,464
Do	80	0.49m. to 4.49m. south of Hillston	do do do do	do		1,631	3,631
Do	80	Intersection with State Highway No. 6 at Goolgowi	do do do do	do	2,000	9,500	9,500
Do	244	4.49m. to 7m. south of Hillston	do do do do	do	3,000	3,159	6,159
Do		Hay-Darlington Point-road to the boundary of Murrumbidgee Shire.	do do do do	do			
Do	321	0.35m. to 7.35m. north of Darlington Point	do do do do	do	27,338	5,547*	21,791
Do	321	12.53m. to 14.28m. north of Darlington Point	do do do do	do	482*	5,547	5,065
Do	321	2.6m to 5.6m. south of State Highway No. 6	do do do do	do		10,475	10,475
Do	501	Keats-street and High-street, Hillston	do do do do	do	1,500	76*	1,424
Do	501	13m. to 20m. west of Hillston	Reforming and graveling	do		1,250	1,250
Do	501	Mountain Creek, 5.5m. east of Willanthry	Reinforced concrete bridge	do	10,172	69	10,241
Casino	83	1.16m. to 3.15m. north and 0.12m. to 1m. south from 41m. peg on State Highway No. 16.	Strengthening and widening	do		3,654	3,654
Central Darling	433	40.0m. to 59.6m. west of State Highway No. 21	Reconstruction	do		2,000	2,000
Cobar	61	7m. to 9m. south of Cobar	Reconstruction and bitumen surfacing	do	6,000	3,000	9,000
Cockburn	63	10.1m. to 13m. north of Tamworth	Widening	do		3,000	3,000
Do	63	Browns Springs, 17m. north of Tamworth	Reinforced concrete bridge and approaches	do		3,000	3,000
Do	105	Bridge over Dungowan Creek, 15.5m. south of Tamworth	Approaches	do		1,000	1,000
Do	553	1.38m. to 4.63m. from Somerton Bridge	Reconstruction	do	3,000	3,000*	
Cockburn and Nundle	105	Dungowan Creek, 15.5m south of Tamworth	Reinforced concrete bridge	do		7,500	7,500
Coff's Harbour	151	43.67m. to 44.93m. south of Grafton	Reconstruction and bitumen surfacing	do	8,474	1,415	9,889
Do	151	45.09m. to 46.06m. south of Grafton	do do do do	do	600	6,408	7,008
Do	540	0m. to 0.42m. and 1.88m. to 2.12m. towards Sawtell	do do do do	do	5,000	493	5,493
Do	540	0.4m. to 1.9m. from southern junction with State Highway No. 10.	do do do do	do		9,356	9,356
Colo	182	Windsor to Wilberforce	Reconstruction and widening	Department	2,357	11,461	13,818
Do	519	5.3m. to 6.83m. from Main Road No. 184	Reconstruction and bitumen surfacing	Council		7,000	7,000
Condobolin	57	2.36m. to 3.25m. south of Condobolin	do do do do	do		2,812	2,812
Do	57	1.52m. to 2.36m. south of Condobolin	do do do do	do		2,000	2,000
Coolah	55	17.59m. to 21.71m. south of Coolah	do do do do	do	27,633	2,012*	25,621
Do	55	Bridge over Coolah Creek, 10m. south of Coolah	Approaches	do	8,920	1,415	10,335
Do	62	Croppy Creek, 8m. east of Coolah	Reinforced concrete bridge	do		5,000	5,000
Do	77	0.18m. to 7.81m. west of Main Road No. 206 at Dunedoo (selected section)	Reconstruction and bitumen surfacing	do		26,000	26,000
Do	77	4.81m. to 6.34m. east of Mendooran	do do do do	do		10,155	10,155
Do	77	7.79m. to 9.83m. west of Dunedoo	do do do do	do		12,800	12,800
Coolamon	243	3.66m. to 12.42m. east of Coolamon	do do do do	do	12,200	19,670	31,870
Do	387	0m. to 4.83m. west of Ardlethan	do do do do	do	13,500	2,320	15,820
Do	387	State Highway No. 17 to Narrabarra Shire Boundary	do do do do	do		1,600	1,600
Coonabarabran	129	8.7m. to 10.7m. north of Coonabarabran	Deviation	do		351	351
Do	329	0m. to 1.50m. north of junction with Main Road No. 129 at Baradine.	Reconstruction and bitumen surfacing	do		2,520	2,520
Do	334	17m. to 26m. south of Coonabarabran	do do do do	do		20,000	20,000

* Credit

Appendix No. 8—continued

COUNTRY MAIN ROADS FUND—GENERAL PURPOSES—continued

Summary of Expenditure on Construction and Reconstruction Works—continued

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Expenditure from Department's Funds		
					To 30th June, 1963	1963-64	To 30th June, 1964
					£	£	£
TRUNK AND ORDINARY MAIN ROADS—continued							
Coonabarabran	334	Myall Plains Creek, 23m. from State Highway No. 11	Reinforced concrete bridge	Council		18,232	18,232
Do	334	Bridge over Myall Plains Creek 23m. from State Highway No. 11.	Approaches	do		4,000	4,000
Do	396	8.30m. to 10.05m. south of Coonabarabran	Reconstruction and bitumen surfacing	do	9,310	1,890	11,200
Coonabarabran and Gulgandra	205	Yarragrin Creek, 73m. south of Coonamble	Steel and reinforced concrete bridge and approaches	do		7,590	7,590
Coonamble	129	24m. to 28.8m. west of Coonamble	Deviation	do	3,500	4,500	8,000
Do	129	4m. to 5.5m. east of Coonamble	Reconstruction and bitumen surfacing	do	6,094	1,370	7,464
Do	129	5.5m. to 6.5m. east of Coonamble	do do do do	do	3,000	1,578	4,578
Do	129	Westward from Coonamble	do do do do	do		2,000	2,000
Do	383	25m. north of Coonamble	Replacement of causeway	do	1,500	2,000	3,500
Copmanhurst	83	39.56m. to 42.93m. north of Grafton	Reconstruction and bitumen surfacing	Department	77,348	91*	77,257
Do	83	Sportsmans Creek deviation 15.5m. to 19m. north of Grafton	Construction	do	59,075	74,757	133,832
Do	83	34m. to 39.21m. north of Grafton	Reconstruction and bitumen surfacing	do	22,494	88,308	110,802
Do	83	30.9m to 34m. north of Grafton	Construction and bitumen surfacing	do		19,668	19,668
Do	83	Bridge over Selection Flat 41m. north of Grafton	Approaches	do		2,641	2,641
Do	83	Sportsmans Creek, Flood Channel of Sportsmans Creek and Creek near Dilkoon.	Reinforced concrete bridges	do	48,828	47,893	96,721
Do	83	Timber beam bridge over Myall Creek at Whiporie	Widening	do		4,737	4,737
Do	83	8.51m. to 9.51m. north of Grafton	Reconstruction and bitumen surfacing	Council	6,000	5	6,005
Do	83	11.9m. to 13.4m. north of Grafton	do do do do	do		1,667	1,667
Do	150	17.61m. to 18.81m. north of Grafton	do do do do	do	5,620	247	5,867
Do	150	Bridge over Pulganbar Creek	Reinforced concrete bridge	do		2,250	2,250
Do	151	8.79m. to 9.3m., Boothbys Creek Bridge	Reconstruction and bitumen surfacing	do	2,870	10,130	13,000
Do	151	9.32m. to 12.71m. east of Grafton	do do do do	do		1,333	1,333
Corowa	299	10m. to 15m. from Corowa	do do do do	do	12,918	2,190	15,108
Do	550	West of Corowa	do do do do	do		3,517	11,199
Crookwell	201	3.1m. to 4.9m. north of Crookwell	do do do do	do	8,656	1,214	9,870
Do	201	4.94m. to 9.0m. north of Crookwell	do do do do	do	6,000	19,724	25,724
Do	291	1.95m. to 3.2m. west of Crookwell	Reconstruction	do	6,584	495	7,079
Cudgegong	55	7.1m. to 14.75m. north of Gulgong	Reconstruction and bitumen surfacing	do	31,200	2,638	33,838
Do	55	14.75m. to 22.1m. north of Gulgong	do do do do	do	23,000	8,500	31,500
Do	55	12.9m. north of Gulgong	Reinforced concrete box culvert and approaches	do		6,800	6,800
Do	208	6.6m. to 7.6m., including concrete causeway at 7.7m. from Mudgee.	Reconstruction and bitumen surfacing	do		3,500	3,500
Do	208	Pipe Clay Creek, 5m. from Mudgee	Prestressed and reinforced concrete bridge and approaches	do		20,000	20,000
Do	214	7.85m. to 9.6m. from Mudgee	Reconstruction and bitumen surfacing	do		5,500	5,500
Do	216	3.5m. to 3.89m. from Mudgee	Gravelling and bitumen surfacing	do		6,000	6,000
Do	216	3.89m. to 5.5m. from Mudgee	Reconstruction and bitumen surfacing	do			
Do	233	1.76m. to 4.38m. west of Gulgong	Reconstruction and bitumen surfacing	do		19,640	19,640
Do	233	5.19m to 8.79m. west of Gulgong	do do do do	do			
Do	233	1.48m. west of Gulgong	Precast concrete box culvert and approaches	do		3,200	3,200
Culcairn	211	1.5m. to 9.15m. south of boundary of Kyeamba Shire	Reconstruction and bitumen surfacing	do	18,800	510	19,310
Do	370	Lockhart Shire boundary (0.0m.) to Walbundrie (9.63m.)	do do do do	do		4,500	4,500
Do	547	1.06m. to 4.13m. and 5.82m. to 7.11m. south of Main Road No. 331.	do do do do	do	3,602	14,718	18,320
Darling	68	Bogan River at Beemery, 26m. from Bourke	Reinforced concrete bridge	Department		34,094	34,094
Do	68	0.0m. to 0.48m. from State Highway No. 7	Reconstruction and bitumen surfacing	Council	3,675	287	3,962
Do	404	0.0m. to 2.57m. from State Highway No. 7	do do do do	do		8,500	8,500
Demondrille	381	0.16m. to 3.04m. from State Highway No. 2 at Jugiong	do do do do	do	7,500	9,166	16,666
Do	381	3.04m. to 5.85m. from State Highway No. 2 at Jugiong	do do do do	do		12,334	12,334

* Credit

Appendix No. 8—continued

COUNTRY MAIN ROADS FUND—GENERAL PURPOSES—continued

Summary of Expenditure on Construction and Reconstruction Works—continued

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Expenditure from Department's Funds		
					To 30th June, 1963	1963-64	To 30th June, 1964
					£	£	£
TRUNK AND ORDINARY MAIN ROADS—continued							
Dumaresq	74	30.53m. to 34.31m. east of Armidale	Reconstruction and bitumen surfacing	Council	16,702	5,638	22,340
Do	74	34.31m. to 36.3m. east of Armidale	do do do do	do	10,000	10,000	10,000
Do	74	Bakers Creek Bridge, 15.9m. east of Armidale	Approaches	do	10,142	240	10,382
Do	75	Blackbird Flat, 69.25m. east of Armidale	Reinforced concrete bridge	do	19,150	6,098	25,248
Do	75	Blackbird Flat Bridge, 69.25m. east of Armidale	Approaches	do	2,000	1,647	3,647
Do	124	0.65m. to 1.65m. west of Armidale	Reconstruction and bitumen surfacing	do		4,400	4,400
Dungog	101	0.6m. to 4.7m. south of Dungog	do do do do	do		5,000	5,000
Do	101	Jordan's Hollow, 1m. north of Paterson	do do do do	do		8,000	8,000
Do	128	6.5m. to 7.5m. east of the boundary of Patrick Plains Shire	Reconstruction of damaged bitumen pavement	do	5,109	3,600	8,709
Do	567	1.85m. to 4.35m. east of Clarencetown	Reconstruction and bitumen surfacing	do	17,447	553	18,000
Do	567	4.35m. to 6.35m. east of Clarencetown	Gravelling and bitumen surfacing	do		1,000	1,000
Eurobodalla	51	Nelligen Creek to Mongarlowe River	Construction	Department	384,443	199	384,642
Do	51	Bridge over Clyde River at Nelligen	Approaches	do	8,598	12,402	21,000
Do	51	Clyde River at Nelligen	Reinforced and prestressed concrete bridge	do	120,411	81,599	202,010
Do	51	Nelligen to Nelligen Creek	Reconstruction and bitumen surfacing	Council	49,500	1,310*	48,190
Do	271	Daley's Creek, 11.5m. from Moruya	Reinforced concrete bridge	do	3,001	14,000	17,001
Gilgandra	205	0.13m. to 2.61m. from State Highway No. 11 to Tooraweenah	Reconstruction and bitumen surfacing	do		1,500	1,500
Gloucester	90	3.61m. to 5.36m. east of Gloucester	do do do do	do	10,614	14*	10,600
Do	90	11.72m. to 12.89m. east of Gloucester	Reconstruction	do		16,856	16,856
Do	90	9.15m. to 11.22m. east of Gloucester	Reconstruction and bitumen surfacing	do		5,000	5,000
Do	90	Mogran Creek, 1.53m. east of Gloucester	Steel and reinforced concrete bridge	do		13,800	13,800
Do	90	Avon River, 0.55m. east of Gloucester	do do do do	do		24,072	24,072
Do	90	Bridge over Mogran Creek, 1.53m. east of Gloucester	Approaches	do		6,000	6,000
Goobang	61	14.96m. to 19.83m. west of Parkes and 0.34m. to 5.08m. west of Bogan Gate	Reconstruction and bitumen surfacing	do	46,500	3,686	50,186
Do	61	5.08m. to 8.83m. west of Bogan Gate	do do do do	do		17,814	17,814
Do	233	Goobang Creek, 19.85m. from Parkes	Steel and concrete bridge and approaches	do	173	11,000	11,173
Do	233	Deep Creek, 18.4m. from Parkes	Reinforced concrete box culverts and approaches	do		3,500	3,500
Do	238	23.38m. to 24.23m. from Eugowra	Reconstruction and bitumen surfacing	do		5,220	5,220
Do	348	3.76m. to 6.98m. west of Peak Hill	do do do do	do	13,447	745*	12,702
Do	348	6.98m. to 9.38m. west of Peak Hill	do do do do	do		9,706	9,706
Do	350	Trundle	do do do do	do	1,000	2,586	3,586
Goodradigbee	56	Boorowa gates	Railway overbridge	Department		12,039	12,039
Do	56	8.0m. to 10.0m. from Yass	Reconstruction and bitumen surfacing	Council	15,000	3,000	18,000
Do	56	5.1m. to 8.0m. from Yass	do do do do	do		2,000	2,000
Do	56	10.0m. to 11.0m. from Yass	do do do do	do		1,500	1,500
Do	56	Railway overbridge at Boorowa gates, 6.1m. from Yass	Approaches	do		6,000	6,000
Do	278	11.8m. to 13.8m. from Yass	Strengthening and bitumen surfacing	do		6,000	6,000
Gosford	225	Mangrove Mountain, low lying sections	Reconstruction and bitumen surfacing	do	2,000	83	2,083
Do	225	11m. to 15.5m. from Wiseman's Ferry	do do do do	do		10,300	10,300
Do	336	Erina Creek, 1.5m. from Gosford	Reinforced concrete bridge	Department	27,102	960	28,062
Do	336	1m. to 2m. east of Erina Creek Bridge	Reconstruction and bitumen surfacing	Council	10,000	1,347	11,347
Do	336	2m. to 3m. east of Erina Creek Bridge	do do do do	do		8,000	8,000
Do	336	Bridge over Erina Creek, 1.5m. from Gosford	Approaches	do	5,000	1,309	6,309
Do	349	0m. to 0.62m. from Patonga	Reconstruction and bitumen surfacing	do	7,043	309*	6,734
Do	349	3.15m. to 4.10m. south of State Highway No. 10 towards Woy Woy	do do do do	do		5,000	5,000
Do	349	11.3m. to 13.2m. from State Highway No. 10	do do do do	do		10,650	10,650
Goulburn	256	Northern approach to Kenmore Bridge, 2m. from Goulburn	Realignment and reconstruction	do	3,000	74	3,074
Grafton	298	Footway embankment adjacent to existing bridge over Alunny Creek	Construction	do		3,522	3,522

* Credit

Appendix No. 8—continued

COUNTRY MAIN ROADS FUND—GENERAL PURPOSES—continued

Summary of Expenditure on Construction and Reconstruction Works—continued

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Expenditure from Department's Funds		
					To 30th June, 1963	1963-64	To 30th June, 1964
					£	£	£
TRUNK AND ORDINARY MAIN ROADS—continued							
Greater Cessnock	218	Lynch's Creek Bridge to Wollombi	Reconstruction and bitumen surfacing	Council	7,354	11,546	18,900
Do	218	Lang-street Kurri Kurri between Victoria-street and Hampden-street	Median strips	do		2,450	2,450
Do	218	Swamp Creek at Abermain	Timber footbridge	do		1,985	1,985
Do	220	0m. to 0.35m. north of Branxton	Reconstruction and bitumen surfacing	do	6,200	1,412	7,612
Do	220	Nulkaba, 1.9m. north of Cessnock	Elimination of causeway	do		1,000	1,000
Do	220	Deep Creek, 4.3m. south of Cessnock	Steel and reinforced concrete bridge	do	9,500	349*	9,151
Do	220	Deep Creek, 3.3m. north of Cessnock	Prestressed reinforced concrete bridge and approaches	do	7,072	13,418	20,490
Do	220	First Creek, 4.9m. north of Cessnock	Reinforced concrete box culvert	do	6,000	349	6,349
Do	223	Surveyors Creek (No. 2) 2.55m east of Kurri Kurri	Reinforced concrete box culvert and approaches	do	6,463	2,282*	4,181
Do	223	Wallis Creek and Surveyors Creek (No. 1 bridge) 2.5m. east of Kurri Kurri	Reinforced concrete bridges	do	26,139	11,300	37,439
Do	223	Bridges over Wallis Creek and Surveyors Creek (No. 1 bridge) 2.5m. east of Kurri Kurri	Approaches	do	4,000	5,900	9,900
Greater Wollongong	186	4.45m. to 6.4m. west of Wollongong	Reconstruction	do	9,500	650	10,150
Do	186	0.02m. to 0.2m. from State Highway No. 1	Reconstruction and widening	do	1,000	1,100	2,100
Do	295	Flinders-street to Darcy-road Port Kembla	Reconstruction	do	32,400	4,443	36,843
Do	295	Railway level crossing near Unanderra	Installation of flashing light signals	do	2,318	44	2,362
Do	295	Flinders-street, Port Kembla	Railway level crossing	do	600	1,500†	2,100
Do	295	Flinders-street to Darcy-road Port Kembla	Reconstruction	do		4,000†	4,000
Do	295	Springhill-road to Glastonbury-avenue	Widening	do		6,000	6,000
Do	295	Bridge over the Australian Iron and Steel railway line near Flinders-street	Construction	do	120	120*	
Do	295	Bridge over the Australian Iron and Steel jetty line at Port Kembla	Duplication	do	2,667	272	2,939
Do	502	0.0m. to 2.05m. from Main Road No. 513	Strengthening	Department		34,246	34,246
Do	513	Mount Ousley-road below Mount Pleasant overbridge	Rectification of slip area	do		3,524	3,524
Do	513	6.2m. to 8.85m. from State Highway No. 1	Northbound lanes	do		10,174	10,174
Do	568	0.08m. north of Main Road No. 295 at Cringila to 1.32m.	Construction of dual carriageway	Council	41,479	285*	41,194
Do	568	Ellen-street to Swan-street	Reconstruction	do	6,905	519	7,424
Do	568	Railway bridge over road on rail link from Coniston to Inner Harbour	Adjustment to road alignment	do		1,000	1,000
Do	581	Keira-street and Virginia-street	Reconstruction of intersection	do		2,750	2,750
Do	581	Gipps-street to Kembla-street	Reconstruction and widening	do		3,500	3,500
Grenfell	237	0.45m. to 1.35m. towards Gooloogong	Reconstruction and bitumen surfacing	do		2,500	2,500
Do	237	1.35m. to 2m. north of Grenfell	do do do do	do		1,000	1,000
Gundagai	243	4.1m. to 6.9m. from State Highway No. 2	Reconstruction	do	6,100	11,690	17,790
Do	243	4.08m. to 6.88m. west of State Highway No. 2	Reconstruction	do	11,000	11,000*	
Do	243	4.08m. to 6m. west of State Highway No. 2	Bitumen surfacing	do			
Do	243	6.9m. to 7.83m. from State Highway No. 2	Reconstruction and bitumen surfacing	do	2,500	2,000	4,500
Gundurimba	65	2.96m. to 4m. from Lismore	do do do do	do		1,694	1,694
Do	146	14.2m. to 14.39m. from State Highway No. 10	Deviation	do	1,300	150*	1,150
Do	147	1.95m. to 2.85m. from Woodburn	Reconstruction and bitumen surfacing	do	10,400	392*	10,008
Do	147	13.6m. to 14.35m. from Woodburn	do do do do	do		2,000	2,000
Do	544	3.56m. to 4.68m. from Lismore	do do do do	do	10,409	218	10,627
Do	544	7.43m. from Lismore at Eleven Mile Creek	Replacement of bridge	do		1,500	1,500
Gunning	249	0.25m. to 18.1m. south of Gunning	Reconstruction and bitumen surfacing	do	8,938	118	9,056
Do	249	Fairfield Bridge over Gundaroo Creek	Steel and concrete bridge and approaches	do	22,733	11,662	34,395
Do	249	Fairfield Bridge over Gundaroo Creek	Erosion control	do	500	3,000	3,500
Do	249	Inglewood Bridge over Lachlan River	Approaches	do	1,000	4,274	5,274
Guyra	135	22.25m. to 26.25m. east of Guyra	Reconstruction and bitumen surfacing	do	15,000	985*	14,015
Do	135	26.25m. to 30.25m. east of Guyra	do do do do	do		15,400	15,400

