



PUBLIC WORKS DEPARTMENT

ADMINISTRATION REPORT
OF THE
HIGHWAYS DEPARTMENT
1952-53



PRINTED BY THE SUPERINTENDENT
GOVERNMENT PRESS
MADRAS
1955

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Dy. Secy. to Govt.
N. S. S. S.
32867

MAP OF MADRAS STATE

SHOWING NATIONAL HIGHWAYS PROVINCIAL HIGHWAYS

AND JURISDICTION OF HIGHWAYS DIVISIONS

SCALE 1 INCH = 100 MILES

REFERENCE

- NATIONAL HIGHWAYS
- PROVINCIAL HIGHWAYS
- HIGHWAYS DIVISIONAL BOUNDARY
- SADAPET HEAD QUARTERS OF HIGHWAYS DIVISIONS

Reproduced From Indentor's Original

Helio. P. Z. P., C. S. O., Madras.

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ADMINISTRATION REPORT OF THE HIGHWAYS DEPARTMENT, 1952-53

CHAPTER I.

SUMMARY.

1. *Accomplishments.*—During the year under report, the Highways Department continued to execute works on all categories of roads, viz., National Highways, Provincial Highways, Major and other District Roads in charge of Government and other District Roads, Village roads and the balance of Major District Roads under District Boards, the expenditure on works on National Highways having been financed by the Government of India. The Department continued to pursue its established policy of forming more and more new roads and extending the mileage of improved surfacings of the existing roads. Thus several roads running through both rural and urban areas or those subjected to heavy traffic were treated with appropriate types of improved surfacings such as cement concrete, surface dressing with precoated chips, etc. Due to inadequacy of funds and difficulty in procuring materials like steel, cement, etc., the programme of works could not be achieved in full and the progress was considerably hampered. Nothing but a judicious utilization of available resources and alertness at all levels would have rendered possible even the limited achievements of the year.

As regards maintenance of roads, the Twelve-year Plan drawn up in 1951-52 for providing higher standard of maintenance by surface dressing with precoated chippings according to traffic needs was pursued and it was being operated by the territorial divisions.

It has been the policy of this department that all National Highways, Provincial Highways and Major District Roads should be taken over by Government from the Local Bodies in order to relieve them of the responsibility of maintaining these classes of roads and enable them to concentrate their resources on roads of rural importance. But during this year, in view of the stringent economic policy of the Government, the proposal for the transfer of roads from Local Bodies was deferred in G.O. Ms. No. 2816, P.W., dated 30th June 1952. However, a length of about 18 miles in Tanjore district was taken over by Government in pursuance of the instructions contained in G.O. No. 1978, P.W., dated 6th May 1952, that all roads on Canal banks, tank bunds, etc., formed at the instance of local bodies be taken over by Government for maintenance. Including the above the total mileage of roads at the end of 1952-53 was 15,650 miles. The details of roads taken over are given in Appendix 7. The activities of the Department have been increasing year by year and indication is given below by the figures of total expenditure on all Government and District Board works.

Year.	Expenditure on Government roads and District Board road and Non-road works.		Year.	Expenditure on Government roads and District Board road and Non-road works.	
		RS. IN LAKHS.			RS. IN LAKHS.
1946-47	..	375	1950-51	..	808
1947-48	..	437	1951-52	..	881
1948-49	..	627	1952-53	..	987
1949-50	..	751			

A brief summary of accomplishments of the department in 1952-53 is rendered below—

Government Roads.—Sixty-three miles of roads were cement-concreted; 961 miles were black-topped and 83 bridges and culverts were constructed. Besides special repairs were carried out to the extent of Rs. 40 lakhs covering 67 works.

District Board Roads.—Sixty-four miles of roads were black-topped; 1,358 miles of new roads were formed and 48 bridges, culverts and causeways were constructed, besides carrying out special repairs to the extent of Rs.15 lakhs covering 55 works.

Division-wise details of works completed during the year are given in Annexure 22 (ii) and 23 (ii) and the Division-wise particulars of roads newly formed or provided with cement-concrete and black-top surfaces by different authorities are shown in the statement in Appendix 6.

2. *Expenditure.*—The particulars of final grant and actual expenditure incurred during the year 1952-53 in respect of Government and District Board works and a comparison with previous years' figures are given below :—

Nature of works.	Final grant for 1952-53.	Expenditure, 1952-53.		Expenditure, 1951-52	
		Amount.	Percentage of final expenditure to the final grant.	Amount.	Percentage of expenditure to final grant.
	(2)	(3)	(4)	(5)	(6)
(1)	RS. IN LAKHS.	RS. IN LAKHS.		RS. IN LAKHS.	
<i>Government Roads—</i>					
Capital works including Post-War Road Development.	181.33	187.26	103	156.13	96
Maintenance	420.78	459.70	109	424.13	104
Total, Government Roads ..	602.11	646.96	107	580.26	102
<i>District Board works—</i>					
Capital works on roads including Post-War Road Development.	158.25	149.32	94	118.64	91
Maintenance	146.24	147.36	100.7	143.65	100
Non-road works	62.67	43.47	69	38.95	75
Total, District Board works.	367.16	340.15	93	301.24	93
Grand total ..	969.27	987.11	103	881.50	98

The expenditure during the year on Government and District Board Road works classified under different categories of roads is given below :—

		Expenditure in rupees.	
		New constructions.	Maintenance.
		RS.	RS.
Government Roads—			
National Highways	..	54,63,102	75,66,082
Provincial Highways	..	59,28,473	1,01,38,525
Major District Roads	..	72,87,385	2,70,28,530
Other District Roads	..	46,651	3,96,775
Maintenance of avenues	..	..	8,40,544
Total ..	..	1,87,25,611	4,59,70,456

		Expenditure in rupees.	
		New constructions.	Maintenance.
		RS.	RS.
District Board Roads—			
Major District Roads	..	21,10,815	53,36,814
Other District Roads	..	23,45,226	51,03,079
Village Roads	..	1,04,75,451	40,99,486
Maintenance of Avenues	..	..	1,96,880
Total ..	..	1,49,31,492	1,47,36,259

The following statement shows the cost of establishment as percentage of the expenditure on works during the year 1952-53 with corresponding figures for the previous years for comparison :—

Year.	Expenditure on works inclusive of tools and plant.	Expenditure on establishment.	Percentage cost of establishment of working expenditure.
(1)	(2)	(3)	(4)
	RS. IN LAKHS.	RS. IN LAKHS.	
1946-47	351.71	36.10	10.3
1947-48	467.33	46.50	9.9
1948-49	670.21	46.58	6.9
1949-50	835.56	50.64	6.1
1950-51	958.84	49.94	5.2
1951-52	964.40	49.63	5.01
1952-53	1,064.87	48.00	4.46

Out of the total establishment charges of Rs. 48.00 lakhs, a sum of Rs. 11,03,599 was recoverable from the Union Government towards the charges for works executed by the Department on National Highways and a sum of Rs. 15,90,871 was provisionally marked for being recovered from the District Boards, in proportion to the expenditure incurred on District Board works. Thus the net charge on the State on account of establishment was only Rs. 21.05 lakhs.

3. *Upkeep.*—A general review concerning the upkeep of Government and District Board roads in the State is given below :—

Government Roads.—As per the statistics available, the minimum allotment required for proper maintenance of roads is Rs. 503.12 lakhs. During the year, the maintenance grant sanctioned by Government was quite inadequate compared to the minimum requirement; nevertheless, the roads were maintained as satisfactorily as possible with the available funds.

District Board Roads.—Against an estimated minimum requirement of about Rs. 300 lakhs for proper maintenance of roads, the District Boards were able to allot funds only to the extent of about Rs. 145 lakhs during the year. The inability of the District Boards to provide more funds for maintenance of roads left in their charge was mainly due to their slender and inelastic financial conditions which has affected seriously the maintenance of their roads. In spite of lack of funds and also the inability of

District Boards to place the available funds to the credit of the Department promptly, the Department was doing its best to maintain the roads in a satisfactory condition.

With the construction of more and more new roads every year, the strain on the resources of the District Boards in meeting their maintenance charges steadily increase. Unless measures are devised to reorganize and improve the financial condition of the Boards, the position in respect of maintenance of District Board Roads will tend to deteriorate further.

Some facts concerning upkeep.—Certain outstanding facts concerning up-keep which give an insight into the efficiency of maintenance and a general idea of the problems facing some regions are described below.

Ongole, Guntur and Visakhapatnam divisions.—Improved surfacing with the provision of black-topping and cement-concreting the entire portions of National Highways in these divisions was taken up.

Krishna, Srikakulam, East Godavari, West Godavari and Rajahmundry Divisions.—A programme to black-top the National Highways during the course of five years was drawn up, and it was pursued during the year.

The condition of other Government Roads in First Circle, Kakinada, was generally satisfactory.

Anantapur.—The roads in the division were generally in good condition.

Kurnool.—Due to failure of rains, there was draught everywhere. Every effort was being made to maintain the roads in spite of this difficulty.

Cuddapah.—The upkeep of Government roads was very fair although District Board roads required improvements.

North Arcot.—The entire length of Madras-Chittoor-Bangalore road mile 53/4 to 81/6 was black topped and maintained in an excellent condition. Cement-concreting miles 87/2 to 110 of Ranipet-Krishnagiri road was also completed. All other roads were maintained in a fair condition.

Chingleput.—A considerable length of important roads subjected to heavy traffic and in a bad condition in the past was upgraded with black-top surfacing. All roads including rural roads had the "stretch in time" repair, necessary for satisfactory maintenance, and their condition was generally satisfactory.

Chittoor.—All Government roads were maintained in good condition. Due to paucity of funds, the District Board roads could not be maintained to the required standard. But none of the roads was in a bad condition.

South Arcot.—In Chidambaram and Vriddhachalam taluks, unmetalled roads run in black clay soil and heavy outlay was necessary for sanding and gravelling to make them fit for traffic.

Madurai.—The condition of Madurai-Poovandh road miles 5/0 to 14/1 was not satisfactory and required improvement with black-top surfacing. The metalled width of Periyakulam-Kuruvanuthu road was widened during the year.

Tiruchirappalli.—Several roads in the Ex-Pudukottai State were not to the required standards. These are to be attended to gradually in view of the limited funds available.

Tanjore district.—More than 1,000 miles of earthen roads in the district were presenting a problem to road users, as they become miry after showers and cloddy during summer. To make them fit for traffic, heavy sanding is

necessary. Some of the roads were being metalled under the Post-War Road Development Plan.

South Kanara, Malabar, Coimbatore, Salem and the Nilgiris.—All roads in the districts were generally maintained in good condition with due reference to the allotment available. A special drive was exercised to increase the mileage of black-top surface in built-up areas and other stretches of roads where water-bound macadam was found uneconomic.

General.—The National Highways in the State were generally maintained in a very satisfactory condition.

The following roads were maintained in excellent condition :—

GOVERNMENT ROADS.

1. Guntur Division.

- (a) National Highways—
Great Northern Trunk road, miles 233/0 to 241/0.
- (b) Provincial Highways—
Guntur-Pondugula road, miles 7/0 to 32/0.
- (c) Major District Road—
Thuvumilla-Chandole road, miles 9/3 to 16/0.
Repalle-Nizampatam road, miles 7/0 to 15/0.
Guntur-Amaravathi road, miles 0/0 to 21/0.
Guntur-Narasaraopeta road, miles 7/0 to 17/0.
Guntur-Repalle road, miles 12/0 to 23/0.
Road from Main Canal to Bank Canal, miles 0/0 to 3/5.
Road from 12/6 of Guntur-Baptla-Chinnaganjam, road to Thurumelle, miles 0/0 to 8/0.

2. Krishna Division.

- (a) National Highways—
Masulipatam-Hyderabad road section XI and XII.
Great Northern Trunk road, miles 272/0 to 296/5.
- (b) Provincial Highways—
Masulipatam-Hyderabad road, miles 1/0 to 16/0 and 34/0 to 39/0.
- (c) Major District Roads—
Pedana-Bantimilli-Gudivada road, miles 1 to 25.
Ilur-Nidumole-Kowtaram road, miles 0/0 to 14/0.

DISTRICT BOARD ROADS.

1. Guntur.

- (a) Major district roads—
Tadikonda village road.
- (b) Village roads—
Road from Kachanapudi to Pragnam, miles 1/2 to 3/6.
Road from Brahmanakodur to Jupudi.

2. *Krishna Division.*

Kanchikachila-Peddapuram road, miles 0/0 to 9/4.
 Nakkupeta-Penuginchiproti road, 4 miles.
 Jaggayyapeta-Shermohamedelapalli road, 2 miles.
 Nuzvid-Velavadam road.

The following roads were in a condition to give room for complaints :-

GOVERNMENT ROADS.

(a) *National Highways.*

Krishna Division—

Masulipatam-Hyderabad road, miles 71/0 to 80/0.

Anantapur Division—

Benares Cape Comorin road, miles 52/1 to 85/0.

(b) *Provincial Highways.*

Krishna Division—

Masulipatam-Elore road, miles 10/0 to 32/0.

Anantapur—

Anantapur-Talipatri road, miles 2/0 to 42.

Bellary-Cuddapah road, miles 16/0 to 32.

(c) *Major District Roads.*

Guntur Division—

Tenali-Naracodur road, miles 4/0 to 5/0.

Tenali-Pedavallapudi road, miles 4/0 to 5/4.

Tenali-Pedpudi road, miles 2/0 to 4/4.

Guntur-Hanumanupalam road, miles 0/6 to 12/0.

Guntur-Repalli road, miles 0/0 to 12/0.

Old Madras road, miles 0/8 to 18/0.

Krishna Division—

Nuzvid-Bezwada road.

Kankipadu-Kesarapalli road.

Masulipatam-Tiruvur road.

Gudivada-Someswaram road, miles 25/0 to 33/0.

M. Ch. N. road, miles 1 to 10.

Anantapur—

Anantapur-Kalyandrug road, miles 2/0 to 24/0.

DISTRICT BOARD ROADS.

(a) *Major District Roads.*

Guntur Division—

Vallatur Bapatla road, miles 24/0 to 27/0 and miles 35/3 to 39/6.

Kuchipudi-Gowada road, miles 4/8 to 12/7.

Kudipudi-Malpur road, miles 3/4 to 7/3.

Kollur-Vallatur road, miles 5/0 to 5/4.

Sathanapalli-Aswaraopeta road, miles 0/0 to 11/6.

Sathanapalli-Krosur-Atchanapeta road, miles 0/0 to 16/7.

Pedapadi-Thumma road, miles 6/4 to 8/5.

Mangalagiri-Rayapudi road, miles 0/0 to 10/2.

Nandigama-Gudipudi road, miles 0/0 to 3/3.

Anantapur—

Rayadrug-Dharmavaram road.

Kadiri-Rajampet road.

(b) *Other Roads.*

Other district roads—

Guntur—

Alapadu-Maparru road, miles 0/0 to 2/5.

Chebrolu-Mutlur road, miles 8/6 to 12/0.

Nandur-Bodipalam road, miles 0/0 to 3/4.

Krishna district—

Telaprolu-Amgolunu-Ogirala road, miles 3/4 to 9/1.

Anantapur—

Hindupur-Manepalle road.

Amarapuram-Siva road.

Nagasamudram to Perur road.

CHAPTER II.

ORGANIZATION.

1. *Administrative set-up.*

General.—This department continued to function with one Chief Engineer in charge of the Department. The strength of the various administrative and executive posts as on 31st March 1953 is given below :—

Name of post.	Permanent strength.	Temporary strength.	Total strength.
Chief Engineer (Highways)	1	..	1
Superintending Engineers (Highways) ..	3	..	3
Divisional Engineers (Highways) ..	28	11	39
Assistant Engineers (Highways) ..	98	55	153
Junior Engineers and Supervisors ..	368	246	614

2. *Chief Engineer and his office.*

Sri K. K. Nambiar, B.E., C.E. (Hons), M.I.E. (Ind.), F.INST.H.E. (Eng.), M.I.MUN.E. (Eng.), M.A.M.SOC.C.E., M.R.SAN.I. continued as Chief Engineer till the end of the year.

Sri K. Ramaswamy Reddy, B.E., M.A.M.SOC. C.E., M.I.H.E., continued as Deputy Chief Engineer (Highways) till the end of the year.

Sri N. Sambamurthi, B.A., continued as Accounts Officer (Highways) till 9th April 1952 forenoon when he was succeeded by Sri V. S. Ramachandran, B.A., who continued till the end of the year.

Sri Hardyal continued as Engineer Liaison Officer till the end of the year.

Sri K. V. Krishna Iyer, B.A., continued as Deputy Accounts Officer (Highways), till the end of the year.

Technical Assistants to the Chief Engineer (Highways).—Sri A. N. Damodaram Naidu and Sri P. V. Raju continued as Technical Assistants to Chief Engineer (Highways) till the end of the year.

Sri P. G. Nambiar continued as Technical Assistant to Chief Engineer (Highways) throughout the year in charge of the compilation of the Madras Highways Manual and Type Designs.

Sri C. V. Padmanabhan continued as Technical Assistant to the Chief Engineer (Highways) throughout the year except during the period of his leave from 27th November 1952, forenoon, to 24th February 1953, afternoon.

Sri K. S. Srinivasan was continued as Technical Assistant to Chief Engineer (Highways) till 11th May 1952, afternoon, against the sanction, for the post of an Assistant Engineer (Highways) for scrutinizing the Road Development Fund estimates in the office of the Chief Engineer (Highways). On transfer, Sri R. L. Sreshta succeeded Sri K. S. Srinivasan. He continued as Technical Assistant to the Chief Engineer (Highways) till the end of the year except during the period from 30th June 1952, forenoon, to 12th July 1952, afternoon, when he was on earned leave.

Service rules.—The special section formed in November 1951 to tackle the questions such as probations, seniority, confirmation, recruitment of personnel against vacancies of Supervisors' posts reserved for war service candidates, regularization of temporary appointments of Overseers and Draftsmen, etc., was continued throughout the year 1952-53. Preliminaries such as review of service registers, etc., for determination of seniority of Supervisors were attended to in almost all the cases. Options of the Public Works Department Subordinates working in the Highways Department for ultimate absorption in the Highways or for reversion to the Public Works Department were obtained and action taken accordingly. The temporary appointments of holders of M.I. & R.C. Diploma of the Annamalai University as Draftsmen and certain L.S. Diploma holders as Overseers against posts of Supervisors were regularized after obtaining orders of Government. Proposals for relaxation of relevant rules in favour of certain deserving unqualified Draftsmen were submitted to Government so as to regularize their appointments.

3. Superintending Engineers (Highways).

I Circle, Kakinada.—Sri M. N. Kamath, B.E., M.I.E. (Ind.), M., AM. SOC., C.E., continued till 8th September 1952, forenoon, when he was succeeded by Sri P. T. Narayanan Nair, B.E., who continued till 23rd December 1952. Again Sri M. N. Kamath joined the circle on 23rd December 1952 and continued till the end of the year.

II Circle, Madras.—Sri K. K. Nambiar, B.E., M.I.E. (Ind.), F. INST. H.E. (Eng.), M.I., MUN. E. (Eng.), M. AM. SOC. C.E., M.R., SAN. I., Chief Engineer (Highways), continued, to be in direct charge of the circle till the end of the year.

III Circle, Tiruchirappalli.—Sri N. Durrani, B.SC., B.E., M.I.E. (Ind.), Chartered Engineer, A.M. AM. SOC. C.E., continued as Superintending Engineer till the end of the year.

IV Circle, Coimbatore.—Sri P. T. Narayanan Nair, B.E., continued as Superintending Engineer till 28th April 1952 when he was succeeded by Sri S. C. Nayak, M.I.E. (Ind.), who continued till the end of the year.

4. Divisional Engineers (Highways).

The following list shows the divisional charges during the year :—

(1) Visakhapatnam North Division, Srikakulam.

Sri B. Krishnamurthy, B.A., B.E., from 1st April 1952 to 31st March 1953.

(2) Visakhapatnam South Division, Visakhapatnam.

Sri Basheer Ahmed Sahib Bahadur, from 1st April 1952 to 19th April 1952, forenoon.

Sri R. Prabhala, B.E., A.M.I.E., from 19th April 1952 to 31st March 1953.

(3) East Godavari Division, Kakinada.

Sri N. Seshagiri Rao, B.E., from 1st April 1952 to 31st March 1953.

(4) Agency Division, Rajahmundry.

Sri M. A. Thirunavukarasu, B.A., C.E., from 1st April 1952 to 16th March 1953, afternoon.

Sri P. L. Subramanian, C.E., from 16th to 31st March 1953.

(5) West Godavari Division, Eluru.

Sri C. Krishna Reddi, C.E., from 1st April 1952 to 2nd June 1952, afternoon.

Sri M. A. Thirunavukarasu, B.A., C.E., from 2nd June 1952, afternoon, to 2nd July 1952, afternoon in additional charge.

Sri Ch. Madhava Rao, B.E., from 2nd July 1952, afternoon, to 31st March 1953.

(6) Krishna Division, Masulipatnam.

Sri Md. Share Ali, C.E., from 1st April 1952 to 26th May 1952, afternoon.

Sri H. R. Sayoji Rao, B.Sc., from 26th May 1952, afternoon, to 18th June 1952, forenoon.

Sri A. R. Satyanarayana from 18th June 1952, forenoon, to 26th November 1952, forenoon.

Sri K. S. Krishnan, B.E., A.M.I.E., from 26th November 1952, forenoon, to 31st March 1953.

(7) Guntur North Division, Guntur.

Sri H. R. Sayoji Rao, B.Sc., from 1st April 1952 to 31st March 1953.

(8) Guntur South Division, Ongole.

Sri R. Prabhala, B.E., from 1st to 14th April 1952, forenoon.

Sri H. R. Sayoji Rao, B.Sc., from 14th April 1952, forenoon, to 22nd April 1952, afternoon (additional charge).

Sri Basheer Ahmed, C.E., from 22nd April 1952, afternoon, to 31st March 1953.

(9) Nellore Division, Nellore.

Sri C. N. Thirupuvanam, C.E., from 1st to 16th April 1952, afternoon.

Sri M. L. Narayana, B.E., from 16th April to 3rd May 1952, forenoon (additional charge).

Sri N. T. Gnanaprakasam, M.E., from 3rd May 1952, forenoon, to 7th January 1953, afternoon.

Sri Rangaraja Ayyangar, C.E., from 7th January 1953, forenoon, to 31st March 1953.

(10) Kurnool Division, Kurnool.

Sri P. Sivarama Reddi, C.E., from 1st April 1952 to 31st March 1953.

(11) Bellary Division, Bellary.

Sri P. Veeriah, B.E., from 1st April 1952 to 31st March 1953.

(12) Anantapur Division, Anantapur.

Sri M. Ramachandra Rao, B.E., from 1st April to 20th August 1952, forenoon.

Sri M. U. Samitha from 20th August 1952, forenoon, to 31st March 1953.

(13) Cuddapah Division, Cuddapah.

Sri Ch. Madhava Rao, B.E., from 1st April to 7th June 1952, afternoon.

Sri P. Sivarama Reddy, C.E., from 7th June 1952, afternoon, to 31st March 1953.

(14) Chingleput Division, Saidapet.

Sri K. A. Nanjundeswara Chetti, B.E., M.I.E. (Ind.), from 1st April to 28th July 1952, forenoon.

Sri K. S. Srinivasan, B.E., Personal Assistant to Divisional Engineer, Saidapet, from 28th July to 9th August 1952, afternoon (additional charge).

Sri G. S. Gnanaprakasam, B.E., from 9th August 1952, afternoon, to 31st March 1953.

(15) Chittoor Division, Chittoor.

Sri M. U. Samitha, C.E., from 1st April to 12th June 1952, forenoon.

Sri M. S. Lawrence, B.E., A.M.I.E., from 12th June 1952, forenoon, to 28th November 1952, forenoon.

Sri M. Ramachandra Rao, B.E., from 28th November 1952, forenoon, to 31st March 1953.

(16) North Arcot Division, Vellore.

Sri C. R. Munuswamy Naidu, C.E., from 1st April 1952 to 31st March 1953.

(17) South Arcot Division, Cuddalore.

Sri A. S. Anantanarayanan, B.E., from 1st to 14th April 1952, afternoon.

Sri A. R. Sivaswamy from 14th April to 1st September 1952, forenoon.

Sri M. Subba Rao, Assistant Engineer (Highways), from 2nd September 1952, forenoon, to 16th September 1952, forenoon (additional charge).

Sri A. R. Sivaswamy from 16th September 1952, forenoon, to 31st March 1953.

(18) Salem South Division, Salem.

Sri V. Govindaswamy Pillai, B.E., from 1st April 1952 to 25th March 1953, forenoon.

Sri M. A. Thirunavukarasu, B.A., C.E., from 25th to 31st March 1953.

(19) Salem North Division, Krishnagiri.

Sri P. S. Sivaprakasam, B.E., A.M.I.E., from 1st April to 9th August 1952, forenoon.

Sri C. N. Thirupuvanam, C.E., from 9th August 1952, forenoon, to 31st March 1953.

(20) Tiruchirappalli Division, Tiruchirappalli.

Sri G. S. Gnanaprakasam, B.E., from 1st April to 7th August 1952, afternoon.

Sri N. Durrani, B.Sc., B.E., Superintending Engineer (Highways), Tiruchirappalli, from 7th to 22nd August 1952, forenoon (additional charge).

Sri T. M. Veeraraghavan from 22nd August 1952, forenoon, to 31st March 1953.

(21) Tanjore East Division, Nagapattinam.

Sri M. Balasubramanian, B.E., from 1st April 1952 to 31st March 1953.

(22) Tanjore West Division, Tanjore.

Sri P. Narayanan, B.E., from 1st April 1952 to 31st March 1953.

(23) Tirunelveli Division, Tirunelveli.

Sri S. Kalyanaraman, C.E., from 1st April 1952 to 13th August 1952, afternoon.

Sri A. Rangaswami Pillai, from 13th August 1952, afternoon, to 19th August 1952, forenoon (additional charge).

Sri P. S. Sivaprakasam, B.E., A.M.I.E., from 19th August 1952, forenoon, to 31st March 1953.

(24) Ramanathapuram Division, Sivaganga.

Sri T. S. Kethara Mudaliar, C.E., from 1st April to 11th August 1952, afternoon.

Sri S. Pichamuthu, Assistant Engineer (Highways), from 11th August 1952, afternoon, to 30th August 1952 (additional charge).

Sri P. Sirajudeen, B.E., A.M.I.E., from 30th August 1952, forenoon, to 31st March 1953.

(25) Madurai Division, Madurai.

Sri T. M. Veeraraghavan, B.E., from 1st April to 14th August 1952, afternoon.

Sri M. A. Hafeez Khan, B.E., Assistant Engineer (Highways), from 14th to 20th August 1952, afternoon, (additional charge).

Sri T. S. Kethara Mudaliar, C.E., from 20th August 1952, afternoon, to 31st March 1953.

(26) Coimbatore North Division, Erode.

Sri O. Sivasankaran, B.E., from 1st April 1952 to 31st March 1953.

(27) Coimbatore South Division, Coimbatore.

Sri S. R. Nayudu, B.E., A.M.I.E., from 1st April 1952 to 31st March 1953.

(28) The Nilgiris Division, Ootacamund.

Sri G. S. Ganapathy, C.E., from 1st April to 24th November 1952, afternoon.

Sri W. G. S. Saldhanha, Assistant Engineer (Highways), from 24th November 1952, afternoon, to 17th December 1952, afternoon (additional charge).

Sri G. S. Ganapathy, C.E., from 17th December 1952, afternoon to 31st March 1953.

(29) Malabar North Division, Kozhikode.

Sri N. J. John, C.E., from 1st April 1952 to 31st March 1953.

(30) Malabar South Division, Palghat.

Sri M. Kumaran, C.E., A.M.I.E., from 1st April 1952 to 31st March 1953.

(31) South Kanara Division, Mangalore.

Sri M. Srikanta Srouthy, B.E., from 1st April 1952 to 31st March 1953.

(32) Transport and Machinery Division, Madras.

Sri G. Srirangachari, B.E., M.I.E., from 1st April to 16th April 1952 afternoon.

Sri K. Namasivayam, B.E., from 16th April 1952, afternoon, to 31st March 1953.

Special Divisions.

(1) Designs Division, Madras.

Sri P. R. Golikere, B.E., from 1st April 1952 to 31st March 1953.

(2) Bharathapuzha Bridge Division, Kuttipuram.

Sri K. Srinivasan, B.E., from 1st April 1952 to 31st March 1953.

(3) Pugalur Bridge Division, Pugalur.

Sri K. Namasivayam, B.E., from 1st to 14th April 1952 afternoon. Since the division was closed.

(4) Godavari Bridges Division, Kakinada.

Sri R. Ram Mohan Rao, B.E., from 1st April 1952 to 31st March 1953.

(5) Coleroon Bridge Division, Coleroon.

Sri P. Sirajuddeen, B.E., A.M.I.E., from 1st April to 23rd August 1952 forenoon.

Sri S. Kalyanaraman, C.E., from 23rd August 1952, forenoon, to 31st March 1953.

(6) Minamalur Ghat Road Division, Anakapalle.

Sri P. Rangaraja Ayyangar, C.E., from 1st April to 31st August 1952 forenoon.

Sri R. Prabhala, Divisional Engineer (Highways), Visakhapatnam, from 31st August 1952, forenoon, to 7th September 1952, forenoon (additional charge)

Sri H. Nataraja Sastrigal, B.E., from 7th September 1952, forenoon, to 31st March 1953.

(7) Pennar Bridge Division, Nellore.

Sri M. L. Narayana, B.E., from 1st April 1952 to 31st March 1953.

No new divisions were formed during the year under review. The Pugalur Bridge Division which was formed on 5th July 1948 was closed during the year.

5. Subdivisions.

The following Special Subdivisions formed during the previous years were closed during the year under report on the dates noted against each :—

Serial number and name of the work. (1)	Headquarters. (2)	Date of formation. (3)	Date of closing. (4)
1 Special Araku Subdivision No. II.	Araku	16th June 1948, <i>f.n.</i>	31st March 1953, <i>a.n.</i>
2 Cement concreting Koderu-Nallajerla road No. II Subdivision.	Tadepalligudem.	21st September 1949, <i>f.n.</i>	30th June 1952, <i>a.n.</i>
3 Cement concreting Madras-Calcutta road.	Mangalagiri ..	21st January 1950, <i>a.n.</i>	30th April 1952, <i>a.n.</i>
4 Metalling Nidadavole-Yernagudem road.	Nidadavole and then at Tanuku.	19th April 1950, <i>f.n.</i>	7th July 1952, <i>a.u.</i>
5 Cement concreting Rajahmundry-Kakinada road.	Dwarapudi ..	20th April 1950, <i>a.n.</i>	1st June 1952, <i>f.n.</i>
6 Construction of a Bridge over Gurpur river at Kulur.	Mangalore ..	8th July 1950, <i>f.n.</i>	30th September 1952, <i>a.n.</i>
7 Cement concreting-Ranipet-Krishnagiri road.	Vellore	29th September 1950, <i>f.n.</i>	30th June 1952, <i>a.n.</i>
8 Special Subdivision for municipal works in Coimbatore Municipality.	Coimbatore ..	1st October 1950, <i>f.n.</i>	30th September 1952, <i>a.n.</i>
9 Special Subdivision for Tuticorin - Tiruchendur road.	Tuticorin	24th November 1950, <i>a.n.</i>	31st January 1953, <i>a.n.</i>
10 Mannarghat to Chinna-thadagam road.	Coimbatore ..	17th July 1951, <i>f.n.</i>	1st May 1952, <i>f.n.</i>
11 Special Subdivision for investigation and preparation of plans and estimates.	Chintalapudi ..	3rd November 1952, <i>f.n.</i>	31st March 1953, <i>a.n.</i>
12 Famine Works No. I Sub-division in Anantapur district.	Hindupur	24th March 1952, <i>f.n.</i>	3rd September 1952, <i>a.n.</i>

The Special Subdivisions mentioned below were formed during the year under report :—

Serial number and name of the work. (1)	Headquarters. (2)	Date of formation. (3)	Remarks. (4)
1 Formation of a road from Rapur-Chitvel road in Cuddapah Division.	Chitvel	8th April 1952, <i>f.n.</i>	..
2 Famine Works No. II Sub-division in Anantapur district.	Tadpatri and then at Ananthapur.	19th May 1952, <i>f.n.</i>	Closed on 27th November 1952, <i>a.n.</i>
3 Cement concreting Tanjore-Tiruchi road.	Tiruchirappalli ..	19th May 1952, <i>f.n.</i>	..
4 Cement concreting Gantur-Pondugula road.	Gantur	12th June 1952, <i>f.n.</i>	..
5 Cement concreting Madurai-Tenkasi road.	Rajapalayam ..	11th July 1952, <i>f.n.</i>	..
6 Special subdivision for Godavari Bridge Works.	Rajahmundry ..	5th August 1953, <i>f.n.</i>	..
7 Special Subdivision for Famine Relief Works in Nellore district.	Podili	9th September 1952, <i>f.n.</i>	Closed on 31st December 1952, <i>a.n.</i>
8 Cement concreting Eluru-Jangareddigudam.	Eluru	3rd December 1952, <i>f.n.</i>	..

Serial number and name of work. (1)	Headquarters. (2)	Date of formation. (3)	Remarks. (4)
9 Cement concreting Cuddalore-Chittoor road.	Vellore	3rd December 1952, <i>a.n.</i>	..
10 Special Subdivision for Bridge works in Wynad Area.	Sultaas Battery.	29th December 1952, <i>f.n.</i>	..
11 Constructing causeway across Pennar at M. 10/4 to 11/2 of Muddanur-Jammalamadugu road.	Jammalamadugu.	12th February 1953, <i>f.n.</i>	..
12 Cement concreting Masulipatnam-Tiruvur road.	Gudivada	9th March 1953, <i>f.n.</i>	..

In addition to this the post of Personal Assistant to the Divisional Engineer (Highways), Chingleput, was sanctioned in G.O. Ms. No. 1626, P.W., dated 10th April 1952. Sri K. S. Srinivasan, was working as Personal Assistant to the Divisional Engineer (Highways), Chingleput, from 12th May 1952, afternoon.

6. Junior Engineers and Supervisors.

The category of supervisors in the Madras Highways Engineering Subordinate Service is borne on State basis. For normal maintenance work of the Department during the year 1952-53 there was sanction of Government for 385 posts excluding temporary posts of supervisors sanctioned for specific works. Exclusively there were eight sections for the maintenance work in the area of ex-States of Pudukkottai, Banganapalle and Sandur merged in the Madras State.

2. The staff position in regard to the availability of qualified personnel considerably improved. No retired supervisor was, therefore, re-employed.

3. During the year under review 88 sections were newly formed and 22 of them were closed before the end of the year. The remaining 66 sections were continued throughout the year. Sixty-six special sections formed during the previous years were closed during the course of the year. Statement I shows the special sections formed during the previous years for the works noted against each and wound up during the year on the dates noted against each and Statement II shows the particulars of special sections formed during the year.

4. Responsibilities of the Department in the execution of Post-war and non-Post-war works and Firka Development works continued to be great. As in the previous years, common staff attended to both Government and district board works.

Statement I.

The following were the special sections formed during the previous years for the works noted against each and wound up during the year on the dates noted against each:—

Serial number and name of work.	Date on which wound up.
1 Work connected with the improvements to the Visakhapatnam Anantagiri-Araku road.	31st March 1953.
2 Do. do.	 Do.

Serial number and name of work.	Date on which wound up.
3 Cement concreting M. 424/2 to 443/0 of the Madras-Calcutta road, National Highways No. 5.	31st March 1953.
4 Cement concreting surfacing on the Kathipudy-Narsapur Ferry road from M. 22/0 to 26/0.	1st June 1952, <i>f.n.</i>
5 Forming a road from Chodavaram to Rampa-Addatigalla via Cherukommapalem.	22nd May 1952, <i>f.n.</i>
6 Investigation of Maredumalli-Chinthur road via Lakkavaram.	31st March 1953, <i>a.n.</i>
7 Do. do.	Do.
8 Do. do.	Do.
9 Cement concrete works—Koderu-Nalljerla road	30th June 1952, <i>a.n.</i>
10 Do.	24th September 1952, <i>f.n.</i>
11 Metalling the road from Devilapalli to Dubacherla	15th November 1952, <i>f.n.</i>
12 Metalling the road from Nidadavolu to Yernagudem. M. 0/0 to 14/0.	31st October 1952, <i>a.n.</i>
13 Metalling Damonnu-Tanaku-Alamuru-Hancalacoderu road from Tanuku to Hancalacoderu.	7th July 1952, <i>a.n.</i>
14 Post-war Road Development works—Allapalli to Modisettivarigudam via Seethanagram.	31st March 1953, <i>a.n.</i>
15 Construction of a bridge across the Budameru on the Vijayawada-Nuzvid road in Krishna district.	18th July 1952, <i>f.n.</i>
16 Construction of two bridges on Pulleru canal at Peda Ogirala and Chinna Ogirala.	13th July 1952, <i>f.n.</i>
17 Metalling of the road from Avanigadda to Koderu in Krishna district.	31st March 1953, <i>a.n.</i>
18 Preparation of estimates and plans of certain works of Krishna District Board.	12th October 1952, <i>f.n.</i>
19 Do. do.	11th October 1952, <i>f.n.</i>
20 Metalling of Bapatla-Peddanandipadu road, Guntur district.	23rd December 1952, <i>a.n.</i>
21 Cement concreting M. 247/1-4 and 250/3 to 267/0 of the Madras-Calcutta road in Guntur Division, National Highways No. 5.	30th April 1952, <i>a.n.</i>
22 Do. do.	Do.
23 Do. do.	Do.
24 Providing cement concrete surfacing to M. 0/7-574 to M. 6/3 of the Guntur-Bapatla-Chinnaganjam road.	31st July 1952, <i>a.n.</i>
25 Forming road from Dursi to Chriakurthi via Petakomuru ..	31st March 1953, <i>a.n.</i>
26 Providing cement concrete surface to Nellore-Bombay road, M. 323/5 to 325/3.	15th September 1952, <i>a.n.</i>
27 Providing cement concrete surface to Nellore-Bombay road, M. 325/3 to 327/4.	31st December 1952, <i>a.n.</i>
28 Improvements to Dornal Pass road, Atmakur	10th April 1952, <i>a.n.</i>
29 Constructing a bridge at M. 7/1 of Koilkuntla, Nossem road.	19th July 1952, <i>a.n.</i>
30 Widening and improving the Kurlighat road in M. 44/4-47/0 of Cuddapah-Velpula road.	27th August 1952, <i>a.n.</i>
31 Famine works, Yerraguntla	20th September 1952, <i>a.n.</i>
32 Constructing bridge across supply channel of Gotlur tank in M. 93/3-4 of Rayadrug-Dharmavaram road.	1st October 1952, <i>f.n.</i>
33 Constructing a bridge at Kalavapalli at M. 19/8 of Anantapur-Kalyandrug road.	6th September 1952, <i>f.n.</i>
34 Famine relief work, Kadiri South	28th August 1952, <i>a.n.</i> (Again re-opened on 14th October 1953.)
35 Do.	24th August 1952, <i>f.n.</i>
36 Do.	11th October 1952, <i>f.n.</i>

Serial number and name of work.	Date on which wound up.
37 Post-war Road Development works, Gudur Section	28th July 1952, <i>f.n.</i>
38 Post-war Road Development works, Kavali	1st July 1952, <i>f.n.</i>
39 Firka Development Works, Tiruvallur	21st August 1952, <i>f.n.</i>
40 Constructing a bridge at M. 0/3 of Tiruvottiyur-Ponneri-Panjetty road.	31st December 1952, <i>a.n.</i>
41 Cement concreting M. 87/2 to 90/0 and 90/0 to 100/0 of the Ranipet-Krishnagiri road.	30th June 1952, <i>a.n.</i>
42 Famine works, Wandiwash	25th November 1952, <i>a.n.</i>
43 Famine works, Tiruvannamalai	Do.
44 Construction of a bridge at M. 0/5 of the Chittoor-Aragonda road.	31st March 1953.
45 Preparation of plans and estimates and for supervising the works for district board.	4th April 1952, <i>a.n.</i>
46 Forming road from Elayangudi to Rajasingamangalam ..	1st April 1953, <i>f.n.</i>
47 Constructing Board High school building at Kamuthi ..	30th September 1952, <i>a.n.</i>
48 Reconstructing the bridge over Karupiar at M. 22/3 of Tenkasi-Madurai road in Tirunelveli Division.	31st July 1952, <i>a.n.</i>
49 Constructing a bridge at M. 4/8 of Nanguneri-Tirukarangudi road.	21st July 1952, <i>a.n.</i>
50 Forming road from Tuticorin to Tiruchendur	31st January 1953, <i>a.n.</i>
51 Constructing a bridge across Cauvery at Pugalur	14th April 1952, <i>a.n.</i>
52 Do. Section II	Do.
53 Do. Section III	7th April 1952, <i>a.n.</i>
54 Do. Section IV	5th April 1952, <i>a.n.</i>
55 Certain capital works in Coimbatore Municipality	30th September 1952, <i>a.n.</i>
56 Do.	Do.
57 Do.	Do.
58 Constructing a bridge at M. 5/5 of Annamalai-Pulankinar road.	31st March 1953, <i>a.n.</i>
59 Formation of a road from Mannarghat to Chinnathadagam in Malabar and Coimbatore districts.	30th April 1952, <i>a.n.</i>
60 Constructing a bridge over the Gurpur river in M. 4/7-8 of Manjeswar-Baindur road.	30th September 1952, <i>a.n.</i>
61 Constructing a bridge at M. 2/7 of Papireddipetta-Malapuram road.	11th August 1952, <i>a.n.</i>
62 Constructing bridge at M. 5/5 of Papireddipetta-Malapuram road.	11th December 1952, <i>f.n.</i>
63 Constructing a bridge across the Bharathapuzha river ..	5th May 1952, <i>a.n.</i>
64 Bridge Subdivision Section in Tiruchirappalli Division ..	5th February 1953, <i>a.n.</i>
65 Bridge Investigation Subdivision, Section I	4th October 1952, <i>a.n.</i>
66 Do.	Do.

Statement II.

The following are the particulars of special sections formed during the year:—

Serial number and name of work for which section was formed.	Date of formation.
1 Forming road from Pedavalasa to Katragoda	19th January 1953, <i>f.n.</i>
2 Cement concreting M. 424/2 to 443/0 of the Madras-Calcutta road, National Highways No. 5.	2nd January 1953, <i>f.n.</i>

Serial number and name of work for which section was formed.	Date of formation.
3 Cement concreting works, Anakapalli	26th November 1952, <i>f.n.</i> (closed on 31st March 1953.)
4 Reconstructing the bridge over Yernamaduru drain at M. 51/3 of Pamerru-Palacodo road at Bhimavaram.	31st May 1952, <i>f.n.</i>
5 Cement concrete works—Eluru-Gangareddigudem road, M. 0/0 to 7/0—Employment sanctioned.	28th August 1952, <i>f.n.</i>
6 Cement concrete works—Eluru-Gangareddigudem road, M. 0/0 to 7/0—Employment sanctioned.	6th November 1952, <i>a.n.</i>
7 Construction of District Board office building at Eluru ..	14th November 1952, <i>f.n.</i>
8 Cement concreting Masulipatnam-Tiruvur road, M. 23/0 to 28/0.	3rd December 1952, <i>f.n.</i>
9 Cement concrete works—Masulipatnam-Hyderabad road, M. 31/0 to 34/0.	4th December 1952, <i>f.n.</i>
10 Cement concrete works—Masulipatnam-Hyderabad road, M. 31/0 to 34/0.	22nd November 1952, <i>f.n.</i>
11 Cement concrete works—Guntur-Pondugula road, M. 1/0 to 7/0.	27th June 1952, <i>f.n.</i>
12 Cement concrete works—Guntur-Pondugula road, M. 1/0 to 7/0.	2nd September 1952, <i>f.n.</i>
13 Forming a road from Halvi to Kuppagal	30th July 1952, <i>f.n.</i> (closed on 6th October 1952, <i>f.n.</i>)
14 Famine relief works, Headquarters Bommanahal	31st December 1952, <i>f.n.</i>
15 Do.	5th January 1953, <i>f.n.</i>
16 Constructing a causeway at M. 32/2 of the Bellary-Kalyandrug road.	17th July 1952, <i>a.n.</i>
17 Constructing a causeway at M. 4/8 of Katchapuram-Manchala road.	12th June 1952, <i>f.n.</i>
18 Forming a road from Molagavalli to Alur	11th June 1952, <i>f.n.</i> (closed on 9th March 1953, <i>a.n.</i>)
19 Constructing a bridge at M. 7/1 of Koiikuntla-Nossam road ..	5th January 1953, <i>f.n.</i>
20 Constructing a bridge at M. 27/2 and 29/4 of Repalle-Asphari road.	25th May 1952, <i>f.n.</i> (closed on 24th July 1952, again reopened on 19th December 1952, <i>f.n.</i>)
21 Post-war Road Development works, Giddalore	30th June 1952, <i>f.n.</i> (closed on 1st April 1953, <i>f.n.</i>)
22 Famine works, Cumbum	29th July 1952, <i>f.n.</i>
23 Famine works, Hakkireddipalli	15th October 1952, <i>f.n.</i>
24 Providing dustless surfacing for the Muddanur-Jammalamadugu road, M. 1/4 to 8/0.	26th May 1952, <i>a.n.</i>
25 Bridge works, Kalasapad	3rd December 1952, <i>f.n.</i>
26 Constructing a causeway at M. 7/8 of Kajipet-Kamala-puram road.	12th May 1952, <i>f.n.</i>
27 Constructing a causeway across the Pennar at M. 10/4 to 11/2 of the Muddanur-Jammalamadugu road.	13th May 1952, <i>f.n.</i>
28 Constructing a bridge at M. 7/3 of Perumancola-Gangayapalli road.	7th May 1952, <i>f.n.</i> (closed on 19th July 1952, <i>f.n.</i>)
29 Famine works, Cuddapah	4th April 1952, <i>f.n.</i> (closed on 5th March 1953, <i>f.n.</i>)
30 Famine works, Nandalur	3rd June 1952, <i>f.n.</i> (closed on 31st December 1952, <i>a.n.</i>)

Serial number and name of work for which section was formed.	Date of formation.
31 Famine works, Rayachoty	24th September 1952, <i>f.n.</i>
32 Famine works, Pulivendla	9th May 1952, <i>f.n.</i> (closed on 1st November 1952, <i>f.n.</i>) again reopened on 2nd January 1953, <i>f.n.</i>)
33 Famine works, Badvel	21st May 1952, <i>f.n.</i>
34 Famine works, Paramalli	6th April 1952, <i>f.n.</i> (closed on 14th October 1952, <i>a.n.</i>)
35 Famine works, Jammalamadugu	23rd May 1952.
36 Famine works, Special Section, Rapur-Chitvel road	9th May 1952, <i>a.n.</i>
37 Constructing a causeway across Papanigal—Miles 27/4-5, Rayachoty-Vempally road.	15th May 1952, <i>a.n.</i>
38 Famine works, Buckapatnam	22nd May 1952, <i>a.n.</i> (closed on 17th November 1952, <i>a.n.</i>)
39 Do.	22nd April 1952, <i>f.n.</i> (closed on 31st August 1952, <i>a.n.</i>)
40 Famine works, Palasamudram	10th April 1952, <i>f.n.</i> (closed on 26th August 1952, <i>a.n.</i>)
41 Famine works, Pamidi	27th May 1952, <i>f.n.</i> (closed on 17th November 1952, <i>a.n.</i>)
42 Great Northern Trunk Road works, Headquarters, Gudur ..	9th January 1953, <i>f.n.</i>
43 Famine works, Pamur	5th August 1952, <i>f.n.</i> (closed on 31st December 1952, <i>a.n.</i>)
44 Black-top works, on M.C. road in Sulurpet road	8th January 1953, <i>f.n.</i>
45 Great Northern Trunk road works, Nayudupet section ..	15th January 1953.
46 Famine works, Kanigiri	7th July 1952, <i>f.n.</i> (closed on 31st December 1952, <i>a.n.</i>)
47 Famine works, Darsi	9th May 1952, <i>f.n.</i> (closed on 9th January 1953, <i>f.n.</i>)
48 Famine work, Podili	26th May 1952, <i>f.n.</i> (closed on 31st December 1952, <i>a.n.</i>)
49 Concreting bridge across Cheyyar at mile 7/2 of Uttiramerur-Kanjeepuram road.	8th July 1952, <i>f.n.</i>
50 Improvements to Mahapalipuram to Madras road	20th November 1952, <i>f.n.</i>
51 Cement concreting miles 14/0 to 15/4 of Madras-Calicut road.	27th November 1952, <i>f.n.</i>
52 Cement concreting Cuddalore-Chittoor road, miles 122 to 126/3 in North Arcot Division.	7th May 1952, <i>f.n.</i>
53 Constructing a Board High School at Wandiwash	17th September 1952, <i>f.n.</i>
54 Bridge works at mile 49/8 to 53/4, Kurnool-Chittoor Trunk road.	16th February 1953, <i>f.n.</i>
55 Famine works, Chittoor	14th March 1952, <i>f.n.</i>
56 Famine works, Chandragiri	26th April 1952, <i>f.n.</i> (closed on 16th July 1952, <i>f.n.</i>)
57 Famine works, Chittoor East	19th July 1952, <i>f.n.</i>
58 Famine works, Palmaner	3rd April 1952, <i>f.n.</i>
59 Famine works, Puthur	9th April 1952, <i>f.n.</i>

Serial number and name of work for which section was formed.	Date of formation.
60 Famine works, Punganur	26th May 1952, <i>f.n.</i>
61 Famine works, Kaligiri	8th May 1952, <i>f.n.</i>
62 Cement concrete works, Chittoor-Cuddalore road, miles 0/1-6 in South Arcot Division.	18th August 1952, <i>f.n.</i>
63 Do. do.	30th August 1952, <i>f.n.</i>
64 Constructing a bridge over Gadilam river on V.L.A. road ..	11th February 1953, <i>a.n.</i>
65 Cement concrete works, Tanjore-Tiruchirappalli road, miles 26/0 to 28/5 to 33/6, Section I.	7th January 1952, <i>f.n.</i> (closed on 7th January 1953, <i>f.n.</i>)
66 Ramanathapuram Bridges Section	6th October 1952, <i>a.n.</i>
67 Cement concrete works, Tanjore-Tiruchirappalli road at miles 26/0 to 28/5 to 33/6, Section II.	14th April 1952, <i>f.n.</i>
68 Forming a road, Pannaikadu Mangala Gumbu	19th May 1952, <i>f.n.</i>
69 Dindigul-Palani road, miles 32/0 to 34/6, Madurai Division, H.W. Palni.	1st November 1952, <i>f.n.</i>
70 Cement concrete works, Tenkasi-Madurai road, miles 30/0 to 39/0 in Ramanathapuram Division.	13th September 1952, <i>f.n.</i>
71 Do. do.	1st September 1952, <i>a.n.</i>
72 Forming a road from Ramanathapuram to Mandapam road ..	5th November 1952, <i>f.n.</i>
73 Constructing a bridge at mile 19/3-4 of Great Western Trunk road in Chingleput Division.	24th April 1952, <i>f.n.</i> (closed on 31st December 1952, <i>a.n.</i>)
74 Construction of a bridge works over Palar river at 38/3-5 of the Madras-Tiruchirappalli-Dindigul road in Chingleput Division.	22nd April 1952, <i>f.n.</i>
75 Bridge subdivision in Chingleput Division	28th May 1952, <i>f.n.</i>
76 Construction of a Board High School building at Ammalaj and Board Middle School at Vettaikarampudur.	1st April 1952, <i>f.n.</i> (closed on 1st April 1953, <i>f.n.</i>)
77 Special staff for bridge works employment, Malabar North ..	15th January 1953, <i>f.n.</i>
78 Do. do.	29th January 1953, <i>f.n.</i>
79 Do. do.	2nd February 1953, <i>f.n.</i>
80 Cement concrete works, Tellicherry-Coorg road within Tellicherry Municipal limits, additional staff.	3rd November 1952, <i>f.n.</i>
81 Cement concrete works, Madras-Calicut road, miles 357/7 to 361/1.	21st May 1952, <i>a.n.</i>
82 Reconstructing a bridge at mile 0/6 of Vittal-Kabacca road.	1st October 1952, <i>f.n.</i>
83 Constructing a bridge at miles 49/3 and 52/8 of Mangalore-Agumbe Ghat road.	17th February 1953, <i>a.n.</i>
84 Reconstructing the Kalamady bridge in miles 0/4-5 of Mayor Udipi-Karkal road.	2nd December 1952, <i>f.n.</i>
85 Famine works, Omalur in Salem North Division	11th August 1952, <i>a.n.</i> (closed on 14th February 1953, <i>a.n.</i>)
86 Godavari Bridges subdivision, Revulapalam	10th September 1952, <i>a.n.</i> (closed on 14th February 1953, <i>a.n.</i>)
87 Godavari Bridge subdivision, Badampudi	18th February 1953, <i>a.n.</i>
88 Godavari Bridges Division office	11th July 1952, <i>f.n.</i>

CHAPTER III.

WORKS.

1. *General.*

There were 15,599 miles of Government roads and 24,957 miles of district board roads at the beginning of the year under review, i.e., on 1st April 1952. Besides the regular maintenance of these roads, 63 miles were cement concreted, 1,026 miles were black-topped, 750 miles metalled and 1,337 miles were formed under Government and district boards during the year 1952-53 and 18 miles of Canal Bank Roads were taken over under maintenance by the Department. Details of roads improved and newly formed and taken over are given in Annexures 6 and 7 respectively. The position of various types of roads as on 31st March 1953, is as indicated hereunder :—

	Government.		District Board.	
	MILES.		MILES.	
Cement concrete roads	352		..	
Black-top roads	2,650		92	
Metalled roads	12,378		12,867	
Unmetalled roads	270		12,879	
Total ..	15,650		25,838	

2. *Maintenance.*

The expenditure on maintenance of Government and District Board roads compared with five preceding years is given below :—

Year.	Government roads.		District Board roads.	
	RS.		RS.	
1947-48	2,62,03,053		91,54,213	
1948-49	3,50,15,182		1,15,83,288	
1949-50	3,37,91,000		1,29,85,735	
1950-51	3,87,73,748		1,33,63,439	
1951-52	4,16,35,671		1,41,82,154	
1952-53	4,51,29,912		1,45,39,379	

The division-wise details of expenditure on the maintenance of Government and district board roads during 1952-53 are furnished in Annexure 11 (i) and (ii).

Cost per mile.—The average cost of maintenance per mile without regard to type of road surface for the past years is furnished in Annexure 2 and a comparison of average maintenance cost during the past few years is rendered below :—

Year.	Average maintenance cost per year.	
	RS.	
1949-50	1,229	
1950-51	1,338	
1951-52	1,376	
1952-53	1,438	

The rise in cost of maintenance was mainly due to the increased tempo of maintenance work dictated by the needs of the more complex traffic with a large number and variety of vehicles, higher speeds and heavier loads. Hence the cost of maintenance cuts deeper into the highway budget year after year and the necessity for improved surfacing to meet the traffic requirements with less recurring cost was being felt to a great extent.

The division-wise classification of maintenance expenditure according to categories of roads is given in Annexure 13 and an abstract for the State worked out in Annexure 3. The average cost of maintenance per mile of various categories of roads without regard to the type of surface is given below :—

Government Roads.					RS.
National Highways					3,779
Provincial Highways					3,224
Major district roads					2,629
Other district roads					1,763
District Board Roads.					
Major district roads					922
Other district roads					634
Village roads					353

These figures give a broad indication of the relative standards of the different categories of roads. The large disparity between the standards of the Government roads and the district board roads is also an indication of the relative inadequacy of available funds on district board side.

Cost per ton-mile.—The cost of maintenance per ton-mile of traffic for a few roads taken at random is given below:—

Serial number and classification of road.	Name of road.	Reach.	Type of surface.	Maximum intensity per ton-hour.	Maintenance expenditure.		Cost of maintenance per ton-mile.
					Length in miles.	Cost.	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
MILES.							
GOVERNMENT ROADS.							
<i>Guntur (South).</i>							
1 N.H.	Madras-Calcutta road	169/0—175/0	....	1,417	6—0	14,553	1 11 6
2 P.H.	Ongole-Nandyal road	155/0—162/0	....	891	7—0	15,773	2 8 5
3 M.D.R.	Chirala-Narasaraopet road	0/6—6/0	....	1,608	5—2	23,216	2 13 1
4 Do.	Chirala-Narasaraopet-Gurzala road	43/0—49/0	....	631	6—0	13,251	3 8 0
<i>Guntur (North).</i>							
1 N.H.	Great Southern Trunk road	233/0—242/0	....	5,418	9—0	32,764	0 10 9
2 P.H.	Guntur-Pondugula road	7/0—11/0	....	819	4—0	23,781	7 4 1
3 M.D.R.	T. K. road	0/0—6/0	....	2,148	6—0	26,247	2 0 7
4 Do.	Tenali-Pedavadiapudi road	1/8—6/4	....	1,578	4—4	11,915	1 10 10
5 Do.	G. R. road	6/3—12/0	....	2,184	5—5	14,948	1 3 6
<i>Rajahmundry.</i>							
1 N.H.	Madras-Calcutta road	406/0—413/0	....	1,479	7—0	15,907	1 8 7
2 P.H.	Rajahmundry-Kakinada road	1st bit.	....	2,731	..	1,665	0 9 9
3 M.D.R.	Dowleswaram to Rajahmundry	0/0—2/4	....	1,157	2—4	15,276	5 4 6
1 P.H.	Rajahmundry-Kakinada road	30/0—38/0	B.T.	3,337	8—0	32,316	1 3 5
2 M.D.R.	Dwarapudi-Underu road	4/0—3/0	....	1,588	1—0	13,285	8 5 10
<i>Visakhapatnam.</i>							
1 N.H.	Great Southern Trunk road	431/0—439/0	C.C.	1,709	8—0	8,214	0 9 7
2 M.D.R.	Chintapalligudem road	33/0—40/0	....	29	7—0	2,850	13 13 4
3 Do.	Lamasingi-Lothugedda road	24/0—38/0	....	48	14—0	9,888	14 4 3
4 Do.	Vizianagaram-Pulakund road	0/0—1/6	B.T.	2,823	1—6	1,413	0 4 7
<i>Arcot (North).</i>							
1 N.H.	Madras-Chittoor-Bangalore road	62—71	....	4,522	9—0	28,768	0 11 4
2 Do.	Ranipet-Krishnagiri road	105—111	W.B.M.	1,349	6—0	11,687	1 7 0
3 P.H.	Cuddalore-Chittoor road	116/0—118/4	B.T.	3,905	1—6	10,991	1 9 9
4 Do.	Do.	100—106	W.B.M.	459	6—0	23,705	8 9 9
5 M.D.R.	Arkonam-Kancheepuram road	0/1—9/1	B.T.	2,445	9—0	36,746	1 10 3
6 Do.	Arkonam-Ocheri road	0/0—10/0	W.B.M.	1,636	10—0	13,536	0 13 3
7 O.D.R.	Arni-Kalambur-Ettivadi road	6/0—11/0	Do.	674	5—0	6,529	1 15 0
<i>Salem (South).</i>							
1 N.H.	Madras-Calicut road	261/0—266/1	W.B.M.	2,151	5—0	9,400	0 14 0
2 P.H.	Salem-Cuddalore road	5/4—17/2	Do.	3,464	11—6	24,700	0 9 8
3 M.D.R.	Tiruchengode-Arianur road	0/1—15/0	Do.	2,144	16—0	18,100	0 9 0
4 Do.	Sankari-Tiruchengode road	1/6—7/2	Do.	2,974	7—2	3,860	0 2 11
5 O.D.R.	Attur-Bye-pass road	0/0—1/0	Do.	1,346	1—0	2,750	2 0 8
<i>Ramnathapuram.</i>							
1 N.H.	Benares-Cape Comorin road	324/7—356/1	....	2,264	31—2	75,759	1 1 3
2 Do.	Madurai-Ramanathapuram road	6/5—70/5	....	950	64—0	2,25,055	3 11 2
3 P.H.	Manamadurai-Tirupattur road	10/1—39/5	....	732	39—4	1,48,295	5 2 0
4 Do.	Tenkesi-Madurai road	33/1—64/1	....	2,500	31—0	74,313	0 15 4
5 M.D.R.	Virudhunagar-Aruppukottai road	0/1—10/4	....	2,683	10—4	45,003	1 9 6
6 Do.	Sankarankoil-Rajapalayam road	46/7—53/3	....	1,050	7—4	13,654	1 10 9
7 Do.	Elayangudi-Emaneswaram road	20/0—25/0	....	980	5—0	3,038	0 9 10
<i>Arcot (South).</i>							
1 N.H.	Madras-Tiruchirappalli-Dindigul road	64/0—74/4	B.T.	998	10—4	20,000	1 14 6
2 P.H.	Cuddalore-Chittoor road	6/4—10/0	C.C.	4,695	3—4	4,500	0 4 5
3 Do.	Cuddalore-Vridhachalam-Salem road	42/0—52/0	W.B.M.	331	10—0	12,000	3 10 0
4 Do.	Do.	62/0—73/0	Gravelled	151	11—0	2,000	1 3 5
<i>The Nilgiris.</i>							
1 P.H.	Ooty-Mettupalayam road	0/4—11/0	B.T.	3,700	10—4	14,261	0 5 10
2 Do.	Do.	11/0—22/0	Do.	1,957	11—0	23,887	1 1 9
3 Do.	Gudalur Suktans Battery road	22/0—31/5	Do.	5,011	9—5	19,242	0 6 5
4 M.D.R.	Do.	10/0—17/1	W.B.M.	292	7—1	20,376	9 1 6
<i>Coimbatore-Erode.</i>							
1 N.H.	Salem-Cochin road	266/0—273/0	W.B.M.	2,984	7—0	21,916	1 0 10
2 P.H.	Tiruchirappalli-Coimbatore road	69—75	Do.	931	6—0	5,496	1 0 0
3 M.D.R.	Erode-Karur road	2/0—12/0	Do.	673	10—0	26,465	3 15 0
4 Do.	Gobichettipalayam-Dharapuram road	45/0—52/5	Do.	550	7—5	7,496	1 12 7

Serial number and classification of road.	Name of road.	Reach.	Type of surface.	Maximum intensity (in tons per 24 hours).	Maintenance expenditure.		RS. A. P.
					Length in miles.	Cost.	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
		MILES.				RS.	
DISTRICT BOARD ROADS.							
<i>Guntur.</i>							
1 M.D.R.	Kuchipudi-Govada road	4/7-12/7	....	1,209	8-0	3,357	0 5 6
2 Do.	Vellatur-Eapatla road	24/3-27/4	....	1,263	3-1	1,001	0 4 1
3 Do.	Amaravathi-Lingapuram road	0/0-5/0	....	601	5-0	1,062	0 5 8
<i>Coimbatore (North).</i>							
1 M.D.R.	Dharapuram-Pollachi road	0/0-12/0	W.B.M.	401	12-0	8,825	1 14 4
2 ..	Perundurai-Kunnathur road	0/0-7/0	Do.	719	7-0	11,606	2 4 10
<i>Arcot (South).</i>							
1 ..	Mortandi-Tindivanam road	15/0-24/5	W.B.M.	304	9-5	6,700	2 4 8
2 ..	Kallakurichi-Kullanchavadi Cross road	0/0-3/7	Laterite	576	3-7	2,700	1 3 4
3 ..	Solathuru-Srimushnam road	0/0-8/0	Gravelled	666	8-0	8,000	1 8 0

Black-topping in built-up areas.—During the year, the policy of black-topping built-up areas was pursued. A scheme towards this end was launched in several divisions and roads radiating from town limits and subjected to heavy traffic were provided with improved surfacing with pre-coated chips out of the annual maintenance allotments.