* Credit

† For additional expenditure see Appendix No. 8A

Appendix No. 8—continued

COUNTRY MAIN ROADS FUND—GENERAL PURPOSES—continued

Summary of Expenditure on Construction and Reconstruction Works—continued

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Expenditure from Department's Funds		
					To 30th June, 1963	1963-64	To 30th June, 1964
					£	£	£
TRUNK AND ORDINARY MAIN ROADS—continued							
Hastings	112	0m. to 1.25m. from Main Road No. 538 towards Comboyne	Reconstruction and bitumen surfacing	Council	4,500	605	5,105
Do	112	6.02m. from State Highway No. 11	Pipe culvert	do		1,000	1,000
Do	538	0m. to 2m. west of Kendall	Reconstruction and bitumen surfacing	do	5,300	2,764	8,064
Do	538	2.21m. to 4.0m. west of Kendall	do do do do	do	2,030	8,110	10,140
Do	538	4m. to 6m. west of Kendall	do do do do	do		10,000	10,000
Holbrook	284	11.00m. to 13.05m. west of the boundary of Tumbarumba Shire	Reconstruction	do	12,600	4,600	17,200
Do	284	11.00m. to 13.05m. west of the boundary of Tumbarumba Shire	Gravelling and bitumen surfacing	do		4,600	4,600
Do	284	Carabost Creek	Prestressed reinforced concrete bridge and approaches	do		8,250	8,250
Hume	57	17.5m. to 24.5m. north of Albury	Widening of reinforced concrete box culverts	do		1,635	1,635
Do	125	5.6m. to 7.1m. north of Albury	Reconstruction and bitumen surfacing	do	14,273	104*	14,169
Do	282	State Highway No. 2 to Cumboroona Bridge	do do do do	do	7,250	11,212	18,462
Do	282	Cumboroona Bridge to Toonalook	do do do do	do		5,354	5,354
Do	370	11.26m. and 13.06m. from Howlong	Reinforced concrete box culverts	do		1,500	1,500
Illabo	57	Old Junee	Improvement to level crossing	do		550	550
Do	243	Houlaghan's Creek at Old Junee	Reinforced concrete bridge	do	15,000	428	15,428
Imlay	275	7.3m. to 9m. from State Highway No. 1	Reconstruction and bitumen surfacing	do	12,952	2,139*	10,813
Do	275	3.8m. to 6.04m. from State Highway No. 1	do do do do	do	14,000	109	14,109
Do	275	0m. to 3.41m. from State Highway No. 1	do do do do	do	3,000	11,364	14,364
Do	275	Wolumba Creek, 1.0m. from State Highway No. 1	Steel and reinforced concrete bridge	do	13,150	20,000	33,150
Inverell	187	1.2m. north of Inverell	Concrete pipe culverts	do	300	1,700	2,000
Jemalong	56	8.94m. to 13.44m. south of Forbes	Reconstruction and bitumen surfacing	do	4,414	15,500	19,914
Do	56	14.6m. to 20.0m. from Forbes	Construction and bitumen surfacing	do		7,000	7,000
Do	61	37.28m. to 41.87m. and 45.13m. to 46.8m. west of Parkes	Reconstruction and bitumen surfacing	do	49,744	800	50,544
Do	61	41.87m. to 45.13m. west of Parkes	Construction and sealing	do		10,672	10,672
Do	61	46.8m. to 48.2m. west of Parkes	Reconstruction and bitumen surfacing	do	6,500	672*	5,828
Do	236	6.53m. to 10.57m. from Forbes	Reconstruction and surfacing	do		6,000	6,000
Do	377	12.7m. to 17.7m. west of Eugowra	Reconstruction and bitumen surfacing	do	14,034	576	14,610
Do	377	Approximately 17m. west of Forbes	Extension of macadam floodway	do	1,578	474	2,052
Do	377	8.97m. to 14.55m. west of Forbes	Reconstruction	do		9,000	9,000
Jerilderie	59	10m. to 10.3m. east of State Highway No. 17	Strengthening and bitumen surfacing	do	705	119	824
Do	321	5m. to 12.5m. north of State Highway No. 17	Reconstruction and bitumen surfacing	do	15,000	25,257	40,257
Do	321	14.1m. to 25.5m. north of State Highway No. 17	do do do do	do		34,470	34,470
Jindalee	78	Cootamundra Creek, 2m. south of Cootamundra	Reinforced concrete bridge	do	16,734	438	17,172
Do	84	12.23m. to 15.93m. west of Murrumburrah	Reconstruction	do		3,000	3,000
Do	84	31.50m. to 34.0m. west of Murrumburrah	Reconstruction and bitumen surfacing	do		8,505	8,505
Do	84	34m. to 37.13m. west of Murrumburrah	do do do do	do	18,000	1,178*	16,822
Do	84	Dudauman Creek, 1.75m. west of Stockinbingal	Reinforced concrete bridge	do		1,960	1,960
Kempsey	198	Rudder-street and Pola Creek, Kempsey	Deviation	do		323	323
Kiama	571	0.65m. to 2.84m. from Gerringong towards Gerroa	Reconstruction and bitumen surfacing	do		10,240	10,240
Kyeamba	211	26m. from Wagga Wagga to the boundary of Culcairn Shire	do do do do	do	13,683	238	13,921
Do	384	3.44m. to 38.40m. south of Wagga Wagga	do do do do	do	3,507	693	4,200
Do	384	10.4m. from Wagga Wagga	Concrete pipe culvert	do	1,000	238*	762
Do	384	19m. from Wagga Wagga at Tooles Creek	Widening of bridge	do		2,157	3,157
Kyogle	83	Yongurra Railway Station	Overbridge	Department	19,639	5,639	25,298
Do	83	19.97m. to 20.76m. north of Casino	Strengthening and bitumen surfacing	Council	6,700	79*	6,621
Do	83	Bridge over Fawcetts Creek 19.97m. north of Casino	Repairs	do	1,250	21	1,271
Do	83	Intersection with Main Road No. 141	Improvement	do	5,533	4,921*	612
Do	83	Level crossing at Wiangaree	do	do	2,150	11,610	13,760
Do	83	Railway overbridge at Yongurra Railway Station	Construction of approaches	do		1,173	25,173
Do	83	0.26m. to 5.19m. north of Kyogle	Reconstruction and bitumen surfacing	do	24,000	1,737	1,737
Do	361	33.00m. to 33.66m. from Woodenbong	Construction of deviation and bitumen surfacing	do		3,648	6,148
Do	544	8.51m. to 10.35m. from Kyogle	Reconstruction and bitumen surfacing	do	2,500		1,936
Do	544	10.35m. to 11.25m. from Kyogle	do do do do	do		1,936	1,936

* Credit

Appendix No. 8—continued

COUNTRY MAIN ROADS FUND—GENERAL PURPOSES—continued

Summary of Expenditure on Construction and Reconstruction Works—continued

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Expenditure from Department's Funds		
					To 30th June, 1963	1963-64	To 30th June, 1964
					£	£	£
TRUNK AND ORDINARY MAIN ROADS—continued							
Lachlan	57	Intersection with Main Road No. 347 at Albert	Reconstruction	Council	5,700	123	5,823
Do	57	Tottenham to Ffield	Reconstruction and bitumen surfacing	do	2,000	14,000	16,000
Do	57	3.27m. to 8.13m. south of Condobolin	do do do do	do		14,500	14,500
Do	61	Walkers Hill near the boundary of Bogan Shire	Reconstruction	do	3,750	16	3,766
Do	231	1.94m. to 4.75m. east of Lake Cargellico	Reconstruction and bitumen surfacing	do	8,500	1,500	10,000
Lake Macquarie	233, 392 and others	{ Cross Roads to Wyee Dora Creek at Cooranbong }	Strengthening of existing structures	do	6,370	12,870*	6,500*
Do	217	Boundary of Newcastle City to Cross Roads	Reconstruction	do	10,302	6,098	16,400
Do	223	Cardiff Heights, between City boundary and Wallsend turnoff	Improvement and widening pavement	do	13,500	1,640	15,140
Do	223	Near Callen-street, Edgeworth	Reinforced concrete box culvert	do	2,000	1,103	3,103
Do	325	Charlestown to Whitebridge	Reconstruction and bitumen surfacing	do		5,000	5,000
Do	325	North Creek at Warners Bay	Temporary timber bridge	do	1,000	2,435	3,435
Do	325	North Creek at Warners Bay	Reinforced concrete bridge	do		4,000	4,000
Do	527	0.49m. to 0.82m. from Warners Bay	Reconstruction and bitumen surfacing	do	9,104	1,789*	7,315
Do	527	Deviation at Eleebana	Construction	do	96	1,825	1,921
Leston	80	0m. to 22m. west of Leston (selected sections)	Reconstruction and bitumen surfacing	do		2,500	2,500
Do	80	Intersection with Acacia, Palm and Wamoon-avenues	Improvement	do		4,000	4,000
Do	539	{ 6.15m. to 16.03m. south of Whitton 14.53m. to 16.03m. south of Whitton }	Reconstruction	do		17,000	17,000
Lismore	65	0.78m. to 1.88m. east of Lismore	Bitumen surfacing	do			
Do	65	1.88m. to 3.00m. east of Lismore	Reconstruction and bitumen surfacing	do	9,455	2,279	11,734
Lithgow	516	Intersection with Vale-street	do do do do	do		2,875	2,875
Do	516	1.62m. to 1.68m. and 1.93m. to 2.06m. from Lithgow City	Channelisation	do	600	6	606
Liverpool Plains	55	MacPherson's Crossing, 4m. north of Tambar Springs	Extension of third lane	do		1,000	1,000
Do	72	10.4m. to 16m. south of Gunnedah	Reinforced concrete bridge and approaches	do		25,106	25,106
Do	72	16m. to 19.7m. south of Gunnedah	Reconstruction and bitumen surfacing	do	78,856	25,000*	53,856
Do	72	19.7m. to 23.72m. south of Gunnedah	do do do do	do	14,560	27,679	42,239
Do	72	23.72m. to 25.38m. south of Gunnedah	do do do do	do	40,340	6,849	47,189
Do	72	27.5m. to 34.5m. south of Gunnedah	do do do do	do		24,432	24,432
Do	72	Gulligal Lagoon No. 2, 17.2m. north of Gunnedah	do do do do	do		16,000	16,000
Do	72	Gulligal Lagoon No. 1, 16m. north of Gunnedah	Reinforced concrete bridge	do		6,000	6,000
Lockhart	59	56m. to 58.81m. west of Wagga Wagga	do do	do		10,367	10,367
Do	370	31.75m. to 36.36m. south of boundary of Narrandera Shire	Pavement strengthening and widening	do		1,500	1,500
Do	543	0.64m. to 6.87m. north of The Rock	Reconstruction and bitumen surfacing	do	10,580	821*	9,759
Lyndhurst	246	11.9m. to 14.08m. at Hobbs Yards	do do do do	do	3,205	5,321	8,526
Do	and 390		do do do do	do		10,000	10,000
Do	390	6.51m. to 8.72m. south of Blayney	do do do do	do	8,098	944	9,042
Do	390	8.89m. to 10.87m. south of Blayney	do do do do	do	8,914	299*	8,615
Do	390	10.87m. to 12m. south of Blayney	do do do do	do		10,000	10,000
Macintyre	73	7.25m. to 10.8m. south of Inverell	do do do do	do		12,232	12,232
Do	73	Gilgai Creek, 6m. south of Inverell	Reinforced concrete bridge	do		4,800	4,800
Do	134	2.45m. to 3.75m. north of Delungra	Reconstruction and bitumen surfacing	do		5,333	5,333
Do	135	Blue Pinch, 33m. from Inverell	Realignment and reconstruction	do	2,150	10	2,160
Do	187	5.06m. to 7.58m. north of Inverell	Reconstruction and bitumen surfacing	do	9,621	916	10,537
Do	187	Bannockburn Creek, 14m. north of Inverell	Reinforced concrete bridge and approaches	do	13,800	1,055*	12,745
Maclean	151	20.33m. to 21.90m. from Grafton	Reconstruction and bitumen surfacing	do		2,000	2,000
Do	152	0.02m. to 2.11m. (selected sections) from State Highway No. 10 at Maclean	do do do do	do	6,801	816*	5,985
Do	152	2.11m. to 3.95m. from Maclean	do do do do	do	10,975	761*	10,214
Do	152	3.66m. to 5.57m. west of Maclean	do do do do	do	9,600	1,276	10,876
Do	152	19.88m. to 20.95m. from Grafton (selected sections)	Reconstruction and sealing	do		301	301

* Credit

Appendix No. 8—continued

COUNTRY MAIN ROADS FUND—GENERAL PURPOSES—continued
Summary of Expenditure on Construction and Reconstruction Works—continued

Cntry, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Expenditure from Department's Funds		
					To 30th June, 1963	1963-64	To 30th June, 1964
					£	£	£
TRUNK AND ORDINARY MAIN ROADS—continued							
Macleay	75	5.64m. to 7.45m. west of Kempsey	Reconstruction and bitumen surfacing	Council	20,000	24	20,024
Do	75	7.45m. to 9.30m. west of Kempsey	do do do do	do	7,500	2,500	10,000
Do	75	4.15m. to 5.64m. west of Kempsey	do do do do	do		34	34
Do	75	9.30m. to 11.93m. west of Kempsey	do do do do	do		18,000	18,000
Do	198	10.0m., 13.25m. and 13.5m. from Kempsey	River bank protection	do		1,860	1,860
Maitland	101	Hunter River at Maitland (Belmore Bridge)	Steel and concrete bridge	Department	258,572	37,500	296,072
Do	101	Hunter River at Maitland (Belmore Bridge)	Approaches	Council	395	11,336	11,731
Do	103	Pitnacree Bridge over flood channel of Hunter River	Demolition of bridge and replacement of earth bank	do	2,788	1,336*	1,452
Do	104	2.5m. from State Highway No. 9	Two reinforced concrete box culverts	do	6,855	3,566	10,421
Do	104	2.5m. from State Highway No. 9	Approaches to culverts	do	3,566	3,566*	
Do	218	7.58m. from State Highway No. 9 at East Maitland	Reinforced concrete box culvert	do		6,567	6,567
Do	218	0.6m. to 1.35m. south of State Highway No. 9	Reconstruction and surfacing	do	9,419	194*	9,225
Do	218	1.35m. to 1.7m. south of State Highway No. 9	do do do	do	10,302	1,744	12,046
Manilla	63	13.2m. to 15.1m. north of Manilla	Deviation	do	15,599	5,793*	9,806
Do	63	9.19m. to 10.84m. north of Manilla	Reconstruction and bitumen surfacing	do	10,600	564*	10,036
Do	63	23.69m. to 24.65m. north of Tamworth	Deviation and bitumen surfacing	do	4,319	5,379	9,698
Do	63	10.9m. to 13.2m. north of Manilla	Reconstruction and bitumen surfacing	do	3,000	5,564	8,564
Do	63	Bridge over Namoi River at Manilla	Footway	do	1,000	2,406	3,406
Do	63	9.13m. north of Manilla	Reinforced concrete box culvert and approaches	do	2,385	7,390	9,775
Do	63	20.87m. to 22.62m. north of Tamworth	Deviation	do	175	3,000	3,175
Do	63	Greenhatch Creek	Reinforced concrete bridge	do	3,000	9,968	12,968
Manning	90	3.8m. from Burrell Creek to Kundibakh	Reconstruction and bitumen surfacing	do	9,995	5,419*	4,576
Do	90	17.4m. to 20.4m. from State Highway No. 10 at Purfleet	do do do do	do		16,000	16,000
Do	90	15.8m. to 17.4m. from State Highway No. 10 at Purfleet	do do do do	do		6,950	6,950
Do	90	31.24m. north of Gloucester	Construction of bridge	do		10,034	10,034
Do	109	From boundary of Wingham Municipality to Wherrol Flat turnoff.	Reconstruction and bitumen surfacing	do	8,668	40	8,708
Do	109	10.15m. to 10.65m. from Wingham	do do do do	do		4,200	4,200
Do	109	Bridge over Dingo Creek at Rocky Falls	Approaches	do	8,000	2,875	10,875
Do	111	Manning-street, Tuncurry	Reconstruction	do	2,000	10,000	12,000
Do	112	The boundary of Wingham Municipality to Moorai Creek turnoff.	Reconstruction and bitumen surfacing	do	8,000	2,000	10,000
Do	192	From the boundary of Taree Municipality to 1.65m. west	do do do do	do	2,000	2,000*	
Do	192	1.65m. west of Taree Municipal boundary	do do do do	do		7,667	7,667
Merriwa	62	24.5m. to 25m. west of Merriwa	do do do do	do	2,725	898*	1,827
Do	62	4.5m. west of Merriwa	Reinforced concrete box culvert	do	5,140	121*	5,019
Do	62	Bow Creek, 6m. west of Merriwa	Reinforced concrete bridge	do	5,000	17,565	22,565
Do	62	Bridge over Bow Creek	Approaches	do		3,000	3,000
Do	209	12.11m. to 13.27m. east of Merriwa	Reconstruction and bitumen surfacing	do	7,067	2,191	9,258
Do	209	11.49m. to 12.11m. east of Merriwa	do do do do	do	7,893	372*	7,521
Do	209	7.94m. to 11.44m. east of Merriwa	do do do do	do		16,898	16,898
Mitchell	57	Bridge over the railway line at Kapooka, 5m. south of Wagga Wagga	Improvement of approaches	do	2,250	924*	1,326
Do	59	Bullenbung Creek, 27.5m. west of Wagga Wagga	Prestressed and reinforced concrete bridge and approaches	do	9,045	694	9,739
Do	543	Between Collingullie and boundary of Lockhart Shire	Reconstruction and bitumen surfacing	do	10,000	20,268	30,268
Mittagong	258	3.46m. to 5.46m. from State Highway No. 2 towards Bullio	do do do do	do		5,198	5,198
Do	263	9.76m. to 10.43m. from Main Road No. 260	Deviation	do	6,125	1,208	7,333
Do	263	13.82m. to 14.29m. from Main Road No. 260 at Bowral	Reconstruction and bitumen surfacing	do	1,000	5,434	6,434
Do	263	12.47m. to 12.96m. from Main Road No. 260	do do do do	do	850	2,654	3,504

* Credit

Appendix No. 8—continued

COUNTRY MAIN ROADS FUND—GENERAL PURPOSES—continued

Summary of Expenditure on Construction and Reconstruction Works—continued

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Expenditure from Department's Funds		
					To 30th June, 1963	1963-64	To 30th June, 1964
					£	£	£
TRUNK AND ORDINARY MAIN ROADS—continued							
Molong	234	Cummock to State Highway No. 7	Reconstruction and bitumen surfacing	Council	9,116	2,000	11,116
Do	234	3.46m. to 5.63m. from Molong	do do do do	do		3,000	3,000
Do	234	5.63m. to 6.06m. from Molong	do do do do	do		3,000	3,000
Do	234	Dilga and Benya Creeks	Reinforced concrete bridge and approaches	do	14,000	2,784	16,784
Do	359	Walker's Creek	Reinforced concrete culvert and approaches	do	2,500	996	3,496
Monaro	394	18.6m. to 21.55m. from Berridale	Reconstruction and gravelling	do	9,036	262*	8,774
Do	394	21.55m. to 24.0m. from Berridale	do do do	do	2,000	6,762	8,762
Mulwaree	54	6.5m. to 8.3m. from Goulburn	Reconstruction and bitumen surfacing	do	19,800	519*	19,281
Do	54	8.3m. to 9.06m. from Goulburn	do do do	do		14,354	14,354
Do	54	Sooley Creek Bridge near Kingsdale	Reinforced concrete box culvert	do		5,280	5,280
Do	79	15.8m. to 19.2m. and 19.4m. to 21.4m. from Goulburn	Reconstruction and bitumen surfacing	do	37,779	729*	37,050
Do	248	2.2m. to 3m. from Goulburn	do do do do	do	5,461	500	5,961
Do	248	3.0m. to 4.3m. from Goulburn	do do do do	do		8,513	8,513
Do	256	6.2m. to 7.6m. from Goulburn	do do do do	do		6,990	6,990
Mumbulla	273	1.7m. to 3.7m. from Bega	do do do do	do	8,117	2,754	10,871
Do	320	1.3m. to 2.7m. from Cobargo	do do do do	do	3,000	12,500	15,500
Do	320	2.7m. to 4.1m. from Cobargo	do do do do	do		1,000	1,000
Murray	341	9m. to 14m. west of Moama	do do do do	do	13,333	89	13,422
Do	388	8.9m. to 14.1m. from Deniliquin	do do do do	do	5,000	7,300	12,300
Do	391	Bridge over Murray River at Barmah	Steel and reinforced concrete bridge	Country Roads Board, Victoria.		10,000	10,000
Do	391	0m. to 4.4m. east of State Highway No. 21	Reconstruction and bitumen surfacing	Council	10,500	256	10,756
Do	391	4.4m. to 8.1m. east of State Highway No. 21	do do do do	do		9,533	9,533
Murrumbidgee	244	State Highway No. 14 to Murrumbidgee River	do do do do	do	1,715	500	2,215
Do	321	5m. to 7.60m. south of Darlington Point	do do do do	do		246	246
Do	321	12.4m. to 20.4m. south of Darlington Point	do do do do	do		23,530	23,530
Do	439	0m. to 1.08m. east of Darlington Point	do do do do	do		720	720
Murrurundi	358	Big Jack's Creek, 9.5m. to 9.87m. from State Highway No. 9	Prestressed concrete bridge and approaches	do	21,424	408*	21,016
Muswellbrook	208	28.4m. to 30.94m. from Muswellbrook	Reconstruction and bitumen surfacing	do	10,000	3,264	13,264
Do	208	Bridge over Baerami Creek, 31.2m. from Muswellbrook	River bank protection to control erosion	do	1,750	479*	1,271
Do	208	Spring Creek	Prestressed concrete bridge and approaches	do	13,000	2,303	15,303
Do	208	Dingo Gully, 32.7m. from Muswellbrook	Reinforced concrete box culvert and approaches and reconstruction of Folpp's Cutting.	do		4,000	4,000
Nambucca	118	Provost's Flat, 3.84m. to 4.89m. from Macksville	Concrete pipe culvert and approaches	do	3,976	1,611	5,587
Do	118	4.1m. to 5.1m. from Macksville	Improvement and bitumen surfacing	do		1,266	1,266
Do	118	9.54m. to 9.87m. and 10.24m. to 10.32m. from Macksville	do do do do	do		840	840
Do	533	18.47m. to 19.18m. from Macksville	Reconstruction and bitumen surfacing	do	7,688	169	7,857
Do	533	0m. to 1.33m. west of Bottom Town	do do do do	do	9,849	353	10,202
Do	533	14.0m. to 14.5m. west of Macksville	do do do do	do	1,000	1,457	2,457
Do	533	Bakers Creek	Timber beam bridge and approaches	do	4,035	2,688	6,723
Namoi	72	4.17m. to 10.78m. south of Narrabri	Deviation	do	43,181	235	43,416
Do	72	10.78m. to 13.56m. south of Narrabri	Reconstruction and bitumen surfacing	do	26,173	2,325*	23,848
Do	72	2.05m. to 3.11m. south of Narrabri	do do do do	do	9,827	2,325	12,152
Do	72	Grantham and Wee Waa-streets, Boggabri	Construction of new route	do		4,472	4,472
Do	72	Between Narrabri West and Turravan	Deviation	do		453	453
Do	72	7.1m. and 7m. south of Narrabri	Bridges	do		28,000	28,000
Do	72	Jack's and Sandy Creeks	Approaches	do		1,237	1,237
Do	127	1.5m. to 4.7m. west of Narrabri	Reconstruction and bitumen surfacing	do		23,439	23,439
Do	127	Barber's Creek, 39.7m. from Narrabri	Reinforced concrete box culvert and approaches	do		3,548	3,548
Narraburra	84	11.5m. to 14.5m. east of Tamora	Reconstruction and bitumen surfacing	do	3,575	8,425	12,000
Do	398	4.9m. to 8.5m. east of Barmedman	do do do do	do		747	747
Narrandera	387	4.7m. to 12.4m. west of Coolamon Shire Boundary	do do do do	do		8,500	8,500
Do	387	20.3m. to 29.36m. west of Coolamon Shire Boundary	do do do do	do	15,111	12,609	27,720

* Credit

Appendix No. 8—continued

COUNTRY MAIN ROADS FUND—GENERAL PURPOSES—continued

Summary of Expenditure on Construction and Reconstruction Works—continued

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Expenditure from Department's Funds		
					To 30th June, 1963	1963-64	To 30th June, 1964
					£	£	£
TRUNK AND ORDINARY MAIN ROADS—continued							
Newcastle	82	Turton-road to Lambton-road, Waratah	Construction and bitumen surfacing	Council	12,000	14,500	26,500
Do	108	Wharf-road from Merewether-street to Stockton Ferry	Widening and reconstruction	do		834	834
Do	108	State Highway No. 10 to Rifle-street, Adamstown	Third lane	do	14,177	3,223	17,400
Do	108, 223 and 326	Nine Ways Intersection at Broadmeadow	Reconstruction	do		13,600	13,600
Do	188	Edith-street to Lorna-street, and Platt-street to Maude-street, Waratah	Reconstruction and bitumen surfacing and installation of drainage system	do	2,706	336	3,042
Do	217	Coke Ovens at Jesmond	Bridge replacement with road embankment	do	867	8,000	8,867
Do	223	Regent-street to Hobart-road, New Lambton	Reconstruction and bitumen surfacing	do	20,000	2,318	22,318
Do	223 and 326	Intersection at The Gully Line	Construction of intersection	do	6,424	6,000	12,424
Do	326	Russel-road southerly to Rankin Park Hospital	Reconstruction and bitumen surfacing	do		14,000	14,000
Do	223	Elizabeth-street to Cross-street overbridge	do do do do	do	2,500	1,160	3,660
Do	316	Tourle-street to Werribi-street, Mayfield West	do do do do	do	2,270	24*	2,246
Do	316	Boreas-road to Ailsa-road, Broadmeadow	Reconstruction of western shoulder	do	2,500	2,000	4,500
Do	326	Boreas-road to Australia-road Bridge	Reconstruction and bitumen surfacing of shoulders	do		2,000	2,000
Do	326	Lambton-road to Christo-road	Reconstruction and bitumen surfacing	do		5,000	5,000
Nundle	105	23m. to 25.61m. south of Tamworth	do do do do	do	20,321	4,675	24,996
Do	105	25.61m. to 26.38m. south of Tamworth	do do do do	do	2,000	6,343	8,343
Do	105	26.38m. to 28.61m. south of Tamworth	do do do do	do		3,000	3,000
Do	105	Bridge over Dungowan Creek, 15.5m. from Tamworth	Approaches	do		1,967	1,967
Nymboida	511	Purgatory Creek to Camp Creek	Reconstruction and bitumen surfacing	Department	65,181	8,095*	57,086
Do	74	47.6m. to 49.75m. south of Grafton	do do do do	Council	18,000	1,875	19,875
Do	74	56m. to 57.35m. south of Grafton	do do do do	do		2,500	2,500
Do	74	57.35m. to 58.7m. south of Grafton	do do do do	do		9,817	9,817
Do	74	46.50m. to 47.6m. south of Grafton	Improvement and bitumen surfacing	do		1,666	1,666
Oberon	253	8.46m. to 9.46m. north west of Oberon	Reconstruction and bitumen surfacing	do	7,166	1,177	8,343
Do	253	2.2m. to 8.46m. from Oberon	do do do do	do		13,000	13,000
Do	255	0.9m. to 1.9m. from Oberon	do do do do	do		1,000	1,000
Do	256	Abercrombie Hill	Widening, formation gravelling and protection fencing	do		3,500	3,500
Orange	526	Woodward-street	Reconstruction and bitumen surfacing	do		1,000	1,000
Parkes	233	Want-street, north-east to boundary of Goobang Shire	do do do do	do	1,500	6,000	7,500
Patrick Plains	128	16.56m. to 17.7m. from Singleton	do do do do	do		2,000	2,000
Do	181	17.12m. to 19.40m. from Main Road No. 503	do do do do	do	12,180	1,067	13,247
Do	213	18.77m. to 20.30m. from Main Road No. 503	do do do do	do		1,000	1,000
Do	503	16.1m. to 48.4m. from Singleton (selected sections)	do do do do	Department	319,514	53,330	372,844
Do	503	21.85m. to 31.2m. south of Singleton	do do do do	do	14,308	180,974	195,282
Do	503	48.4m. to 48.9m. south of Singleton	do do do do	do	63	7,138	7,201
Do	503	Lodens Creek, 6m. south of Singleton	Renewal of superstructure and minor reconstruction of approaches	Council	1,170	204	1,374
Peak Hill	348	Within the Municipality	Strengthening and bitumen surfacing	do	4,000	243	4,243
Peel	130	18.15m. to 19.29m. south of Tamworth	Reconstruction and bitumen surfacing	do	3,000	2,000	5,000
Do	579	0.11m. to 2.11m. from Main Road No. 130	Strengthening and bitumen surfacing	do	3,000	6,000	9,000
Port Stephens	101	Albion Drain, 0.4m. west of Woodville	Reinforced concrete box culvert	do	3,713	1,446	5,159
Do	108	Selected sections within the Shire	Reconstruction of damaged bitumen pavement	do	4,968	4,405	9,373
Do	108	1.4m. to 2.1m. north of Main Road No. 518	Realignment and bitumen surfacing	do	3,859	4,707	8,566
Do	302	Between Main Road No. 108 and Tomago-road	Reconstruction of damaged bitumen pavement	do	276*	1,192	1,468
Do	108	Bridge over Tilligery Creek	Approaches	do	6,165	2,714	8,879
Do	301	5.9m. to 7.3m. from Main Road No. 101 at Woodville	Reconstruction and bitumen surfacing	do	4,384	3,100	7,484
Do	517	0.1m. to 4.1m. from State Highway No. 10 at Raymond Terrace	do do do do	do	2,500	10,833	13,333

* Credit

Appendix No. 8—continued

COUNTRY MAIN ROADS FUND—GENERAL PURPOSES—continued

Summary of Expenditure on Construction and Reconstruction Works—continued

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Expenditure from Department's Funds		
					To 30th June, 1963	1963-64	To 30th June, 1964
					£	£	£
TRUNK AND ORDINARY MAIN ROADS—continued							
Queanbeyan	51	Battles Creek	Reinforced concrete box culvert and approaches	Council	6,000	5,000	11,000
Quirindi	126	0.0m. to 0.61m. from Trunk Road No 72 at Quirindi	Reconstruction and bitumen surfacing	do	1,000	1,000	1,000
Rylstone	54	Ryans Creek, 18m. south of Rylstone	Reinforced concrete box culvert and approaches	do	5,000	2,000	7,000
Do	55	Within the Shire	Subsoil drainage and pavement reconstruction	do		2,000	2,000
Do	215	2.02m. to 2.97m. north of Rylstone	Reconstruction and bitumen surfacing	do		6,500	6,500
Do	215	Bylong Creek 32.5m. from Rylstone	Reinforced concrete bridge	do	10,000	5,350	15,350
Scone	62	13m. to 14.5m. west of Scone	Reconstruction and bitumen surfacing	do		10,000	10,000
Do	62	Hall's Creek at Merriwa Shire Boundary	Reinforced concrete bridge	do		21,000	21,000
Do	105	9.02m. to 11.0m. east of Scone	Completion of reconstruction and bitumen surfacing	do		4,000	4,000
Do	105	Glen Creek, 7.5m. east of Scone	Reinforced concrete bridge and approaches	do	14,925	4,016	18,941
Severn	382	7.3m. to 9.3m. west of Glen Innes	Reconstruction and bitumen surfacing	do	900	12,324	13,224
Shoalhaven	293	2.47m. to 4.49m. from State Highway No. 1	Widening, reconstruction and bitumen surfacing	do	11,720	10,619	22,339
Do	293	Broughton Creek, 4.8m. from Bomaderry	Reinforced concrete bridge and eastern approach	do	49,905	8,021	57,926
Do	293	Trust Drain, 1m. from State Highway No. 1	Reinforced concrete box culvert and approaches	do	4,550	1,150	5,700
Snowy River	286	Jindabyne to Mount Kosciusko	Reconstruction	Department	91,424	7,282	98,706
Do	286	0.2m. to 6.5m. west of Jindabyne	Temporary bitumen sealing	do	4,847	1,273	6,120
Do	286	7.75m. to 10.0m. west of Jindabyne	Reconstruction and bitumen surfacing	do	13,718	122,158	135,876
Do	286	Ingebyra-road (1.2m.) to 7.75m.	Final gravelling and bitumen surfacing	do		40,824	40,824
Do	286	7.9m. to 8.33m. west of Jindabyne	Reconstruction	do	7,107	7,107*	
Do	286	16m. to 17m. from Jindabyne	do	do		23,106	23,106
Do	286	13.8m. to 17m. from Jindabyne	Reconstruction and bitumen surfacing	do		114,708	114,708
Do	286	17m. to 18.6m. from Jindabyne	do do do	do		2,912	2,912
Do	286	Ironpot Creek	Reinforced concrete bridge and approaches	Council	10,500	474	10,974
Do	286	Myack Creek, 19.81m. from Cooma	Reinforced concrete box culvert and approaches	do		7,500	7,500
Do	394	Chapel Creek, 10.5m. from Berridale	Prestressed reinforced concrete bridge	do		7,500	7,500
Do	585	State Highway No. 4 to Main Road No. 286 at Berridale	Bitumen surfacing	do	57,350	2,018	59,368
Do	585	Cootralantra Creek	Reinforced concrete bridge	do	2,000	703	2,703
Do	585	Wullwey Creek	Reinforced concrete bridge and approaches	do	4,000	1,022	5,022
Stroud	90	Wards River	Construction of railway overbridge	Department		5,828	5,828
Do	90	Stroud-road to Weismantels	Reconstruction and bitumen surfacing	Council	7,470	6,500	13,970
Do	90	Near Gloucester Shire Boundary	Cement modification of gravel pavement	do	54,186	5,575*	48,611
Do	90	Length within village of Wards River	Reconstruction and bitumen surfacing	do	10,936	5,575	16,511
Do	90	1m. south of Booral	Replacement of culvert	do		1,576	1,576
Do	90	2m. north of Main Road No. 110, Booral	Reinforced concrete bridge	do	26,608	4,029	30,637
Do	90	Bridge over Alderley Creek, 2m. north of Booral	Approaches	do	13,500	1,472*	12,028
Do	90	Spring Creek, 1m. south of Gloucester Shire Boundary	Reinforced concrete box culverts	do	15,731	5,107*	10,624
Do	90	Spring Creek, 1m. south of Gloucester Shire Boundary	Approaches to culvert	do	7,000	9,500	16,500
Do	90	Stoney Creek 5.2m. north of State Highway No. 10	Reinforced concrete bridge	do	2,560	7,100	9,660
Do	90	Bridge over Stoney Creek	Approaches	do		7,440	7,440
Do	90	Railway overbridge at Wards River	do	do		1,974	1,974
Do	101	Scotters Creek, 4.2m. from Trunk Road No. 90	Prestressed concrete bridge	do	7,930	456	8,386
Do	101	Bridge over Scotters Creek, 4.2m. from Trunk Road No. 90	Approaches	do		1,608	1,608
Do	110	1.9m. east of Booral	Improvement to Robard's Corner	do	3,050	543*	2,507
Do	111	1m. to 10m. south of Forster	Reconstruction and bitumen surfacing	do	30,000	10,000	40,000
Do	111	10m. to 14.3m. south of Forster	do do do do	do	45,873	16,592	62,465
Do	111	McIntosh-street, Forster	Reinforced concrete box culvert	do	2,900	89	2,989
Do	111	1.8m. to 2.86m. from State Highway No. 10	Reconstruction and bitumen surfacing	do	10,000	542	10,542
Do	111	5.3m. to 8.3m. from State Highway No. 10	do do do do	do		26,224	26,224
Do	111	Bridge over Wallamba River at Forster	Approaches	do	3,074	96*	2,978
Do	289	Valley Creek 6.15m. from Trunk Road No. 90	Prestressed concrete bridge	do	154	1*	153
Do	506	0m. to 4.5m. from Bundabah Creek	Reconstruction and bitumen surfacing	do	10,640	447*	10,193