National Highways.—During the year, a final grant of Rs. 71.36 lakhs was sanctioned by the Union Government for the maintenance of National Highways in the State inclusive of the allotment of Rs. 1.36 lakhs for special and unavoidable repairs and flood damages. The above amount include agency charges of 10 per cent. Though the expenditure had to be restricted to the allotment available for utilization, the actual expenditure exceeded the limit as the condition of the National Highways in certain districts warranted much attention and the excess expenditure, viz., Rs. 4.30 lakhs was borne by the State Government out of the actual expenditure of Rs. 75,66,082 incurred during the year.

3. Capital Works.

The bulk of all works of improvements to roads such as providing improved surfacing to suit traffic needs, forming new roads, and constructing or reconstructing bridges and culverts was being done under the National Plan. The rest of the works was executed under Central Road Fund and Grants-in-aid to local bodies under "Excluding Post-War Reconstruction". A brief summary of the schemes is rendered below :—

(a) The Five-Year Plan.

The Five-Year Plan under National Plan is only a continuation of the Post-War Road Development Programme which was under implementation from 1st April 1947.

The Planning Commission constituted by the Government of India, after studying the development schemes of the Central and State Governments, suggested the formulation of the Five-year Plan in two stages, the first two years beginning with 1951-52 and the second of 3 years in continuation thereof; the plans of development in respect of State Governments being drawn up suited to their own conditions. After a discussion with the Planning Commission, the Madras State had a sum of Rs. 5 crores allotted under "Roads" for its Five-Year Plan. Accordingly, a scheme for five years was prepared with the following provisions :—

	RS.
State Roads	245.45 lakhs.
Other Roads	130.00 "
Tools and Plant	124.55 "
Total ..	500.00 "

These provisions were intended to meet the expenditure on the works in progress in the Five-Year Programme of Post-War Road Development and also the works which would be selected for execution subsequently from 1951-52 to 1955-56.

During the year under report, an expenditure of Rs. 75.42 lakhs was incurred on State Roads and Rs. 57.69 lakhs on other roads against the targets of Rs. 70 lakhs, and Rs. 50 lakhs, respectively. An expenditure of

Rs. 29.21 lakhs was incurred under Tools and Plant against the target of Rs. 32.00 lakhs. In all, therefore, an amount of Rs. 162.32 lakhs was expended during the year 1952-53 against the total targeted programme of Rs. 152 lakhs.

The provision under other roads made in the Five-year Plan was for the assistance that the State Government would give to the district boards as grant-in-aid under Post-War Road Development.

During the year, Government sanctioned full grants to the extent of value of work done to the District Boards, Visakhapatnam, Anantapur, North Arcot, Bellary, Chingleput, Chittoor, Cuddapah, East Godavari, South Kanara, Kurnool, Malabar, the Nilgiris, Ramanathapuram, Salem and Tiruchirapalli, in view of their slender financial position and half-grants to other district boards, viz., Coimbatore, West Godavari, Guntur, Krishna, Nellore, Madurai, Srikakulam, Tirunelveli and Tanjore, for the execution of district board portion of the above plan.

As in the case of State Highways and other roads, the Planning Commission had made a separate provision of Rs. 25 crores for National Highways all over India, the details of which were being worked out by the Government of India. However, an expenditure of Rs. 54.61 lakhs on the works already in progress and sanctioned subsequently by the Government of India, was incurred in 1952-53.

(b) Central Road Fund Schemes.

The Central Road Fund was constituted with the receipts under petrol tax and the proceeds thereof are allocated to the States for utilization on approved Road Development Schemes.

During the year, this State had an allocation of Rs. 56 lakhs which brought the total allotment under this scheme to Rs. 413.99 lakhs. The State Government, besides financing the approved schemes on their roads, were sanctioning full grants to district boards also for such schemes where the district boards were not normally able to find funds for executing them.

A statement showing the expenditure incurred during the past five years is given below :—

Year.	Expenditure incurred on		Total.
	Government works.	District Board works.	
	RS.	RS.	RS.
1948-49	2,66,247	1,26,351	3,92,628
1949-50	13,28,516	1,75,659	15,04,176
1950-51	16,65,665	5,88,866	22,54,531
1951-52	16,84,817	9,70,782	26,55,599
1952-53	49,96,227	15,08,853	65,05,080

(c) Grants-in-aid to local bodies under "Excluding Post-war Reconstruction".

Grants are allocated to district boards by the State Government under "Excluding Post-War Reconstruction Grants-in-aid". Small works which do not come under the scope of Post-War Road Development and are considered essential to local needs, are given aid by the Government for their execution under the following categories :—

- (1) Village communication other than Post-War Reconstruction,
- (2) roads and bridges other than village communications,
- (3) improved surfacing of roads, and
- (4) flood damage to roads.

Government have also been sanctioning grants for unemployment relief works necessitated by the adverse seasonal conditions, famine, etc., on the recommendations of the District Collector concerned.

Grants thus sanctioned by Government and expenditure incurred thereon are given in the statement below in respect of the sub-heads mentioned above :—

Sub-head.	Accounts, 1951-52. RS.	Revised estimate, 1952-53. RS.
(1) Village communications other than Post-war Reconstruction.	4,77,523	5,00,000
(2) Roads and bridges other than village communications.	16,98,170	52,900
(3) Improved surfacing of roads	7,27,127	6,80,000
(4) Flood damage to road	50,000	..
(5) Special grant for road works to relieve unemployment due to failure of monsoon.	..	35,00,000

Capital Expenditure.

The total expenditure on all capital works during the year and the preceding years is furnished below :—

Year.	Expenditure on Government roads. RS.	Expenditure on District Board roads. RS.
1946-47	45,66,518	14,58,197
1947-48	33,49,405	60,22,963
1948-49	48,33,513	88,56,910
1949-50	1,45,34,000	1,00,97,570
1950-51	1,63,21,126	1,12,85,991
1951-52	1,56,13,516	1,18,63,708
1952-53	1,87,25,611	1,49,31,492

Division-wise particulars of expenditure are given in Annexure 11 (i) and (ii) and the expenditure classified under the different categories of roads in respect of each division is shown in Annexure 13.

Works completed.

A summary of new constructions and improvements completed during the year is given below :—

(a) Government Works.

Upgrading.—Thirty-five works at a total cost of Rs. 26,62,214 were completed during the year by which 63 miles were cement concreted and 961 miles were black topped.

New formations.—Two works costing Rs. 2,83,343 was completed during the year.

Bridges and culverts.—Four major bridge works costing Rs. 16,12,831 and seventy-nine minor bridges, culverts and causeways to a total cost of Rs. 11,04,685 were completed during the year. The details are given in Annexure 22 (ii) and 23 (ii), respectively.

Improvements and special repairs.—Sixty-seven works costing Rs. 39,91,448 were completed during the year.

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(b) District Board Works.

Upgrading.—Six works at a total cost of Rs. 44,227 were completed.

Bridges and culverts.—Forty-eight minor bridges and culverts to a total cost of Rs. 6,29,884 were completed during the year.

New formations.—One hundred and sixty-one works to a total cost of Rs. 15,73,037 were completed involving the formation of 1,306 miles of new roads.

Improvements and special repairs.—Fifty-five works costing Rs. 15,00,643 were completed.

Works in Progress.

An abstract of the number and estimated cost of works that were under execution by the Department during the year is furnished below :—

(a) Government Roads.

Nature of work.	Number.	Cost. RS.
Works costing over Rupees one lakh each—		
Cement concrete and black top works	38	1,97,22,500
Bridges and culverts	40	2,97,36,000
New formations	7	36,39,000
Improvements and special repairs	13	45,33,300
Works costing less than Rupees one lakh each—		
Cement concrete and black top	8	7,92,400
Bridges and culverts	99	27,24,860
New formations	6	2,42,500
Improvements and special repairs	35	6,57,790

(b) District Board Roads.

Works costing over Rupees One Lakh each—		
Cement concrete and black top	..	..
Bridges and culverts	8	16,51,000
New formations	18	32,55,700
Improvements and special repairs	22	55,46,000
Works costing less than Rupees One Lakh each—		
Cement concrete and black top	17	3,30,000
Bridges and culverts	161	43,09,080
New formations	685	1,41,55,410
Improvements and special repairs	266	67,55,320

A detailed review of works costing over Rupees one lakh each is given in Annexure 22 (i). Division-wise figures of works costing less than one lakh of rupees each are given in Annexure 23 (i).

A BRIEF SUMMARY OF THE IMPORTANT WORKS UNDER EXECUTION.

A large number of works such as construction of Major Bridges, Improvements to Roads, etc., has been taken up on all categories of Roads since the commencement of the Post-War Road Development Programme in 1947 and National plan in 1951; of these, certain works were under execution during the year, some were completed, and certain new works were also

taken up during the year. A brief survey covering the progress of a few important works is rendered below :—

(a) Bridge works.

Constructing a bridge across Upputeru at Someswaram on Gudivada-Bhimavaram Road—West Godavari Division.—This is a Post-war Road Development work sanctioned at an estimated cost of Rs. 3,35,000. On completion, the bridge would serve as the nearest link between Krishna and West Godavari District. The work was in full swing.

Constructing a bridge across Champavathi river at mile 570/3-6 of Madras-Calcutta Road.—The bridge work was sanctioned under Post-War Road Development Programme at an estimate cost of Rs. 13,20,000 and was in progress. All piers except Numbers 16 and 17 were completed and deck slab was laid up to pier No. 4 and between piers 18, 4 and 19. Sinking of wells under piers 16 and 19 was in progress.

Reconstructing the collapsed bridge near Terravaram over Eluru river.—The bridge was damaged by cyclone in the year 1949. Originally it was proposed to reconstruct the washed off portion of the bridge at an estimate cost of Rs. 1,20,000 but, as the foundations were not found suitable, the entire reconstruction of the bridge was considered necessary and it was estimated to cost Rs. 7,10,000. The work was in progress.

Constructing a bridge at mile 38/5 of great Southern Trunk Road across Palar river on National Highway 45—Estimate Rs. 32,00,000. Chingleput Division.—The work was in progress. Well sinking for 23 piers was done and two abutments and Piers were completed. Prestressing for 9 Beams was also completed.

Constructing a bridge across Pennar near Nellore on National Highway 5—Estimate Rs. 33,80,000—Pennar bridge Division, Nellore.—The work was in progress. Two abutments, 27 piers out of 32 and 9 spans out of 33 were completed during the year.

Constructing a bridge across the Coleroon river at Anaikaran Chatram—Estimate Rs. 28,50,000—Coleroon bridge division, Sirkali.—This is an important bridge connecting the two Districts of Tanjore and South Arcot. Construction of north abutment and piers 1 to 10 up to 16 feet were completed during the year. The design of the bridge originally proposed to be of reinforced concrete bow string girder type with 16 spans of 150 feet each was changed to Prestressed concrete construction.

Constructing a bridge at mile 6/6 of Anamalai-Pulankinar Road—Coimbatore Division.—This is an Road Development Fund Work. The major portion of the work was almost completed during the year 1952-53 and the formation of approaches were pending acquisition of lands.

Constructing the bridge across the River Noyyal at mile 331/1 of Madras-Calicut Road—Estimate Rs. 2,00,000—Coimbatore Division.—The work lies on National Highways 47 and the work was under progress. During open excavation, the expected soil was not met with at the designed depth. The bridge is of R.C.C. rigid frame type requiring an unyielding foundation and so the wells in foundation were taken to soft rock and plugged. The well cap and hinge footings were laid over the wells. During the year, both legs of the rigid frames were brought to bed level and the extension of the wing walls constructed up to 101.50 the top level being 106.90.

Providing underpents to road dam at mile 2/8 of Coimbatore-Sathy Road—Coimbatore Division.—The work was in progress. The body walls and abutments were nearing completion and R.C. deck and C.C. wearing coat were to be constructed. The progress was held up due to interruption caused by floods.

Constructing a bridge across Bharathapuzha at mile. 18/2 of Angadipuram-Kuttiapuram Road—Revised Estimate, Rs. 18,50,080.—Bharathapuzha Division.—Major portion of the piers, the right abutment and concreting of bow string girder spans were completed during the year. The progress was hampered for want of bearings.

Constructing a bridge across Payaswami River at mile 62/8 of Kalladka Kanhangad Road—Estimate Rs. 10,00,000.—Bharathapuzha Division.—The work in foundations, superstructure and of the T-Beam and bow string girders were about completed during the year. Delay in land acquisition for the approaches and the supply of roller bearings were holding up the progress.

(b) *Cement concreting and black-topping works.*

Cement concreting Guntur—Pondugula road—Miles 0/0 to 7/0—Estimate Rs. 7,30,000—Guntur Division.—This is part of the stretch of National Highway 5 connecting the important towns and trading centres Guntur and Vijayawada noted for cement factories, Match factories and Textiles, etc. The work was almost completed.

Conphalt surfacing Guntur-Amaravathy road—Miles 0/0 to 1/0—Post-war Road Development—Estimate Rs. 1,07,000.—The road runs through heart of Guntur town and conphalt surfacing was found necessary both in the interest of heavy traffic and to mitigate the dust nuisance. This is a contribution work of the Guntur Municipality.

Cement concreting miles 28/0 to 29/0 of Masulipatnam Eluru road.—The road between Gudivada and Perikedu is often subject to deterioration due to flood havoc of Budameru river. In addition there is very heavy vehicular traffic on the road during the harvesting season. In view of this, cement concrete work was taken up in the reach and it was in progress.

Cement concreting Rajahmundry-Kakinada road—Miles 0/0 to 10/3—Estimate Rs. 10,00,000.—This is an important road connecting the two towns Rajahmundry and Kakinada where there is very heavy traffic and cement concrete was considered necessary.

In addition, the following major cement concrete schemes were also in progress during the year :—

(1) Cement concreting road from Salem junction to Salem Bye-pass road—Estimate Rs. 1,65,000.

(2) Cement concreting Pollachi-Meenakarai road—Estimate Rs. 2,75,000.

(3) Cement concreting Madras-Calicut road—Miles 357/7 to 361—Estimate Rs. 2,75,000.

(4) Cement concreting Tellicherry-Coorg road—Miles 0/1 to 1/7—Estimate Rs. 2,30,000.

(5) Providing Asphaltic concrete surfacing to Calicut-Cannanore road—Miles 41/2 to 43/4 in Bazaar centre—Estimate Rs. 1,45,000.

(c) *New formations.*

Besides the works of bridging and other improvements to Roads, formation of new roads was also in progress. A majority of these roads were under the grants-in-aid programme of the District Boards and consisted of mainly village roads and other District Roads.

The formation of a road from Ramanathapuram to Mandapam for a length of 21 miles 4 furlong under National Highway Scheme was completed during the year. This road leads to the pilgrim centre at Rameswaram and is also of strategic importance.

Forming a road from Perugonalu to Konijerlu via Vutukur was in progress.—The work was sanctioned as a security measure and was in progress. This is a full grant work and formation to a length of 4 miles was completed.

Forming and metalling the road from Polukonda to Putlacheruvu.—This is an important Major District Road running through the fertile delta area. The formation of the road would generally improve the transport facilities of paddy to the marketing centre.

Forming a road from Nandigama to Pokkanur.—This road connects Hyderabad State with Krishna District. On completion, this would be of great help in improving Inter-State trade and commerce.

Photographs of a few works in progress are shown in Figures III (a) to III (p).



FIG. III (A).—BRIDGE OVER THE GURPUR RIVER NEAR KULUR AT M. 4/7-8 OF MANGALORE-BAINDUR ROAD.



FIG. III (B).—BRIDGE OVER THE GURPUR RIVER NEAR KULUR AT M. 4/7-8 OF MANGALORE-BAINDUR ROAD.

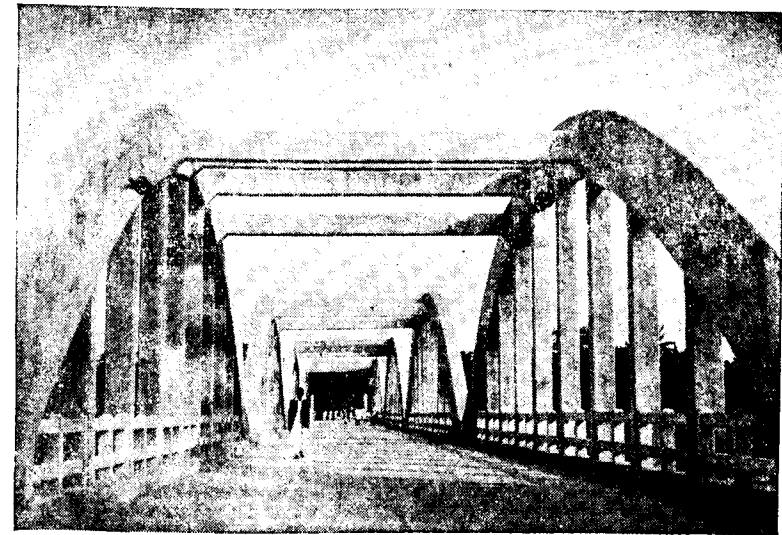


FIG. III (C).—BRIDGE OVER THE GURPUR RIVER NEAR KULUR AT M. 4/7-8 OF MANGALORE-BAINDUR ROAD.



FIG. III (D).—NOYYAL BRIDGE AT M. 331/1 OF MADRAS-CALICUT ROAD. FIGURE SHOWS THE HINGE RIGID FRAME AND DETAILS OF REINFORCEMENTS OF THE HINGE FOOTING.



FIG. III (E).—NOYYAL BRIDGE. FIGURE SHOWS THE FRAMEWORK FOR THE L.E. 8 WITH R.S. JOISTS WHICH SERVED AS SCAFFOLDINGS.

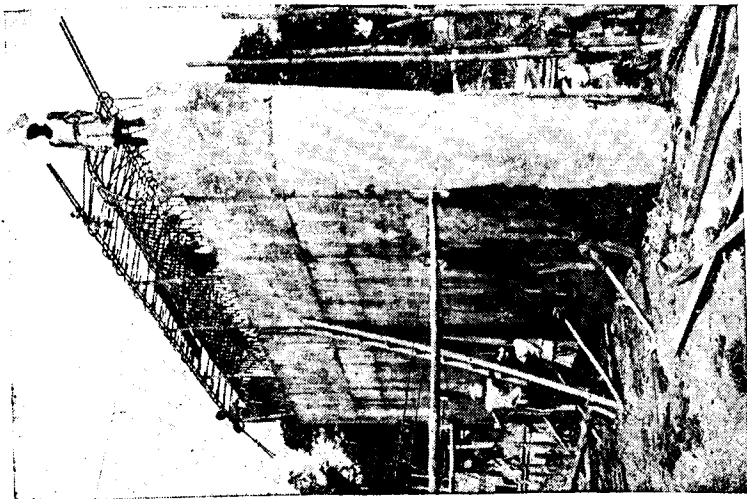


FIG. III (F).—NOYYAL BRIDGE. CLOSER VIEW OF THE COMPLETED LEGS.

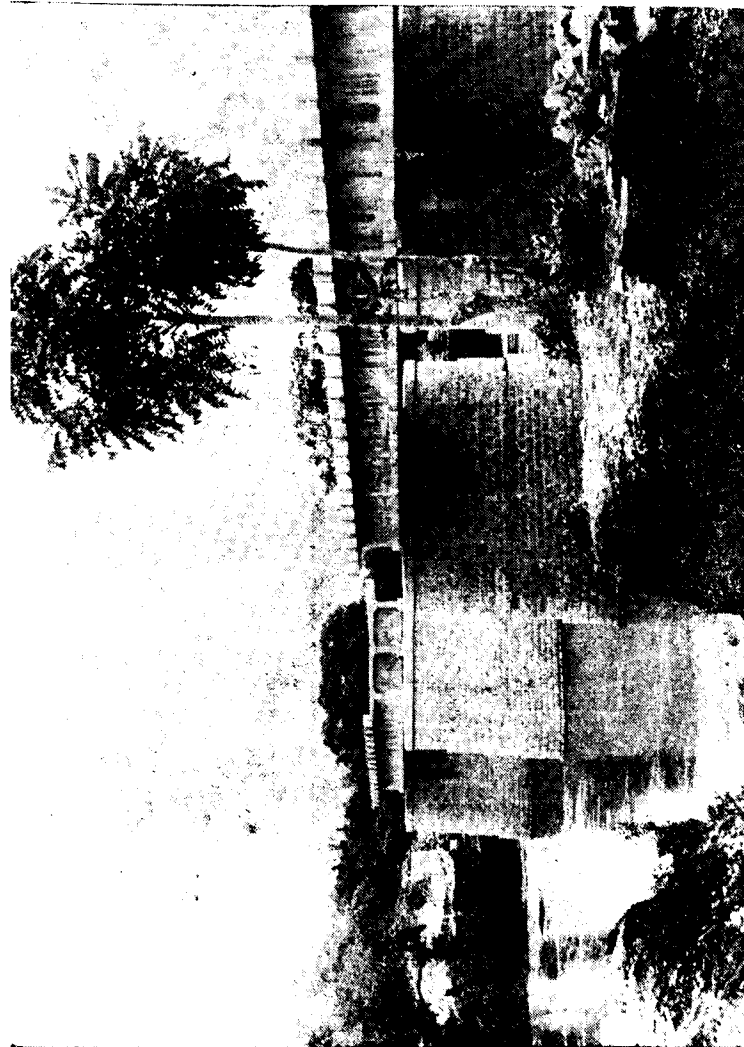


FIG. III (G).—BRIDGE ACROSS SWARNANADHI AT PUTTIGE AT M. 13 OF MALPE-HEBRI-AGUNBE-SHINOCA ROAD. A VIEW OF THE HALF-COMPLETED BRIDGE.

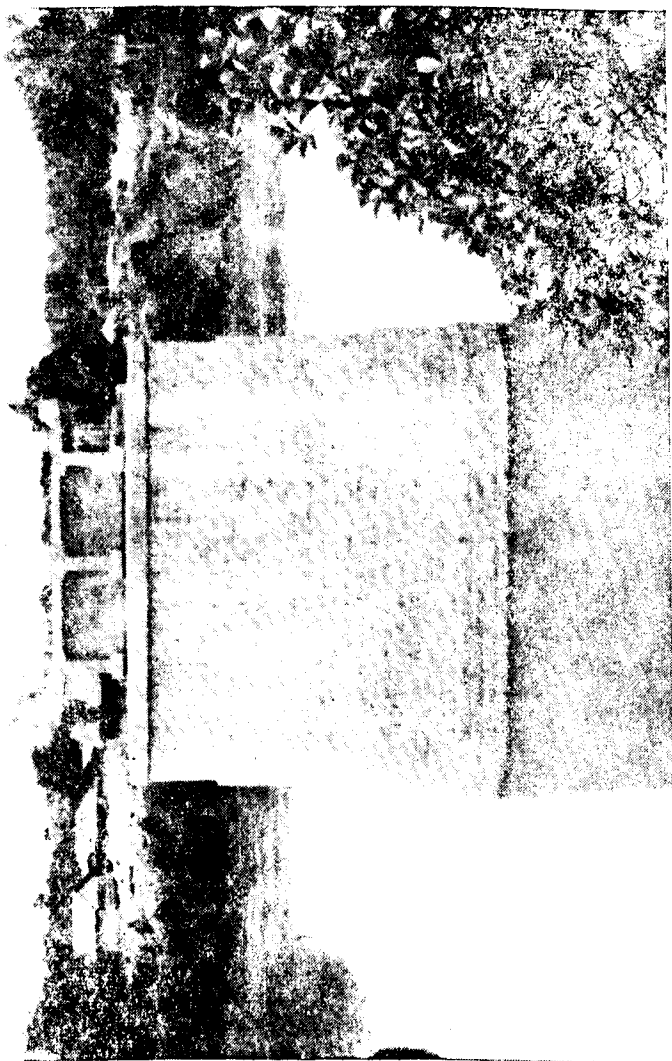


FIG. III (H).—BRIDGE ACROSS SWARNANADHI AT PUTTIGE AT M. 13 OF MALPE-HEBRI-AGUMBE-SHIMOGA ROAD.
A CROSS-SECTIONAL VIEW OF THE "T" BEAMS AND DECK OF THE 4TH SPAN.

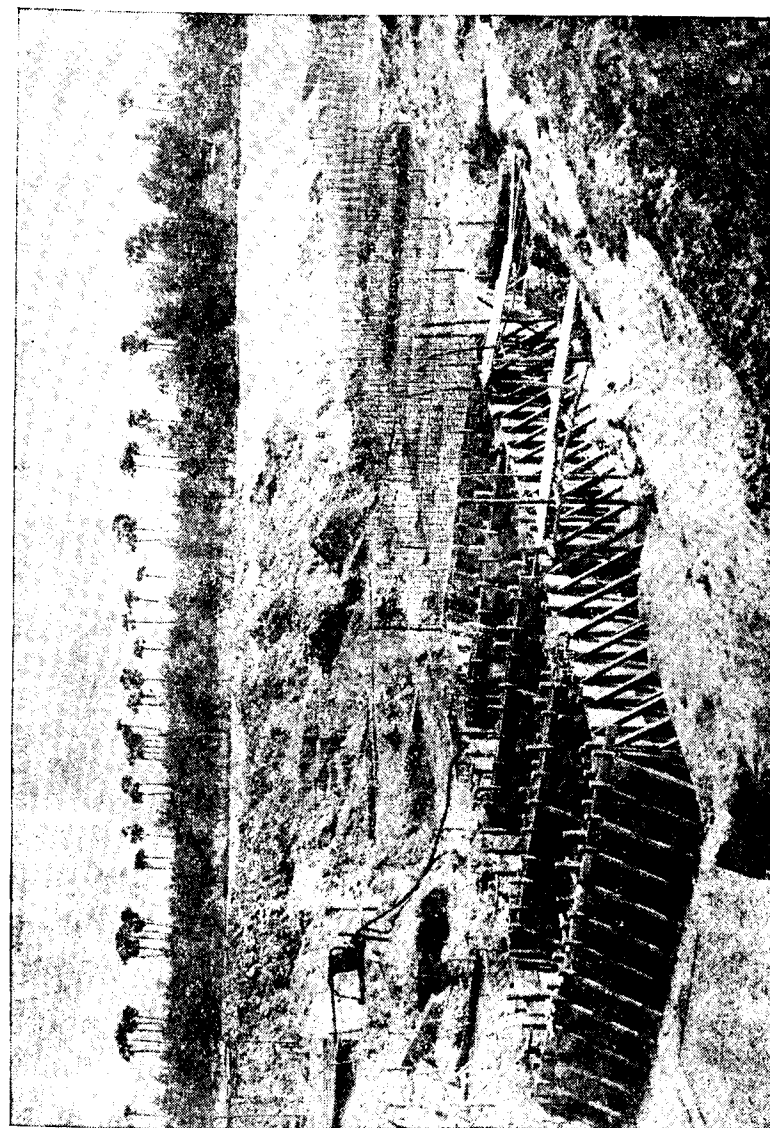


FIG. III (I).—CONSTRUCTING A SUBMERSIBLE BRIDGE ACROSS AGNIAR AT M. 6/45 OF PATTUKKOTTAI-
ARANTANGI ROAD.