* Credit

Appendix No. 8—continued

COUNTRY MAIN ROADS FUND—GENERAL PURPOSES—continued

Summary of Expenditure on Construction and Reconstruction Works—continued

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Expenditure from Department's Funds		
					To 30th June, 1963	1963-64	To 30th June, 1964
					£	£	£
TRUNK AND ORDINARY MAIN ROADS—continued							
Talbragar	206	4.72m. to 8.6m. east of Dubbo	Reconstruction and bitumen surfacing	Council	18,432	2,394*	16,038
Do	206	14.65m. to 16.74m. east of Dubbo	do do do do	do	2,500	2,500	2,500
Do	206	8.6m. to 10.38m. east of Dubbo	do do do do	do	7,000	41	7,041
Do	206	Deep Creek at Beni, 10m. east of Dubbo	Reinforced concrete box culvert and approaches	do		9,000	9,000
Tallaganda	51	Mongarlowe River	Prestressed concrete bridge	Department	19,129	20,244	39,373
Do	51	Bridge over Mongarlowe River	Improvement to approaches of existing bridge	Council	3,839	376	4,215
Do	51	Bridge over Mongarlowe River 9.5m. to 10.5m. east of Braidwood	Approaches	do		25,000	25,000
Do	51	Bridge over Pound Creek at Braidwood	Widening and provision of footway	do		2,000	2,000
Do	79	20.46m. to 24.9m. north of Braidwood	Reconstruction and bitumen surfacing	do	22,003	8,597	30,600
Do	271	6.75m. from Braidwood	Reinforced concrete box culvert	do		5,000	5,000
Do	271	Wallace-street, Braidwood	do do	do		2,000	2,000
Tamarang	129	3.7m. to 5m. west of Trunk Road No. 72	Reconstruction and bitumen surfacing	do		7,167	7,167
Do	130	0.95m. to 3.5m. north of Quirindi	Widening and surfacing	do	2,844	591*	2,253
Taree	192	0m. to 2.7m. from Taree	Reconstruction and bitumen surfacing	do		1,000	1,000
Temora	57	52.55m. to 53.02m. from Temora	do do do do	do	4,676	2,646	7,322
Terania	65	8.2m. to 8.98m. from Lismore	do do do do	do		3,922	3,922
Do	141	Ottery's Bridge to Wadeville	Deviation and improvement of Old Tweed Road	do		10,143	10,143
Terania	142	16.07m. to 16.6m. from Lismore	Reconstruction and bitumen surfacing	do	3,908	209	4,117
Do	142	16.6m. to 17.4m. north of Lismore	do do do do	do	10,916	2,234	13,150
Timbreebongie	89	3.5m. to 5.48m. south of Narromine	do do do do	do	23,871	4,312*	19,559
Do	347	Bridge over Macquarie River at Gin Gin	Approaches	Department	13,511	802	14,313
Do	347	Macquarie River at Gin Gin	Steel truss bridge	do	106,507	4,511	111,018
Do	347	0.28m. to 2.38m. north-east from State Highway No. 7	Reconstruction and bitumen surfacing	Council		4,500	4,500
Do	354	1m. to 5m. west of Narromine	do do do do	do		14,750	14,750
Do	572	0.56m. to 0.7m. north of Narromine	Strengthening and bitumen surfacing	do		2,500	2,500
Tintenbar	146	9.17m. to 10m. from State Highway No. 10	Reconstruction and bitumen surfacing	do	7,300	248*	7,052
Do	146	3.08m. to 4.58m. from State Highway No. 10	do do do do	do	1,845	988	2,833
Do	146	10.0m. to 11.54m. from Ballina	do do do do	do		2,636	2,636
Do	555	4.59m. to 5.69m. from Wardell	do do do do	do	12,484	1,386	13,870
Tomki	83	11.91m. to 14.68m. south of Casino	do do do do	do	25,466	2,632	28,098
Do	83	14.68m. to 16.93m. south of Casino	do do do do	do		6,384	6,384
Do	83	Myrtle Creek, 18.0m. south of Grafton	Prestressed, reinforced concrete bridge and box culvert	do		53,019	53,019
Do	83	Bridge over Sand Creek, 11.6m. south of Casino	Approaches	do	21,011	59*	20,952
Do	544	11.95m. from Lismore	Timber beam bridge and approaches	do		2,167	2,167
Tumbarumba	85	1.53m. to 5.57m. north of Tumbarumba	Reconstruction and bitumen surfacing	do	36,789	405	37,194
Do	85	6.38m. to 8.38m. north of Tumbarumba	do do do do	do	4,000	11,000	15,000
Do	85	8.38m. to 12.72m. north of Tumbarumba	do do do do	do		30,000	30,000
Do	282	Boggy Creek, 8m. south of Tumbarumba	Reinforced concrete box culvert and approaches	do		767	3,467
Do	282	8.31m. to 9.91m. south of Tumbarumba	Construction and bitumen surfacing	do	2,700	2,500	2,500
Do	282	Clarke's Hill, 14m. east of Tumbarumba	Concrete pipe culvert and approaches	do		1,000	1,000
Do	282	Mannus Creek and Tumbarumba Creek at Tooma	Steel and concrete bridges and approaches	do	6,789	36,165*	42,954
Tumut	85	State Highway No. 4 to 3.11m. south of Gilmore	Reconstruction and bitumen surfacing	do	15,693	116*	15,577
Do	85	3.11m. to 6.4m. south of Gilmore	do do do do	do	2,000	6,875	8,875
Do	85	Gilmore Creek, 2m. south of Gilmore	Reinforced concrete bridge and approaches	do	10,220	757*	9,463
Do	279	Gilmore Creek at Tumut	do do do do	do	21,000	1,431*	19,569
Do	280	1m. to 2.22m. south of Adelong	Reconstruction and bitumen surfacing	do	10,000	71*	9,929
Do	280	3.6m. to 4.8m. south of Adelong	do do do do	do	12,900	3,104	16,004
Turon	54	15.24m. to 16.15m. from Bathurst	do do do do	do	7,000	2,750	9,750
Do	54	16.15m. to 17.5m. from Bathurst	do do do do	do	3,147	1,000	4,147
Do	225	0.7m. to 2.04m. from State Highway No. 5	do do do do	do		7,500	7,500

* Credit

Appendix No. 8—continued

COUNTRY MAIN ROADS FUND—GENERAL PURPOSES—continued

Summary of Expenditure on Construction and Reconstruction Works—continued

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Expenditure from Department's Funds		
					To 30th June, 1963	1963-64	To 30th June, 1964
					£	£	£
TRUNK AND ORDINARY MAIN ROADS—continued							
Tweed	142	35.06m. to 37.1m. from Lismore	Reconstruction and bitumen surfacing	Council	16	5,666	5,682
Do	142	34.63m. to 35.06m. from Lismore	do do do do	do	7,650	2,350	10,000
Do	142	37.4m. to 37.9m. from Lismore	do do do do	do		3,333	3,333
Do	142	Doon-Doon Creek, 39.86m. north of Lismore	Timber beam bridge and approaches	do	22,900	1,219	24,119
Ulmarr	151	20.03m. to 23.3m. south of Grafton	Reconstruction and bitumen surfacing	do	9,900	65	9,965
Do	151	30.23m. to 31.00m. from Grafton	Deviation	do		6,111	6,111
Do	151	23.3m. to 24.6m. south of Grafton	Reconstruction and bitumen surfacing	do		6,545	6,545
Do	151	Bagawa Creek	Reinforced concrete bridge	do	5,900	159	6,059
Uralla	73	6.0m. to 10.2m. south of Uralla	Reconstruction and bitumen surfacing	do	18,000	79	18,079
Do	73	10.2m. to 12.34m. south of Uralla	do do do do	do	13,000	3,842	16,842
Do	73	12.34m. to 13.51m. south of Uralla	do do do do	do		15,233	15,233
Do	73	13.51m. to 15.63m. south of Uralla	do do do do	do		5,000	5,000
Do	73	8.33m. to 8.64m. north of Uralla	Concrete pipe culverts and realignment	do	3,050	676	3,726
Do	73	Salisbury Creek	Reinforced concrete bridge	do		3,000	3,000
Urana	59	15.1m. to 19.3m. west of Urana	Reconstruction and bitumen surfacing	do	13,000	3,021	16,021
Do	131	Billabong Creek 10.4m. south of Urana	Reinforced concrete bridge	do	1,074	3,500	4,574
Do	323	0.0m. to 5.75m. west of Main Road No. 131	Reconstruction and bitumen surfacing	do		9,000	9,000
Wade	80	Between Pontoon-street and Crossing-street, Griffith	Reconstruction and bitumen surfacing, including median strip	do		500	500
Do	321	4.95m. to 8.13m. north of Griffith	Reconstruction and bitumen surfacing	do	10,807	2,695*	8,112
Do	321	8.13m. to 14.34m. north of Griffith	do do do do	do		11,695	11,695
Do	321	Mirrool Creek, 8.5m. south of Griffith	Reinforced concrete bridge	do	2,000	2,095	4,095
Wakool	67	31.75m. to 33.75m. north of Swan Hill	Reconstruction and bitumen surfacing	do		7,350	7,350
Do	222	0.0m. to 5.0m. west of Trunk Road No. 67	do do do do	do		14,250	14,250
Do	296	0.45m. to 1.82m. east of Moulamein	do do do do	do	500	3,500	4,000
Do	319	10.8m. to 15m. north of Wakool River	Four floodways	do	9,610	824	10,434
Do	319	Edward River at Moulamein	Reinforced concrete bridge	do		15,000	15,000
Walcha	73	5.04m. to 7.5m. north of Walcha	Reconstruction and bitumen surfacing	do	20,000	2,021	22,021
Do	73	7.5m. to 9.3m. north of Walcha	do do do do	do		8,000	8,000
Waradgery	319	19.13m. and 19.25m. from Windouran Shire Boundary	Two timber beam bridges	do	5,015	413	5,428
Do	319	13.1m. and 19.35m. from Windouran Shire Boundary	do do do do	do	2,550	2,766	5,316
Do	319	13.3m. and 13.4m. north of Windouran Shire Boundary	do do do do	do		1,350	1,350
Do	514	4.18m. to 8.18m. west of Hay	Reconstruction and bitumen surfacing	do	3,600	4,650	8,250
Do	514	8.18m. to 11.75m. west of Hay	do do do do	do		9,430	9,430
Warren	333	32.8m. to 37.8m. north of Warren	do do do do	do	10,500	2,371	12,871
Do	333	30.5m. to 32.8m. and 38.4m. to 43.4m. north of Warren	do do do do	do		15,000	15,000
Waugoola	56	6.0m. to 10.0m. north of Cowra	do do do do	do	13,500	138	13,638
Do	56	1.76m. to 3.43m. south of Cowra	do do do do	do	23	9,977	10,000
Do	56	3.43m. to 7.46m. south of Cowra	do do do do	do		13,500	13,500
Do	56	10.0m. to 14.0m. north of Cowra	do do do do	do		11,000	11,000
Do	56	24.81m. to 26.19m. north of Cowra	do do do do	do		5,500	5,500
Do	310	8.75m. to 11.71m. north of Cowra	do do do do	do	12,611	252*	12,359
Do	310	2.6m. to 5.85m. north of Cowra	do do do do	do		11,752	11,752
Weddin	236	4.21m. to 6.21m. from State Highway No. 6	Bitumen surfacing	do	614	614*	
Do	236	10.36m. to 15m. from State Highway No. 6	Reconstruction and bitumen surfacing	do	15,000	970*	14,030
Do	236	14.87m. from Grenfell	Reinforced concrete box culvert and approaches	do		3,808	3,808
Do	237	2.0m. to 6.0m. north of Grenfell	Reconstruction and bitumen surfacing	do		13,066	13,066
Do	239	5.59m. to 9.76m. south of Grenfell	Strengthening and bitumen surfacing	do	16,000	372	16,372
Do	239	9.76m. to 13.0m. south of Grenfell	do do do do	do	10,363	2,473	12,836
Wellington	206	25.64m. to 28.49m. from Dunedoo	Reconstruction and bitumen surfacing	do		2,500	2,500
Do	233	5.83m. and 6.41m. from Wellington	Reinforced concrete box culverts and approaches	do		4,500	4,500

* Credit

Appendix No. 8—continued

COUNTRY MAIN ROADS FUND—GENERAL PURPOSES—continued

Summary of Expenditure on Construction and Reconstruction Works—continued

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Expenditure from Department's Funds		
					To 30th June, 1963	1963-64	To 30th June, 1964
					£	£	£
TRUNK AND ORDINARY MAIN ROADS—continued							
Wellington	233	Barney's Gully, 11.5m. from Wellington	Reinforced concrete box culvert and floodway	Council	1,240	1,500	2,740
Do	233	4.57m. to 9.0m. north of Wellington	Reconstruction and bitumen surfacing	do	8,000	8,000	8,000
Do	353	0.04m. to 2.79m. from State Highway No. 7	do do do do	do	5,513	2,000	7,513
Do	353	2.79m. to 5.78m. from State Highway No. 7	do do do do	do	2,487	8,000	10,487
Do	573	45.12m., 45.51m., 49.22m., and 49.67m. north of Orange	Reinforced concrete box culverts	do	6,527	382	6,909
Do	573	41.0m. to 43.29m. north of State Highway No. 7	Reconstruction and bitumen surfacing	do	4,500	4,500	4,500
Wentworth	68	5.4m. to 9.5m. north of Wentworth	do do do do	do	20,000	582	20,582
Do	68	9.5m. to 11.81m. north of Wentworth	do do do do	do	4,500	6,975	11,475
Do	68	11.81m. to 13.47m. north of Wentworth	do do do do	do	8,000	8,000	8,000
Do	68	13.47m. to 16.5m. north of Wentworth	do do do do	do	8,000	8,000	8,000
Windouran	296	61.5m. to 64.82m. west of Deniliquin	do do do do	do	8,197	2,102	10,299
Do	296	27.57m. to 31.8m. west of Deniliquin	do do do do	do	30,993	5,915	5,915
Wingecarribee	88	0.2m. to 2.0m. east of Moss Vale	Reconstruction	do	5,000	7,030	38,023
Do	88	2.6m. to 4.0m. east of Moss Vale	Reconstruction and bitumen surfacing	do	5,000	5,000*	5,000
Do	261	0.92m. to 3.0m. from State Highway No. 25	do do do do	do	28,055	6,532	34,587
Do	261	3.0m. to 4.4m. from State Highway No. 25	do do do do	do	11,600	9,800	21,400
Do	261	9.69m. to 11.44m. from State Highway No. 25	do do do do	do	15,800	434	16,234
Do	265	1.0m. to 3.0m. south of State Highway No. 25	do do do do	do	6,200	6,200	6,200
Wollondilly	259	11.35m. to 12.0m., 12.8m. to 13.05m. and 13.6m. to 17.1m. from State Highway No. 2.	Strengthening and drainage	Department	22,059	185	22,244
Do	259	7.33m. to 7.9m. and 11.55m. to 13.25m. from State Highway No. 2.	Reconstruction, strengthening and drainage	do	36,968	36,968	36,968
Do	259	4.32m. to 4.48m. from Camden	Improvement to alignment and replacement of culvert	do	7,682	7,682	7,682
Do	259	9.0m. from State Highway No. 2	Improvement to cutting	do	2,959	2,959	2,959
Woodburn	145	3.12m. to 3.77m., and 9.55m. to 9.9m. north of Woodburn	Reconstruction of damaged pavement	Council	9,712	827	10,539
Do	153	1.6m. to 3.6m. from Woodburn	do do do do	do	2,000	7,000	9,000
Wyong	335	Junction of State Highway No. 10 at Tuggerah	Improvement of level crossing	Department	4,711	4,711	4,711
Do	335	Tumbi Umbi Creek	Reinforced concrete box culvert and approaches	Council	7,500	7,500	7,500
Do	509	Dunleigh-street to Yarralla-road, Toukley	Reconstruction	do	3,000	3,000	3,000
Do	509	Wallerah Point Bridge to State Highway No. 10	Widening	do	2,000	2,000	2,000
Yallaro	63	12.0m. to 16.8m. north of Warialda	Reconstruction and bitumen surfacing	do	16,900	5,517	22,417
Do	63	16.8m. to 19.5m. north of Warialda	do do do do	do	6,450	8,550	15,000
Do	63	0.5m. to 4.2m. north of Warialda	Strengthening and bitumen surfacing	do	3,200	3,200	3,200
Yarrowlumla	51	10.59m. to 11.42m. east of Queanbeyan	Deviation	do	13,856	541*	13,315
Do	51	16.5m. to 17.7m. east of Queanbeyan	Reconstruction and bitumen surfacing	do	1,523	13,956	15,479
Do	51	Halfway Creek	Reinforced concrete box culvert	do	2,000	2,000*	2,000
Do	51	16.5m. to 17.7m. east of Queanbeyan	Reconstruction and bitumen surfacing	do	14,000	14,000*	14,000
Do	51	Turallo Creek near Bungendore	Reinforced concrete bridge	do	15,000	431	15,431
Do	51	Halfway Creek	Reinforced concrete box culvert	do	3,107	3,107	3,107
Do	52	8.65m. to 10.4m. north of Queanbeyan	Reconstruction and bitumen surfacing	do	5,000	5,541	10,541
Total—Trunk and Ordinary Main Roads						£4,134,485	
TOURIST ROADS							
Coff's Harbour	4007	Access road to Lake Woolgoolga	Formation gravelling and bitumen surfacing	Council	1,922	610	2,532
Gosford Shire	4009	Cullens-road and Cape Three Points-road from Kincumber to Avoca.	Reconstruction and bitumen surfacing	do	4,000	500	4,500
Do	4009	Cullens-road and Cape Three Points-road from Scenic-road to Kincumber to Avoca.	do do do do	do	3,750	3,750	3,750
Hastings Shire	4030	0m. to 2m. from Lake Cathie	Construction and bitumen surfacing	do	2,000	2,000	2,000
Imlay Shire	4015	Pambula to Pambula Beach	do do do do	do	4,000	4,000	4,000
Nambucca Shire	4008	Access road to Valla Beach Reserve	Reconstruction and bitumen surfacing	do	2,000	86	2,086

* Credit

Appendix No. 8—continued

COUNTRY MAIN ROADS FUND—GENERAL PURPOSES—continued

Summary of Expenditure on Construction and Reconstruction Works—continued

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Expenditure from Department's Funds		
					To 30th June, 1963	1963-64	To 30th June, 1964
					£	£	£
TOURIST ROADS—continued							
Tamarang Shire	4003	Access road to "Who'd-a-thought it" Lookout	Construction and bitumen surfacing	Council	1,433	28*	1,405
Tweed Shire	4013	Mount Warning-road	do do do	do		500	500
Do	4028	Bridge over Mooball Creek at Pottsville	Prestressed concrete bridge	do		406	406
Wyong Shire	4014	0m. to 2.0m. south of Norahville	Reconstruction and bitumen surfacing	do		11,000	11,000
Do	4014	2m. to 5.37m. south of Norahville	Construction and bitumen surfacing	do		10,000	10,000
Total—Tourist Roads						£32,824	
ROADS OTHER THAN MAIN ROADS							
Boolooroo		Within the Shire	Assistance towards repair of shire roads	Council		4,077	4,077
Gosford		10.56m. to 13.67m. from Calga	Expressway	Department	244,997	18,465	263,462
Do		13.67m. to 17.17m. from Calga	do	do	215,952	53,565	269,517
Do		17.17m. to 19.7m. from Calga	do	do	37,610	321,553	359,163
Do		Calga to Central Mangrove	Improvement	do		91,494	91,494
Do		Somersby to Ourimbah	Crossing of Ourimbah Creek-road	do	6,691	18,155	24,846
Lake Macquarie		Railway bridge at Dora Creek	Conversion of bridge for use by road traffic and construction of approaches	Council	31,041	36*	31,005
Lismore		Union-street, South Lismore	Improvement to level crossing	do		279	279
Macleay		Greenhills-Frederickton-road from Trunk Road No. 75 to State Highway No. 10	Improvement	do	4,133	102	4,235
Do		Greenhills-Frederickton-road	Replacement of timber culvert	do	1,404	278*	1,126
Manning		Failford-road, 3.6m. from State Highway No. 10 to Main Road No. 111	Reconstruction and bitumen surfacing	do	1,934*	3,100†	1,166
Do		1m. to 3.42m. from Nabiac and 0.35m. through Krumbach Village	do do do do	do	7,533	1,017	8,550
Newcastle		South Arm of the Hunter River at Tourle-street, Mayfield	Steel and concrete bridge	Department	82,429	96,557†	178,986
Do		Tarro to the boundary of the City of Greater Cessnock	Construction	Council	134,400	1,600	136,000
Nymboida		Black Hole Creek, 35m. from South Grafton	Reinforced concrete causeway and deviation	do	352	1,756	2,108
Do		Chambigne Creek Bridge, 12.64m. from South Grafton	Repairs	do	1,300	1,000	2,300
Do		Fridays Creek Bridge and O.B.X. Creek Bridge at 20.6m. and 21.2m. from Grafton	Improvement and Repairs	do		2,000	2,000
Do		Bruiser's Creek 62.7m. from South Grafton	Deviation and reinforced concrete causeway	do		6,800	6,800
Port Stephens		Williams River at Nelsons Plains	Prestressed concrete bridge	Department		80,012†	80,012
Do		Bridge over Williams River at Nelsons Plains	Approaches	do		24,022†	24,022
Stroud		Tea Gardens at Viney Creek adjacent to State Highway No. 10	Reconstruction of northern access	Council		2,500	2,500
Talbragar		Dubbo-Mendooran-road Section 1	Reconstruction and bitumen surfacing	do	1,622	8,378	10,000
Total—Roads other than Main Roads						£736,118	

SUMMARY

	£	£
State Highways	7,408,325	
Trunk and Ordinary Main Roads	4,134,485	
Tourist Roads	32,824	
Roads other than Main Roads	736,118	12,311,752
Supervision, adjustment to properties etc.		1,262,974
Total as shown in Receipts and Payments Statement—Appendix No. 2 (4)		£13,574,726

* Credit

† For additional expenditure see Appendix No. 8A

Appendix No. 8A
COUNTRY MAIN ROADS FUND—SPECIAL PURPOSES
Summary of Expenditure on Construction and Reconstruction Works

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Expenditure from Department's Funds		
					To 30th June, 1963	1963-64	To 30th June, 1964
					£	£	£
TRUNK AND ORDINARY MAIN ROADS							
Greater Cessnock	181	Wollombi to Bucketty	Reconstruction and bitumen surfacing	Council	5,000	37,000	42,000
Do	181	Wollombi to Bucketty (2m. to 3m. north of Bucketty)	do do do do	do .....	..	35,000	35,000
Do	218	13.74m. to 16.95m. south of Cessnock	do do do do	do	67,400	23,600	91,000
Greater Wollongong	295	Bridge over the Australian Iron and Steel railway line near Flinders-street	Construction	do	780	780*	.....
Do	295	Bridge over the Australian Iron and Steel jetty line at Port Kembla	do	do	12,320	1,813	14,133
Do	295	Main Road No. 568 to Flinders-street, Port Kembla, including intersection with Main Road No. 568	Reconstruction	do	92,092	305*	91,787
Do	295	Flinders-street to Darcy-road, Port Kembla	do	do	84,593	23,261†	107,854
Do	295	Flinders-street, Port Kembla	Railway level crossing	do	1,575	3,985†	5,560
Do	295, 568 and 581	Various Locations	Street lighting	do	6,250	345	6,595
Do	568	0.08m. north of Main Road No. 295 at Cringila to 1.32m.	Construction of dual carriageway	do	153,143	2	153,145
Do	568, 581	1.32m. north of Main Road No. 295 at Cringila to 2.84m.	do do do	do	148,699	981	149,680
Do	581	Drainage channel near Swan-street, Wollongong	Reinforced concrete bridge	do	12,473	50	12,523
Yarrowlunla	270	Whisker's Creek, 10m. from Queanbeyan	do do do	do .....	.....	9,051	9,051
Do	270	2.5m. to 7.6m. from Queanbeyan	Reconstruction and bitumen surfacing	do	2,000	54,969	56,969
Do	270	7.6m. to 10.3m. from Queanbeyan	do do do do	do	16,852	9,991	26,843
Do	270	10.3m. to 20.8m. from Queanbeyan	do do do do	do	50,648	3,261	53,909
Do	270	20.8m. to 24.75m. from Queanbeyan	do do do do	do	5,000	29,488	34,488
Do	270	24.75m. to 27.2m. from Queanbeyan	do do do do	do .....	.....	8,739	8,739
Total—Trunk and Ordinary Main Roads						£240,451	
TOURIST ROADS							
Dumaresq	4002	Access-road to Point Lookout	Widening and gravelling	Council .....	.....	4,500	4,500
Snowy River	4016	Smuggin Holes to the Island Bend-Guthega-road	Gravel resheeting and improvement	Department	3,935	37	3,972
Do	4023	State Highway No. 4 to Old Adaminaby Township	Gravelling and sealing	Council	5,000	4,070	9,070
Total—Tourist Roads						£8,607	

* Credit † For additional expenditure see Appendix No. 8

Appendix No. 8A—continued

COUNTRY MAIN ROADS FUND—SPECIAL PURPOSES—continued

Summary of Expenditure on Construction and Reconstruction Works—continued

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Expenditure from Department's Funds		
					To 30th June, 1963	1963-64	To 30th June, 1964
					£	£	£
ROADS OTHER THAN MAIN ROADS							
Central Darling		Darling River at Tilpa	Steel and reinforced concrete bridge	Department	111,250	9,510	120,760
Darling		Darling River at Louth	Steel and concrete bridge	do	105,365	14,467	119,832
Do		Warrego River at Enngonia	Steel bridge	do	19,032	25,592	44,624
Do		Bridge over Darling River at Louth	Reinforced concrete box culvert in approaches	do		2,355	2,355
Gosford		Hawkesbury River bridge to Mount White	Expressway	do	27,215	798,604	825,819
Imlay		Towamba River at Towamba	Low level bridge with timber deck on steel foundations and high level timber pedestrian suspension bridge.	do	20,159	8,332	28,491
Do		Bridge over Towamba River at Towamba	Approaches	Council		1,100	1,100
Manning		Failford road 3.6m. from State Highway No. 10 to Main Road No. 111.	Reconstruction and bitumen surfacing	do	17,485	1,934*†	15,551
Newcastle		South arm of the Hunter River at Tourle-street, Mayfield	Steel and concrete bridge	Department	55,330	42,497†	97,827
Port Stephens		Williams River at Nelsons Plains	Prestressed concrete bridge	do		54,267†	54,267
Do		Bridge over Williams River at Nelsons Plains	Approaches	do		2,375†	2,375
Wentworth		Darling River at Pooncarie	Steel and reinforced concrete bridge	do	82,449	11,433	93,882
Do		Bridge over Darling River at Pooncarie	Approaches	Council	20,000	11,346	31,346
Do		Bridge over Darling River at Pooncarie	Four reinforced concrete bridges in approaches	Department		14,427	14,427
Total—Roads other than Main Roads						£994,371	
SUMMARY							
Trunk and Ordinary Main Roads				£	£		
Tourist Roads				240,451			
				8,607			
Roads other than Main Roads					249,058		
Total—Road Construction—Shown in Receipts and Payments Statement—Appendix No. 2(B)					994,371		
					£1,243,429		

* Credit

† For additional expenditure see Appendix No. 8

Appendix No. 9

DEVELOPMENTAL ROADS FUND

Summary of Expenditure on Construction and Reconstruction Works

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Expenditure from Department's Funds		
					To 30th June, 1963	1963-64	To 30th June, 1964
					£	£	£
Berrigan	1172	3m. to 9.7m. from Tocumwal (selected sections)	Raising formation and gravelling	Council	8,000	8,000	8,000
Bland	1123	17m. to 19.4m. north of State Highway No. 6	Gravelling	do	500	500	500
Do	1220	Southerly from State Highway No. 6 at Taleeban	Clearing, forming and draining	do	2,500	2,500	2,500
Blaxland and Oberon	1276	Main Road No. 253 at Hampton to Main Road No. 255 near Oberon	Reconstruction and bitumen surfacing	Department	190,308	165,718	356,026
Do do do	1276	Duckmaloi River	Steel and reinforced concrete bridge	do	23,345	17,553	40,898
Blue Mountains	1195	4m. to 5m. from Blackheath	Construction	Council	6,006	1,000	7,006
Bogan	1163	Bogan River 11.35m. from Nyngan	Timber beam bridge	do	135*	8,999	8,999
Do	1163	17.64m. to 26.49m. south of Panjee	Construction	do	8,857	115*	8,742
Do	1177	Girilambone to Booramugga	Survey work	do	188	188	188
Boolooroo	1289	8.6m. to 15.25m. east of State Highway No. 17	Clearing, forming and draining	do	900	900	900
Boree	1156	Gooloogong railway siding	Reinforced concrete box culvert	do	500	500	500
Byron	1043	Within the Shire	Restoration of flood damage	do	191	191	191
Canobolas	1219	Clifton Grove to Lewis Ponds	Construction	do	2,000	2,000	2,000
Carrathool	1222	Soldier's Settlement to Bringagee siding	Culverts	do	3,000	3,000	3,000
Cobar	1262	46.4m. to 58.8m. south of Tilpa	Clearing, forming and draining	do	11,070	973*	10,097
Do	1262	52.1m. to 59.5m. from State Highway No. 8	Gravelling	do	5,761	973	6,734
Do	1279	Keewong to Warbreccan-road	Clearing, forming and draining	do	4,752	4,752	4,752
Cockburn	1032	22.98m. to 23.90m. from Limbri	Construction	do	6,800	2,095*	4,705
Do	1032	Limbri to Weabonga-road (selected sections)	do	do	7,459	7,459	7,459
Do	1093	11.2m. to 12.8m. from Attunga	do	do	5,700	58	5,758
Do	1093	9.25m. to 9.90m. from Attunga	do	do	1,988	225*	1,763
Colo	3154	Webb's Creek	Steel and reinforced concrete bridge	do	10,802	802*	10,000
Conargo	3166	5.65m. to 9.65m. north of State Highway No. 20	Construction	do	3,000	4,000	7,000
Do	3179	Billabong Creek at Conargo	Concrete bridge	do	8,000	8,000	8,000
Coolah	1189	Main Road No. 316 to 11.82m. from Piambra	Construction	do	5,000	5,000	5,000
Do	1304	Easterly from Trunk Road No. 55	do	do	2,146	15,000	17,146
Coonamble	1269	46m. to 47m. from Coonamble through Warrumbungle State Park	do	do	2,930	2,000	4,930
Do	1269	47m. to 48m. from Coonamble through Warrumbungle State Park	do	do	9,942	2,420	12,362
Do	1269	From 50m. from Coonamble through Warrumbungle State Park	do	do	22,000	18,000	40,000
Do	3025	Big and Little Terrigal Creeks	Timber bridges	do	10,627	55*	10,572
Copmanhurst	1148	9.47m. to 10.5m. south of Tabulam	Construction	do	7,000	7,000	7,000
Do	1148	Within the Shire	Restoration of flood damage	do	116	116	116
Do	1179	do do do	do do do	do	515	515	515
Do	1179	Barrett's Creek to Fine Flower. Section 4.6m. to 5.81m.	Construction	do	3,000	3,000	3,000
Crookwell	1271	Access road to Sylvia Vale. Section 6.6m. to 10.8m.	do	do	10,744	10,744	10,744
Do	3133	Mulgowie Creek	Prestressed concrete bridge and approaches	do	5,200	1,163	6,363
Do	3134	Access road to Mulgowrie	Construction	do	11,000	143*	10,857
Cudegong	3141	Hargraves to Triamble	Concrete causeways and culverts	do	5,000	5,000	5,000
Darling	1284	Trunk Road Road No. 68 near Beemery to Tarcoon	Clearing, forming and draining	do	6,000	6,000	6,000
Demondrille	1252	0m. to 7.8m. from State Highway No. 2	Construction	do	8,118	181*	7,937
Do	3095	Cumbamurra River	Low level timber beam bridge	do	18,800	2,412	21,212
Do	3096	Murrumbidgee River at Jugiong	do do do	do	34,525	1,459*	33,066
Dungog	1128	Within the Shire	Restoration of flood damage	do	2,400	2,400	2,400
Do	3062	28.5m. north of Gresford	Construction	do	10,000	3,840*	6,160
Do	3163	Dungog to Gresford	do	do	18,840	18,840	18,840

* Credit

Appendix No. 9—continued

DEVELOPMENTAL ROADS FUND—continued

Summary of Expenditure on Construction and Reconstruction Works—continued

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Expenditure from Department's Funds		
					To 30th June, 1963	1963-64	To 30th June, 1964
					£	£	£
Eurobodalla	1206	3.85m. to 4.62m. from Batehaven	Construction	Council	5,576	17	5,593
Do	1206	4.62m. to 5.0m. from Batehaven	do	do		7,000	7,000
Gloucester	1150	Bridge over Barnard River near Kauthi	Approaches	do	14,797	720*	14,077
Do	1150	17.5m. to 18.5m. north of Trunk Road No. 90	Reconstruction	do	6,387	745*	5,642
Do	1150	14.75m. to 15.58m. north of Gloucester	Construction	do	6,000	175	6,175
Do	1150	13.2m. to 14.5m. north of Gloucester	Reconstruction	do	10,000	500	10,500
Do	1150	12.8m. to 13.2m. north of Gloucester	do	do	7,957	745	8,702
Do	1150	11.95m. to 12.8m. north of Gloucester	do	do		10,000	10,000
Do	3139	Barnard River, 24.8m. north of Gloucester	Steel and concrete bridge	do	27,500	2,082	29,582
Do	3152	Carsons-road to Developmental Road No. 1150	Construction	do		2,095	2,095
Goodradigbee	1234	1.40m. to 2.45m. from Nottingham Creek	do	do	13,603	2,854*	10,749
Do	1234	0.8m. to 1.4m. from Nottingham Creek	do	do		12,854	12,854
Gosford	1264	Developmental Road No. 1160 to Main Road No. 225	do	Department	147,890	5,829	153,719
Hastings	1261	0m. to 4.5m. south of State Highway No. 11	do	Council		3,000	3,000
Do	1273	0m. to 3m. from Deep Creek Bridge	do	do	7,300	544*	6,756
Do	1285	0m. to 4m. south of State Highway No. 11	do	do		12,000	12,000
Do	3126	0m. to 2.2m. from Hack's Ferry	do	do	480	186	666
Imlay	1045	Kiah to Lower Towamba	Improvement to alignment	do		1,500	1,500
Jerilderie	1295	0m. to 10.8m. west of Main Road No. 321	Construction	do		6,000	6,000
Leeton	1301	North Kooba Soldier Settlers-road	do	do		8,512	8,512
Liverpool Plains	1277	9.57m. to 12.9m. from Developmental Road No. 1112	do	do		9,000	9,000
Lockhart	3161	Access road to Mundawaddera Soldiers Settlement. Sections 1.62m. to 3.47m. and 3.72m. to 5.44m.	do	do		5,206	5,206
Lyndhurst	1248	Orange to Panuara (selected sections)	do	do	7,365	685	8,050
Maclean	1049	3.63m. to 5.36m. from Tullymorgan	do	do	6,207	16*	6,191
Do	1049	Within the Shire	Restoration of flood damage, April, 1962	do	500	6	506
Do	1203						
Do	and 1245	Within the Shire	Restoration of flood damage, July, 1962	do	165	2	167
Do	1049, 1203						
Do	and 1245	Within the Shire	Restoration of flood damage, May, 1963	do		375	375
Do	1203	0.51m. to 2.6m. from State Highway No. 10	Resumption, survey and compensation costs	do		248	248
Do	1245	5.34m. to 8.02m. from State Highway No. 10	Construction	do		19,000	19,000
Do	1245	8.41m. to 10.94m. from State Highway No. 10	do	do		1,793	1,793
Macleay	1048	Nulla Nulla Branch, 11.28m. from Trunk Road No. 75	Pipe Culvert	do	1,094	464*	630
Do	1048	Nulla Nulla Branch, 11.9m. from Trunk Road No. 75	Reinforced concrete box culvert	do	2,500	62	2,562
Do	1048	Nulla Nulla Branch, 6.5m. from Trunk Road No. 75	do do do	do		69	69
Do	1048	Within the Shire	Restoration of flood damage, May, 1963	do		500	500
Do	3151	State Highway No. 10 to Crescent Head	Reconstruction	do	23,352	5,000	26,852
Do	3164	0.6m. to 3.0m. east of Loftus Bridge	Construction	do		5,000	5,000
Maitland	3143	3.25m. north of Main Road No. 101	Reinforced concrete box culvert	do		8,000	8,000
Manning	1150	Kitti to Barnes Crossing	Construction of deviation	do		138	138
Do	1209	Rocks Crossing	do do do	do		5,000	5,000
Do	1292	0m. to 1.5m. from Purfleet	Construction	do	6,650	161	6,811
Do	1292	3.4m. to 5.35m. from Purfleet	do	do		9,000	9,000
Merriwa	1304	Curryall to Shire Boundary	do	do		12,000	12,000
Monaro	3178	3.6m. to 12.25m. from State Highway No. 4 (selected sections)	do	do		5,190	5,190
Murray	1236	9.91m. to 10.4m. from Main Road No. 388	Gravelling	do	602	34	636
Do	1237	8.0m. to 14.65m. from Main Road No. 388	do	do	4,130	34	4,164
Do	1237	McMahon's Property	Fencing	do		1,142	1,142
Do	1238	0m. to 6.65m. from Developmental Road No. 1236	Construction, including culverts	do	5,000	268	5,268
Do	1238	0m. to 6.65m. from Developmental Road No. 1236	Gravelling	do		6,418	6,418
Murrumbidgee	1283	0m. to 9.9m. south of State Highway No. 14	do	do	7,000	17	7,017

* Credit

Appendix No. 9—continued

DEVELOPMENTAL ROADS FUND—continued

Summary of Expenditure on Construction and Reconstruction Works—continued

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Expenditure from Department's Funds		
					To 30th June, 1963	1963-64	To 30th June, 1964
					£	£	£
Murrumbidgee	1283	9.9m. to 19.7m. south of State Highway No. 14	Construction	Council		9,100	9,100
Murrurundi	3104	Miller's Creek, 13.7m. from Willow Tree	Prestressed concrete bridge and approaches	do	10,644	693	11,337
Muswellbrook	3173	8.3m. to 11.3m. from Jerry's Plains	Construction	do		7,000	7,000
Nambucca	1075	Within the Shire	Restoration of flood damage, July, 1962	do	1,425	8	1,433
Do	and 1078	Within the Shire	Restoration of flood damage, May, 1963	do		2,365	2,365
Do	1075	Within the Shire					
Do	and 1078	Within the Shire					
Nundle	1078	15.01m. to 15.61m. and 15.75m. to 16m. from Bowraville	Reconstruction	do		5,021	5,021
Do	1233	Middlebrook Creek, 14m. from Nundle	Timber beam bridge and approaches	do	18,575	191*	18,384
Do	3175	Sugarloaf Creek, 17.2m. from Nundle	Reinforced concrete bridge	do		3,000	3,000
Patrick Plains	3098	5.1m. to 5.9m. from Jerry's Plains	Reconstruction	do		19,350	19,350
Peel	1233	0.35m. to 3m. from State Highway No. 9	Construction	do		370	6,408
Do	1275	0m. to 2.55m. and 5.42m. to 7.06m. from Main Road No. 130.	do	do	6,038	19,550	19,550
Port Macquarie	3088	0m. to 4.5m. and 5.42m. to 7.06m. from Main Road No. 130.	do	do	12,000	366	12,366
Do	3145	0m. to 1.2m. from Lake Cathie	Reconstruction and bitumen surfacing	do		217*	5,083
Do	3145	1.2m. to 2m. from Lake Cathie-road	Reconstruction	do	5,300	3,500	3,500
Scone	1259	3.07m. to 4.15m. and 4.85m. to 5.04m. from Dartbrook-road	do	do		6,000	6,000
Shoalhaven	1246	2m. to 9.67m. south of Milton	Construction	do	7,500	9,000	16,500
Stroud	1161	Cedar Tree Creek	do	do	5,000	42	5,042
Do	3117	4.1m., 5.5m. and 6.05m. east of Horse Creek	Timber beam bridge	do		3,500	3,500
Snowy River	1297	Jacob's River southerly to Victorian Border at Willis	Concrete culverts	Council	5,100	659	5,759
Tallaganda	1268	Jinden and Currumbene Creeks	Construction	do		8,813	8,813
Tamarang	1213	Quirindi Creek to State Highway No. 9	Improvement to crossings	do		1,500	2,800
Do	1267	Blackville to Main Road No. 129 at Dimby Well	Flood free deviation	do	1,300	903*	6,097
Do	1267	3.94m. to 6.62m. south of Main Road No. 129	Construction	do	7,000	5,682	5,682
Terania	1305	Lillian Rock to Wadeville	Reconstruction	do		7,500	7,500
Tomki	1253	Within the Shire	Restoration of flood damage, May, 1963	do		88	88
Do	3157	0.18m. Rambaldini's-road	Timber beam bridge	do	10,145	390	10,535
Tumbarumba	1117	0m. to 1.46m. Rambaldini's-road	Construction	do		6,700	6,700
Do	1171	Schoolmaster's Creek	Reinforced concrete box culvert and approaches	do		6,000	6,000
Do		10.14m. to 10.78m., 12.89m. to 13.91m. and 14.53m. to 16m. east of Welaregang	Construction	do			
Do	3102	Indi River at Biggara	Steel and timber bridge	do	5,350	100*	5,250
Turon	3127	Turon River at Turondale	Timber beam bridge	do	9,560	616*	8,944
Tweed	1217	Cudgera Creek at Hastings Point	Prestressed concrete bridge and approaches	do	24,162	134*	24,028
Do	3148	Smith's Creek-road	Construction of first of three low level bridges	do		2,500	2,500
Tumut	1215	Yaven Yaven Creek-road southerly from 11.56m. to 13.16m. from State Highway No. 4	Construction	do	7,500	748*	6,752
Do	1215	0.0m. to 2.0m. north of Trunk Road No. 78	do	do		895	895
Ulmara	1274	2m. to 4m. from the Tucabia-Pillar Valley-road	do	do	9,264	105	9,369
Do	1274	4m. to 5.5m. from the Tucabia-Pillar Valley-road	do	do		7,500	7,500
Do	1290	State Highway No. 10 to the Shire Boundary	Construction of flood-free route	Council	7,500	7,500*	
Do	3129	Within the Shire	Restoration of flood damage, May, 1963	do		600	600
Uralla	1258	13.03m. to 15.01m. from Uralla	Culverts and causeways	do	9,000	6,090*	2,910
Do	1258	15.55m. to 18.94m. from Uralla	do	do		6,000	6,000
Wade	1301	North Kooba Soldier Settlers-road	Construction	do		2,500	2,500
Wakool	1238	0m. to 1.8m. north of Main Road No. 388	Formation and gravelling	do		2,500	2,500
Do	1239	9.58m. to 15.55m. east of Trunk Road No. 67	Reforming and gravelling	do	5,500	4	5,504
Do	1239	3.58m. to 9.58m. east of Trunk Road No. 67	do	do		7,906	7,906