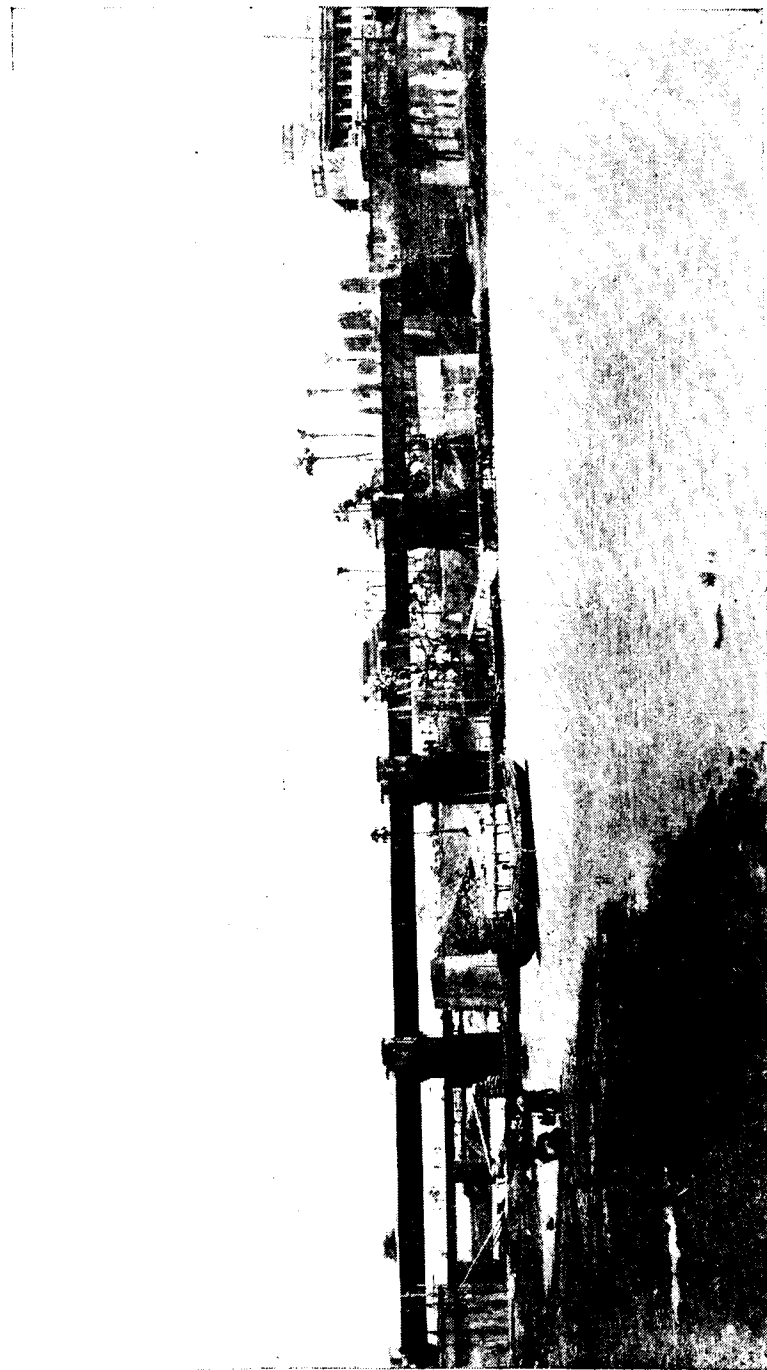


FIG. III (J).—CONSTRUCTING A BRIDGE AT BHEEMAVARAM IN M. 53/1 OF PAMARRU-PALACOLE ROAD.

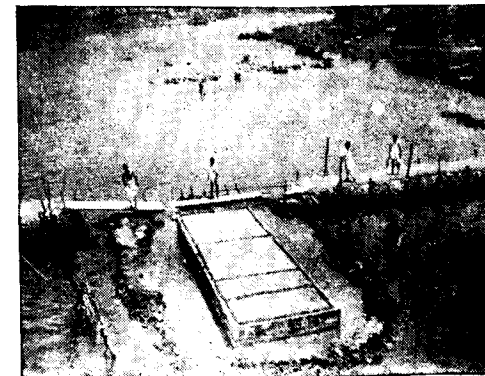


FIG. III (K).—CONSTRUCTING A BRIDGE AT BHEEMAVARAM IN M. 53/1 OF PAMARRU-PALACOLE ROAD.

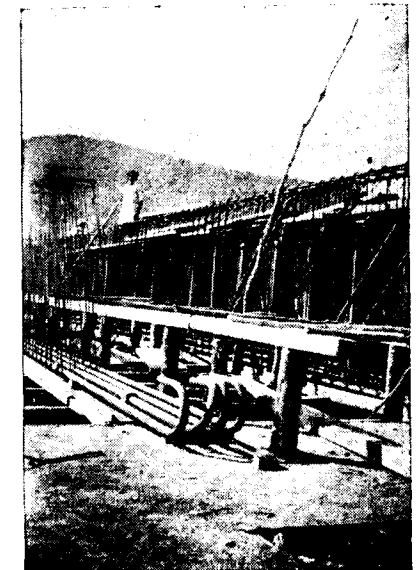


FIG. III (L).—KANKIDI GEDDA BRIDGE ON VISAKHAPATNAM-ANANTAGIRI-ARAKU ROAD.



FIG. III (M).
CONSTRUCTING A BRIDGE ACROSS THE RIVER PENNAE NEAR NELLORE ON MADRAS-CALCUTTA ROAD—N.H. 5.



FIG. III (N).

BRIDGE ACROSS UPPUTERU AT AKKIVIDU ON GUDIVADA-BHEEMAVARAM ROAD.

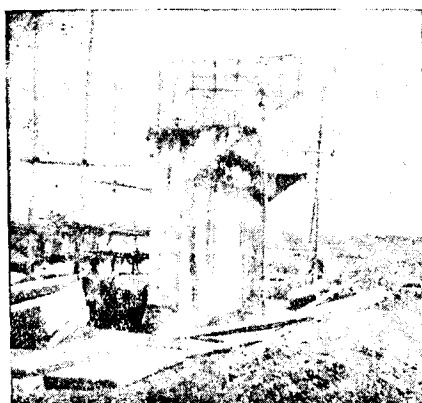


FIG. III (O).—LEFT ABUTMENT PIER AFTER REMOVAL OF SHUTTERING.



FIG. III (P).—CANT RECTIFICATION BY WATER JET PIER 'A' WHICH ANCHORED ON THE GROUND.

CHAPTER IV.

RURAL DEVELOPMENT WORKS.

The aim of this plan is "to organize the villagers for a happier, more prosperous and fuller life in which the individual villager will have the opportunity to develop both as an individual and as a unit of a well-integrated society".

2. Rural Development has a revitalizing effect on villagers by bringing them into new activity. Works under this scheme are generally carried out where the villagers bring in their contribution either in cash or in kind or in the form of labour. The execution of works is also entrusted to the villagers and Grama Seva Sanghams in preference to professional contractors. The untapped energy of the villagers is thus canalized for developing the country side.

3. For improvements to village communications, Government had sanctioned a sum of Rs. 50,000 for each of the 34 firkas originally selected and Rs. 25,000 in respect of each of the 50 new firkas. A discretionary grant of Rs. 10,000 per annum was also placed at the disposal of the Collector in respect of each of the 34 Firkas or centres for expenditure on minor and urgent items of work. A sum of Rs. 8,000 was placed at the disposal of the Collectors in respect of each of the 50 additional Firkas.

In addition to the 84 Firkas and centres 31 additional Firkas were selected during 1952-53 for launching intensive Rural Reconstruction Scheme. (Vide lists appended.)

4. The Rural Welfare Programme provides a democratic basis for development of Rural Areas. The villagers themselves have a share in framing the proposals for their own improvements. The Rural Welfare Board (consisting of officials and non-officials) draws up the comprehensive plan. It selects work in consultation with the District Collectors. Works which are not specifically included in the Recast Five-Year Programme of Post-War Road Development are taken up under the Rural Welfare Programme. Such works as come under the first Five-Year Programme of Post-War Road Development are to be taken up under Post-War Road Development with the highest priority if they are within the selected firkas and centres.

During 1952-53, 230 miles of roads were formed. One hundred and eighty miles of roads were improved. About 163 miles of road were under construction. In addition 52 miles of village rasthas, cart-tracks, footpaths, etc., were formed. One hundred and fifty-one culverts and 136 road drains were constructed during the period.

The total expenditure incurred on the village communications under this scheme during the year 1952-53 was Rs. 5,63,265.

(A) List of twenty-seven firkas originally selected for Intensive Rural Reconstruction work.

District.	Name of firka.	District.	Name of firka.
1 Anantapur ..	Hindupur.	11 West Godavari	Polavaram.
2 North Arcot ..	Kalasapakkam.	(Agency).	
3 South Arcot ..	Kadambuliur.	12 Guntur ..	Ongole.
4 Bellary ..	Alur.	13 South Kanara ..	Kumbha.
5 Chingleput ..	Tiruvallur.	14 Krishna ..	Vijayavada since transferred to Tiruvur.
6 Chittoor ..	Nagari.	15 Kurnool ..	Kurnool.
7 Coimbatore ..	Palladam.	16 Madurai ..	Tirumangalam.
8 Cuddapah ..	Proddatur.	17 Malabar ..	Tallicherry.
9 East Godavari ..	Rajahmundry.		
10 West Godavari ..	Dondur.		

District.	Name of centre.	District.	Name of centre.
18 Nellore	Kanapur.	24 Tiruchirappalli ..	Musiri.
19 The Nilgiris ..	Kundha.	25 Srikakulam	Gara.
20 Ramanathapuram.	Malli.	26 Visakhapatnam ..	Pendurthi.
21 Salem	Virapandy.	27 Visakhapatnam ..	Madugula.
22 Tanjore	Saliyamangalam.		(Agency).
23 Tirunelveli ..	Sheramahadevi		
	since transferred		
	to Pazhamcottai.		

(B) List of seven Khadi centres selected for Intensive Rural Reconstruction work.

Name of district.	Name of firka.	Name of district.	Name of firka.
1 Coimbatore ..	1 Avanashi	4 Visakhapatnam..	5 Kotauratla.
	2 Vellakoi.	5 Malabar	6 Payyanur-cum-Nileshwar.
2 Kurnool	3 Yerragondapalem.	6 Salem	7 Chinnasalem.
3 Guntur	4 Guruvareddipalem		

(C) List of fifty additional firkas selected for Intensive Rural Reconstruction work.

Name of district.	Name of firka.	Name of district.	Name of firka.
1 Anantapur ..	1 Madakasira.	14 Kurnool	27 Nandikotkur.
	2 Paragi.		28 Tripurantakam.
2 North Arcot ..	3 Thuringipuram.	15 Madurai	29 Kallupatti.
	4 Kadaladi.		30 Pannikundu area.
3 South Arcot ..	5 Thirunavalur.	16 Malabar	31 Mattanur.
	6 Vadakkanandal area.		32 Kuthuparamba.
4 Bellary	7 Holagundi.	17 Nellore	33 Sarvepalli.
	8 Chippagiri.		34 Podalakur.
5 Chingleput ..	9 Mappedu.	18 The Nilgiris ..	35 Gudalur.
	10 Pandur.		36 Pandalur.
6 Chittoor	11 Arungolam area.	19 Ramanathapuram	37 Nathampatti.
	12 Narayanavaram area.	20 Salem	38 Edirkottai.
7 Coimbatore ..	13 Tiruppur.		39 Veeraganur.
	14 Kangayam.	21 Srikakulam ..	40 Talaiwasal area.
8 Cuddapah ..	15 Chapad.		41 Srikakulam.
	16 Arakatavemula.	22 Tanjore	42 Amudalavalasa.
9 East Godavari ..	17 Raghudevapuram.		43 Vedaranyam.
	18 Burugupudi.	23 Tirunelveli ..	44 Talainayar.
10 West Godavari ..	19 Dharmajigudem.		45 Niladanallur.
	20 Kamavarapukota.		46 Part of Tiruvengadam and part of Sankarankoil.
11 Guntur	21 Ammanabrolo.	24 Tiruchirappalli ..	47 Vengalam and Valikhandapuram.
	22 Doddavaram area.		48 Tathienagarpet and part of Paramathi.
12 South Kanara ..	23 Mulki.	25 Visakhapatnam..	49 Sabbavaram.
	24 Manjeshwar.		50 Jallur.
13 Krishna	25 Nuzvid.		
	26 Vissanapeta.		

List of additional firkas selected during 1952-53 for Rural Reconstruction Scheme.

Name of district.	Name of firka.	Name of district.	Name of firka.
1 Anantapur ..	1 Roddam.	14 Madurai	14 Pannikundu area.
2 North Arcot ..	2 Kilpennathur.	15 Malabar	15 Madayi area.
3 South Arcot ..	3 Kurinjipadi and Kullanchavadi.	16 Nellore	16 Chithalore.
		17 The Nilgiris ..	17 Thuneri.
4 Bellary	4 Peddahothur.	18 Ramanathapuram.	18 Kalayarkurichi.
5 Chingleput ..	5 Odappai.		19 Gangavalli area.
6 Chittoor	6 Pallipat.	19 Salem	20 Nagrikatakam.
7 Cuddapah ..	7 Talamanchipatnam.	20 Srikakulam ..	21 Alathambadi.
8 East Godavari ..	8 Rajahnagaram.	21 Tanjore	22 Pulivalam.
9 West Godavari ..	9 Jangareddigudem.	22 Tiruchirappalli..	23 Nilidanallur.
10 Guntur	10 Duddukur.	23 Tirunelveli ..	24 Nakkapalli.
11 South Kanara ..	11 Sullia.	24 Visakhapatnam.	
12 Krishna	12 Musumur.		
13 Kurnool	13 Dornal and six villages of Dupad.		

CHAPTER V.

INSPECTIONS.

(a) Inspection of Division offices by the Superintending Engineers (Highways).

As per the standing orders, the Superintending Engineers have been inspecting the division offices once in a year. A brief summary of the inspections of division offices done by the Superintending Engineers during the year 1952-53 is given below.

I Circle—Kakinada.

All the division offices in the circle except the Srikakulam division were inspected by the Superintending Engineer (Highways), I Circle, during the years—vide statement below. There has been some unavoidable delay in inspecting the offices on the due dates owing to frequent changes in the personnel of Superintending Engineers (Highways). The inspection of division office at Srikakulam that could have been done by the end of February 1953 was programmed to be taken up by the Superintending Engineer during the second week of March 1953 which had to be necessarily postponed to the third week of April 1953 in view of instructions that no inspection should be taken up between 10th March to 15th April.

Name of division.	Date due for inspection.	Date of actual inspection.
(1)	(2)	(3)
1 Guntur, South ..	25th February 1952 ..	17th February 1953.
2 Guntur, North ..	15th December 1952 ..	4th February 1953.
3 Krishna	22nd February 1952..	19th February 1953.
4 West Godavari ..	16th November 1951 ..	26th December 1952.
5 Rajahmundry ..	21st December 1951 ..	7th January 1953.
6 East Godavari ..	4th February 1952 ..	28th January 1953.
7 Visakhapatnam ..	20th August 1951 ..	25th September 1952.
8 Srikakulam	20th March 1952 ..	20th April 1953.
9 Anakapalle Special ..	14th March 1953 ..	12th January 1953.
10 Godavari Bridge Special ..	28th November 1951 ..	5th December 1952.

By the enforcement of the periodical inspections, the offices have been much improved in spite of the fact that adequate staff was not provided in keeping with the increasing volume of work after the reorganization of the Department in 1947 resulting in heavy arrears especially in the matter of accounts and audit.

II Circle—Madras.

There was no post of Superintending Engineer (Highways) separately sanctioned for the second circle area. The divisions in this circle were kept in direct charge of the Chief Engineer (Highways) during the year. Consequently there were some delays in inspecting the division offices owing to administrative reasons. The dates on which the inspection of division offices were conducted by the Chief Engineer (Highways) during the year are furnished.

Name of division.	Date due for inspection.	Date of actual inspection.
(1)	(2)	(3)
1 Anantapur	March 1952	18th February 1953.
2 Bellary .. ..	.. ..	.. ..
3 Chingleput	16th February 1953 ..	20th June 1953.
4 Chittoor	29th August 1952 ..	.. ..
5 Cuddapah .. ..	.. ..	.. ..
6 Kurnool	20th March 1952 ..	17th July 1952.
7 Nellore .. ..	.. ..	12th November 1952.
8 North Arcot .. ..	.. ..	15th January 1953.
9 Pennar Bridge division ..	.. ..	14th November 1952.
10 Transport and Machinery division.	19th December 1952 ..	.. ..

III Circle—Tiruchirappalli.

During the year, inspection of all the division offices in the circle was completed by the Superintending Engineer (Highways) although there had been some delay in taking up the inspections as shown below. The result of inspections disclosed that the conditions of offices were generally satisfactory.

Name of division. (1)	Date due for inspection. (2)	Date of actual inspection. (3)
1 South Arcot	15th March 1953	15th and 16th December 1952.
2 Coleroon Bridge Division ..	10th August 1952	15th October 1952.
3 Tanjore East	18th February 1953	13th and 14th March 1953.
4 Tanjore, West	11th December 1952	12th March 1953.
5 Tiruchirappalli	30th August 1952	3rd November 1952.
6 Madurai	27th February 1953	27th and 28th March 1953.
7 Ramanathapuram	29th August 1952	24th October 1952.
8 Tirunelveli	20th October 1952	21st 22nd and 23rd January 1953.

IV Circle—Coimbatore.

The division offices were inspected during the year under report by the Superintending Engineer (Highways) on the dates noted against the each as in the following. It was observed that the condition of offices was satisfactory.

Name of division. (1)	Date due for inspection. (2)	Date of actual inspection. (3)
1 Malabar North	26th October 1952	27th October 1952.
2 Bharathapuzha	5th August 1952	16th September 1952.
3 Coimbatore North	27th September 1952	10th October 1952.
4 Molabar South	31st January 1953	20th February 1953.
5 Coimbatore South	26th June 1952	6th September 1952.
6 Salem South	16th February 1953	21st March 1953.
7 Salem North	12th May 1953	30th May 1953.
8 The Nilgiris	27th June 1953	30th July 1953.

(b) Inspection of Circle offices by the Chief Engineer (Highways).

The circle offices have to be inspected by the Chief Engineer (Highways) once in two years. In pursuance thereof no inspection was undertaken by the Chief Engineer (Highways) during the year as circle offices were inspected during 1951-52.

CHAPTER VI.

STATISTICS.

(a) Tests, Experiments and Research.

I. Prestressed concrete bridge over Palar.

The first prestressed concrete Highway Bridge in India is under construction over the Palar River near Chingleput on National Highway No. 45 about 40 miles from Madras. As prestressed concrete was a comparatively new technique in this country, the tender included a condition that one beam would be tested to destruction to demonstrate the behaviour of prestressed concrete under severe conditions of loading.

(2) The test girder consisted of a 96 feet 'U' shaped prestressed concrete girder, 5' 1" deep, prestressed with 256 high tensile steel wires (0.2" dia.) anchored on the Magnel-Blaton system. The test load was applied with four hydraulic jacks operating against cross girders anchored down to

buried counterweights. The first crack (visible with a magnifying glass) occurred when the applied load corresponded to a factor of safety of 2. The beam failed under about 6 times the design live load.

(3) The test showed that the design of the prestressed concrete girder was adequate. A prestressed concrete girder would always give ample warning of failure. Since the test beam showed visible cracks only at 75 tons load which is about half the ultimate strength of the beam, the design fulfils the above requirement. The observations during the test also revealed that the Magnel-Blaton system of anchorages is effective. Prestressed concrete structures are expected to have a longer life than reinforced concrete ones because of the increased resistance to corrosion offered by crack-free concrete. Finally the economy which results from the use of prestressed concrete construction would be enhanced if the special materials which are at present imported from foreign countries could be manufactured in this country.

II. Providing wearing surface over the stabilized soil base in Ramnad-Mandapam road.

Ramnad-Mandapam road, Miles 0/0 to 21/4 (National Highway No. 49) under formation, is provided with a soil-cement base for carriageway. Though soil-cement is quite a satisfactory material as a durable weather-resisting base, it cannot withstand for long the cutting action of iron tyred vehicular traffic. Asphaltic concrete wearing surface 1½" thick is therefore provided over the soil-cement base. This is finished off with a real coat of sand coated with 3¾" lb. of asphalt applied at the rate of ½ c.ft. per 100 r.ft. Various other types of black-top surfacing over soil cement sub-grade are being experimented on this road.

III. Guide bund on the left abutment of the Gowthami Bridge.

It was proposed to lay a guide bund on the left abutment of the Gowthami Bridge at the new site proposed by the Consulting Engineer (Roads) to Government of India. Model experiments have been carried out for checking the design of the guide bund at the Hydraulic Research Institute, Kodakivalasa, Poona. The experiments are reported to be successful and indicated the feasibility of providing a guide bund to the river. The work has been stopped pending final decision on the site for the bridge.

IV. Tests, experiments and research conducted in the soil research laboratory.

Various tests on soils were conducted in connection with soil stabilization works in progress and on roads proposed for new metalling. Four typical soils, viz., laterite gravel, laterite soil, light brown silty soil, and light brown medium sand of wide occurrence in the State were taken up for a study of the influence of various percentages of cement, lime and their combinations with special reference to their use as building material in place of bricks. Tests were also conducted on the effectiveness of mixing soil cement with hand-operated drum mixers and making blocks using hand tampers and steel moulds. The tests conducted in the laboratory also include testing of typical samples of table moulded and country bricks manufactured of the same material in and around Madras for determining their properties such as unit weight, water absorption, compressive strength, etc. The test results showed that the compressive strength varied within a wide range of values while the other properties were within distinguishable ranges. The country

bricks tested singly showed higher compressive strength while for block masonry the table moulded bricks gave better values. Further tests are continued to arrive at definite results.

(b) *Investigation of roads.*

During the year under report 93 investigations on Government roads and 212 investigations on District Board roads were conducted by the department. The comparative figures of investigations conducted since 1946-47 are given in Annexure 21 (i) and the division-wise details for the year 1952-53 are given in Annexure 21 (ii).

A brief summary on the investigations done in certain divisions is furnished below :—

Guntur Division.

Investigation for the formation of a road from Atchampeta to Madipadu was taken up and completed during the year. The road is essentially required under security measures and its execution was to be put on hand on receipt of sanction to the estimate.

Rajahmundry Division.

Investigation of the following works was completed during the year :—

- (1) Forming a road from Maredumille to Chintur via Lakkavaram;
- (2) Forming a road from Gangavaram to meet Major District Road No. 6 in Rajahmundry taluk via Nelupudi.

Anakapalle Special Division.

Investigation for the formation of the road from M. 20/1 of Anakapalle-Madugole road to the foot of Minimalur Ghat via Paderu (i.e., from M. 11/0 to 13/0 and M. 15/0 to 17/0) was completed and detailed estimates prepared.

Cuddapah Division.

Investigation for the formation of road from M. 27/4 to 29/5 of Rayachoti-Vempalli road was completed and plans and estimates were prepared.

Tanjore East Division.

A length of 18 miles was taken up for investigation, of which, investigation for 10 miles of the road was in progress and estimates were got prepared for the completed portions.

Madurai Division.

The formation of Ghat road, viz., Bodi-Mettu Ghat road was taken up for investigation at the instance of the Cardamom Planters' Association as deposit work.

The investigation was completed and an estimate for Rs. 7 lakhs was got prepared. The road, after its formation would be of great help to the Planters for the transport of their produce from the hills to the plains.

Investigation for the formation of a road from Panrimalai to Adalur was also conducted. This road also would afford facilities to hill tribes in Panrimalai to have closer contact with the people in the plains and relieve them of the necessity of carrying the hill produce on ponies by the existing bridle-paths.

The Nilgiris Division.

The formation of a road from Jagathala to Othanathy under the District Board was investigated and detailed plans and estimates for Rs. 24,000 were prepared.

Kozhikode Division.

The District Board works, viz., (1) forming a road from Tamasseri to Narikunnu via Eranar (Kumaraswami Raja road) and (2) forming a road from Kakkodi-Chalapuram to Puthiyangadi-Chithadikadavu road were investigated during the year.

(c) *Investigation of Bridges and Culverts.*

I Circle—Kakinada.

Investigation and detailed surveys on the selection of sites and designs for the bridges of Gowthami and Vasishta arms of the River Godavari were taken up and completed during the year. Extensive sub-soil explorations by taking the borings to about 120' in the bed of the rivers were done and the soils obtained were sent to the Highways Soils Research Laboratory, Guindy, for analysis.

II Circle—Madras.

The following bridge works were investigated during the year :—

Cuddapah Division.

- (1) Constructing a bridge across Pennar near Chennur.
- (2) Constructing a causeway at M. 22/8 of Mydukur-Cumbum road.
- (3) Constructing a causeway at M. 40/4 of Cuddapah-Balupalli road.
- (4) Constructing a causeway at M. 0/3 of Kodur-Chitvel road.

Chingleput Division.

- (1) Constructing a bridge across Kortalayar river at M. 37/5 of Tirumushi-Satyavedu road.
- (2) Constructing a bridge at M. 3/7 of Tiruporur-Mahabalipuram road.
- (3) Constructing a bridge across Nandanam Channel at M. 24/2 of Kortalayar Bridge-Puttur road.
- (4) Constructing a bridge at M. 3/8 of Tiruporur-Mahabalipuram road.
- (5) Constructing a bridge at M. 5/5 of Tiruporur-Mahabalipuram road.
- (6) Constructing a causeway at M. 14/5 of Thandalam-Cooum road.
- (7) Constructing a causeway at M. 2/6 of Tiruporur-Kelambakkam road.
- (8) Constructing a causeway at M. 2/8 of Tiruporur-Kelambakkam road.
- (9) Constructing a causeway at M. 4/4 of Tiruporur-Mahabalipuram road.

For the three small bridges in Ms. 3/7, 3/8, and 4/4 of Tiruporur-Mahabalipuram road, foundations were kept at shallow depth by adopting block concrete foundations.

(10) *Constructing a causeway across Palar at mile 13/1 of Nelvoy-Tirukalikunram road.*—Box culvert design was adopted.

(11) Constructing a bridge at M. 27/4 of Tirumushi-Satyavedu road.

Five borings for about 25 feet depth were taken. Coarse sand was met with from 10 feet to 15 feet below the bed level and soft clay was found from 1 foot to 4 feet below the sand layer. Hard stiff clay was found below the soft clay stratum for more than 5 feet. It was proposed to adopt well foundations for this bridge.

Nellore Division.

- (1) Investigation of a bridge at the dip at M. 84/8 of Madras-Culeutta road.
- (2) Investigation of a bridge at the dip at M. 85/5 of Madras-Calcutta road.
- (3) Investigation of a bridge at the dip at M. 84/4 of Madras-Calcutta road.

Bellary Division.

- (1) Constructing a bridge at M. 28/8 of Hospet-Mysore Frontier road.
- (2) Construction of a bridge at M. 23/2 of Tornagal-Sandur road.
- (3) Construction of a bridge across Tungabadra river in Benares-Cape Comorin road, National Highways-7.

Kurnool Division.

Constructing a bridge at M. 3/3 of Gazullapalli-Mahanadhi-road.

North Arcot Division.

Constructing a bridge across Palar river at M. 71/0 5 of Ranipet-Krishnagiri road.

III Circle, Tiruchirappalli.

Ramanathapuram Division.

Government works.—(1) Constructing a bridge at M. 339/4 of Benares-Cape Comorin road.

- (2) Constructing a bridge at M. 343/7 of Benares-Cape Comorin road.
- (3) Constructing a bridge at M. 345/8 of Benares-Cape Comorin road.

District Board works.—(4) Constructing a causeway at Ms. 19/17 and 32/2 of Devakottai-Devipatnam road.

- (5) Constructing culverts on Kamuthy-Mandalamanickam road.

IV. Circle—Coimbatore.

South Kanara Division.

Government works.—(1) Investigation for Halady bridge on Halady-Wandse road in Ms. 3/8, 5/7, 13/8, 9/6 and 8/3 of Halady-Wandse road.

Investigations were completed in respect of Halady bridge and bridges in M. 3/8, 5/7, 9/6 and 13/8.

- (2) Investigation for a bridge at M. 15/1 of Bisley Ghat road.

District Board works.—(1) Investigation for a bridge at M. 1/3 of Mudradi-Hebri road over Janvata Hole.

- (2) Investigation for a bridge at M. 1/8 of Hebri-Belve road over Sithanadhi river.

(d) Cost of labour and materials.

Godavari Bridge Division.—Postwar difficulties in securing materials like steel, cement, etc., and railway waggons for their transport continued during the year and proved a great handicap for the quick progress on the works. Labour condition of the previous year also continued except for the fact that on account of the continued drought conditions in the upland tracts, there was a large movement of labour into deltatic areas.

Anakapalle Division.—Scarcity of labour was keenly felt. The works being situated in scheduled areas, the contractors had to import labour from the plains.

Srikakulam Division.—The cost of both materials and labour was abnormally increased due to scarcity of labour. Much difficulty was felt in executing the works even though the works were entrusted at high premium rates.

Visakhapatnam Division.—Materials were available throughout the district and the schedule rates were generally workable. Labour was scarce in Chintapalli, K.D. Petta and Madugole areas.

Kakinada Division.—Labour and materials were generally available at schedule rates.

Eluru Division.—The cost of labour was high while that of materials had come to a set. In the upland areas, labour was scarce.

Rajahmundry Division.—Labour continued to be scarce in the agency area resulting in slow progress of works.

Krishna Division.—Scarcity of skilled labour during transplantation and harvest seasons continued to be intensive in the delta as a result of which the progress of works in the agricultural seasons was hampered. The position with regard to supply of cement and steel had not also eased.

Guntur Division.—Even though there was no dearth of unskilled labour, the outturn was not generally satisfactory. Skilled labour was concentrated in a few town centres and usually immobile.

Ananthapur Division.—The labour conditions during the year were steady and gradually reduced in the month of March due to drought.

Chingleput Division.—The conditions of labour and cost of materials were fair during the year. No scarcity of labour was felt.

Pennar Bridge Division—Nellore.—Cost of materials used for cement concrete was well within the schedule of rates. Local labour was freely available at the schedule rates.

Chittoor Division.—Though the cost of materials continued on a par with previous year's condition, the famine conditions induced a downward trend in the rates for labour, with the result that there was corresponding reduction in the cost of maintenance and other works put to tender.