* Credit

Appendix No. 9—continued

DEVELOPMENTAL ROADS FUND—continued

Summary of Expenditure on Construction and Reconstruction Works—continued

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Expenditure from Department's Funds		
					To 30th June, 1963	1963-64	To 30th June, 1964
Walcha	1227	5m. to 6.62m. east of Topdale	Construction	Council	£ 7,580	£ 164*	£ 7,416
Do	1227	6.62m. to 7.72m. east of Topdale	do	do	4,118	278*	3,840
Do	1227	Mukki Creek, 7.7m. east of Topdale	Timber beam bridge and approaches	do	6,000	789*	5,211
Do	1227	East of Mukki Creek towards Nowendoc	Drainage works	do		1,232	1,232
Do	1282	Nowendoc to Boundary of Gloucester Shire	Construction	do	10,000	10,000	20,000
Walgett	1190	Beyond 19.6m. from Main Road No. 127	do	do		10,000	10,000
Warren	3021	Booka-road, north of Marra Creek	Reshaping, forming and construction of causeways and pipe culverts	do		8,600	8,600
Wellington	1007	1.56m. to 5.00m. from Walmer	Construction	do		510	510
Do	1057	9.76m. to 10.47m. and 10.69m. to 14.47m. from Ballimore	Completion of construction	do	13,500	773*	12,727
Wentworth	1278	30.4m. east of State Highway No. 22 to Darling River (selected sections)	Construction	do		5,000	5,000
Wingecarribee	1299	4.m. to 8.6m. from Canyonleigh-road	do	do		10,000	10,000
Wollondilly	1302	0.3m. to 2.3m. from Main Road No. 259	Reconstruction and bitumen surfacing	do	5,000	18,000	23,000
Do	1302	2.3m. to 3.6m. from Main Road No. 259	do do do do	do		18,400	18,400
Woodburn	1203	Within the Shire	Restoration of storm and flood damage, May, 1963	do		300	300
Do	1203	Between State Highway No. 10 and Maclean Shire Boundary	Resumption and survey costs	do		433	433
Do	3120	Bungawalbyn Creek	Reinforced concrete bridge and approaches	do		8,666	8,666
Do	3170	Evan's River at Evan's Head	Prestressed concrete bridge and approaches	Department	29,000	685	29,685
Yallaro	1250	3.7m. to 5.7m. from Ashford Shire Boundary	Construction	Council	9,500	1,144*	8,356
Do	1250	6.8m. to 7.4m. from Ashford Shire Boundary	do	do		1,014	1,014
Total Expenditure on road construction						£706,779	
Payments to Councils for long service leave						67	
Total shown in Receipts and Payments Statements—Appendix No. 3						£706,846	

* Credit

Appendix No. 10

COUNTY OF CUMBERLAND MAIN ROADS FUND

PAYMENTS FOR MAINTENANCE AND MINOR IMPROVEMENT OF MAIN ROADS, BRIDGES AND FERRIES
DURING THE YEAR 1963-64

Work by Councils

City, Municipal or Shire Area	State Highways	Tourist and Ordinary Main Roads	Secondary Roads	Total
	£	£	£	£
Ashfield	127	573	700
Auburn	2,279	1,146	3,425
Bankstown	7,159	65	7,224
Baulkham Hills	350	15,745	.....	16,095
Blacktown	6,001	.....	6,001
Blue Mountains	1,373	5,780	7,153
Botany	205	174*	31
Burwood	85	402*	317*
Camden	3,298	.....	3,298
Campbelltown	5,656	.....	5,656
Canterbury	12,345	12,345
Colo	81*	.....	81*
Concord	1,352	.....	1,352
Drummoyne	81	81*	.....
Fairfield	1,300	.....	1,300
Hornsby	359	31,083	5,690	37,132
Hunter's Hill	930	930
Hurstville	1,596*	717	879*
Kogarah	1,450	.....	1,450
Ku-ring-gai	590	290	880
Lane Cove	136	136
Leichhardt	1,483	1,483
Liverpool	3,140	.....	3,140
Manly	550	120	670
Marrickville	1,653	1,353*	300
Mosman	750	1,897	2,647
North Sydney	130	270	400
Parramatta	130	130
Penrith	8,951	1,299	10,250
Randwick	55	.....	55
Rockdale	1,613	513*	1,100
Ryde	14,211	3,999	18,210
Strathfield	450	250	700
Sutherland	4,240	4,010	8,250
Sydney	200	1,050	250	1,500
Warringah	15,924	.....	15,924
Waverley	3,165	.....	3,165
Willoughby	138*	138	.....
Wollondilly	7,714	.....	7,714
Woollahra	6,192	.....	6,192
Windsor	573	573
	£909	£145,757	£39,568	£186,234
Allowances to councils for administration and supervision				2,321
Total shown in Receipts and Payments Statement—Appendix No. 1 (A)				£188,555

* Credit.

Appendix No. 10A

COUNTY OF CUMBERLAND MAIN ROADS FUND

MAINTENANCE AND MINOR IMPROVEMENT OF MAIN ROADS, BRIDGES AND FERRIES DURING THE YEAR
1963-64

Work by Department

Road No.	Location of Work	Amount	Total
STATE HIGHWAYS			
		£	£
1	Prince's Highway— May-street, St. Peters to the northern boundary of the City of Greater Wollongong at Waterfall	68,692	93,991
	Northern boundary of the City of Greater Wollongong to Main Road No. 185 at Thirroul (boundary of County of Cumberland)	25,299	
2	Hume Highway— State Highway No. 5 (Great Western Highway) at Ashfield to Prospect Creek including Lansdowne Bridge	44,852	67,465
	Prospect Creek to Leppington Corner at the western boundary of the City of Liverpool	14,558	
	Leppington Corner to the Nepean River at Camden including Camden Bridge (boundary of County of Cumberland)	8,055	
5	Great Western Highway— Johnston's Creek, Annandale, to the eastern boundary of Blacktown Shire	49,617	91,208
	Eastern boundary of Blacktown Shire to the eastern boundary of Blaxland Shire at Victoria Pass	41,591	
10	Pacific Highway— Alfred-street, North Sydney, to Pearce's Corner at State Highway No. 13 (Pennant Hills-road) Wahroonga	13,798	32,913
	State Highway No. 13 (Pennant Hills-road), Wahroonga, at Pearce's Corner to the southern abutment of Peat's Ferry Bridge	19,115	
13	State Highway No. 2 (Hume Highway) at Carramar to the southern junction with State Highway No. 5 (Great Western Highway) at Parramatta and from the northern junction with State Highway No. 5 to McArthur-street, North Parramatta and from Bettington-road, Dundas to Carlingford-road, Carlingford	47,590	56,211
	Main Road No. 373 (Carlingford-road) at Mobb's Hill to State Highway No. 10 (Pacific Highway), Wahroonga at Pearce's Corner	8,621	
Total—State Highways			£341,788

ORDINARY MAIN ROADS

139	Bridge over the railway line at Epping to Main Road No. 373 (Carlingford-road)	689	
154	Main Road No. 184 at Windsor to 5.25m. south of State Highway No. 5 (Great Western Highway)	12,748	
155	Main Road No. 184 at Richmond to 2.5m. south	1,396	
158	Main Road No. 165 (Victoria-road) at Ermington to State Highway No. 13 (Pennant Hills-road)	13,623	
162	Samuel-street, Mona Vale to First Rocks, St. Ives	20,905	
163	Major bridges on council controlled length	119	
164	Main Road No. 184 to Richmond Air Station	25	
164	Narrabeen Lagoon to Beach-road, Palm Beach, including Narrabeen Bridges	86,122	
165	Glebe Island Bridge to Pittwater-road, Gladesville, including Glebe Island Bridge	48,028	
166	State Highway No. 10 (Pacific Highway), Lane Cove to Main Road No. 165 (Victoria-road), Gladesville	4,332	
167	South-eastern side from Old Canterbury-road, Canterbury to Princess-street, Canterbury and thence full width to Georges River, including Milperra Bridge	17,884	
	Georges River to Main Road No. 512 at Liverpool	2,133	
170	Gardeners-road to Bumborah Point road, Bunnerong	4,804	
171	Allison-road, Randwick to La Perouse	9,727	
172	Northern side from Jersey-road, Woollahra, to Queen-street and thence full width to Main Road No. 340 (Bronte-road), Bondi Junction ..	1,270	
174	Main Road No. 162 (Mona Vale road), Terrey Hills, to the western end of General San Martin drive near McCarr's Creek	11,223	
175	Main Road No. 171 (Bunnerong-road), Matraville to Prince Henry Hospital	3,639	
177	0m. to State Highway No. 2 (Hume Highway) to 1.40m. at the southern boundary of the City of Liverpool at Cross Roads	615	
	Cross Roads to the southern boundary of Campbelltown Municipality at 16.91m. south of State Highway No. 2 (Hume Highway) and from the western boundary of the City of Greater Wollongong at 26.4m. to State Highway No. 1 (Prince's Highway) at 29.98m. ...	24,947	

Appendix No. 10A—continued

COUNTY OF CUMBERLAND MAIN ROADS FUND—continued

Maintenance and Minor Improvement of Main Roads, Bridges and Ferries during the Year
1963-64—continued

Work by Department—continued

Road No.	Location of Work	Amount	Total
ORDINARY MAIN ROADS—continued			
		£	£
178	Main Road No. 177 at Campbelltown to State Highway No. 2 (Hume Highway) at Narellan	7,547	
181	Main Road No. 184 at McGrath's Hill to Webb's Creek Ferry	5,838	
182	Main Road No. 184 at Windsor to the Hawkesbury River including Hawkesbury River Bridge	223	
183	Anzac-parade, Kingsford to State Highway No. 1 (Prince's Highway), Sydenham	3,100	
184	State Highway No. 13 (Pennant Hills-road) Parramatta to Hunt's Creek at the northern boundary of Parramatta City, including Hunt's Creek Bridge	44,823	
	Hunt's Creek to State Highway No. 5 (Great Western Highway) at Mount Victoria	10,520	
185	State Highway No. 1 (Prince's Highway) at Helensburgh to State Highway No. 1 at Thirroul	28,027	
194	Botany-road, Mascot to Cook's River, Kyeemagh, including Cook's River Bridge	5,188	
199	Ramsgate-road, Ramsgate, to and including Taren Point Ferry	25,340	
200	Major bridges on council controlled length	8,517	
225	Main Road No. 181 at Wiseman's Ferry Village to Wiseman's Ferry	650	
309	State Highway No. 5 (Great Western Highway) to Department of Main Roads workshop at Granville	1,068	
315	State Highway No. 2 (Hume Highway), Enfield to Broadarrow-road, Beverly Hills	7,002	
317	Main Road No. 171 (Bunnerong-road), Matraville to Marine-parade, Maroubra	604	
327	Anzac-parade, Moore Park, to Belmore-road, Randwick	506	
328	Bridge over Middle Harbour at Roseville to Main Road No. 164 (Pittwater-road), Brookvale, including Roseville Bridge	14,469	
344	Main Road No. 171 (Bunnerong-road), Matraville to Sutherland-street, Mascot	5,011	
366	Entrance to Ku-ring-gai Chase at 4m. north of State Highway No. 10 (Pacific Highway) at Turramurra to Mount Colah Lodge Gates	1,075	
373	Longueville-road, Lane Cove, to Lane Cove River, including Lane Cove River Bridge	15,462	
393	State Highway No. 1 (Prince's Highway) at Loftus to Main Road No. 185 at Bald Hill and from State Highway No. 1 at Waterfall to Main Road No. 393 at Upper Causeway	35,783	
397	Montauban-avenue to Main Road No. 164 at Narrabeen	22,008	
512	State Highway No. 1 (Prince's Highway) at Heathcote to Deadman's Creek at the boundary of Liverpool City	13,133	
	Deadman's Creek to State Highway No. 2 (Hume Highway) at Liverpool	3,044	
513	Om. at State Highway No. 1 (Prince's Highway) at the top of Bulli Pass to 0.4m. at the County of Cumberland boundary	48	
515	State Highway No. 2 (Hume Highway) at Liverpool to State Highway No. 5 (Great Western Highway) at Eastern Creek	21,069	
516	Main Road No. 184 at Bell to the eastern boundary of Blaxland Shire	847	
523	Major bridges on Council controlled length	705	
525	Main Road No. 174 (McCarr's Creek road) at McCarr's Creek to Main Road No. 174 near Terrey Hills, including McCarr's Creek Bridge	52,020	
535	Badgery's Creek to Main Road No. 154	994	
536	Main Road No. 535 to State Highway No. 5 (Great Western Highway) at St. Mary's	13,385	
537	South Creek to Main Road No. 184 at Richmond	5,082	
570	Main Road No. 155 at Agnes Banks to the eastern boundary of the City of Blue Mountains	2,224	
574	Main Road No. 165 (Victoria-road), Rydalmere, to Main Road No. 158 (Marsden-road) Dundas	14,429	
587	State Highway No. 10 (Pacific Highway) at Hornsby to State Highway No. 10 at Asquith	817	
Total—Ordinary Main Roads			£634,787
SECONDARY ROADS			
2034	Major bridges on council controlled length	£ 413	£
Total—Secondary Roads			£413

Appendix No. 10A—continued

COUNTY OF CUMBERLAND MAIN ROADS FUND—continued

Maintenance and Minor Improvement of Main Roads, Bridges and Ferries during the Year
1963-64—continued

Work by Department—continued

Road No.	Location of Work	Amount	Total
TOURIST ROADS		£	£
4005	Main Road No. 525 (General San Martin Drive) to West Head	6,698	
4020	Main Road No. 393 to Wattamolla Beach through Royal National Park	1,322	
4025	Main Road No. 393 to Garie Beach through Royal National Park	6,284	
4026	Main Road No. 162 to Main Road No. 191 through Lane Cove National Park	1,725	
Total—Tourist Roads			£16,029
SUMMARY			
State Highways		341,788	
Ordinary Main Roads		634,787	
			976,575
Secondary Roads			413
Tourist Roads			16,029
Bridges and ferries not on classified roads			48,112
Supervision, testing laboratory working expenses (net), traffic striping, signposting, suspense accounts, etc.			215,050
Total as shown in Receipts and Payments Statements—Appendix No. 1 (A)			£1,256,179

Appendix No. 11

COUNTRY MAIN ROADS FUND

PAYMENTS FOR MAINTENANCE AND MINOR IMPROVEMENT OF MAIN ROADS, BRIDGES AND FERRIES
DURING THE YEAR 1963-64

Work by Councils

City, Municipal or Shire Area	State Highways	Trunk, Tourist and Ordinary Main Roads	Total
	£	£	£
Abercrombie	13,171	17,000	30,171
Albury . . . . .	...	967	967
Armidale	3,082	276	3,358
Ashford	13,186	14,000	27,186
Ballina	232	2,964	3,196
Balranald	315	19,462	19,777
Barraba . . . . .	...	8,756	8,756
Bathurst . . . . .	...	230	230
Bega . . . . .	...	717	717
Bellingen . . . . .	...	21,668	21,668
Berrigan . . . . .	...	12,470	12,470
Bibbenluke	14,681	11,265	25,946
Bingara . . . . .	...	6,785	6,785
Bland	10,723	15,194	25,917
Blaxland . . . . .	...	15,827	15,827
Bogan	11,703	26,607	38,310
Bombala	812	310	1,122
Boolooroo	15,430	11,088	26,518
Boomi	14,900	28,685	43,585
Boorowa . . . . .	...	14,000	14,000
Boree . . . . .	...	36,500	36,500
Bowral . . . . .	...	4,320	4,320
Brewarrina . . . . .	...	29,357	29,357
Broken Hill	5,962	4,067	10,029
Burrangong . . . . .	...	35,463	35,463
Byron . . . . .	...	14,458	14,458
Camden . . . . .	...	1,074	1,074
Canobolas	19,711	12,500	32,211
Carrathool	13,524	36,628	50,152
Casino	2,671	2,236	4,907
Central Darling	108	30,357	30,465
Cessnock . . . . .	...	41,000	41,000
Cobar	67	42,510	42,577
Cockburn . . . . .	...	12,719	12,719
Coffs Harbour . . . . .	...	14,673	14,673

Appendix No. 11—continued

COUNTRY MAIN ROADS FUND—continued

Payments for Maintenance and Minor Improvement of Main Roads, Bridges and Ferries during
the Year 1963-64—continued