North Arcot Division.—Cost of skilled and unskilled labour went up throughout the district and was very high in Tiruvannamalai and Gudiyatham taluks. In Tirupattur and Gudiyattam taluks, even unskilled labourers had to be imported from Salem district.

Cuddapah Division.—Labour was available. The cost of materials was fluctuating from time to time.

Nellore.—The rates of labour and materials were generally normal in the southern taluks. In the northern areas, due to adverse seasonal conditions labour was easily available and the cost of materials and labour was also less. There was a general tender cut of about 8 per cent in those areas.

Kurnool.—Labour condition was generally satisfactory; but in harvest seasons there was difficulty in securing skilled labour.

South Arcot.—Labour was generally available but wages were high. The acute famine conditions in Kallakurichi, Gingee and Vriddhachalam taluks had in no way served as an inducement to labour being available in abundance. Skilled labourers had to be imported from other districts.

Tanjore East Division.—Conditions of labour continued to be unsatisfactory. Though the cost of labour was increased by 100 per cent, the outturn and efficiency were poor. The cost of materials was also high.

Ramanathapuram Division.—Labour was available due to famine conditions, but the outturn was below normal. The cost of road materials was reduced by adopting economic rates of cartage beyond 10 miles.

Malabar District.—The cost of materials had increased during the year to some extent. There was keen competition among the contractors and the works were executed satisfactorily.

Salem Division.—Though there was dearth of work in some parts of the district due to famine conditions, there was no appreciable decrease in wages except in the regions actually affected by famine.

Coimbatore.—There was rise in the cost of labour. Due to adverse seasonal conditions in Palladam and Udumalpet taluks, labour was available cheaper than at current schedule of rates in the areas. In Dharapuram taluk, which was affected by acute famine, labour had migrated to other taluks. Consequently, there was difficulty in securing labour at times.

Nilgiris Division.—There was no appreciable fluctuation in the rates of previous year. No scarcity of labour was felt.

South Kanara.—Acute scarcity of labour was keenly felt for skilled work and for quarrying granite metal. Mostly imported coolies were engaged for major works and stone breaking. Even experienced and enterprising contractors were not forthcoming to take up works at reasonable rates, and there were cases where no tenders were received at all.

(e) Traffic census.

During the year under review, no census of traffic on roads was conducted. The decision to conduct census once in three years was under consideration.

(f) Transport and Machinery Division.

The main activities of the Transport and Machinery Division were.—

- (a) attending to major repairs to plant and machinery and manufacture of certain equipments;
- (b) maintenance of central stores;
- (c) purchase of sanctioned items of plant and machinery; and
- (d) distribution of stores.

Repairs and manufacture.—The manufacturing section of Transport and Machinery Division consists of machine shop, foundry, welding, carpentry,

tinker shop and repair yard. This section besides manufacturing equipments required necessary for the day to day maintenance of roads, was carrying out major repairs to lorries, rollers, etc. A brief summary of accomplishments of the division in the year 1952-53 is furnished below :—

(a) Major repairs to lorries, rollers, etc., completed during the year :—

	Nos.
Lorries	14
Rollers	13
Concrete mixers	4

(b) Items manufactured in the Manufacturing section of the Transport and Machinery Repair yard, Madras—

Category.	Nos.
1 Gang water carts	19
2 Barrow mixers	22
3 Trailer carts	36
4 Concrete dumping buckets	2
5 Channel forms	2,211 R.ft.
6 Cast iron moulds 6" × 6" × 6"	1
7 Panel board for diving set with compressor unit.	3
8 Plug and socket levelling pins	2
9 Roller bearings	28 sets
10 Top plates for bearings	8

Besides these, the repair yard was engaged in converting 59 numbers of pontoons purchased from the disposals, into water tanks to be used in water lorries, assembling three pumps coupled with prime movers fitted with frame, building bodies for lorries, canopies for graders, and hard facing to blades of earth moving machinery.

A prime mover was also coupled to a compressor for use as sand blasting equipment for the removal of dust and old paint and to spray new paint.

Repair yards.—In order to ensure prompt and satisfactory execution of repairs to plant and machinery located at various divisions in this department similar yards as that of Transport and Machinery Repair yards at Madras have been functioning at Coimbatore, Rajahmundry and Tiruchirappalli which were originally kept under the control of the Transport and Machinery Division prior to its re-organization on 1st November 1951, when the repair yards in the mufassal towns were placed under the administrative control of respective Superintending Engineers. These repair yards continued to be under their control during the year. It has been proposed to bring them to a uniform standard by equipping them with necessary tools and machinery for tackling all sorts of major and minor repairs and necessary proposals were under consideration.

Distribution of stores.—Spare parts for rollers, lorries and other types of machinery worth Rs. 5.18 lakhs were stocked to cater to the needs of the Highways Divisions in the State. Apart from these, steel and iron materials required for bridge works were also stocked and despatched to various divisions.

The question of keeping a reserve stock of spares, etc., to the extent necessary in each of the repair yards was still under consideration.

Purchase of plant and machinery.—In G.O. No. 906, P.W., dated 12th March 1949, the Government approved in principle the purchase of several

items of plant and machinery separately under Postwar and Excluding Postwar, the purchase of which was proceeded with during the year incurring an expenditure of Rs. 29.21 lakhs.

Other activities.—With a view to meeting the demand for drivers of steam road rollers and diesel road rollers from the various divisions, courses of training for such drivers were conducted and 99 persons were trained in diesel roller driving.

The Transport and Machinery Division took an active part in the Exhibition conducted by the Indian Roads Congress held in February 1953. Different kinds of plant and machinery exhibits specially made for the purpose of mobile laboratory vans for soil and concrete testing and various items manufactured in the Transport and Machinery Repair Yard were exhibited. Technical films were also shown.

The average number of days each class of tools and plant such as road rollers, lorries, concrete-mixers, tar boilers, graders, asphalt mixers, etc., had been used, hire charges earned and the cost of crew and propulsion of each category, are shown below for the year under report.

Serial number and name of plant.	Total number.	Number reported on.	Capital cost.	Average working days.	Hire charges earned.
(1)	(2)	(3)	(4)	(5)	(6)
1 Rollers	705	495		62	20,03,243
2 Lorries	223	209		76	8,72,396
3 Concrete mixers	105	77		37	22,946
4 Tar boilers	116	41		28	4,769
5 Barrow mixers	104	36		5	580
6 Air compressors	31	19		77	12,363
7 Graders	15	4		72	18,585
8 Stone crushers	4	4		98	22,032
9 Millars asphalt mixers	18	11		44	20,439
10 Heat masters	6	29		81	11,054
11 Tractors	6	5		50	10,150
12 Bull dozers	6	5		52	12,028
13 Pump sets	94	23		35	10,153
	Cost of oils and fuel.	Cost of crew propulsion and running charges.	Expenditure on repairs.	Total operating cost.	Depreciation.
	(7)	(8)	(9)	(10)	(11)
	RS.	RS.	RS.	RS.	
1 Rollers	5,48,046	3,70,294	1,68,875	10,87,215	
2 Lorries	4,44,350	2,78,173	3,63,322	10,85,845	
3 Concrete mixers	5,726	5,324	7,098	18,148	
4 Tar boilers	490	3,621	3,991	8,102	
5 Barrow mixers	62	161	108	331	
6 Air compressors	5,770	6,577	3,550	15,897	
7 Graders	2,936	1,345	126	4,407	
8 Stone crushers	2,680	18,360	4,888	25,928	
9 Millars asphalt mixers	3,537	3,920	2,098	9,555	
10 Heat masters	1,330	7,650	2,819	11,808	
11 Tractors	4,047	3,519	1,805	9,371	
12 Bull dozers	5,639	6,449	981	13,069	
13 Pump sets	980	2,383	3,874	7,237	

NOTE.—(1) The above particulars do not include information relating to Bellary, Chittoor and Chingleput Divisions.

(2) In respect of columns 4, 5, 11 and 12, complete particulars were not available.

(g) *Contracts.*

Statistics showing contracts awarded for Government and District Board works during 1952-53, under different classifications are given below :—

Classification.	Government roads.		District Board roads.	
	Number.	Cost.	Number.	Cost.
		RS.		RS.
Maintenance works	3,399	3,21,17,336	4,613	1,60,38,878
Surfacing works	690	95,30,243	380	22,19,258
Bridges, culverts and causeways ..	368	33,36,209	359	29,04,209

Comparative figures for the previous years are given in the Statement I in Annexure 20 and the divisionwar particulars in the Statement II.

(h) *Claims and Disputes.*

There were certain claims put up by the contractors during the year 1952-53, of which some were disposed and the remaining cases were pending as detailed below :—

Name of division.	Name of contractor.	Nature and details of claims.
(1)	(2)	(3)
Guntur District work.	Division, Sri Appalaswamy	Suit Notice was issued by the contractor for his claim in respect of work constructing bridges in Mile 230/1-5 and Mile 231/2-3 of Great Northern Trunk Road when the works were under District Board. This was referred to the Superintending Engineer (Highways), I Circle, Kakinada, who had passed his award. The claim had to be finalized by the Guntur District Board.
Rajahmundry Division.	....	The work of reconstructing the collapsed bridge at Mile 391/1-3 of Madras-Calcutta road over Eluru river was taken up originally at the collapsed portion, but subsequently the foundations were found to be unsound and the entire reconstruction was aimed at and the original work was stopped. The contractor claimed compensation of Rs. 36,000 which was pending finalization.
Visakhapatnam ..	Sri J. Venkatanarayana Raju ..	The contractor claimed in a suit notice payment of the cost of 720 units consolidation and about 120 units of materials, etc., in respect of maintenance work at Mile 38/2 to 48/0 and Mile 48/0 to 58/0 of Visakhapatnam-Ananthagiri-Araku road, stating that he was not paid for them. The suit notice was replied and the orders of Collector awaited.

Name of division. (1)	Name of contractor. (2)	Nature and details of claims. (3)
Anakapalle Special.	Sri M. Satyanarayana	The contract of the party for the work of forming a road from Mile 20/1 of Anakapalle-Madugole road to the foot of Minimalur Ghat road (viz., Paderu was terminated in 1949). The contractor claimed compensation for the loss due to termination of his contract and filed a suit. Counter statement was got prepared by the Government Pleader and was sent up for obtaining Government approval.
South Arcot	.. Sri V. R. Govindarajan	A suit was filed by the contractor in the District Munsif's Court, Cuddalore, claiming Rs. 2,055 towards refund of deposit which was pending decision by the Court.

(i) Accidents.

During the year under reference there were five major accidents of which four proved fatal and other resulted in a minor injury. The victims were mazdoors employed on road works and it involved payment of compensation to the value of Rs. 5,450.

Serial number and name of district. (1)	Date and nature of accident. (2)	Name of victim and brief note of the accident. (3)	Award of compensation. (4)	Loss of property. (5)
			Rs.	
1 Madurai	20 Oct. 1951, fatal.	While the work of spreading road materials at M. 20 of Thalyuthu - Kallimandayam road was in progress the mazdoor by name Papa alias Palaniammal slipped and fell under the rolling stone roller accidentally on 20th October 1951. The patient was taken to Palani Hospital where she died.	200	..
2 Madurai	26 Sep. 1952, minor injury.	While the cleaner of roller No. 1710, L. Govindaswamy, was steaming up the roller, a sudden breeze gave to a flame from the fire place and consequently the cleaner sustained injuries on his knee and was cured in the hospital.	No compensation was paid.	..
3 Malabar	4 July 1952, fatal.	K. Achutha Menon, driver of diesel roller, No. MDR 9087, met with fatal accident on 4th July 1952. While he was driving the roller the starting handle of the roller got entangled with engine shaft and on its rotation, it knocked down the driver splitting open through his abdomen, as a result of which he died in the hospital.	2,100	..

Serial number and name of district. (1)	Date and nature of accident. (2)	Name of victim and brief note of the accident. (3)	Award of compensation. (4)	Loss of property. (5)
			Rs.	
Malabar	21 July 1952, fatal.	While consolidation work was in progress on Calicut-Nilambur road, one gang mazdoor by name Methayil Muhammed was accidentally run over and killed by the roller RR 1580, driven by R. K. Raman.	1,350	..
Nellore	21 Oct. 1952, fatal.	During drilling operations at well No. 2 of pier No. 17 of the bridge over Pennar at Nellore, K. Ganesan, an employee of Messrs S. V. R. Ranade and Sons, Nellore, had a shock caused by sudden change from a high to low pressure area and died.	1,800	..

(j) Floods and monsoon damages.

There were several cases of interruptions to traffic during the year in the districts of Madurai, East Godavari, Malabar, Chingleput, Chittoor, Cuddapah, Nellore, Kurnool, Ramanathapuram, South Arcot, Visakhapatnam and North Arcot. Prompt action was taken and traffic was restored, as early as possible in all the cases.

Details of the roads affected and the nature of damages caused are given below:—

Serial number and name of district. (1)	Name of road. (2)	Month of occurrence. (3)	Remarks as to cause of interruption, etc. (4)
1 East Godavari ..	Great Northern Trunk Road, M. 391/3, National Highway No. 5.	Apr. 1952.	Due to floods.
2 Malabar	Kaduvally bridge, Kozhikode-Cannanore road at M. 44/2, Provincial Highway.	May 1952.	Cross girder collapsed.
3 Chingleput ..	Thiruvottiyur-Panchetty-Ponneri road, Major District Road at M. 0/3.	May 1952.	Heavy rains.
4 Chittoor	Major District Road, Kalahasti-Varadayapalayam-Tada road M. 7/2.	May 1952.	Floods.
5 Cuddapah	Chittoor-Kurnool road, M. 108/4-7, Provincial Highway.	May 1952.	Pennar unfordable.
6 Chittoor	Puthalpet-Naidupet road, M. 62/8, Major District Road.	May 1952.	Do.
7 Nellore	Madras-Caleutta road M. 110th National Highway.	May 1952.	Floods.
8 Kurnool	(a) Nandyal-Atmakur at M. 10/1 and 11/3, Major District Road. (b) Nandyal-Koilkuntla road at M. 6/8, 7/8 and 2/7, Major District Road. (c) Chittoor-Kurnool road at M. 181/1-4, Provincial Highways.	Do. Do. Do.	Heavy floods. Do. Do.
9 Do.	Panyam-Banganapalle, Tadpatri road at M. 27/8, Major District Road.	May 1952.	Do.
10 Godavari ..	Madras-Caleutta road, M. 391/3, Major District Road.	June 1952.	Floods.

Serial. number and name of district.	Name of road.	Month of occurrence.	Remarks as to cause of interruption, etc.
11 Madurai	Culvert at M. 12/1, Mottupala-Kunnathur road, Major District Road.	July 1952.	Collapsed.
12 Ramanathapuram.	M.R.R. 5/4 Karaikudy, Kanadukathan road.	Sep. 1952.	Heavy rains.
13 Madurai	M.D.R. 11, Elumali road, M. 1/4.	Do.	Breached.
14 South Arcot ..	Provincial Highway, Cuddalore-Chittoor road, M. 45, Pennar Causeway.	Oct. 1952.	Unfordable.
15 East Godavari ..	National Highway, Madras-Calcutta road at M. 413/2.	Do.	Floods.
16 Visakhapatnam ..	National Highway, Great Northern Trunk road, M. 520/3 and 520/6.	Do.	Not fordable.
17 Kurnool	M.D.R. Koilkuntla-Owk road, M. 7/1.	Do.	Do.
Do.	M.D.R. Koilkuntla-Nossem road, M. 7/1.	Do.	Do.
18 Ramanathapuram.	Sivaganga-Eliyangudy road, culvert at M. 18/3.	Nov. 1952.	Collapsed.
19 Chingleput ..	M.D.R. Causeway at M. 15/3 Arcot-Tindivanam road and Causeway at M. 11/7, Kancheepuram, Wandiwash road, Arcot, Wandiwash road-M. 15/8.	Dec. 1952.	Floods.
20 South Arcot ..	M.D.R. Bridge at M. 15/3, Cuddalore and Vridhachalam road.	7th Dec. 1952.	Cyclone and heavy rains.
21 Do.	Madras-Tiruchirappalli Dindigul road M. 39, 91/7 and 104/4.	Dec. 1952.	Do.
22 Do.	Cuddalore-Chittoor road, M. 45 ..	Do.	Do.
23 Do.	Madras-Calcutta road, M. 47/8 ..	Do.	Do.
24 Do.	G.W.T. road, M. 19/3	Do.	Heavy rains.
25 Do.	Madras-Calcutta road, M. 84/8 and 87/7.	Do.	Do.
26 Chingleput ..	Kortaliyar Bridge-Puthur road ..	Do.	Do.
27 Do.	Tiruporur-Kelampakkam road ..	Do.	Floods.
28 Do.	Tiruporur-Mahabalipuram road ..	Do.	Do.
29 Do.	Uthiramerur-Kancheepuram road.	Do.	Do.
30 North Arcot ..	Cuddalore-Chidambaran road, M. 14/2.	Do.	Do.
31 Do.	Cuddalore-Chittoor road ..	Do.	Do.
32 Nellore	Pennar Causeway-Madras-Calcutta road.	Do.	Do.
Do.	Madras-Calcutta road M. 85/5 ..	Do.	Bridge collapsed.
33 Do.	Arni-Chetpet road, M. 6/1—Venamangalam Causeway.	Do.	Floods, unfordable.
34 Do.	Arni-Wandiwash road	Do.	Floods.
35 Chingleput ..	Arcot-Tindivanam road	Do.	Do.

(k) Avenues.

During the year 156,422 plants on Government roads and 76,222 plants on District Board roads were newly planted. Out of them 90,445 plants on Government roads and 35,665 plants on District Board roads survived.

Divisionwise particulars of number of trees planted, number survived, expenditure incurred and income derived are furnished in Annexure 26. An expenditure of Rs. 7,46,979 on Government roads and Rs. 1,78,262 on District Board roads was incurred during the year on the maintenance of avenues while the income realized on avenues was Rs. 5,89,269 and Rs. 2,18,351 in respect of Government and District Board roads respectively.

Analysis of figures in Annexure 26 indicates that there are only 72 trees per mile on Government roads and 24 trees per mile on District Board roads, whereas the number of trees required per mile is about 300.

(l) Ferries.

During the year 79 ferries were maintained by the department and a sum of Rs. 5,45,163 was realized towards revenue. Divisionwise particulars are given in Annexure 28.

(m) Inspection Bungalows.

Thirty-eight Inspection Bungalows were in charge of the department. An expenditure of Rs. 18,512 was incurred on their maintenance while the income realized was Rs. 4,049. Details are furnished in Annexure 29 (ii).

(n) Travellers' Bungalows.

Four hundred and twelve numbers of travellers' bungalows were maintained by the department. A sum of Rs. 2,12,753 was incurred during the year towards their maintenance and Rs. 48,199 was realized towards rents.

Details of Travellers' Bungalows in each division and expenditure incurred, etc., are given in Annexure 29 (iv).

(o) Encroachments.

Government roads.—17,447 numbers of encroachments were detected during the year, 7,032 numbers licensed, 4,911 numbers evicted and 8,341 objectionable and 18,378 numbers unobjectionable encroachments were pending disposal at the end of the year.

Details of municipal and non-municipal areas are given in Annexure 27 (i).

District Board roads.—Two thousand one hundred and sixty-six numbers of encroachments were detected during the year, 928 numbers licensed, and 949 numbers evicted, 1,047 numbers of objectionable and 769 unobjectionable cases were pending disposal at the end of the year—vide Annexure 27 (ii).

(p) Works approved by Government under Post-War Development Scheme.

During the year, 37 works to a total cost of Rs. 39,76,850 on Government roads and 82 works costing Rs. 25,16,882 on District Board roads were approved by Government.

Divisionwise details showing the number of works approved during the year and those approved to end of the year are shown in Annexure 15.

(g) *Work done in the offices of the Superintending Engineers (Highways) and Divisional Engineers (Highways).*

Divisionwar particulars of technical sanctions accorded to the estimates, tenders and agreements by the Superintending Engineers (Highways) and Divisional Engineers (Highways) are furnished in the statements in Annexures 16, 17 and 18.

(r) *Work done in the office of the Chief Engineer (Highways).*

Details of technical sanctions to estimates, tenders dealt with and contracts approved are given in Annexure 19.

CHAPTER VII.

ACCOUNTS AND AUDIT.

The special scheme of accounting and audit sanctioned by the Government and the Comptroller and Auditor-General of India for the department continued to function during the year under report. The divisional accounts were rendered monthly to the Accounts Officer by the Divisional Engineers (Highways). The accounts were checked and compiled by the Accounts Officer into a monthly accounts for the Highways Department for submission to Accountant-General without paid vouchers. Detailed audit of vouchers was conducted by the Accounts Officer and the accounts with vouchers filed in Chief Engineer's (Highways) office. A percentage test audit of the accounts with vouchers and the local inspection of Division offices were arranged for by the Accountant-General as usual. These were supplemented by the inspection of divisions by the Accounts Officer and Deputy Accounts Officer (Highways).

2. The benefits anticipated are realized as detailed below :—

(i) During 1952-53 seven Divisional Accountants who were left untrained, underwent training in Public Works Accounts and Procedure in the Public Works Divisions, Chief Engineer and Accountant-General offices. So far 13 out of 53 Divisional Accountants have passed the Divisional Test Examination conducted by the Accountant-General, Madras.

(ii) The Executive Officers are getting more familiar with the Public Works Procedure being helped by detailed audit notes issued monthly and instructions issued by the Accounts Officers and Accountant-General's Inspection staff during their inspections.

(iii) The following additional advantages which might not have otherwise been possible are also achieved :—

(a) Prompt and full reconciliation between departmental accounts and compiled accounts and treasury accounts.

(b) More accurate accounting of expenditure on National Highways, Post-War Road Development works and prompt adjustment against Central funds.

(c) Effective and prompter control of expenditure, better budgeting and compilation of statistical returns.

(d) Advance scrutiny of financial sanctions avoiding post-audit objections.

(e) Enforcement of audit objections with the authority of the Chief Engineer (Highways).

(f) More effective control of rush of expenditure during the last days of the month including March.

3. The following is the analysis of the items of objections outstanding on 31st March 1953 :—

(1)	Items over three years.		Items over one year.		Items less than one year.	
	Number.	Amount.	Number.	Amount.	Number.	Amount.
	(2)	(3) RS.	(4)	(5) RS.	(6)	(7) RS.
(a) Want of estimate ..	65	2,06,21,167	260	17,63,290	796	31,81,892
(b) Excess over estimate ..	108	7,19,398	468	28,06,912	644	28,06,912
(c) Want of appropriation.	..	..	..	..	30	2,61,629
(d) Excess over appropriation.	..	..	..	..	33	6,44,700
(e) Want of vouchers ..	71	1,24,055	237	13,61,925	727	8,94,990
(f) Miscellaneous irregularities	1	23,075	4	4,535	36	1,42,414
Total ..	245	..	969	..	2,266	..

Total number of items outstanding objections (3,480). Amount under objection Rs. 3,48,56,404.

There is a slight increase in the number of outstanding objections as compared with last year. These are being got cleared by issue of special letters urging the officers for regularizing the objections early.

CHAPTER VIII.

COMMITTEES AND CONFERENCES.

(a) *The Board of Communications, Madras.*

During the period under report no meeting was held since all the members of the Board as reconstituted in G.O. No. 621, P.W., dated 18th February 1952, were not appointed by Government. Also consequent on the separation of the Andhra State certain changes in the constitution of the Board were found necessary. This has been suggested to Government and their orders are awaited.

(b) *Central Annual Conference of the Superintending Engineers (Highways) with the Chief Engineer (Highways).*

The Central Annual Conference was held on 22nd May 1952 and 23rd May 1952 at Ootacamund.

The following officers were present :—

- (1) Sri K. K. Nambiar, Chief Engineer (Highways)—*Chairman.*
- (2) Sri S. C. Nayak, Superintending Engineer (Highways), Coimbatore.
- (3) Sri N. Durrani, Superintending Engineer (Highways), Tiruchirappalli.
- (4) Sri M. N. Kamath, Superintending Engineer (Highways), Kakinada.
- (5) Sri K. Ramaswamy Reddy, Deputy Chief Engineer (Highways).
- (6) K. Namasivayam, Divisional Engineer (Highways), Transport and Machinery Division.

(7) Sri V. S. Ramachandran, Accounts Officer.

The following subjects were discussed :—

- (1) Review of progress in the implementation of last year's decisions.
- (2) Plant and Machinery—Annual inspection to be prescribed.
- (3) (a) Training of road maistries and refresher course for Supervisors.
- (b) Highways Department Maistries—Upgrading and provincialization.
- (4) Avenue—Development—Protection and preservation.
- (5) Finalization of gang cooly system.
- (6) Procedure to fix rates for supplemental works on Government roads similar to that on District Board works.
- (7) Elimination of unnecessary returns.
- (8) Original works—Vast difference between original budget allotment, Revised Budget and Final Modification Statement.
- (9) Writing of Technical papers.
- (10) Programmes of Black-topping.
- (11) (a) Review of work of Bridges section, viz., Assistant Engineer (Bridges) and Divisional Engineer (Designs).
- (b) Review of G.O. No. 372, P.W., dated 25th January 1951, regarding special powers to Presidents, District Boards.
- (c) Review of new procedure for land acquisition.
- (12) (a) Special Service and Economic Developments—Quarterly Progress Report.
- (b) Road Development Fund—Accelerating progress.
- (c) Experimental works not to be done without prior approval of Chief Engineer (Highways).
- (d) Five-year Plan of the Planning Commission.
- (e) Irregularities—Prevention.
- (f) Pooling and distribution of steel on circle basis.
- (g) Allowances—Travelling allowances—Halts during nights by Assistant Engineers (Highways).
- (13) Administration control over the subordinate staff of Transport and Machinery Division by the Headquarters Divisional Engineers (Highways).

(c) *Monthly Conference.*

During the year under report only one conference was held on 6th June 1952.

The subjects discussed were—

- (1) Pension or Provident Fund system for the officers of the Highways Department.
- (2) Revision of Travelling Allowance Rules—Grant of full mileage to Assistant Engineers (Highways) and Divisional Engineers (Highways) and restriction on 40 miles to Superintending Engineers (Highways) to be necessary.
- (3) Land acquisition—Post-War Road Development—Formation of roads—Procedure to quicken acquisition.

CHAPTER IX.

A. EVENTS.

1. *Indian Roads Congress.*

The Seventeenth Session of the Indian Roads Congress was held at "Rajaji Hall", Government House Estate at Madras, from the 7th to 14th February 1953 and the Session was inaugurated by the Hon'ble Sri C. Subramaniam, B.A., B.L., Minister for Finance, Madras State.

The following were the official delegates who attended the Session :—

Senior Delegates.

- (1) Sri K. K. Nambiar, Chief Engineer (Highways).
- (2) Sri N. Durrani, Superintending Engineer (Highways), Tiruchirappalli.
- (3) Sri M. N. Kamath, Superintending Engineer (Highways), Kakinada.
- (4) Sri T. S. Kethara Mudaliar—Divisional Engineer (Highways), Madurai.
- (5) Sri M. L. Narayana—Divisional Engineer (Highways), Pennar Bridge, Nellore.
- (6) Sri M. Kumaran—Divisional Engineer (Highways), Palghat.
- (7) Sri M. A. Tirunavukkarasu—Divisional Engineer (Highways), Rajahmundry.

Junior Delegates.

- (1) Sri A. R. Satyanarayana Rao—Assistant Engineer (Highways).
- (2) Sri K. Krishnamohan Rao—Assistant Engineer (Highways), Bapatla.
- (3) Sri K. Krishnan Nair—Assistant Engineer (Highways), Special Subdivision, Coimbatore.
- (4) One delegate from the Madras Corporation Engineering Department.
- (5) One Municipal Engineer.
- (6) A Professor of Civil Engineering in the College of Engineering, Guindy, who is in charge of Highways Engineering.

THE INVESTIGATION, DESIGN AND CONSTRUCTION OF THE CAUVERY BRIDGE AT PUGALUR.

(1) *Indian Roads Congress Paper No. 161.*

A paper on the bridge over the river Cauvery on National Highway No. 7 was contributed by Sri K. K. Nambiar, B.E., M.I.E. (Ind.), F. INST. H.E. (Eng.), M.I. MUM. E. (Eng.), M. AN. SOC. C.E. and Sri K. Namasivayam, B.E., Divisional Engineer (Highways), Transport and Machinery Division.

The paper described the investigation design and construction of the bridge and the problem encountered. The project was approved in 1940 and executed in 1949-50 with considerable modifications arising from consideration of the flood controlling effects of the Mettur Dam which had become apparent during this interval. The total length of the bridge is 2,634 feet with 40 equal spans of 66 feet. Both open foundations and well foundations consisting of three 8 feet × 9 feet rectangular wells under a pier were adopted. The superstructure is of reinforced concrete T-Beams continuous

over units of three spans. The details of construction, the difficulties encountered during execution, the methods adopted to overcome the difficulties and the results of tests on concrete and reinforcement wells were also described.

PAPERS READ BY THE OFFICERS OF THE DEPARTMENT.

(2) *Indian Roads Congress Paper No. 164.*

Testing to destruction a 96-foot prestressed concrete bridge girder.

A paper on the construction of the first prestressed concrete highway bridge in India over the Palar river near Chingleput on National Highway 45 was contributed by Sri K. K. Nambiar, B.E., M.I.E. (Ind.), F. INST. H.E. (Eng), M.I. MUM. E. (Eng.), M. AM. SOC. C.E., Chief Engineer (Highways), Madras and Sri P. V. Raj, B.E., Technical Assistant to Chief Engineer (Highways).

The paper described the test to destruction of a 96-foot 'U' shaped prestressed concrete girder 5 feet 1 inch deep, prestressed with 256 high tensile steel wires (0.2 in diameter) anchored on the Magnal Blaton System. Four such prestressed girders with 6-inch reinforced concrete deck slab would constitute the superstructure of the completed bridge as designed for Indian Roads Congress loading.

The test load was applied with four hydraulic jacks operating against cross-girders anchored down to buried counter-weight. The details of the design and construction of the prestressed girder, the method of test, the instruments used, the observations recorded and an interpretation of the results were also explained. The first crack (visible with a magnifying glass) occurred when the applied load corresponded to a factor of safety of 2.0. The beam was taken to have failed under about six times the design live load. The possible effects of the continued application of the full working load over a long period were discussed therein.

Exhibitions.

A Technical Exhibition on a modest scale was held at the same time. The Highways Department took part in it.

The exhibits by the Highways Department comprised of five sections—

Section I—Dealing with statistical data.

Section II—On bridges.

Section III—Covering soil stabilization.

Section IV—Displaying machinery manufactured in Transport and Machinery Division.

Section V—Exhibiting new type and foundations cut blocks.

The exhibition attracted large number of visitors both technical and non-technical officials and non-officials, business people and laymen and was much appreciated by one and all.

2. Institution of Engineers.

(a) The Annual General Meeting of the Institution of Engineers, South India Centre, was held at Madras from 28th to 30th December 1952. The following officers of the department attended the meeting:—

(1) Sri S. C. Nayak—Superintending Engineer (Highways).

(2) Sri M. N. Kamath—Superintending Engineer (Highways).

(3) Sri C. N. Thirupuvanam—Divisional Engineer (Highways).

(4) Sri K. S. Srinivasan—Personal Assistant to Divisional Engineer (Highways), Saidapet.

(5) Sri M. A. Samad—Assistant Engineer (Highways).

(6) Sri P. S. Sivaprakasam—Divisional Engineer (Highways).

(7) Sri L. N. Natesan—Assistant Engineer (Highways).

(8) Sri S. Sundaram—Assistant Engineer (Highways).

(b) The Annual Meeting of the Institution of Engineers (All-India Centre) was held during January 1953 at Bombay. The following officers of the department attended the meeting:—

(1) Sri S. C. Nayak—Superintending Engineer (Highways).

(2) Sri P. Sirajuddin—Divisional Engineer (Highways).

(3) Sri M. A. Samad—Assistant Engineer (Highways).

(4) Sri P. V. Raju—Technical Assistant to Chief Engineer (Highways).

B. LAYING OF FOUNDATION STONES.

(1) *Kalmadi bridge.*—The foundation stone of the Kalmadi bridge on Malpe-Udipi Road was laid by the Hon'ble Sri N. Ranga Reddy, B.A., B.L., Minister for Public Works, on 22nd September 1952.

Inaugurating the function, the Chief Engineer (Highways) delivered his speech on the necessity of the Kalmadi bridge and explained its geographical position and other aspects.

Concluding his speech, the Chief Engineer (Highways) requested the Hon'ble Minister to lay the foundation stone of the bridge.

The foundation stone was laid by the Hon'ble Minister with the following foreword:—

The Hon'ble Minister during his speech dealt with the importance of the bridge considering the future of Malpe as one of the good natural ports of the West Coast, and referred to several bridge works taken up for execution in South Kanara district under Post-War Road Development Programme and also referred to the departmental officers building techniques. He concluded that the bridge Engineers would be able to evolve the most economic and at the same time efficient design suited for each type of crossing and they could thus contribute a lot for a satisfactory solution of the communication problem.

(2) *Unveiling the Commemoration tablet marking the starting of the bridge construction across swarnanadhi near Puttige at mile 13/1 of Hariadka-Hebri road.*—The Hon'ble Sri N. Ranga Reddy, B.A., B.L., Minister for Public Works, Madras, unveiled the commemoration tablet marking the commencement of the bridge on 22nd September 1952.

The Chief Engineer (Highways), Madras, inaugurated the function. In the course of his address, he said that the estimate of the bridge work prepared as far back as in 1939 had to be postponed on account of war and felt glad to see that the work had been well in progress. After dealing with the technical aspects of the bridge, he requested the Hon'ble Minister to unveil the tablet.

Unveiling the tablet commemorating the commencement of the bridge, the Hon'ble Minister spoke on the special priority for bridge works that the South Kanara district deserves and wished similar bridges spring up in large numbers and the problem of road communications be solved satisfactorily.

C. OPENING CEREMONY.

Kulur bridge.—The bridge over the Gurpur river near Kulur at mile 4/7-8 of Mangalore Baindur road was declared open for traffic on 21st September 1952 by the Hon'ble Sri N. Ranga Reddy, B.A., B.L., Minister for Public Works.

On behalf of Highways Department Sri K. K. Nambiar, B.E., M.I.E. (Ind.), F.INST.H.E. (Eng.), M.I.MUM., E.(Eng.), M.A.M., SOC.CE., Chief Engineer (Highways), extended a cordial welcome and addressed the distinguished personalities. He explained the longfelt need for the bridge in South Kanara district and pointed out that the Kulur bridge is the first large bridge to be completed among those included in the Five-Year Programme of Post-War Road Development. He further described in great length the geographical position of the place and the technical aspects of the bridge and finally referred to the statistical figures on the consumption of steel, cement, etc. He also paid a tribute to the contractors for the good work performed by them and requested the Hon'ble Minister to declare open the bridge.

The Hon'ble Minister during his speech on this occasion outlined the necessity for the bridge and appreciated the officers of the department for considering ways of building bridges more economically and welcomed such proposals for other works also. After dealing with the geographical position of South Kanara district, the Minister wished that the bridge opened might prove the opening of new avenue to prosperity, comfort and happiness of the citizens of the part of this country.

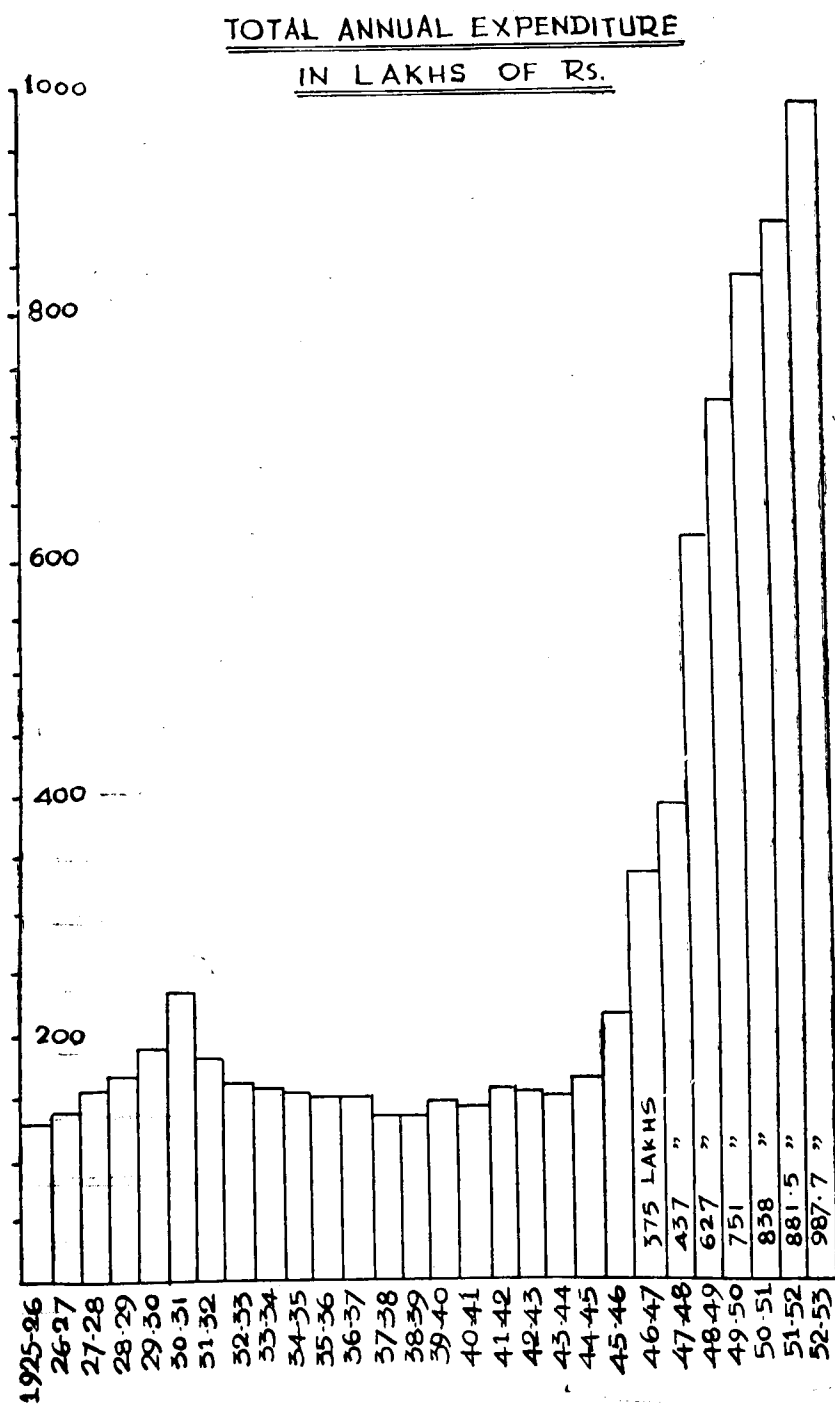
D. FILM SHOWS.

A 16 mm. motion picture film "*Highways Soil Engineering*" was obtained from United States Information Service and screened on 28th October 1952 in the Public Works Department Library Hall at Chepauk.

The film consisted of three reels, the reel No. 1 being somewhat of an introduction to Soil Engineering and Soil Sampling and was very well appreciated. The second and third reels were mostly concerned with Laboratory tests.

GROWTH OF ROADS IN THE STATE MAINTAINED BY THE DEPARTMENT AS ON 31st MARCH 1953.

1846	3,100 MILES
1880-81	19,500
85-86	19,650
90-91	21,600
95-96	21,600
1900-01	23,800
05-06	25,100
10-11	26,000
15-16	26,500
20-21	26,500
25-26	28,700
30-31	32,700
35-36	36,000
40-41	37,900
45-46	37,900
46-47	37,900
47-48	37,900
48-49	37,974
49-50	38,047
50-51	38,971
51-52	40,556
52-53	41,488



ANNEXURES.

ANNEXURE 1.

(i) Statement showing mileage of and expenditure on extra-municipal roads maintained by public authorities ("extra-municipal" means outside the area of jurisdiction of a municipality, a City/Improvement/Port Trust or corporation or like urban body) year ending 31st March 1952.

Type of road.	Maintained by Public Works Department or other Government Department (See note 1.)										Maintained by Local Bodies (See Note 2).										Unbridged mileage (see Note 3).	Remarks (see Note 4).							
	Mileage					Expenditure (Rupees in lakhs.)					Mileage.					Expenditure (Rupees in lakhs.)													
	As on 31st March 1951	Change since last report plus or minus on column (2).	M F	M F	M F	Total as on 31st March 1952 column (2) plus (3).	(4)	(5)	(6)	Total columns (5) plus (6).	(7)	(8)	M F	M F	M F	Total as on 31st March 1952 column (8) plus (9).	(10)	(11)	(12)	Total columns (11) plus (12).			(13)	(14)	M F	M F	M F	(15)	(16)
1. Bituminous—																													
(a) Surface dressed with tar bitumen or asphalt hot or in form of cut backs or emulsion.	733-6	+476-4	1,210-2	9-01	54-62	63-63						10-2	+19-1			29-3	2-39	1-32	3-71	1,239-5	67-34	12-4	0-62	..	..	..	..	..	125-6*
(b) Grouted, sheet asphalt or any base, asphaltic concrete or macadam, tar concrete or macadam including carpets one inch thick or more.	12-1	+ 0-3	12-4	0-47	0-15	0-62						..	..	..	..	..	..	..	..	..	..	12-4	0-62	..	..	..	..	..	11-7
2. Concrete—																													
(a) Cement concrete	163-4	+40-7	204-3	21-01	0-64	21-65						0-3	0-1	0-2	..	..	0-07	0-07	0-07	0-07	0-07	204-5	21-72	..	..	..	..	..	15-4
(b) Cement bound macadam	2-5	..	2-5	..	0-10	0-10						..	..	..	..	..	..	..	..	..	2-5	0-10	..	..	..	..	..	..	2-5
3. Water bound macadam—																													
(a) Broken rock metal	6,588-5	-334-0	6,254-5	34-86	161-81	195-67	3,916-3	+179-2	4,095-5	14-82	51-80	66-62	10,350-2	262-29	627-1	88-5													
(b) Kankar, laterite or brick metal ..	972-5	-95-1	877-4	2-59	16-76	19-35	2,932-2	+123-7	3,106-1	8-06	24-03	32-09	3,983-5	51-44	646-0	0-5													
4. Lower types—																													
(a) Using artificially admitted granular material, gravel, m.orum, etc.,	175-7	- 48-2	123-5	13-46	0-83	14-29	3,127-5	+ 114-0	3,241-5	13-76	7-33	21-09	3,370-2	35-38	538-0	..													
(b) Natural soil, mottable in fair weather.	537-4	+ 18-3	555-7		0-75	0-75	2,847-4	+ 582-2	3,429-6	11-86	12-91	24-77	3,985-5	25-52	480-4	..													
(c) Natural soil, unmotorable.. .. .	68-7	- 15-0	53-7	2-47	0-11	2-58	2,350-2	1,319-0	2,669-2	9-10	6-10	15-20	2,723-1	17-78	438-2	..													
Total (all types)	9,256-4	+ 43-6	9,300-2	83-37	235-27	318-94	15,234-5	+1,337-8	16,572-0	59-99	103-56	163-55	25,872-2	482-19	2,728-7	245-0													

NOTE.—1. Name the departments, other than Public Works Department or Highways Departments here.

2. The figures in columns (2) to (7) may include roads in Municipal areas maintained by the Public Works Department only if the data for such roads cannot be separated easily. To indicate where such data is or is not included in this statement, please cut out one or the other of the words YES/NO.

3. "Not fully bridged" (column (16)) means there are interruptions to traffic for periods exceeding twelve hours on more than six occasions in the year. The mileage of the entire section affected between two important stations (and not merely the part of the section affected) should be included in the figures in column (16).

4. Where trackways are included in the figures given (against any of the types) in the main statement, please give the mileage of these TRACKWAYS in the REMARKS COLUMN against the relevant entries in the statement.

This information is required to be collected in good time so that it may be submitted by the Head of the State Department concerned with roads by the first March of the year following that to which the information relates.

* The mileages of Municipal roads maintained by this department, included in column (14) are separately shown under this column. (Vide also separate statement with expenditure on pro rata basis.)

(ii) *Expenditure incurred on extra-municipal roads maintained by Public authorities during year ending 31st March 1953.*

("Extra-Municipal" means outside the area of jurisdiction of a Municipality, Town/City Corporation or like urban body.)

STATE.

(Figures to be rounded off to the nearest thousand rupees.)

Class of expenditure. (1)	Expenditure.		
	State. (2)	Local body. (3)	Total. (4)
	RS.	RS.	RS.
1. Maintenance, repairs and minor improvements.	23,527	10,356	33,883
2. New constructions and improvements debited to Original Works (includes improvements of surfaces except surface painting with tar or bitumen-first and subsequent treatment).	8,337	5,999	14,336
3. Administration and other expenses—			
(a) Establishment	1,738	1,121	2,859
(b) Tools and Plant	7,295	178	7,473
(c) Others (<i>see note below</i>)	..	..	..
Total (excluding loan charges) ..	40,897	17,654	58,551

4. Loan Charges—

Interest	..	..	..
Repayments (Principal or sinking fund) ..	..	..	..
Total (including loan charges) ..	..	..	..

Outstanding Highway *DEBIT* at the end of the financial year. 40,897 17,654 58,551

The amount of GRANTS from State revenues to Local Bodies for Roads. .. 3,099 ..

(This amount is *not* included in column (2) as expenditure but expenditure out of the grants is included in column).

NOTE.—When the Engineering Staff of Public Works Departments and Local Bodies are also employed on works other than roads, it is impossible to allocate "Administration and other expenses" accurately. In such cases, these charges may be estimated on the basis of a percentage and the percentage indicated on both maintenance and original works.

(iii) *Sources of expenditure incurred on road works for the year ending 31st March 1952.*

STATE.

(Figures to be rounded off to the nearest thousand rupees.)

Source of expenditure. (1)	Expenditure.		
	State. (2)	Local body. (3)	Total. (4)
	RS.	RS.	RS.
1. Central Road Fund	766	680	1,446
2. State Revenues	33,931	3,099	37,030
3. Local Funds	..	13,875	13,875
4. Loans	..	..	..
5. Any other source to be specified here—			
Government of India for expenditure on works on National Highways.	6,200	..	6,200
Total ..	40,897	17,654	58,551

(iv) *Statement showing the expenditure on the municipal reaches on pro rata basis for 1951-52.*

Type of road. (1)	Total mileage. (2)	Total expenditure. (3)	Mileage in municipal reaches. (4)	Total expenditure on pro rata basis. (5)
	M-F.	RS. (IN LAKHS.)	M-F.	RS. (IN LAKHS.)
I. Bituminous—				
(a) Surface dressed with tar bitumen or asphalt hot or in form of cut backs or emulsion.	1,239-5	67-34	125-6	6-83
(b) Grouted sheet asphalt or any base, asphaltic concrete or macadam, tar, concrete or macadam including carpets one inch thick or more.	12-4	0-62	11-7	0-59
II. Concrete—				
(a) Cement concrete	204-5	21-72	15-4	1-65
(b) Cement bound macadam ..	2-5	0-10	2-5	0-10
III. Water bound macadam—				
(a) Broken rock metal	10,350-2	262-29	88-5	2-25
(b) Kankar laterite or brick metal.	3,983-5	51-44	0-5	0-01
IV. Lower types—Nil.				

ANNEXURE 2.

Statement showing the cost of maintenance of roads since 1946-47.

Year.	Total mileage Government and District Board.	Total expenditure, Government and District Board.	Cost per mile.
	MILES.	RS.	RS.
1946-47	14,958	1,75,22,582	
	22,076	79,96,937	
	37,034	2,55,19,519	609
1947-48	15,024	2,62,03,053	
	22,025	91,54,213	
	37,049	3,53,57,266	954
1948-49	15,780	3,50,15,182	
	22,194	1,15,83,288	
	37,974	4,65,98,470	1,227
1949-50	15,460	3,37,91,000	
	22,587	1,29,85,735	
	38,047	4,67,76,735	1,229
1950-51	15,560	3,87,73,748	
	23,411	1,33,63,439	
	38,971	5,21,37,187	1,338
1951-52	15,599	4,16,35,671	
	24,957	1,41,82,154	
	40,556	5,58,17,825	1,376
1952-53	15,650	4,51,29,912	
	25,838	1,45,39,379	
	41,488	5,96,69,291	1,438

ANNEXURE 3.

Classified cost of maintenance for the year 1952-53.

Classification.	Government roads.			District Board roads.		
	Mileage.	Maintenance expenditure.	Cost per mile.	Mileage.	Maintenance expenditure.	Cost per mile.
(1)	(2)	(3)	(4)	(5)	(6)	(7)
	MILES.	RS.	RS.	MILES.	RS.	RS.
National Highways ..	2,002	75,66,082	3,779	..	..	..
Provincial Highways ..	3,145	1,01,38,525	3,224	..	..	..
Major District Roads ..	10,278	2,70,23,530	2,629	5,801	53,36,814	922
Other District Roads ..	225	3,96,775	1,763	7,887	51,03,079	634
Village Roads	..	..	..	11,625	40,99,436	353
Total ..	15,650	4,51,29,912	2,884	25,313 + 525	4,51,39,379	574

ANNEXURE 4.

Statement showing the length of roads maintained during the year 1952-53 as on 31st March 1953.

Serial number. (1)	Name of division. (2)	Government roads.					District Board roads.			Total. (11)	Public Department roads. (12)	Municipal roads. (13)	Grand total. (14)
		National Highways. (3)	Provincial Highways. (4)	Major District road. (5)	Other District roads. (6)	Total. (7)	Major District roads. (8)	Other District roads. (9)	Village roads. (10)				
I Circle.													
1	Guntur, South	64	77	249	7	397	225	113	36	374	6	114	1,725
2	Guntur, North	35	31	222	..	288	168	45	335	546			
3	Krishna	94	78	292	..	464	158	209	573	920			
4	West Godavari	47	47	418	..	512	121	149	310	580	31	200	1,615
5	Rajahmundry	73	2	386	..	461	45	258	46	349	19	113	1,224
6	East Godavari	12	35	219	..	266	132	188	250	570	10	177	1,833
7	Visakhapatnam (South)	129	..	356	..	485	53	100	277	430	..	152	1,067
8	Visakhapatnam (North)	134	38	349	7	528	101	137	153	391	..	48	987
9	Anakapalle, Special	..	..	65	..	65	..	..	..	..	..	..	65
	Total	588	308	2,556	14	3,466	1,001	1,199	1,960	4,160	66	804	8,496
II Circle.													
10	Anantapur	106	253	212	..	571	331	126	350	807	..	66	1,444
11	Bellary	..	221	336	..	557	282	197	133	612	..	109	1,278
12	Chingleput	133	..	396	129	658	56	279	733	1,068	5	60	1,791
13	Chittoor	53	121	560	..	734	28	431	550	1,009	..	43	1,786
14	Cuddapah	..	160	272	..	432	289	245	91	626	..	50	1,108
							P.H. 1						
15	Kurnool	54	327	282	..	663	256	306	46	608	..	55	1,326
16	Nellore	136	102	371	..	609	302	337	346	985	1	57	1,652
17	North Arcot	104	73	479	..	656	123	457	344	929	1	179	1,765
18	Madras City	..	..	..	..	..	..	..	..	..	3	528	531
	Total	586	1,257	2,908	129	4,880	1,673	2,378	2,593	6,644	10	1,147	12,681
III Circle.													
19	South Arcot	86	90	384	..	560	288	499	642	1,429	102	113	2,210
20	Tanjore, East	..	28	260	..	288	108	385	615	+ 6 1,108			
21	Tanjore, West	..	73	331	..	404	258	255	450	+ 10 963			
22	Tiruchirappalli	130	190	454	..	774	237	546	777	+ 25 1,560	413	256	3,467
23	Madurai	110	67	479	..	656	245	158	754	+ 180 1,560	71	201	2,786
24	Ramanathapuram	95	71	298	..	464	265	302	323	+ 163 1,157	15	277	2,208
25	Tirunelveli	85	99	277	..	461	478	129	354	+ 103 890	..	214	1,700
26	Coleroon Bridge	..	..	..	..	..	..	..	..	+ 132 961	13	160	1,664
										+ 69			
	Total	506	618	2,483	..	3,607	1,879	2,274	3,915	8,068 + 525	614	1,221	13,510 + 525
IV Circle.													
27	Coimbatore South	50	138	341	..	529	203	264	609	1,076	3	253	3,834
28	Coimbatore North	27	57	406	7	497	251	384	84	1,476			
29	Salem South	81	62	239	9	391	165	354	289	808			
30	Salem North	122	..	298	2	422	253	336	298	887	..	154	2,662
31	Malabar (South)	42	145	419	..	606	50	183	270	503	10	197	2,195
32	Malabar (North)	..	190	149	20	359	200	194	126	520			
33	South Kanara	..	266	396	27	689	109	256	405	778			
							P.H. 8				..	65	1,532
34	The Nilgiris	..	104	83	17	204	9	65	319	393	..	142	739
	Total	322	962	2,331	82	3,697	1,248	2,036	3,157	6,441	13	811	10,962
	Grand Total	2,002	3,145	10,278	225	15,650	5,801	7,887	11,625	25,313 + 525	703	3,983	46,174

NOTE.—Five hundred and twenty-five miles are newly formed unmetalled roads under District Board for which detailed under each classification of roads are not available.

ANNEXURE 5.
Statement showing the various types of roads under different authorities as on 31st March 1953.

Serial number and name of circle and division. (1)	Cement concrete roads.						Black-top roads.						Unmetalled roads.					
	Highways. (2)	District Board. (3)	Public Works Department. (4)	Municipal Councils. (5)	Total. (6)		Highways. (7)	District Board. (8)	Public Works Department. (9)	Municipal Councils. (10)	Total. (11)		Highways. (12)	District Board. (13)	Public Works Department. (14)	Municipal Councils. (15)	Total. (16)	
I Circle.																		
1 Guntur, South	26	..	..	4	30	15	..	..	..	8	49	349	70	1,081	6	32	565	1,725
2 Guntur, North	..	..	..	..	..	26	..	..	..	..	..	238	210	327	..	..	747	1,615
3 Krishna	15	..	1	7	23	76	..	..	..	7	83	368	100	762	30	86	389	1,224
4 West Godavari	12	..	..	1	13	49	1	..	..	7	57	434	63	765	2	42	651	1,833
5 Rajahmundry	..	..	..	5	23	35	..	..	..	8	62	343	105	1,094	5	50	128	1,067
6 East Godavari	13	..	2	15	45	50	1	..	..	45	96	405	80	798	..	12	124	987
7 Visakhapatnam, South	30	..	..	..	2	4	..	..	..	..	4	522	31	837	..	17	12	65
8 Visakhapatnam, North	2	..	..	..	6	..	..	..	..	..	..	47	..	..	..	..	..	..
9 Anakapalle, Special	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	107	..	3	32	142	274	2	..	..	75	351	2,913	449	5,384	43	248	2,619	8,496
II Circle.																		
10 Anantapur	1	..	..	2	3	55	1	..	..	4	60	515	31	1,178	..	29	203	1,444
11 Bellary	3	..	..	4	7	37	..	..	..	12	49	517	78	1,120	..	15	102	1,278
12 Chingleput	29	..	..	1	30	312	11	..	..	4	327	317	41	629	..	14	805	1,791
13 Chittoor	1	..	..	2	3	87	3	..	..	6	96	646	20	1,122	..	15	565	1,786
14 Cuddapah	9	..	..	2	11	46	..	..	..	4	50	377	32	949	..	12	98	1,108
15 Kurnool	1	..	..	5	6	6	..	..	..	2	8	656	28	1,071	..	20	241	1,326
16 Nellore	9	..	1	3	13	117	..	..	..	24	141	482	30	1,231	..	265	267	1,652
17 North Arcot	19	..	..	3	22	65	1	..	..	10	76	572	85	1,152	..	81	515	1,765
18 Madras City	..	..	..	20	20	..	..	2	..	408	411	..	82	83	..	17	17	531
Total	72	..	1	42	116	725	16	..	2	475	1,218	4,082	427	8,535	2	203	2,813	12,681

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Statement showing the various types of roads under different authorities as on 31st March 1953—cont.

Serial number and name of circle and division.	Cement concrete roads.					Black-top roads.					Metalled roads.					Unmetalled roads.					Grand Total.
	Highways.	District Board.	Public Works Department.	Municipal Councils.	Total.	Highways.	District Board.	Public Works Department.	Municipal Council	Total.	Highways.	District Board.	Public Works Department.	Municipal Councils.	Total.	Highways.	District Board.	Public Works Department.	Municipal Council.	Total.	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)
III Circle.																					
19 South Arcot	1	..	..	..	16	169	1	..	18	188	358	662	1	85	1,106	17	772	101	10	900	2,210
20 Tanjore, East	2	..	1	5	16	18	2	1	5	130	250	130	3	131	1,114	18	986	408	115	2,207	3,467
21 Tanjore, West	8	..	..	..	..	93	11	..	..	..	284	316	..	..	..	19	661	..	..	..	..
22 Tiruchirappalli	16	..	..	7	23	291	4	..	66	361	467	908	15	50	1,440	..	828	56	78	962	2,786
23 Madurai	24	..	..	7	31	204	21	..	62	287	402	609	6	111	1,128	26	630	9	97	762	2,208
24 Ramanathapuram	6	..	..	13	19	80	4	..	7	91	378	383	..	113	874	..	635	..	81	716	1,700
25 Tirunelveli	14	..	..	42	56	45	6	..	5	56	402	711	5	51	1,169	..	313	8	62	383	1,664
Total	86	..	1	74	161	900	49	1	163	1,113	2,541	3,719	30	541	6,831	80	4,825	532	443	5,930	14,035

IV Circle.

26 Coimbatore, North ..	47	..	..	4	51	54	4	..	55	310	443	707	1	133	1,982	..	769	..	61	1,491	3,834
27 Coimbatore, South ..	..	..	..	..	..	19	..	..	..	..	287	411	..	..	..	..	661	..	..	..	..
28 Malabar, North ..	3	..	..	4	15	67	..	..	11	166	289	280	9	80	1,219	..	240	..	102	795	2,105
29 Malabar, South ..	8	..	..	..	..	87	..	..	..	..	511	50	..	..	..	..	453	..	..	..	..
30 Salem, North ..	9	..	..	17	46	85	5	..	26	161	326	634	..	52	1,840	7	248	..	59	615	2,662
31 Salem, South ..	20	..	..	..	..	43	2	..	..	..	321	505	..	53	1,085	9	376	..	3	388	1,532
32 South Kanara ..	..	..	..	2	..	50	..	..	9	59	630	402	..	72	243	..	242	..	22	264	739
33 The Nilgiris ..	..	..	..	..	2	170	14	..	46	230	33	138	..	..	..	..	..	..	..	..	..
Total ..	87	..	..	27	114	752	25	3	147	926	2,942	3,127	10	390	6,369	16	3,290	..	247	3,553	10,963
Grand total ..	352	..	5	175	532	2,850	92	6	860	3,608	12,378	12,867	67	1,807	27,119	270	12,879	625	1,141	14,915	46,174

ANNEXURE 6.

Statement showing the lengths of various classes of roads improved or newly formed during 1952-53.

Serial number and name of division.	Cement concrete roads.					Black-top roads.					Metalled roads.					Unmetalled roads.					
	Highways.	District Board.	Public Department Works	Municipalities.	Total.	Highways.	District Board.	Public Department Works	Municipalities.	Total.	Highways.	District Board.	Public Department Works	Municipalities.	Total.	Highways.	District Board.	Public Department Works	Municipalities.	Total.	Grand total.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)
I Circle.																					
1 Guntur, South	3	..	..	..	3	6	..	..	1	31	..	11	..	1	12	18	19	..	..	42	88
2 Guntur North	..	..	..	1	1	24	..	..	1	24	8	31	..	7	46	..	68	..	1	69	140
3 Krishna	..	..	..	..	4	18	1	..	1	20	8	3	..	..	11	..	1	..	..	1	36
4 Godavari, West	4	..	..	..	..	17	..	..	..	17	..	..	..	..	..	13	..	..	..	13	30
5 Rajahmundry	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..	..	2	2	29
6 Godavari, East	1	..	..	1	2	21	..	..	1	22	..	..	..	..	3	..	..	..	..	8	60
7 Visakhapatnam, South.	17	..	..	7	24	13	..	..	10	23	..	4	..	1	5	..	8	..	..	..	..
8 Visakhapatnam, North.	..	..	..	..	..	3	..	..	..	3	..	..	..	7	7	..	3	..	..	3	13
9 Anakapalle Special.	6	..	..	..	6	..	..	..	..	..	6	..	..	..	6	12	..	..	..	12	24
II Circle.																					
10 Anantapur	1	..	..	1	2	13	..	..	..	18	..	15	..	1	16	1	74	..	..	75	111
11 Bellary	..	..	..	1	1	..	..	..	2	2	..	..	..	..	..	..	..	..	..	..	3
12 Chingleput	2	..	..	Nil	2	107	5	..	1	113	..	41	..	5	46	..	73	..	..	73	234
13 Chittoor	..	..	..	1	1	13	2	..	2	17	..	172	..	6	178	..	Nil	..	..	Nil	196
14 Cuddapah	..	..	..	1	1	34	1	..	1	36	4	29	..	..	33	..	40	..	..	40	110
15 Kurnool	..	..	..	2	2	6	..	..	2	8	..	22	..	..	22	1	13	..	..	14	46
16 Nellore	..	..	..	1	1	87	..	..	2	89	3	17	..	..	20	2	185	..	..	187	297
17 North Arcot	2	..	..	..	2	24	2	..	4	30	4	33	..	2	39	..	94	..	..	94	165
18 Madras City	..	..	..	..	..	..	..	..	20	20	..	..	..	14	14	..	..	..	..	..	34

Statement showing the lengths of various classes of roads improved or newly formed during 1952-53—cont.