Work by Councils—continued

City, Municipal or Shire Area	State Highways	Trunk, Tourist and Ordinary Main Roads	Total
	£	£	£
Colo .....	.....	32,981	32,981
Conargo .....	.....	2,750	2,750
Condobolin .....	.....	3,000	3,000
Coolah .....	.....	27,783	27,783
Coolamon .....	.....	10,706	10,706
Cooma	1,000	.....	1,000
Coonabarabran	17,252	32,680	49,932
Coonamble .....	.....	28,471	28,471
Cootamundra .....	.....	1,293	1,293
Copmanhurst .....	.....	19,737	19,737
Corowa .....	.....	10,352	10,352
Cowra	1,000	500	1,500
Crookwell .....	.....	45,664	45,664
Cudgegong .....	.....	21,000	21,000
Culcairn .....	.....	11,900	11,900
Darling .....	.....	35,771	35,771
Demondrille .....	.....	32,670	32,670
Deniliquin	4,286	150	4,436
Dubbo	813	66	879
Dumaresq	19,127	18,472	37,599
Dungog .....	.....	15,068	15,068
Eurobodalla .....	.....	12,737	12,737
Forbes	618	.....	618
Gilgandra	23,813	8,569	32,382
Glen Innes	431	31 Cr.	400
Gloucester .....	.....	11,591	11,591
Goobang .....	.....	21,500	21,500
Goodradigbee .....	.....	16,429	16,429
Gosford .....	.....	34,889	34,889
Goulburn	137	1,500	1,637
Grafton	390	1,956	2,346
Greater Wollongong	12	25,952	25,964
Grenfell	1,222	2,862	4,084
Gundagai .....	.....	12,348	12,348
Gundurimba	9,684	19,957	29,641
Gunnedah	600	2,389	2,989
Gunning .....	.....	15,500	15,500
Guyra	1,576	20,585	22,161
Hastings .....	.....	22,186	22,186
Holbrook .....	.....	13,520	13,520
Hume .....	.....	12,000	12,000
Illabo .....	.....	13,768	13,768
Imlay .....	.....	15,893	15,893
Inverell	4,093	2,094	6,187
Jemalong	3,500	17,500	21,000
Jerilderie .....	.....	9,821	9,821
Jindalee .....	.....	10,113	10,113
Junee .....	.....	564	564
Kempsey .....	.....	3,364	3,364
Kiama .....	.....	12,832	12,832
Kyeamba .....	.....	6,066	6,066
Kyogle	3,385	30,225	33,610
Lachlan .....	.....	74,389	74,389
Lake Macquarie	6,109	49,738	55,847
Leeton .....	.....	4,979	4,979
Lismore	3,733	2,452	6,185
Lithgow .....	.....	3,926	3,926
Liverpool Plains	16,076	21,597	37,673
Lockhart .....	.....	9,000	9,000
Lyndhurst	10,522	4,000	14,522
Macintyre	21,900	13,784	35,684
Maclean	4,230	7,090	11,320
Macleay .....	.....	32,152	32,152
Maitland	1,710	8,992	10,702
Manilla .....	.....	10,000	10,000
Manning .....	.....	31,545	31,545
Merriwa .....	.....	41,525	41,525
Mitchell .....	.....	15,574	15,574
Mittagong .....	.....	21,380	21,380
Molong	9,035	6,178	15,213
Monaro	20,863	194	21,057
Moree	750	322	1,072
Mudgee .....	.....	.....	.....
Mullumbimby .....	.....	1,118	1,118
Mulwaree	5,621	34,622	40,243

Appendix No. 11—continued

COUNTRY MAIN ROADS FUND—continued

Payments for Maintenance and Minor Improvement of Main Roads, Bridges and Ferries during
the Year 1963-64—continued
Work by Councils—continued

City, Municipal or Shire Area	State Highways	Trunk, Tourist and Ordinary Main Roads	Total
	£	£	£
Mumbulla	600	8,560	9,160
Murray		8,424	8,424
Murrumbidgee		2,626	2,626
Murrumburrah		100	100
Murrurundi		5,897	5,897
Muswellbrook Municipality	1,509	367	1,876
Muswellbrook Shire		19,527	19,527
Nambucca		15,159	15,159
Namoi		39,671	39,671
Narrabri	3,500	1,306	4,806
Narraburra		18,889	18,889
Narrandera		3,374	3,374
Narromine		213	213
Newcastle	7,500	23,173	30,673
Nundle		8,019	8,019
Nymboida		15,214	15,214
Nyngan	1,700	269	1,969
Oberon		16,500	16,500
Orange	581	3,122	3,703
Parkes	1,000	1,000	2,000
Patrick Plains		22,503	22,503
Peak Hill		329	329
Peel	12,388	13,734	26,122
Port Macquarie	232	325	557
Port Stephens		22,133	22,133
Queanbeyan		23 Cr.	23 Cr.
Quirindi		1,735	1,735
Rylstone		22,200	22,200
Scone		25,718	25,718
Severn	13,200	6,013	19,213
Shellharbour		7,632	7,632
Singleton	300	393	693
Shoalhaven		8,783	8,783
Snowy River		12,768	12,768
Stroud		58,069	58,069
Talbragar	2,300	2,500	4,800
Tallaganda		26,682	26,682
Tamarang		29,009	29,009
Tamworth	4,864	500 Cr.	4,364
Taree	2,153	200	2,353
Temora		450	450
Tenterfield Municipality	1,619		1,619
Tenterfield Shire	32,138	2,478	34,616
Terania		28,680	28,680
Timbregongie		14,312	14,312
Tintenbar	3,008	9,012	12,020
Tomki	4,262	15,756	20,018
Tumbarumba		18,471	18,471
Tumut	19,726	4,000	23,726
Turon		18,616	18,616
Tweed		15,425	15,425
Ulmara		8,080	8,080
Uralla	12,480	25,409	37,889
Urana		22,241	22,241
Wade		7,561	7,561
Wagga Wagga	8,868	6,462	15,330
Wakool	17,850	44,700	62,550
Walcha	14,104	1,500	15,604
Walgett	2,115	55,750	57,865
Waradgery	25,140	4,290	29,430
Warren	2,046	28,500	30,546
Waugoola	5,918	8,383	14,301
Weddin	14,355	15,993	30,348
Wellington	13,949	30,329	44,278
Wentworth	264	17,315	17,579
Wilcannia			
Windouran	8,431	7,094	15,525
Wingham		1,530	1,530
Wingecarribee		19,610	19,610
Wollondilly		6,930	6,930
Woodburn		8,467	8,467
Wyong		16,004	16,004
Yallaroil	17,768	8,255	26,023
Yarrowluma	5,751	8,200	13,951
Yass		208	208
Young		3,715	3,715
	£595,385	£2,605,722	£3,201,107
Allowances to councils for administration and supervision etc.			53,937
Total shown in Receipts and Payments Statement—Appendix No. 2 (A)			£3,255,044

Appendix No. 11A

COUNTRY MAIN ROADS FUND

MAINTENANCE AND MINOR IMPROVEMENT OF MAIN ROADS, BRIDGES AND FERRIES DURING THE YEAR
1963-64

Work by Department

Road No.	Location of Work	Amount	Total
STATE HIGHWAYS			
		£	£
1	Prince's Highway— Main Road No. 185 at Thirroul (County of Cumberland boundary) to Fairy Creek and from Main Road No. 186 to the southern boundary of Shoalhaven Shire	133,747	
	Southern boundary of Shoalhaven Shire to the border of Victoria	129,302	269,049
	North-South Arterial Road— State Highway No. 1 at 1.22m. north of Wollongong to State Highway No. 1 at 1.53m south of Wollongong		14,855
2	Hume Highway— Nepean River at Camden to Uringilla Creek at the eastern boundary of Mulwaree Shire	82,398	
	Eastern boundary of Mulwaree Shire to the Western boundary of Gunning Shire (excluding the concrete section from 2.74m. to 3.47m. from the eastern boundary of the City of Goulburn)	50,475	
	Western boundary of Gunning Shire to the Western boundary of Gundagai Shire at 6.39m. north of Tarcutta	98,368	
	Western boundary of Gundagai Shire to the border of Victoria at Albury	38,085	269,326
3	Federal Highway— Junction with State Highway No. 2 to the northern boundary of the Australian Capital Territory		28,634
4	Snowy Mountains Highway— Tathra Wharf to the top of Brown Mountain at the eastern boundary of Monaro Shire 37.3m. west of Bega	35,450	
	1m. west of Cooma to the western boundary of Snowy River Shire 9m. north of Kiandra	39,745	
	Southern boundary of Gundagai Shire to State Highway No. 2 approximately 12m. north of Tarcutta	3,329	78,524
5	Great Western Highway— Eastern boundary of Blaxland Shire to State Highways Nos. 6 and 7 at Bathurst		34,946
6	Mid-Western Highway— State Highway No. 5 to the western boundary of the City of Bathurst	83	
	State Highway No. 17 at Marsden to Cemetery-road in West Wyalong	7,069	
	Eastern boundary of Waradgery Shire to Goolgowi	1,094	8,246
7	Mitchell Highway— State Highway No. 5 to the western boundary of the City of Bathurst	134	
	Railway crossing approximately 0.5m. west of State Highway No. 17 at Dubbo to the eastern boundary of Warren Shire	25,498	
	Eastern boundary of Warren Shire to the border of Queensland, excluding the length within Nyngan Municipality	80,779	106,411
8	Barrier Highway— Eastern boundary of Cobar Shire to the eastern boundary of Central Darling Shire excluding 0.8m. within the town of Cobar	14,655	
	Eastern boundary of Central Darling Shire to the border of South Australia excluding 6.5m. through the City of Broken Hill and 0.4m. through the town of Wilcannia	35,118	49,773
9	New England Highway— Hunter River at Hexham to Wallis Creek including Wallis Creek bridge	9,841	
	Mount Pleasant street, Maitland to the southern boundary of Scone Shire	51,996	
	Southern boundary of Scone Shire to the northern boundary of Cockburn Shire excluding the length of 5.73m. within the City of Tamworth	79,631	
	44.57m. South of Glen Innes at southern boundary of Guyra Shire to 49m. north of Glen Innes near Bluff Rock railway station	74,502	215,970

Appendix No. 11A—continued

COUNTRY MAIN ROADS FUND—continued

Maintenance and Minor Improvement of Main Roads, Bridges and Ferries during the Year
1963-64—continued

Work by Department—continued

Road No.	Location of Work	Amount	Total
STATE HIGHWAYS—continued			
		£	£
10	Pacific Highway— Hawkesbury river to the northern boundary of Gosford Shire	23,668	
	Northern boundary of Gosford Shire to Highfields parade, Highfields	88,725	
	Southern abutment of Ironbark Creek Bridge to the junction of State Highway No. 10 and Main Road No. 506	39,193	
	Junction of State Highway No. 10 and Main Road No. 110 to Manning River at Taree	47,724	
	Old boundary of Taree Municipality at Chatham to the Hastings River	49,007	
	Hastings River to the northern boundary of Macleay Shire	43,514	
	Northern boundary of Macleay Shire to the southern boundary of Macleay Shire	130,253	
	Harwood ferry on the Clarence River	53,002	
	3.7m. north of Maclean to Grant-street, Ballina, and Tamar-street, Ballina to the southern boundary of Byron Shire	71,296	
	Southern boundary of Byron Shire to the border of Queensland . .	40,452	
			586,834
11	Oxley Highway— State Highway No. 10 to the western boundary of Hastings Shire . .	39,484	
	Eastern boundary of Cockburn Shire to State Highway No. 9 at Bendemeer	2,621	
	Belar Creek at approximately 9m. west of Coonabarabran to the eastern boundary of Warren Shire at Collie	19,410	
	Main Road No. 202 at 15.35m. east of Nevertire to State Highway No. 7 at Nevertire	8,826	
			70,341
12	Gwydir Highway— Western boundary of the City of Grafton to Camp Creek including Camp Creek Bridge	33,119	
	Camp Creek at 56.29m. east of Glen Innes to 3.24m. east of Glen Innes	33,336	
	Major bridges on council controlled length	2,145	
			68,600
14	Sturt Highway— State Highway No. 2 near Lower Tarcutta to eastern boundary of Murrumbidgee Shire excluding the length of 5.96m. within the City of Wagga Wagga	36,957	
	Eastern boundary of Murrumbidgee Shire to the northern boundary of Hay Municipality	21,770	
	Eastern boundary of Balranald Shire to the Murray River at 1m. south of Buronga, including Mildura Bridge but excluding 1.3m. through the town of Balranald	27,871	
			86,598
15	Barton Highway— Northern boundary of the Australian Capital Territory to State Highway No. 2 near Yass . . . . .	.....
			14,175
16	Bruxner Highway— State Highway No. 10 at 2m. to Emigrant Creek at 3.88m. west of Ballina, and from 41.95m. west of Ballina to Drake	29,250	
	Boggabilla to the border of Queensland at Goondiwindi	740	
			29,990
17	Newell Highway— Murray River to the western boundary of Urana Shire	26,614	
	Western boundary of Urana Shire to the southern boundary of Coolamon Shire	13,155	
	Southern boundary of Coolamon Shire to junction with State Highway No. 6 near Wyalong	18,763	
	Southern boundary of Goobang Shire at 9.56m. north of Forbes to the southern boundary of Gilgandra Shire at 26.07m. north of Dubbo excluding the length of 2.59m. within Dubbo Municipality . .	36,712	
	Northern boundary of Coonabarabran Shire to the southern boundary of Boolooroo Shire excluding the length of 3.10m. with- in Narrabri Municipality	24,824	
	Southern boundary of Boolooroo Shire to Boggabilla excluding length in Moree Municipality	34,479	
	Major bridges on council controlled length	17,944	
			172,491

Appendix No. 11A—continued

COUNTRY MAIN ROADS FUND—continued

Maintenance and Minor Improvement of Main Roads, Bridges and Ferries during the year
1963-64—continued

Work by Department—continued

Road No.	Location of Work	Amount	Total
STATE HIGHWAYS—continued		£	£
18	Castlereagh Highway— Southern boundary of Coonamble Shire to the Queensland border excluding approximately 1m. through the town of Walgett		43,593
19	Monaro Highway— Major bridges on council controlled length		1,841
20	Riverina Highway— Murray River at and including Bethanga Bridge to Main Road No. 299 at 61.65m. west of Albury	28,222	
	Main Road No. 299 to the boundary of Deniliquin Municipality at 5.65m. east of Deniliquin	25,174	53,396
21	Cobb Highway— Murray River to the boundary of Deniliquin Municipality at 3.78m. south of Deniliquin	22,313	
	Northern boundary of Hay Municipality to the southern boundary of Central Darling Shire near Mossiel	35,446	
	Southern boundary of Central Darling Shire near Mossiel to State Highway No. 8 near Wilcannia	12,209	69,968
22	Silver City Highway— State Highway No. 14 at Buronga to 104.66m. north of Wentworth including spur to Abbotsford Bridge over the Murray River (0.12m.) but excluding the length between Wentworth Bridge and 1m. north	18,156	
	104.66m. north of Wentworth to the Queensland Border at Warri Gate excluding the full length of 7.01m. within the City of Broken Hill	42,446	60,602
24	Mount Lindesay Highway— Major bridges on council controlled length		755
25	State Highway No. 1 near Macquarie Rivulet at 63.43m. from Sydney to intersection with State Highway No. 2 at Cross Roads, 94.61m. from Sydney		61,399
Total—State Highways			£2,390,317
TRUNK ROADS			
51	Major bridges on council controlled length	284	
54	Do do do do	2,376	
56	Do do do do	6,028	
63	Do do do do	1,498	
66	Boundary of Central Darling Shire at 55.6m. to the boundary of Broken Hill City at 2.5m. east of Broken Hill	15,050	
68	Major bridges on council controlled length	159	
73	Do do do do	138	
74	Do do do do	3,653	
78	Do do do do	7,975	
80	Do do do do	1,316	
81	State Highway No. 8 at 2.2m. to Silverton at 14.32m. west of Broken Hill	1,760	
83	Major bridges on council controlled length	750	
86	Do do do do	1,421	
Total—Trunk Roads			£42,408

Appendix No. 11A—continued

COUNTRY MAIN ROADS FUND—continued

Maintenance and Minor Improvement of Main Roads, Bridges and Ferries during the Year
1963-64—continued

Work by Department—continued

Road No.	Location of Work	Amount	Total
ORDINARY MAIN ROADS			
		£	£
101	Major bridges on council controlled length	1,567	
102	Do do do do	4,245	
104	Major ferries on council controlled length	186,785	
105	Major bridges on council controlled length	2,595	
108	Major ferries on council controlled length	13,345	
127	Major bridges on council controlled length	77	
128	Do do do do	2,811	
137	Do do do do	2,266	
138	Do do do do	768	
142	Do do do do	7,066	
143	Do do do do	1,425	
147	Major ferries on council controlled length	12,136	
149	Do do do do	11,905	
151	Major bridges on council controlled length	1,872	
179	Do do do do	117	
182	Hawkesbury River at Windsor to Main Road No. 503 at Wilberforce including Windsor Bridge	1,091	
198	Major bridges and ferries on council controlled length	15,135	
209	Major bridges on council controlled length	357	
216	Do do do do	3,900	
217	Do do do do	163	
220	Do do do do	249	
221	Do do do do	1,544	
222	Do do do do	1,415	
223	Do do do do	141	
226	Do do do do	11,520	
232	Do do do do	2,767	
233	Do do do do	101	
237	Do do do do	7,360	
253	State Highway No. 5 at Hartley to Main Road No. 520	20,122	
259	Southern boundary of Camden Municipality at 2.65m. to 20.05m. west of State Highway No. 2 at Camden	20,777	
261	State Highway No. 1 near Bomaderry to the northern boundary of Shoalhaven Shire	8,972	
267	Major bridges on council controlled length	3,746	
270	Do do do do	2,709	
272	Do do do do	7,654	
286	Snowy River at Jindabyne to the summit of Mount Kosciusko, includ- ing Jindabyne Bridge	35,847	
293	State Highway No. 1 to Bomaderry railway station and branch road to railway goods yard	496	
307	Main Road No. 261 to Cambewarra Lookout	461	
319	Major bridges on council controlled length	1,974	
321	Do do do do	1,184	
329	Do do do do	3,022	
357	Do do do do	2,152	
367	Do do do do	208	
369	Major ferries on council controlled length	5,230	
391	Do do do do	4,178	
403	Major bridges on council controlled length	23*	
405	Main Road No. 429 at Wanaaring to the border of South Australia at Hawker Gate	3,730	
	Major bridges on council controlled length	8,360	
428	State Highway No. 22 at 35m. north of Broken Hill to Kayrunnera ..	7,270	
429	Northern boundary of Central Darling Shire to the western boundary of Darling Shire at Willara Crossing (Paroo River)	3,691	
435	Boundary of Central Darling Shire to Willaro	418	
501	Major bridges on council controlled length	1,844	
502	Main Road No. 513 at Wollongong to Main Road No. 179 near Wilton	5,081	
503	Main Road No. 182 at Wilberforce to the southern boundary of Patrick Plains Shire	29,616	
	Southern boundary of Patrick Plains Shire to Parson's Creek at 16m. south of Singleton, including Parson's Creek Bridge	22,412	
513	State Highway No. 1 at the top of Bulli Pass to State Highway No. 1 at North Wollongong	8,984	
516	Eastern boundary of Blaxland Shire to the eastern boundary of the City of Lithgow	7,163	
522	Major bridges on council controlled length	10,507	
567	Do do do do	664	
575	Do do do do	4,910	
583	Do do do do	874	
Total—Ordinary Main Roads			£528,956

* Credit

Appendix No. 11A—continued

COUNTRY MAIN ROADS FUND—continued

Maintenance and Minor Improvement of Main Roads, Bridges and Ferries during the Year 1963-64—continued

Work by Department—continued

Road No.	Location of Work	Amount	Total
TOURIST ROADS			
4016	Smiggin Holes to Island Bend—Guthega-road	£ 5,643	
	Total—Tourist Roads		£5,643
SUMMARY			
	State Highways	2,390,317	
	Trunk Roads	42,408	
	Ordinary Main Roads	528,956	
	Tourist Roads	5,643	
	Bridges and Ferries not on classified roads		2,967,324
	Supervision, testing laboratory working expenses (net), traffic striping, signposting, suspense accounts, etc.		94,124
	Total as shown in Receipts and Payments Statement—Appendix No. 2(A)		341,928
			£3,403,376

Appendix No. 12

PROCLAMATION OF MAIN ROADS 1963-64

During the year the following new Main Roads and alteration of existing Main Roads were proclaimed:—

By *Government Gazette* of the 5th July, 1963, the section of Trunk Road No. 57 between the Hume Highway near Ettamogah and a point approximately 2 miles south of Old Junee was reproclaimed as an extension of Trunk Road No. 78. By the same proclamation the full length of Trunk Road No. 78 from Cowra to the Hume Highway near Ettamogah was named the "Olympic Way".

By *Government Gazette* of the 30th August, 1963, the road from Kurri Kurri-West Wallsend-Newcastle road (Main Road No. 223) at Buchanan to the New England Highway (State Highway No. 9) near Tarro was proclaimed Main Road No. 588.

By *Government Gazette* of the 13th September, 1963, Main Road No. 274 from the Princes Highway, (State Highway No. 1) near Pambula via Wyndham, Mount Darragh, Yellow Waterhole and Cathcart to the Monaro Highway (State Highway No. 19) at Bombala was reclassified as Trunk Road No. 91.

By *Government Gazette* of 31st January, 1964, the proclamation of the route of Main Roads Nos. 142 and 544 was altered. The alteration to the route of the main roads within Lismore followed the opening of the new bridge over the Richmond River at Ballina Street, Lismore.

By *Government Gazette* of 26th June, 1964, the proclamation of Main Road No. 326 in the City of Newcastle was altered to include the extension of Hanbury Street and Vine Street between the Pacific Highway and Bull Street (Main Road No. 316) Mayfield.

Appendix No. 12A

PROCLAMATION OF TOURIST ROADS 1963-64

During the Year the following Tourist Roads were proclaimed

City or Shire Area	Date of Proclamation	Road No.	Description	Mileage
Maclean	5-7-63	4024	From Angourie generally southerly to the Maclean-Broome's Head Road.	m. ch. 9 00
Sutherland	19-7-63	4025	Garie Beach Road from Steven's Drive (Main Road No. 393) at 5.65 miles east of Waterfall generally easterly for 1.8 miles to Garie Beach within the Royal National Park.	1 64
Ryde	19-7-63	4026	Riverside Drive from Lane Cove Road (Main Road No. 162) near De Burgh's Bridge, generally south-easterly along the southern side of the Lane Cove River through Lane Cove National Park to Delhi Road (Main Road No. 191) near Fuller's Bridge.	2 66
Dumaresq and Macleay	27-9-63	4027	Access road to Wright's Lookout within New England National Park from the Point Lookout road (Tourist Road No. 4002) at approximately 7.35 miles from Trunk Road No. 74 for a length of approximately 1½ miles to the foot of Wright's Lookout.	1 20
Byron and Tweed	18-10-63	4028	From the Pacific Highway (State Highway No. 10) at Chinderah generally southerly via Kingscliff, Pottsville and New Brighton to the Pacific Highway near Billinudgel.	20 00
Blue Mountains	24-1-64	4029	The road on Narrow Neck Peninsula from its junction with Cliff Drive, Katoomba, generally southerly for approximately 9 miles to Clear Hill.	8 40
Port Macquarie and Hastings.	13-3-64	4030	The road from North Haven generally northerly via Lake Cathie to a point approximately 5.4 miles north of Lake Cathie Entrance.	14 08
Sutherland	24-4-64	4031	The road from Captain Cook drive, Kurnell through the Captain Cook's Landing Place Park to Cape Solander.	1 62
Macleay	26-6-64	4032	The road from Main Road No. 198 at Kinchela generally south easterly to the Hat Head Village boundary.	6 56

Appendix No. 13

DECLARATION OF SECONDARY ROADS 1963-64

During the Year the following new Secondary Roads were declared:—

City or Municipal Area	Date of Declaration	Road No.	Description	Mileage
Parramatta	26-7-63	2066	From the junction of Campbell Street and Church Street (State Highway No. 13) Parramatta via Campbell Street, O'Connell Street and Albert Street to Church Street (State Highway No. 13) North Parramatta.	m. ch. 1 40
Auburn	26-7-63	2069	Rawson Street, Auburn, from Parramatta Road (Great Western Highway, State Highway No. 5) to St. Hilliers Road (Main Road No. 190).	1 16
Fairfield and Liverpool..	4-10-63	2071	From Hoxton Park Road (Main Road No. 515) Liverpool via Copeland Street, Orange Grove Road and deviation to Joseph Street; thence via Joseph Street, Cambridge Street and deviation to Palmerston Road; thence via Palmerston Road and Liverpool Road to the intersection with The Horsley Drive, Smithfield.	5 49
Manly	4-10-63	2072	From the junction of Sydney Road (Main Road No. 164) and Angle Street, Balgowlah via Angle Street, Woodland Street, Balgowlah Road and Cross Street to Condamine Street (Main Road No. 164).	0 40
Randwick	6-12-63	2074	Anzac Parade, from Main Road No. 171 at Kingsford Junction via Maroubra Junction and Malabar Junction to Main Road No. 171 at Yarra Junction.	4 69
Sydney and Leichhardt	20-12-63	2073	From the junction of The Crescent and Johnston Street (Secondary Road No. 2042), Annandale via The Crescent and a deviation via the disused tramway route to Crescent Street; thence via Crescent Street and a deviation to Ross Street, Forest Lodge; thence via Ross Street, to Parramatta Road (Great Western Highway, State Highway No. 5).	1 07
Concord and Drummoyne	7-2-64	2059	From the junction of Patterson Street and Concord Road (Main Road No. 200) North Strathfield via Patterson Street, Gipps Street, the road through St. Luke's Park and thence via Queens Road to Great North Road (Main Road No. 395) Five Dock.	2 14

Appendix No. 14

PROCLAMATION OF DEVELOPMENTAL ROADS 1963-64

During the Year the following new Developmental Roads, extension of existing Developmental Roads and alteration of route of existing roads were proclaimed

Shire Area	Date of Proclamation	Road No.	Description	Mileage
Wollondilly	19-7-63	1302	Barkers Lodge road from Main Road No. 259 at Oakdale generally southerly and easterly to Barkers Lodge (Mowbray Park) approximately 5 miles west of Picton.	m. ch. 7 08
Cobar	19-7-63	1303	The road from Main Road No. 407 at approximately 4.35 miles north-west of Cobar generally northerly for approximately 2.5 miles to the C.S.A. Copper Mine.	2 63
Lecton and Wade	16-8-63	1301	That part of the North Kooba Settlers road from a point 3.3 miles east of Main Road No. 321 at 9.75 miles south of Griffith generally south-easterly to Trunk Road No. 80 approximately 1.4 miles north of Whitton.	8 16
Murrumbidgee.....	8-11-63	1283	That part of the road along the western side of the Coleambally Canal generally southerly from the southern boundary of Farm No. 57 of the Coleambally Irrigation Area to the northern boundary of Jerilderie Shire.	4 24
Coolah and Merriwa....	20-12-63	1304	Uarbry road, from the Mudgee-Cassilis road (Main Road No. 214) east of Curryall generally westerly via Uarbry to the Gulgong-Coolah road (Trunk Road No. 55) east of Craboon.	29 00
Tamarang	20-12-63	1213	The Wallabadah-Woolshed road, branching off the New England Highway (State Highway No. 9) at about $\frac{1}{2}$ mile north of Wallabadah and proceeding generally south-easterly along the northern side of Quirindi Creek to a point approximately 7.2 miles from the highway.	7 21
Terania	31-1-64	1305	The road from near Wadeville at the north-western corner of Portion 10, Parish of Hanging Rock, County of Rous, generally northerly for approximately 3.5 miles to Main Road No. 141 near Lillian Rock.	3 40

Appendix No. 14—continued

DEPROCLAMATION OF DEVELOPMENTAL ROADS 1963-64

During the year the following Developmental Roads were deproclaimed or partly deproclaimed

Shire Area	Date of Proclamation	Road No.	Description	Mileage
Talbragar	16-8-63	1135	From Benelong Bridge over Whylandra Creek generally easterly to a point near Terrabella Bridge 18 miles 1,450 ft. south of Dubbo.	m. ch. 5 22
Muswellbrook	30-8-63	1225	From the Muswellbrook-Sandy Hollow road (Main Road No. 208) approximately 3½ miles west of Muswellbrook generally south-westerly through Bengalla War Service Land Settlement.	4 30
Coolah	13-9-63	1189	From the Merrygoen-Binnaway road near Piambra Railway Station approximately 5 miles from Binnaway generally south-easterly along Gamble Creek to a point approximately 6 miles from the Merrygoen-Binnaway road.	6 00
Urana	13-9-63	1086	The road from Rand to Lockhart via Urangeline Soldiers Settlement.	10 40
Hume	27-9-63	1152	From the Daysdale-Walbundry road (Main Road No. 331) southerly and along the western side of Oil Tree Lagoon toward Hopefield Railway Station.	8 76
Wade.....	11-10-63	1235	From Widgeeli Railway Siding generally southerly through Widgeeli Soldiers Settlement to the north-eastern corner of Portion 19, Parish of Camarooka, County of Cooper.	7 00
Boolooroo and Yallaro... ..	18-10-63	1200	County Boundary road from its junction with the Warialda-Camurra road at approximately 4.5 miles north of the Gwydir Highway to a point approximately 13.35 miles north of Pallamallawa.	10 12
Tweed	18-10-63	1217	From Pottsville northerly along the coast via Cudgera Headlands to the bridge over Cudgen Creek.	7 10
Dungog.....	17-1-64	1015	Road from Lennoxton to Summer Hills	5 00
Wade.....	7-2-64	1197	Part of the road from Griffith to Benerembah from the Narrandera-Hillston road (Trunk Road No. 80) at Griffith generally south-westerly to a point 4.4 miles south-west of Trunk Road No. 80.	4 34
Coolah	14-2-64	1181	From the Gilgandra-Craboona road (Trunk Road No. 77) at Dunedoo, generally southerly to the Cudgegong Shire boundary at the south-eastern corner of Portion 42, Parish of Yarrow.	10 28
Wade.....	10-4-64	1222	From the western boundary of Portion 36, Parish of Learmonth, County of Sturt, generally easterly for approximately 3 miles to the north-western corner of Portion 31, Parish of Warburn, County of Sturt.	2 00
Kyogle	10-4-64	1046	From the western abutment of the bridge over Eden Creek generally westerly to Developmental Road No. 1129 at Doubtfull Creek.	0 20

Appendix No. 15

PROCLAMATION OF DEVELOPMENTAL WORKS 1963-64

During the year the following Developmental Works were proclaimed

Shire Area	Date of Proclamation	Work No.	Description	Mileage
Hastings	19-7-63	3177	The provision of pipe culverts on the Bulli Creek road, Byabarra, for a distance of approximately 3.25 miles from Main Road No. 112 at Byabarra.	m. ch.
Monaro	1-11-63	3178	The construction of three sections of the road from Bolairo via Shannons Flat to the Australian Capital Territory Boundary:— (1) From 3.6 miles from the Snowy Mountains Highway (State Highway No. 4) at Bolairo to 5.8 miles. (2) 9.4 miles to 10.4 miles from State Highway No. 4. (3) 11.3 miles to 12.25 miles from (State Highway No. 4).	
Conargo	15-11-63	3179	The construction of a bridge over Billabong Creek together with approximately 1 mile of approaches thereto on the Conargo-Carrathool road at Conargo.	
Severn	14-2-64	3182	The work of forming draining and gravelling the central 3 miles of the Dundee-Bald Nob road from approximately 2½ miles to 5 miles from Dundee and the replacement of the bridge at Five Mile Creek.	
Scone	1-5-64	3183	The construction of a bridge and immediate approaches over Gibbergunyah Creek near the Scone-Bunnan road at approximately 1½ miles west of Owens Gap Post Office.	
Rylstone	1-5-64	3187	The construction of a bridge over the Boguee or Capertee River on the Rylstone-Glen Alice road at approximately 14½ miles south of Rylstone.	
Uralla and Guyra	8-5-64	3185	The construction of a two-way feeder road over Frame's Hill between 12.4 miles and 13.5 miles from Trunk Road No. 73 on the Laura-Baldersleigh road.	1 08
Uralla	8-5-64	3186	The construction of a two-way feeder road at the Escarpment from 8.5 miles to 9.9 miles from Trunk Road No. 73 on the Laura-Baldersleigh road.	1 32

Appendix No. 15—continued

DEPROCLAMATION OF DEVELOPMENTAL WORKS 1963-64

During the year the following Developmental Works were deproclaimed

Shire Area	Date of Proclamation	Work No.	Description	Mileage
Coolah	20-12-63	3119	On the road from Trunk Road No. 55 near Craboon via Uarbry to Main Road No. 214 near Cassilis. (a) Forming and gravelling a length of 0.35 miles and the provision of 3 pipe culverts on the length 8.55 miles to 12.65 miles from Trunk Road No. 55. (b) Forming and gravelling three lengths aggregating 0.85 miles, gravelling one length of 0.40 miles and the provision of 2 culverts on the length between 17.8 miles and 20.45 miles from Trunk Road No. 55.	4 40
Port Macquarie	13-3-64	3088	The construction of approximately 4½ miles of the road from Port Macquarie to Cathie Lake Entrance between a point approximately 6 miles south of Port Macquarie and the northern approach to the bridge over Cathie Lake Entrance at approximately 10½ miles from Port Macquarie.	
Scone	1-5-64	3171	The construction of a bridge and immediate approaches over Sofia Creek at approximately 400 ft. south-west of Owens Gap Post Office on the Scone-Bunnan road at approximately 13.8 miles west of Scone.	

Appendix No. 16

MILEAGE OF MAIN, SECONDARY, TOURIST AND DEVELOPMENTAL ROADS IN NEW SOUTH WALES

	At 30th June				
	1960	1961	1962	1963	1964
County of Cumberland Area—					
State Highways	194	194	194	194	194
Ordinary Main Roads	650	652	653	653	653
Total all Main Roads	844	846	847	847	847
Secondary Roads	87	92	100	115	132
Tourist Roads .....	..	..	31	36	50
Developmental Roads	14	14	14	14	14
Total all Classified Roads	945	952	992	1,012	1,043
Country Area—					
State Highways	6,309	6,303	6,299	6,338	6,339
Trunk Roads	4,181	4,162	4,163	4,116	4,163
Ordinary Main Roads	11,077	10,999	10,994	10,980	10,937
Total All Main Roads	21,567	21,464	21,456	21,434	21,439
Tourist Roads .....	..	..	23	34	86
Developmental Roads	2,850	2,948	3,069	3,043	3,004
Total all Classified Roads	24,417	24,412	24,548	24,511	24,529*
Total for whole State—					
State Highways	6,503	6,497	6,493	6,532	6,533
Trunk Roads	4,181	4,162	4,163	4,116	4,163
Ordinary Main Roads	11,727	11,651	11,647	11,633	11,590
Total all Main Roads	22,411	22,310	22,303	22,281	22,286
Secondary Roads	87	92	100	115	132
Tourist Roads .....	..	..	54	70	136
Developmental Roads	2,864	2,962	3,083	3,057	3,018
Total all Classified Roads	25,362	25,364	25,540	25,523	25,572*

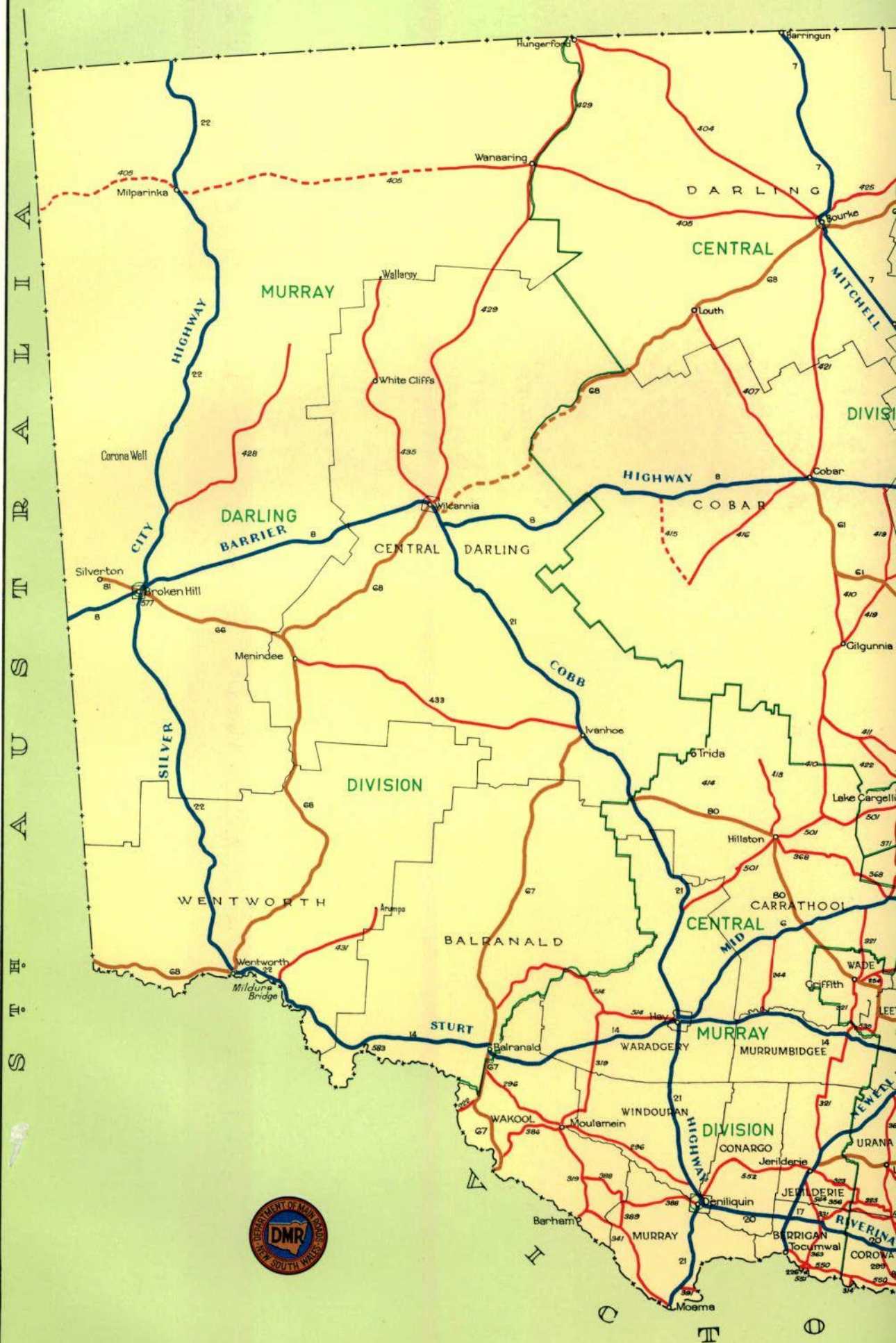
* In addition to the above, the Department is responsible for the full cost of works on unclassified roads in the unincorporated area of the Western Division; the length of these roads totalled 1,030 miles at 30th June, 1964.

Appendix No. 17

DISTRIBUTION BETWEEN THE DEPARTMENT AND COUNCILS OF RESPONSIBILITY
FOR CARE AND CONTROL OF ROADS AT 30TH JUNE, 1964, IN ACCORDANCE
WITH THE PROVISIONS OF THE MAIN ROADS ACT, 1924-63

	County of Cumberland*	Country	Total
	miles	miles	miles
1. Roads which are the responsibility of the Department of Main Roads—			
(a) Where work was carried out by the Department—			
State Highways	193	4,519	4,712
Trunk and Ordinary Main Roads in the Eastern and Central Divisions, other than the County of Cumberland .....	.....	252	252
Ordinary Main Roads in the County of Cumberland	352	.....	352
Unincorporated area of the Western Division—			
Trunk and Ordinary Main Roads .....	.....	476	476
Unclassified roads .....	.....	1,030	1,030
(b) Where work was carried out for the Department by Councils—			
State Highways	1	1,820	1,821
Ordinary Main Roads in the County of Cumberland	301	.....	301
2. Roads which are the responsibility of councils assisted by the Department of Main Roads—			
Trunk and Ordinary Main Roads, other than in the County of Cumberland .....	.....	14,372	14,372
Total	847	22,469	23,316

* County of Cumberland refers to the area defined in Part IV, Section 9 of the Main Roads Act 1924-63.



NEW SOUTH WALES

SHOWING
MAIN ROAD SYSTEM

SCALE OF MILES
0 20 40 60 80

Date of Map June 1964

REFERENCE

STATE HIGHWAYS.....

TRUNK ROADS.....

MAIN ROADS.....

DIVISIONAL BOUNDARIES.....

DIVISIONAL HEADQUARTERS.....



S O U T H A U S T R A L I A



LEGEND

- Bitumen or Concrete —
- Gravel, crushed stone or other improved surface —
- Formed only ---
- Unformed ----



TYPES OF CONSTRUCTION ON MAIN ROADS IN NEW SOUTH WALES

SCALE OF MILES
0 20 40 60