Serial number and name of division.	Cement concrete roads.					Black-top roads.					Metalled roads.					Unmetalled roads.						
	Highways.	District Boards.	Public Department. Works	Municipalities.	Total.	Highways.	District Boards.	Public Department. Works	Municipalities.	Total.	Highways.	District Boards.	Public Department. Works	Municipalities.	Total.	Highways.	District Boards.	Public Department. Works	Municipalities.	Total.	Grand total.	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	
III Circle.																						
19 South Arcot ..	5	..	..	..	5	34	..	..	2	36	9	..	..	..	11	..	6	..	..	6	58	
20 Tanjore East ..	..	..	..	1	6	13	2	..	1	80	..	6	..	12	18	..	10	3	..	38	142	
21 Tanjore West ..	..	..	..	..	..	58	6	..	..	..	..	..	..	..	..	..	25	..	..	..	..	
22 Tiruchirappalli ..	8	..	..	4	12	37	..	..	17	54	..	187	..	11	198	..	180	..	7	187	451	
23 Madurai ..	..	..	..	1	1	115	20	..	11	146	..	..	..	2	2	..	103	..	..	103	252	
24 Ramanathapuram ..	..	..	..	6	6	38	3	..	1	42	..	7	..	..	7	..	132	..	..	132	187	
25 Tirunelveli, ..	..	..	..	4	6	38	6	..	..	44	..	30	..	..	30	..	69	..	..	69	149	
26 Caleroon Bridge Division.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Total ..	68	..	..	34	97	941	65	1	105	1,132	45	705	..	85	835	52	1,285	3	19	1,359	3,423	
IV Circle.																						
27 Coimbatore, South	1	..	..	..	1	34	4	..	14	84	..	17	..	..	31	..	30	..	6	75	191	
28 Coimbatore, North	..	..	..	..	..	32	..	..	..	..	..	5	..	..	..	..	39	..	..	..	..	
29 Salem, South ..	2	..	..	1	3	18	2	..	5	55	..	17	..	2	77	..	13	..	3	38	173	
30 Salem, North ..	..	..	..	..	..	28	2	..	..	..	..	58	..	..	..	..	22	..	..	..	..	
31 Malabar, South	3	..	..	..	5	38	..	..	3	72	..	..	..	..	..	..	31	..	..	36	113	
32 Malabar, North	1	..	..	..	..	30	..	..	..	..	..	..	..	..	..	..	31	..	..	34	69	
33 South Kanara ..	..	..	..	..	..	32	..	..	3	32	3	..	..	..	3	..	8	..	..	8	22	
34 The Nilgiris ..	..	..	..	..	..	2	9	..	..	14	..	..	..	..	..	..	..	..	..	..	..	
Total ..	68	..	..	34	97	941	65	1	105	1,132	45	705	..	85	835	52	1,285	3	19	1,359	3,423	

ANNEXURE 7.

Statement showing the length of roads taken over from the District Boards, etc., during 1952-53.

Serial number and name of division.	Cement Concrete road.	Black-top roads.	Metalled road.	Unmetalled road.	Total length.	Authority for taking over and remarks.
	M. F. FT.	M. F. FT.	M. F. FS.	M. F. FS.	M. F. FT.	
1 Tanjore, East ..	..	..	4 4 0	5 1 185	9 5 185	These are Canal Bank roads and were taken over by this department during this year in view of G.O. No. 1978, Public Works, dated 6th May 1952.
2 Tanjore, West ..	..	..	8 0 0	..	8 0 0	
Other division.			Nil.			

ANNEXURE 8.

Road mileage analysis as on 31st March 1953—Government and District Board roads.

Classification.	Mileage (to the nearest mile).									
	Cement concrete roads.		Black top roads.		Metalled roads.		Unmetalled roads.		Total.	
	Urban.	Rural.	Urban.	Rural.	Urban.	Rural.	Urban.	Rural.	Urban.	Rural.
National Highways ..	41	120	164	593	9	1,056	..	19	214	1,788
Provincial Highways ..	21	102	73	626	23	2,296	..	12	117	3,036
Major District Roads ..	11	57	317	928	318	13,739	..	651	646	15,425
Other District Roads ..	..	..	19	16	337	4,802	..	2,938	356	7,756
Village Roads ..	..	..	..	6	..	2,615	..	9,529	..	12,150
Total ..	73	279	573	2,109	687	24,553	..	13,149	1,333	40,155

ANNEXURE 9.

Statement showing the appropriation and the outlay during 1952-53 under all heads of Civil Works.

Service heads. (1)	Original works.		Repairs.		Total.	
	Appropriation.	Actual Outlay.	Appropriation.	Actual Outlay.	Appropriation.	Actual Outlay.
	(2)	(3)	(4)	(5)	(6)	(7)
	RS.	RS.	RS.	RS.	RS.	RS.
Union—						
50. Civil Works—						
Communications	..	..	71,36,000	71,36,000	71,36,000	71,36,000
State—						
50. Civil Works—						
Scheduled areas—Excluding Post-War Reconstruction—						
Communications	16,800	16,897	6,50,100	6,21,044	6,66,900	6,37,941
Post-War Reconstruction—						
Communications	5,66,900	5,55,369	..	..	5,66,900	5,55,369
Establishment	..	..	..	..	1,53,100	1,67,485
Tools and Plant	..	..	..	..	55,700	57,571
Total—50. Civil Works—Scheduled Areas	..	..	..	..	..	14,18,366
Ordinary Areas—						
Excluding Post-War Reconstruction—						
Communications	55,19,700	2,61,195 51,26,930	3,42,66,400	3,88,67,888	3,97,86,100	3,91,29,083 81,26,930
Post-War Reconstruction—						
Communications	72,17,400	76,25,062	..	..	72,17,400	76,25,062
Establishment	..	..	..	..	44,15,800	48,72,095
Charges in England	..	..	..	..	..	..
Tools and Plant	..	..	..	..	79,29,400	80,04,342
Suspense	..	..	..	..	22,12,000	— 6,04,811
Total—50. Civil Works—Ordinary Areas	..	..	..	..	..	6,41,52,701
Total—50. Civil Works—Highways—						
State	..	..	..	..	..	6,55,71,067
81. Civil Works—						
Union—						
Communications	59,55,700	58,01,618	..	..	59,55,700	58,01,618
.. ..	..	..	..	..	..	58,91,618
Grand total	..	..	..	..	..	7,85,88,685

ANNEXURE 10.

Statement showing in abstract Appropriation and Expenditure in 1952-53.

Finance heads. (1)	Original appropriation. (2)	Final appropriation. (3)	Actual expenditure. (4)
	RS.	RS.	RS.
50. Civil Works—Union—			
Works and Repairs	70,00,000	71,36,000	71,36,000
Buildings and Roads—			
50. Civil Works—State—			
Scheduled Areas—			
Excluding Post-War Reconstruction	7,30,800	6,66,900	6,37,941
Post-war Reconstruction	12,08,500	5,66,900	5,55,309
Ordinary Areas—			
Excluding Post-War Reconstruction	3,79,44,200	3,97,86,100	4,42,56,013
Post-War Reconstruction	1,01,68,100	72,17,400	76,25,062
Total, Civil Works—State	..	..	5,30,74,385
Ordinary Establishment—			
50. Civil Works—State—			
Scheduled Areas	1,05,300	1,53,100	1,67,485
Ordinary Areas	50,88,900	44,15,800	48,72,095
Total, Establishment	..	..	50,39,580
Tools and Plant—			
50. Civil Works—State—			
Scheduled Areas	19,500	55,700	57,571
Ordinary Areas	46,11,600	72,29,400	80,04,342
Total, Tools and Plant	..	..	80,61,913
Suspense—			
81. Civil Works State—			
Ordinary Areas	6,11,400	22,12,000	— 6,04,811
Total Suspense	..	..	— 6,04,811
81. Capital Outlay—Union Works	50,00,000	59,55,700	58,01,618
.. ..	..	..	58,01,618
Grand total—Highways—State and Union	..	..	7,85,08,685

ANNEXURE II.

(i) Statement showing the division-wise particulars of Expenditure on Government Roads (State and Union), 1952-53.

Name of division.	Expenditure on original works.										Expenditure on repairs.										Tools and plant.									
	Ex-P.W.R.					P.W.R.					Ex-P.W.R.					Avenues.														
	N.H.		M.D.R.		O.D.R.	N.H.		M.D.R.		O.D.R.	N.H.		P.H.		M.D.R.	O.D.R.	N.H.		P.H.			M.D.R.	O.D.R.							
	(2)	RS.	(3)	RS.		(4)	RS.	(5)	RS.		(6)	RS.	(7)	RS.			(8)	RS.	(9)	RS.				(10)	RS.	(11)	RS.	(12)	RS.	(13)
I Circle																														
1 Guntur, South	..	..	..	..	..	2,76,849	..	..	..	31,325	..	..	..	..	..	2,62,863	..	..	..	8,19,356	10,080	46,748	72,342	18,56,805						
2 Guntur, North	..	..	3,67,628	..	..	1,58,501	..	2,439	..	1,68,834	..	..	..	..	..	1,69,687	..	..	..	7,79,690	..	11,771	87,151	18,41,017						
3 Krishna	..	..	3,15,439	..	..	145	..	95,879	..	1,45,225	..	..	..	..	..	3,34,055	..	..	..	11,91,700	7,531	90,778	1,11,248	27,69,020						
4 East Godavari	..	..	4,845	..	..	..	..	53,801	..	72,267	..	..	..	..	..	1,93,697	..	..	..	9,87,440	..	17,050	77,605	16,12,605						
5 Rajahmundry	..	..	..	..	..	53,101	..	..	..	1,82,645	..	..	..	..	..	66,581	..	..	..	7,93,184	..	2,803	88,000	12,30,527						
6 West Godavari	..	..	..	..	..	..	..	..	..	7,22,968	..	..	..	..	..	3,00,633	..	..	..	16,26,894	9,383	30,298	1,69,598	34,08,604						
7 Visakhapatnam, South	..	..	3,75,715	..	..	12,82,589	..	..	..	4,22,094	..	..	..	..	..	3,60,094	..	..	..	6,48,420	..	15,190	1,06,484	28,50,738						
8 Visakhapatnam, North	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4,54,308	..	..	..	7,88,041	3,295	4,623	59,561	14,57,552						
9 Anakapalli special	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	90,139	..	2,726	51,201	7,23,187						
10 Godavari Bridges special	..	..	..	..	..	10,20,279	..	..	..	5,76,121	..	..	..	..	..	..	..	..	..	..	..	..	..	73,757	10,94,086					
Total	..	..	10,63,627	..	..	27,91,464	..	1,52,119	..	23,24,479	..	3,009	..	21,41,913	..	12,85,475	..	..	..	77,24,864	30,189	2,21,987	8,96,947	1,88,38,091						
II Circle																														
11 Anantapur	..	..	1,25,708	..	..	10,117	..	16,209	..	18,055	..	..	..	..	..	2,18,640	..	..	..	3,93,563	..	33,992	42,564	15,43,075						
12 Bellary	..	..	153	..	..	..	..	1,59,593	..	3,11,447	..	..	..	..	..	..	..	..	..	6,27,607	..	29,099	69,920	19,58,164						
13 Chingleput	..	..	..	..	..	7,14,887	..	..	..	2,45,015	..	56	..	..	..	5,03,051	..	..	..	12,93,485	1,94,247	80,693	2,14,368	33,13,777						
14 Chittoor	..	..	..	..	..	..	..	..	..	1,46,084	..	..	..	..	..	96,843	..	..	..	8,78,703	..	60,289	1,21,745	17,85,543						
15 Cuddapah	..	..	..	..	..	..	..	..	..	2,27,182	..	..	..	..	..	..	..	..	..	6,00,147	..	6,248	76,947	22,12,278						
16 Kurnool	..	..	..	..	..	..	..	..	..	20,085	..	..	..	..	..	1,73,322	..	..	..	5,81,214	..	37,924	1,32,945	20,00,144						
17 Nellore	..	..	..	..	..	1,541	..	1,36,664	..	20,085	..	..	..	..	..	9,52,215	..	..	..	8,13,408	15,440	8,470	1,25,583	29,47,336						
18 North Arcot	..	..	..	..	..	4,69,790	..	1,47,170	..	1,06,497	..	..	..	..	..	3,68,228	..	..	..	8,68,740	6,529	43,097	1,08,557	21,43,265						
19 Pennar Bridge Division	..	..	3,51,143	..	..	78,380	..	..	..	50,399	..	..	..	..	..	..	..	..	..	..	..	..	..	6,919	5,07,776					
20 Transport and machinery Division	..	..	..	..	..	5,00,867	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	40,73,503	40,74,043					
Total	..	..	5,79,881	..	..	17,75,523	..	4,99,171	..	11,24,764	..	56	..	23,12,299	..	40,27,339	..	..	..	60,56,867	2,16,216	2,99,812	49,73,051	2,24,85,401						
III Circle																														
21 South Arcot	..	..	4,51,825	..	..	..	..	1,67,209	..	2,56,468	..	..	..	..	..	5,78,471	..	..	..	11,84,751	12,587	44,744	1,04,066	29,44,839						
22 Tanjore, East	..	..	..	..	..	..	..	..	..	7,093	..	..	..	..	..	..	..	..	..	8,83,030	..	11,482	62,339	10,72,171						
23 Tanjore, West	..	..	1,86,616	..	..	..	..	1,65,446	..	64,298	..	..	..	..	..	2,87,253	..	..	..	10,59,482	35,391	15,786	1,05,775	17,71,832						
24 Tiruchirappalli	..	..	5,89,477	..	..	..	..	..	..	27,577	..	..	..	..	..	3,99,954	..	..	..	13,93,883	7,242	66,887	2,61,206	31,66,222						
25 Madurai	..	..	..	..	..	..	..	..	..	1,40,724	..	..	..	..	..	3,60,072	..	..	..	14,95,695	3,723	4,641	10,798	24,41,826						
26 Ramanathapuram	..	..	4,79,094	..	..	..	..	..	..	3,956	..	..	..	..	..	5,49,902	..	..	..	9,28,591	..	15,411	1,93,309	28,77,130						
27 Tirunelveli	..	..	1,08,145	..	..	..	..	..	..	86,287	..	..	..	..	..	2,42,382	..	..	..	6,90,521	1,676	12,020	1,12,691	15,06,096						
28 Coleroon Bridge Division	..	..	..	..	..	..	..	..	..	2,56,144	..	..	..	..	..	..	..	..	..	..	..	..	..	3,369	2,59,513					
Total	..	..	18,15,127	..	..	7,10,827	..	2,76,988	..	8,42,537	..	..	..	19,25,761	..	16,53,968	..	..	..	75,85,958	60,619	1,70,971	8,58,553	1,60,89,129						
IV Circle																														
29 Bharatpur Division	..	..	..	..	..	..	..	3,52,005	..	4,17,411	..	..	..	..	..	..	..	..	..	..	..	..	..	153	7,99,569					
30 Coimbatore, North	..	..	..	..	..	..	..	..	..	64,216	..	..	..	..	..	1,02,608	..	..	..	12,83,081	12,670	72,576	1,26,539	17,85,204						
31 Coimbatore, South	..	..	..	..	..	1,32,229	..	40,802	..	1,26,022	..	..	..	..	..	2,03,872	..	..	..	8,74,207	9,134	5,761	2,04,383	22,34,207						
32 Malabar North	..	..	4,24,838	..	..	..	..	2,68,941	..	97,342	..	..	..	..	..	..	..	..	..	3,98,994	..	4,908	85,791	21,19,181						
33 Malabar South	..	..	2,32,899	..	..	..	..	..	..	58,551	..	..	..	..	..	1,68,188	..	..	..	11,14,186	15,265	3,793	2,01,588	24,83,680						
34 Salem, North	..	..	..	..	..	..	..	..	..	80,533	..	..	..	..	..	4,18,187	..	..	..	6,13,398	7,102	20,565	1,12,791	13,40,955						
35 Salem, South	..	..	..	..	..	10,021	..	..	..	16,353	..	..	..	..	..	2,93,231	..	..	..	3,83,042	5,611	37,274	1,23,731	11,22,178						
36 South Kanara	..	..	40,199	..	..	..	..	..	..	8,19,378	..	..	..	..	..	..	..	..	..	8,77,776	35,053	2,897	1,40,532	27,55,999						
37 The Nilgiris	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1,71,162	4,916	..	52,185	4,98,767						
Total	..	..	6,97,936	..	..	1,83,462	..	8,43,674	..	16,76,019	..	193	..	11,86,084	..	31,71,743	..	..	..	56,60,846	89,751	1,47,774	10,47,643	1,51,09,640						
Grand total	..	..	2,327 41,56,571	..	..	43,788	..	54,60,775	..	17,71,902	..	2,863	..	75,66,082	..	1,01,38,525	..	..	..	2,70,28,530	3,96,775	8,40,544	77,76,194	7,24,72,261						

A.P.H. — 6A

(iii) Road Development Schemes—Post-war Road Development Works—Roads

State Highways (Government Roads).

Serial number and name of Division.		Cement concreting.		Black-top surfacing.		New formation (including cost of acquisition and widening of roads).		Metalling.		Major bridges.
		Quantity.		Quantity.		Quantity.		Quantity.		Amount, RS. IN LAKHS.
		M. F.	RS. IN LAKHS.	M. F.	RS. IN LAKHS.	M. F.	RS. IN LAKHS.	M. F.	RS. IN LAKHS.	
(1)										
1	Visakhapatnam, North	..	..	..	..	..	0.01	..	..	..
2	Visakhapatnam, South	..	5 5	3.09	1 3	0.50	..	..	..	..
3	Anakapalli ..	..	6 4	4.51	..	..	12 2	2.42	6 4	0.34
4	East Godavari	..	0 6	1.15	..	..	..	..	..	..
5	Rajahmundry ..	..	..	..	1 5	0.35	3 4	1.27	..	..
6	West Godavari	..	2 2	0.88	..	..	1 0	0.36	4 0	2.87
7	Krishna ..	..	..	0.96	..	..	..	..	..	0.88
8	Guntur, North	..	..	0.04	..	0.05	..	..	6 0	0.93
9	Ongole ..	..	..	..	..	..	..	..	10 0	0.10
10	Nellore ..	..	..	0.07	..	..	0.09	..	..	..
11	Kurnool ..	..	..	..	..	6 1	0.06	10 4	0.46	0.10
12	Bellary ..	..	0 6	1.02	..	..	..	..	..	3.56
13	Anantapur ..	..	..	..	..	..	0.03	..	0.02	0.18
14	Cuddapah ..	..	0 2	0.22	8 2	1.23	..	0.28	1 6	0.17
15	Chittoor ..	..	..	..	10 2	0.79	..	..	..	0.01
16	Chingleput ..	..	0 6	0.04	..	— 0.09	..	..	..	..
17	North Arcot ..	..	..	..	..	..	1 0	0.17	..	..
18	South Arcot ..	..	5 4	1.55	..	..	..	0.11	7 6	1.20
19	Tiruchirappalli ..	..	..	..	..	..	..	..	..	..
20	Tanjore, East ..	..	..	..	..	..	..	..	..	..
21	Tanjore, West ..	..	1 7	0.25	..	..	..	0.17	..	..
22	Coleroon ..	..	..	..	..	..	..	..	..	0.41
23	Madurai ..	..	..	0.60	1 2	0.57	..	..	..	4.74
24	Ramanathapuram ..	..	..	..	..	..	..	..	..	..
25	Tirunelveli ..	..	..	..	..	..	..	..	..	..
26	Salem, North ..	..	..	..	..	..	..	..	..	..
27	Salem, South ..	..	..	..	..	0.09	..	..	..	0.80
28	Coimbatore, North ..	..	0 7	0.22	..	..	..	0.19	..	..
29	Coimbatore, South ..	..	2 0	1.29	..	..	..	..	..	0.16
30	The Nilgiris ..	..	1 2	0.42	..	..	..	..	..	..
31	Malabar, North ..	..	..	..	2 2	0.91	..	0.08	..	..
32	Malabar, South ..	..	..	..	..	..	..	0.42	..	1.59
33	Bharathapuzha ..	..	..	..	..	..	..	..	..	7.80
34	South Kanara ..	..	..	..	1 6	0.56	..	0.19	6 0	0.03
Total ..		28 3	16.23	28 6	4.96	23 7	5.80	52 4	7.10	31.66
Plan for the State for the year 1952-53.		10 0	4.00	10 0	4.00	170 0	16.50	80 0	16.50	12.00

other than National Highways—Progress achieved during the year 1952-53.

State Highways (Government Roads)		Other roads (District Board roads).									
—cont.		Minor bridges, culverts, road dams and other improvements like, strengthening and widening.		Expenditure for the year on all the categories of works.		Plan for the year on all the categories of works.		New formation (including cost of acquisition and widening of roads).		Metalling.	
Amount.		Amount.		Amount.		Amount.		Amount.		Amount.	
RS. IN LAKHS.	RS. IN LAKHS.	RS. IN LAKHS.	RS. IN LAKHS.	RS. IN LAKHS.	RS. IN LAKHS.	RS. IN LAKHS.	RS. IN LAKHS.	RS. IN LAKHS.	RS. IN LAKHS.	RS. IN LAKHS.	RS. IN LAKHS.
(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)
..	0.01	..	2 4	0.06	20 4	0.43	..	0.06	0.33	1.24	..
..	3.59	7.35	8 1	0.80	6 6	0.26	..	..	0.94	0.77	..
0.36	7.77	..	..	..	..	..	..	..	..	..	..
0.09	1.24	..	8 4	0.41	..	..	..	..	..	..	..
0.07	1.69	5.12	2 2	0.63	0 1	0.01	..	0.04	0.77	1.31	..
0.05	7.23	5.94	13 3	0.39	3 1	0.39	0.11	0.13	0.84	2.07	..
..	2.41	6.69	..	0.86	..	1.65	..	2.11	2.45	3.03	..
0.19	1.49	..	1 0	0.15	..	0.23	0.42	0.06	..	7.46	..
0.16	0.32	5.75	22 0	1.58	12 0	0.52	0.23	0.12	1.79	..	..
0.03	1.36	2.03	16 0	0.21	6 6	0.03	..	..	2.05	2.55	..
0.02	0.64	1.66	6 0	3.56	4 4	0.42	0.55	..	1.74	2.48	..
0.13	4.71	2.79	44 0	3.01	13 4	0.79	0.32	0.21	1.70	2.60	..
0.11	0.34	0.22	..	0.79	..	0.18	0.01	..	1.15	1.08	..
..	2.50	2.86	63 0	3.76	2 2	0.13	0.01	..	1.74	1.30	..
0.32	1.45	2.77	60 6	1.00	16 0	1.14	..	0.61	1.33	1.04	..
..	0.76	1.07	8 0	0.51	1 2	0.14	0.27	..	1.08	0.73	..
1.14	0.50	0.46	52 6	3.61	1 4	0.23	0.10	..	1.30	1.10	..
0.66	4.17	4.30	..	0.63	..	2.54	..	0.36	1.69	2.14	..
..	0.27	0.32	133 0	1.82	..	..	..	..	1.49	1.33	..
..	..	..	16 2	0.17	3 3	0.63	0.24	0.02	1.62	1.88	..
0.04	0.87	..	..	0.44	..	1.34	0.02	..	..	..	..
..	4.74	1.71	..	..	..	..	..	..	..	..	..
0.09	1.30	2.02	60 0	1.77	12 4	0.27	..	0.04	1.57	2.46	..
..	..	..	..	2.09	..	0.09	0.13	..	1.50	4.18	..
0.01	0.01	0.56	68 4	2.01	13 4	0.12	0.27	0.24	1.61	2.08	..
..	0.80	6.09	..	0.40	..	..	0.11	0.02	..	..	..
0.01	0.15	..	..	0.25	..	..	..	1.10	1.86	2.04	..
0.10	0.67	..	39 3	0.63	4 6	0.12	..	..	..	..	..
0.38	1.67	2.43	47 4	1.44	17 3	0.21	..	0.81	1.60	1.65	..
..	0.45	..	..	0.27	2 2*	0.34*	..	0.05	0.62	0.60	..
1.23	4.15	..	4 6	0.71	2 2	0.02	..	0.15	..	..	..
0.83	0.83	3.66	2 4	1.29	..	..	0.14	0.09	1.77	2.2	..
..	7.80	..	..	..	..	..	..	..	..	..	..
4.65	9.53	4.20	3 4	0.55	3 5	0.04	..	..	0.77	0.74	..
9.87	75.42	70.00	681 5	35.80	147 7	12.77	2.90	6.22	35.38	50.00	..
17.00	..	70.00	330 0	32.00	40 0	8.00	2.50	7.50	..	50.40	..

* Black-top surfacing.

ANNEXURE 12.

Statement showing the figures under "XXXIX—Civil Works—Rents and Miscellaneous, 1952-53—Highways only".

Heads of accounts.		Actuals.
		RS.
XXXIX. Civil Works—State—		
Rents		9,772
Miscellaneous —		
Contribution towards leave salary of officers lent to foreign service ..		9,183
Other receipts		3,76,424
Total ..		3,95,379

N.B.—(1) The figures includes treasury transactions also.

(2) (a) "Rents" represents recoveries of rent for occupation of Inspection Bungalows and residential buildings.

(b) "Other receipts" includes rent for lease of land and road margins, value of stores found surplus, fines realised, lapsed deposits and all other transactions which are not appropriately classifiable under other heads.

ANNEXURE 13.

Statement of expenditure on roads classified according to categories of roads.

District/category.	Government.				District board.			
	Capital works.		Repairs.	Total.	Capital works.		Repairs.	Total.
	Ex-P.W.R.	P.W.R.			Ex-P.W.R.	P.W.R.		
	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
(1)	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
Guntur, South—								
National Highways ..	..	2,76,849	2,62,863	5,39,712	..	..	..	..
Provincial Highways ..	..	..	2,50,191	2,50,191	..	..	..	..
Major District Roads ..	87,101	31,325	8,19,356	9,37,782	..	..	98,182	98,182
Other District Roads ..	..	..	10,030	10,030	..	2,06,331	28,573	2,34,904
Village Roads ..	..	..	..	..	45,577	..	15,487	61,064
Total ..	87,101	3,08,174	13,42,440	17,37,715	45,577	2,06,331	1,42,242	3,94,150
Guntur, North—								
National Highways ..	..	1,58,501	1,69,687	3,28,188	..	..	..	..
Provincial Highways ..	3,67,628	2,439	86,125	4,56,192	..	..	..	..
Major District Roads ..	9,191	1,68,834	7,79,690	9,57,715	3,795	42,984	73,342	1,25,121
Other District Roads ..	..	..	..	..	11,830	264	20,872	32,966
Village Roads ..	..	..	..	..	1,03,936	63,962	34,970	2,02,868
Total ..	3,76,819	3,29,774	10,35,502	17,42,095	1,24,561	1,07,210	1,29,184	3,60,955
Krishna—								
National Highways ..	..	145	3,34,055	3,34,200	..	..	..	..
Provincial Highways ..	3,15,439	95,879	4,70,053	8,81,371	..	..	..	..
Major District Roads ..	967	1,45,225	11,91,700	13,37,892	42,570	1,47,493	1,49,686	3,39,749
Other District Roads ..	..	..	7,531	7,531	63,085	36,244	1,28,722	2,28,051
Village Roads ..	..	..	..	..	6,23,051	2,78,296	1,49,967	10,51,314
Total ..	3,16,406	2,41,249	20,03,339	25,60,994	7,28,706	4,62,033	4,28,375	16,19,114

Statement of expenditure on roads classified according to categories of roads—cont.

District/category.	Government.				District board.			
	Capital works.		Repairs.	Total.	Capital works.		Repairs.	Total.
	Ex-P.W.R.	P.W.R.			Ex-P.W.R.	P.W.R.		
	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
(1)	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
West Godavari—								
National Highways ..	..	..	3,00,633	3,00,633	..	..	..	..
Provincial Highways ..	3,75,715	..	1,61,436	5,37,151	..	..	..	..
Major District Roads ..	11,729	7,22,968	16,26,894	23,61,591	33,058	21,713	90,689	1,45,460
Other District Roads ..	..	..	9,333	9,333	80,601	99,854	1,31,649	3,12,104
Village Roads ..	..	..	..	..	39,429	50,595	84,043	1,74,067
Total ..	3,87,444	7,22,968	20,98,296	32,08,708	1,53,088	1,72,162	3,06,381	6,31,631
Rajahmundry—								
National Highways ..	..	53,101	66,581	1,19,682	..	..	..	..
Provincial Highways ..	..	..	4,053	4,053	..	..	..	..
Major District Roads ..	40,160	1,82,645	7,93,184	10,15,989	..	..	71,321	71,321
Other District Roads ..	..	..	..	..	59,017	68,989	2,03,613	3,31,619
Village Roads ..	..	..	..	..	6,159	..	41,186	47,345
Total ..	40,160	2,35,746	8,63,818	11,39,724	65,176	68,989	3,16,120	4,50,285
East Godavari—								
National Highways ..	..	..	1,93,697	1,93,697	..	..	..	..
Provincial Highways ..	4,845	53,801	1,65,893	2,24,539	..	..	..	..
Major District Roads ..	37,007	72,267	9,87,440	10,96,714	..	3,616	2,05,960	2,09,576
Other District Roads ..	..	3,000	..	3,000	7,800	24,956	1,39,294	1,72,055
Village Roads ..	..	..	..	..	27,884	12,569	2,74,276	3,14,729
Total ..	41,852	1,29,068	13,47,930	15,17,950	35,684	41,141	6,19,530	6,96,355
Visakhapatnam, South—								
National Highways ..	..	12,82,589	3,60,094	16,42,683	..	..	..	..
Provincial Highways ..	..	..	..	..	..	..	..	..
Major District Roads ..	15,867	4,22,094	6,48,420	10,86,381	..	..	50,769	50,769
Other District Roads ..	..	..	..	..	..	22,281	78,893	1,01,174
Village Roads ..	..	..	..	..	24,850	71,619	2,17,546	3,14,015
Total ..	15,867	17,04,683	10,08,514	27,29,064	24,850	93,900	3,47,208	4,65,958
Visakhapatnam, North—								
National Highways ..	..	..	4,54,308	4,54,308	..	..	..	..
Provincial Highways ..	..	..	1,47,724	1,47,724	..	..	..	..
Major District Roads ..	..	..	7,88,041	7,88,041	41,040	4,347	1,10,430	1,55,817
Other District Roads ..	..	..	3,295	3,295	..	28,160	86,466	1,14,626
Village Roads ..	..	..	..	..	7,410	27,785	46,360	81,555
Total ..	..	..	13,93,368	13,93,368	48,450	60,292	2,43,256	3,51,998
Anakapalle Special—								
National Highways ..	..	..	..	..	..	..	..	..
Provincial Highways ..	..	..	..	..	..	..	..	..
Major District Roads ..	..	5,79,121	90,139	6,69,260	..	..	..	..
Other District Roads ..	..	..	..	..	..	..	..	..
Village Roads ..	..	..	..	..	..	..	..	..
Total ..	..	5,79,121	90,139	6,69,260	..	..	..	..
Godavari Bridges Division—								
National Highways ..	..	10,20,279	..	10,20,279	..	..	..	..
Provincial Highways ..	..	..	..	..	..	..	..	..
Major District Roads ..	..	..	..	..	..	..	..	..
Other District Roads ..	..	..	..	..	..	..	..	..
Village Roads ..	..	..	..	..	..	..	..	..
Total ..	..	10,20,279	..	10,20,279	..	..	..	..

Statement of expenditure on roads classified according to categories of roads—cont.

District/category.	Government.				District board.			
	Capital works.		Repairs.	Total.	Capital works.		Repairs.	Total.
	Ex-P.W.R.	P.W.R.			Ex-P.W.R.	P.W.R.		
	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
(1)	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
Anantapur—								
National Highways ..	..	10,117	2,18,640	2,28,757	..	..	..	..
Provincial Highways ..	1,25,708	16,209	5,34,006	6,75,923	..	..	..	..
Major District Roads ..	1,50,221	18,055	3,93,563	5,61,839	1,74,376	18,831	87,916	2,81,123
Other District Roads ..	..	..	..	..	1,17,461	14,795	17,344	1,49,600
Village Roads ..	..	..	..	..	14,34,405	38,803	36,602	15,09,810
Total ..	2,76,929	44,381	11,40,209	14,66,519	17,26,242	72,429	1,41,862	19,40,538
Bellary—								
National Highways ..	..	..	..	..	..	..	..	..
Provincial Highways ..	153	1,59,593	7,60,345	9,20,091	..	..	..	..
Major District Roads ..	..	3,11,447	6,27,607	9,39,054	..	..	..	..
Other District Roads ..	..	..	..	..	..	..	..	..
Village Roads ..	..	..	..	..	58,224	8,09,955	3,39,180	12,07,359
Total ..	153	4,71,040	13,87,952	18,59,145	58,224	8,09,955	3,39,180	12,07,359
Chingleput—								
National Highways ..	2,327	7,14,887	5,03,051	12,20,265	..	..	..	..
Provincial Highways ..	..	..	..	..	..	..	..	..
Major District Roads ..	65,648	2,45,015	12,93,485	16,04,148	..	17,395	72,514	89,909
Other District Roads ..	..	56	1,94,247	1,94,303	15,632	24,161	2,14,143	2,53,936
Village Roads ..	..	..	..	..	1,69,993	50,112	1,61,625	3,81,720
Total ..	67,975	9,59,958	19,90,783	30,18,716	1,85,625	91,668	4,48,282	7,25,575
Chittoor—								
National Highways ..	..	..	96,843	96,843	..	..	..	..
Provincial Highways ..	1,02,872	1,382	3,33,949	4,40,439	..	..	..	..
Major District Roads ..	41,440	1,46,084	8,78,703	10,66,227	553	9,687	7,753	17,993
Other District Roads ..	..	..	..	..	1,19,368	37,496	1,62,010	3,18,874
Village Roads ..	..	..	..	..	11,30,114	84,266	1,04,010	13,18,390
Total ..	1,44,312	1,44,702	13,14,495	16,03,509	12,50,035	1,31,449	2,73,773	16,55,257
Cuddapah—								
National Highways ..	..	..	..	..	..	..	..	..
Provincial Highways ..	..	40,917	9,67,834	10,08,751	..	..	499	499
Major District Roads ..	2,93,003	2,27,182	6,00,147	11,20,332	..	..	1,89,157	1,89,157
Other District Roads ..	..	..	..	..	12,54,513	1,86,830	57,382	14,48,725
Village Roads ..	..	..	..	..	..	..	6,738	6,738
Total ..	2,93,003	2,68,099	15,67,981	21,29,083	12,54,513	1,86,830	2,53,776	16,45,119
Kurnool—								
National Highways ..	..	1,541	1,73,322	1,74,863	..	..	..	..
Provincial Highways ..	..	1,36,664	8,83,828	10,20,492	..	..	..	..
Major District Roads ..	32,621	20,085	5,81,214	6,33,920	..	96,352	98,841	1,95,193
Other District Roads ..	..	..	..	..	..	1,37,068	1,89,621	3,26,689
Village Roads ..	..	..	..	..	..	1,76,496	6,008	1,82,504
Total ..	32,621	1,58,290	16,38,364	18,29,275	..	4,09,916	2,94,470	7,04,866

Statement of expenditure on roads classified according to categories of roads—cont.

District/category.	Government.				District board.			
	Capital works.		Repairs.	Total.	Capital works.		Repairs.	Total.
	Ex-P.W.R.	P.W.R.			Ex-P.W.R.	P.W.R.		
	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
(1)	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
Nellore—								
National Highways ..	..	4,69,790	9,52,215	14,22,005	..	..	..	..
Provincial Highways ..	..	1,47,170	3,08,763	4,55,933	..	..	..	..
Major District Roads ..	..	1,06,497	8,13,408	9,19,905	..	..	1,76,554	1,76,554
Other District Roads ..	..	..	15,440	15,440	..	..	1,47,110	1,47,110
Village Roads ..	..	..	..	..	..	5,08,196	54,989	5,63,185
Total ..	..	7,23,457	20,89,826	28,13,283	..	5,08,196	3,78,653	8,86,849
North Arcot—								
National Highways ..	..	78,380	3,68,228	4,46,558	..	..	..	..
Provincial Highways ..	3,51,148	..	2,33,614	5,84,762	..	..	..	..
Major District Roads ..	34,623	50,399	8,68,740	9,53,762	9,687	27,740	63,469	1,00,896
Other District Roads ..	..	..	6,529	6,529	64,002	783	1,81,236	2,46,021
Village Roads ..	..	..	..	..	2,45,655	3,33,039	1,19,166	6,97,860
Total ..	3,85,771	1,28,729	14,77,111	19,91,611	3,19,344	3,61,562	3,63,871	10,44,777
Pennar Bridge Division—								
National Highways ..	..	5,00,857	..	5,00,857	..	..	..	..
Provincial Highways ..	..	..	..	..	..	..	..	..
Major District Roads ..	..	..	..	..	..	..	..	..
Other District Roads ..	..	..	..	..	..	..	..	..
Village Roads ..	..	..	..	..	..	..	..	..
Total ..	..	5,00,857	..	5,00,857	..	..	..	..
Transport and Machinery Division—								
National Highways ..	..	..	..	..	..	..	..	..
Provincial Highways ..	540	..	..	540	..	..	..	..
Major District Roads ..	..	..	..	..	..	..	..	..
Other District Roads ..	..	..	..	..	..	..	..	..
Village Roads ..	..	..	..	..	..	..	..	..
Total ..	540	..	..	540	..	..	..	..
South Arcot—								
National Highways ..	..	..	5,73,471	5,73,471	..	..	..	..
Provincial Highways ..	4,51,825	1,67,209	1,74,997	7,94,031	..	..	..	..
Major District Roads ..	24,721	2,56,468	11,34,751	14,15,940	24,631	75,240	3,28,308	4,28,179
Other District Roads ..	..	..	12,587	12,587	46,651	1,35,229	2,22,882	4,04,762
Village Roads ..	..	..	..	..	33,132	1,09,045	1,50,559	2,92,736
Total ..	4,76,546	4,23,677	18,95,806	27,96,029	1,04,414	3,19,514	7,01,749	11,25,677
Tanjore East—								
National Highways ..	..	..	..	..	..	..	..	..
Provincial Highways ..	..	..	1,04,919	1,04,919	..	..	..	..
Major District Roads ..	3,308	7,093	8,83,030	8,93,431	22,664	1,997	1,94,576	2,19,237
Other District Roads ..	..	..	..	..	16,403	6,308	2,16,427	2,39,138
Village Roads ..	..	..	..	..	40,894	5,359	1,36,391	1,82,644
Total ..	3,308	7,093	9,87,949	9,98,350	79,961	13,664	5,47,394	6,41,019
Tanjore West—								
National Highways ..	..	..	..	..	..	..	..	..
Provincial Highways ..	1,86,616	16,546	2,87,253	4,90,415	..	..	..	..
Major District Roads ..	195	64,288	10,59,482	11,23,965	1,71,957	86,778	4,46,841	7,05,576
Other District Roads ..	..	..	35,391	35,391	61,449	34,488	2,22,298	3,18,235
Village Roads ..	..	..	..	..	42,417	78,706	1,03,212	2,23,735
Total ..	1,86,811	80,834	13,82,126	16,49,771	2,75,823	1,99,372	7,72,351	12,47,546

Statement of expenditure on roads classified according to categories of roads—cont.

District/category.	Government.				District board.			
	Capital works.		Repairs.	Total.	Capital works.		Repairs.	Total.
	Ex-P.W.R.	P.W.R.			Ex-P.W.R.	P.W.R.		
	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
(1)	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
Tiruchirappalli—								
National Highways ..	..	13,099	3,99,954	4,13,053	..	..	..	..
Provincial Highways ..	5,89,477	..	4,06,897	9,96,374	..	..	..	..
Major District Roads ..	..	27,577	13,93,883	14,21,460	..	..	..	..
Other District Roads ..	..	..	7,242	7,242	..	..	1,29,898	1,29,898
Village Roads ..	..	..	..	..	..	..	2,85,760	2,85,760
Total ..	5,89,477	40,676	22,07,976	28,38,129	68,417	1,87,186	4,60,622	7,16,225
					68,417	1,87,186	8,76,280	11,31,883
Madurai—								
National Highways ..	..	25,107	3,60,072	3,85,179	..	..	..	..
Provincial Highways ..	..	92,481	1,98,454	2,90,935	..	..	..	..
Major District Roads ..	1,10,131	1,40,724	14,05,695	17,46,550	..	..	5,27,036	5,27,036
Other District Roads ..	..	..	3,723	3,723	..	..	1,28,702	1,28,702
Village Roads ..	..	..	..	..	4,58,126	2,40,665	3,18,425	10,17,216
Total ..	1,10,131	2,58,312	20,57,944	24,26,387	4,58,126	2,40,665	9,74,163	16,72,954
Ramanathapuram—								
National Highways ..	..	6,71,646	3,49,902	10,21,548	..	..	..	..
Provincial Highways ..	4,79,064	1,044	2,29,207	7,09,315	..	..	..	..
Major District Roads ..	..	3,956	9,23,591	9,32,547	29,381	2,59,617	3,96,809	6,85,807
Other District Roads ..	..	..	..	..	86,992	51,672	2,57,861	3,96,525
Village Roads ..	..	..	..	..	1,14,064	2,20,104	1,79,148	5,13,316
Total ..	4,79,064	6,76,646	15,07,700	26,63,410	2,30,437	5,31,393	8,33,818	15,95,648
Tirunelveli—								
National Highways ..	..	475	2,42,382	2,42,857	..	..	..	..
Provincial Highways ..	1,08,145	— 342	2,52,241	3,60,044	..	..	..	..
Major District Roads ..	..	86,287	6,90,521	7,76,808	1,64,465	2,28,861	6,07,228	10,00,554
Other District Roads ..	..	..	1,676	1,676	38,477	53,671	76,521	1,68,669
Village Roads ..	..	..	..	..	3,00,864	..	2,16,815	5,17,679
Total ..	1,08,145	86,420	11,86,820	13,81,385	5,03,806	2,82,532	9,00,564	16,86,902
Coleroon Bridge Division—								
National Highways ..	..	..	..	..	..	..	..	..
Provincial Highways ..	..	..	..	..	..	..	..	..
Major District Roads ..	..	2,56,144	..	2,56,144	..	..	..	..
Other District Roads ..	..	..	..	..	..	..	..	..
Village Roads ..	..	..	..	..	..	..	..	..
Total ..	..	2,56,144	..	2,56,144	..	..	..	..
Bharathapuzha Division—								
National Highways ..	..	..	..	..	..	..	..	..
Provincial Highways ..	..	3,52,005	..	3,52,005	..	..	..	..
Major District Roads ..	..	4,17,411	..	4,17,411	..	..	..	..
Other District Roads ..	..	..	..	..	..	..	..	..
Village Roads ..	..	..	..	..	..	..	..	..
Total ..	..	7,69,416	..	7,69,416	..	..	..	..
Coimbatore, North—								
National Highways ..	..	..	1,02,606	1,02,606	..	..	..	..
Provincial Highways ..	..	6,265	1,67,251	1,73,516	..	..	..	..
Major District Roads ..	..	64,216	12,33,081	12,97,297	..	..	3,51,958	3,51,958
Other District Roads ..	..	..	12,670	12,670	1,33,919	..	2,56,651	3,90,570
Village Roads ..	..	..	..	..	..	..	64,328	2,77,418
Total ..	..	70,481	15,15,608	15,86,089	1,33,919	..	8,86,022	10,84,269

Statement of expenditure on roads classified according to categories of roads—cont.

District/category.	Government.				District board.			
	Capital works.		Repairs.	Total.	Capital works.		Repairs.	Total.
	Ex-P.W.R.	P.W.R.			Ex-P.W.R.	P.W.R.		
	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
(1)	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
Coimbatore, South—								
National Highways ..	..	1,32,229	2,03,872	3,36,101	..	..	..	..
Provincial Highways ..	..	40,802	5,82,804	6,23,606	..	..	..	..
Major District Roads ..	54,993	1,26,022	8,74,207	10,55,222	..	74,622	2,31,868	3,06,490
Other District Roads ..	..	..	9,134	9,134	..	44,341	2,45,106	2,89,447
Village Roads ..	..	..	..	..	..	1,84,298	3,12,824	4,97,122
Total ..	54,993	2,99,053	16,70,017	20,24,063	..	3,03,261	7,89,798	10,93,059
Salem, North—								
National Highways ..	..	41,212	4,18,187	4,59,399	..	..	..	..
Provincial Highways ..	..	..	..	..	..	..	..	..
Major District Roads ..	47,167	80,583	6,13,398	7,41,098	66,861	9,598	1,92,139	2,68,598
Other District Roads ..	..	..	7,102	7,102	79,374	2,232	1,93,797	2,75,403
Village Roads ..	..	..	..	..	1,63,927	43,115	75,241	2,82,283
Total ..	47,167	1,21,745	10,38,687	12,07,599	3,10,162	54,945	4,61,177	8,26,284
Salem, South—								
National Highways ..	..	10,021	2,93,231	3,03,252	..	..	..	..
Provincial Highways ..	..	21	1,29,500	1,29,521	..	..	..	..
Major District Roads ..	1,23,394	16,353	3,83,042	5,22,789	41,763	310	1,61,033	2,03,106
Other District Roads ..	..	..	5,611	5,611	1,33,521	1,11,180	2,11,742	4,56,443
Village Roads ..	..	..	..	..	79,496	23,593	1,01,935	2,05,024
Total ..	1,23,394	26,395	8,11,884	9,61,173	2,54,780	1,35,083	4,74,710	8,64,573
Malabar, North—								
National Highways ..	..	..	..	..	..	..	..	..
Provincial Highways ..	4,24,838	2,68,941	8,43,317	15,37,096	..	..	..	..
Major District Roads ..	..	97,342	3,93,994	4,91,336	9,237	9,199	2,66,477	2,84,913
Other District Roads ..	..	..	..	..	2,008	1,901	1,29,706	1,33,615
Village Roads ..	..	..	..	..	45,334	76,166	37,919	1,59,419
Total ..	4,24,838	3,66,283	12,37,311	20,28,432	56,579	87,266	4,34,102	5,77,947
Malabar, South—								
National Highways ..	..	..	1,68,188	1,68,188	..	..	..	..
Provincial Highways ..	2,32,899	38,759	5,95,383	8,67,041	..	..	..	..
Major District Roads ..	21,910	58,551	11,14,186	11,94,647	..	1,05,782	65,735	1,71,517
Other District Roads ..	39,158	..	15,265	53,423	..	..	1,73,448	1,73,448
Village Roads ..	..	..	..	..	..	..	1,11,805	1,11,805
Total ..	2,92,967	92,310	18,93,022	22,78,299	..	1,05,782	8,50,988	4,66,770
South Kanara—								
National Highways ..	..	..	..	..	..	..	..	..
Provincial Highways ..	40,199	93,863	6,33,803	7,67,865	..	..	..	..
Major District Roads ..	1,12,478	8,19,378	8,77,776	18,09,632	..	..	70,667	70,667
Other District Roads ..	..	..	35,053	35,053	..	..	99,734	99,734
Village Roads ..	..	..	..	..	17,457	55,842	90,011	1,63,310
Total ..	1,52,677	9,13,261	15,46,632	26,12,570	17,457	55,842	2,60,412	3,33,719
The Nilgiris—								
National Highways ..	..	..	..	..	..	..	..	..
Provincial Highways ..	..	47,998	2,19,685	2,67,683	..	..	..	..
Major District Roads ..	1,171	(—) 3,787	1,71,162	1,68,546	..	27,615	8,820	36,435
Other District Roads ..	5,630	(—) 193	4,916	10,353	28,954	41,278	59,942	1,25,174
Village Roads ..	..	..	..	..	9,144	649	1,80,926	1,90,719
Total ..	6,801	44,018	3,95,763	4,46,582	33,098	69,542	2,49,688	3,52,328

ANNEXURE 13 (a).

Statement showing the total expenditure incurred on each category of roads under Government and District Boards in respect of Original and Repair Works.

Serial number and name of circle and division.	(1)	National Highways.		Provincial Highways.	
		Government.	District Board.	Government.	District Board.
		(2)	(3)	(5)	(6)
		RS.	RS.	RS.	RS.
I Circle.					
1 Guntur, South	..	5,39,712	..	2,50,191	..
2 Guntur, North	..	3,28,183	..	4,56,192	..
3 Krishna	..	3,34,200	..	8,81,371	..
4 West Godavari	..	3,00,633	..	5,37,151	..
5 Rajahmundry	..	1,19,682	..	4,053	..
6 East Godavari	..	1,93,697	..	2,24,539	..
7 Visakhapatnam, South	..	16,42,683	..	..	..
8 Visakhapatnam, North	..	4,54,308	..	1,47,724	..
9 Anakapalle Special	..	..	..	..	..
10 Godavari Bridges	..	10,20,279	..	..	..
Total	..	49,13,382	..	25,01,221	..
II Circle.					
11 Anantapur	..	2,28,757	..	6,75,923	..
12 Bellary	..	..	..	9,20,091	..
13 Chingleput	..	12,20,265	..	..	..
14 Chittoor	..	96,843	..	4,40,439	..
15 Cuddapah	..	..	..	10,08,751	..
16 Kurnool	..	1,74,863	..	10,20,492	..
17 Nellore	..	14,22,005	..	4,55,933	..
18 North Arcot	..	4,46,553	..	5,84,762	..
19 Pennar Bridge Division	..	5,00,857	..	..	..
Total	..	40,90,043	..	51,06,391	..

III Circle.

20 South Arcot	..	5,73,471	..	7,94,031	..
21 Tanjore, East	..	..	..	1,04,919	..
22 Tanjore, West	..	..	..	4,90,415	..
23 Tiruchirappalli	..	..	..	9,96,374	..
24 Madurai	..	4,13,053	..	2,90,935	..
25 Ramanathapuram	..	3,85,179	..	7,09,315	..
26 Tirunelveli	..	10,21,543	..	3,60,044	..
27 Coimbatore Bridge Division	..	2,42,857	..	..	..
Total	..	26,36,108	..	37,46,033	..

IV Circle.

28 Bharathapuzha	..	..	..	3,52,005	..
29 Coimbatore, North	..	..	..	1,73,516	..
30 Coimbatore, South	..	1,02,606	..	6,23,006	..
31 Salem, North	..	3,36,101	..	..	..
32 Salem, South	..	4,59,339	..	1,29,521	..
33 Malabar, North	..	3,03,252	..	15,37,096	..
34 Malabar, South	..	..	..	8,62,041	..
35 South Kanara	..	1,68,183	..	7,67,885	..
36 The Nilgiris	..	..	..	2,67,633	..
Total	..	13,69,546	..	47,13,353	..
Grand total	..	1,30,09,084	..	1,60,66,998	..

Statement showing the total expenditure incurred on each category of roads under Government and District Boards in respect of Original and Repair Works—cont.

Serial number and name of circle and division.	Major District Roads.			Other District Roads.			Village Roads.		
	Government.	District Board.	Total.	Government.	District Board.	Total.	Government.	District Board.	Total.
	(8) RS.	(9) RS.	(10) RS.	(11) RS.	(12) RS.	(13) RS.	(14) RS.	(15) RS.	(16) RS.
I Circle.									
1 Guntur, South	9,37,782	98,132	10,35,964	10,030	2,34,904	2,44,934	..	61,064	61,064
2 Guntur, North	9,57,715	1,25,121	10,82,836	..	32,966	32,966	..	2,02,868	2,02,868
3 Krishna	13,37,892	3,39,749	16,77,641	7,531	2,28,051	2,35,582	..	10,51,314	10,51,314
4 West Godavari	23,81,591	1,45,400	25,07,051	9,333	3,12,104	3,21,437	..	1,74,067	1,74,067
5 Rajahmundry	10,15,989	71,321	10,87,310	..	3,31,619	3,31,619	..	47,345	47,345
6 East Godavari	10,96,714	2,09,576	13,06,290	3,000	1,72,050	1,75,050	..	3,14,729	3,14,729
7 Visakhapatnam, South	10,86,381	50,769	11,37,150	..	1,01,174	1,01,174	..	3,14,015	3,14,015
8 Visakhapatnam, North	7,88,041	1,55,317	9,43,358	3,295	1,14,626	1,17,921	..	81,555	81,555
9 Anakapalle Special	6,69,260	..	6,69,260	..	..	..	..	..	..
10 Godavari Bridges	..	..	..	..	..	..	..	..	..
Total	1,02,51,385	11,95,995	1,14,47,380	33,189	15,27,494	15,60,683	..	22,46,967	22,46,967
II Circle.									
11 Anantapur	5,61,839	2,81,123	8,42,962	..	1,49,600	1,49,600	..	15,09,810	15,09,810
12 Bellary	9,39,054	..	9,39,054	..	..	..	..	..	..
13 Chingleput	16,04,148	89,909	16,94,057	1,94,303	2,53,936	4,48,239	..	3,81,730	3,81,730
14 Chittoor	10,66,227	17,993	10,84,220	..	3,18,874	3,18,874	..	13,18,390	13,18,390
15 Cuddapah	11,20,332	..	11,20,332	..	..	..	..	..	..
16 Kurnool	6,33,920	1,95,193	8,29,113	..	3,26,689	3,26,689	..	1,82,504	1,82,504
17 Nellore	9,19,905	1,76,554	10,96,459	15,440	1,47,110	1,62,550	..	5,63,185	5,63,185
18 North Arcot	9,53,762	1,00,396	10,54,158	6,529	2,46,021	2,52,550	..	6,97,860	6,97,860
19 Pennar Bridge Division	..	..	..	..	..	..	..	..	..
Total	77,99,187	8,61,698	86,60,885	2,16,272	14,42,230	16,58,502	..	46,53,479	46,53,479
III Circle.									
20 South Arcot	14,15,940	4,28,179	18,44,119	12,587	4,04,762	4,17,349	..	2,92,736	2,92,736
21 Tanjore, East	8,93,431	2,19,287	11,12,668	..	2,39,138	2,39,138	..	1,82,644	1,82,644
22 Tanjore, West	11,23,965	7,05,576	18,29,541	35,391	3,18,235	3,53,626	..	2,23,735	2,23,735
23 Tiruchirappalli	14,21,460	1,29,898	15,51,358	7,242	2,85,760	2,93,002	..	7,16,225	7,16,225
24 Madurai	17,46,550	5,27,086	22,73,636	3,723	1,28,702	1,32,425	..	10,17,216	10,17,216
25 Ramanathapuram	9,35,547	6,85,807	16,21,354	..	3,91,535	3,96,525	..	5,13,316	5,13,316
26 Tirunelveli	7,71,808	10,00,564	17,72,372	1,676	1,68,669	1,70,345	..	5,17,679	5,17,679
27 Coleroon Bridge Division	2,50,144	..	2,50,144	..	..	..	..	..	..
Total	86,66,845	36,96,287	1,23,63,132	60,619	19,41,791	20,02,410	..	34,88,551	34,88,551
IV Circle.									
28 Bharethapurha	4,17,411	..	4,17,411	..	..	..	..	..	..
29 Coimbatore, North	12,97,297	3,51,953	16,49,250	12,670	3,90,570	4,03,240	..	3,41,746	3,41,746
30 Coimbatore, South	10,45,222	3,06,490	13,51,712	9,134	2,89,447	2,98,581	..	4,97,122	4,97,122
31 Salem, North	7,41,098	2,68,598	10,09,696	7,102	2,75,403	2,82,505	..	2,82,233	2,82,233
32 Salem, South	5,22,789	2,03,106	7,25,895	5,611	4,56,443	4,62,054	..	2,05,024	2,05,024
33 Malabar, North	4,91,336	2,84,913	7,76,249	..	1,33,615	1,33,615	..	1,59,419	1,59,419
34 Malabar, South	11,94,647	1,71,517	13,66,164	53,423	1,73,448	2,26,871	..	1,11,805	1,11,805
35 South Kanara	18,09,632	70,667	18,80,299	35,053	99,734	1,34,787	..	1,63,310	1,63,310
36 The Nilgiris	1,69,546	36,435	2,05,981	10,353	1,25,174	1,35,527	..	1,90,719	1,90,719
Total	76,97,978	16,93,679	93,91,657	1,33,346	19,43,834	20,77,180	..	19,51,423	19,51,423
Grand total	3,43,15,375	74,47,629	4,17,63,004	4,43,426	68,55,349	72,98,775	..	1,23,15,425	1,23,15,425

ANNEXURE 13 (b).

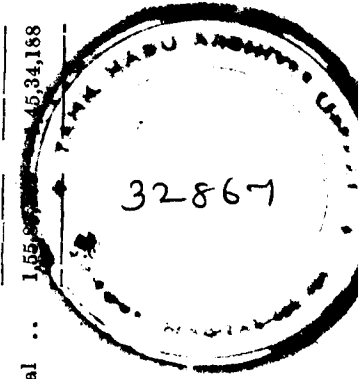
Statement showing Divisionwise Expenditure and Lapses of Grant on Government Roads.

Serial number and name of division.	Original works.			Maintenance works.		
	Final allotment.	Expenditure.	Lapse.	Final allotment.	Minimum allotment required for the proper maintenance of road.	Expenditure.
(1)	(2)	(3)	(4)	(5)	(6)	(7)
	RS.	RS.	RS.	RS.	RS.	RS.
1 Visakhapatnam, North	..	..	..	13,02,200	19,14,455	13,97,901
2 Visakhapatnam, South	..	..	..	9,31,200	17,46,048	10,23,704
3 East Godavari	..	..	..	12,61,300	23,60,159	13,61,080
4 West Godavari	..	..	..	20,25,900	18,10,976	21,28,594
5 Rajahmundry	..	..	..	8,45,800	6,41,599	8,66,621
6 Godavari Special	..	..	..	..	..	..
7 Krishna	..	..	..	20,58,900	30,24,398	21,11,117
8 Guntur, North	..	..	..	8,63,900	..	..
9 Guntur, South	..	..	..	15,02,700	30,35,168	24,36,461
0 Anakapalle Special	..	..	..	92,500	..	92,865
1 Nellore	..	..	..	18,56,100	14,34,269	20,98,296
2 Kurnool	..	..	..	15,02,300	19,44,741	16,76,288
3 Bellary	..	..	..	13,70,400	16,08,439	14,17,031
4 Anantapur	..	..	..	10,88,000	15,51,115	11,80,201
5 Cuddapah	..	..	..	14,24,500	11,72,627	15,74,229
6 Chingleput	..	..	..	19,66,700	23,30,456	20,71,476
7 Chittoor	..	..	..	13,30,300	17,04,126	13,74,784
8 North Arcot	..	..	..	14,16,600	16,33,846	15,20,208
9 Pennar Special	..	..	..	..	..	..
10 South Arcot	..	..	..	18,75,600	19,55,492	19,40,550
11 Tiruchirappalli	..	..	..	19,43,700	13,04,431	22,74,863
12 Tanjore, East	..	..	..	9,25,720	12,25,399	9,99,431
13 Tanjore, West	..	..	..	12,69,400	16,53,029	13,97,912
14 Madurai	..	..	..	19,52,900	17,22,078	20,62,585
25 Ramanathapuram	..	..	..	14,91,200	15,69,698	15,23,111
26 Tirunelveli	..	..	..	11,50,600	11,63,219	11,98,840
27 Coleroon Bridge Division	..	..	..	..	..	..
28 Salem, North	..	..	..	8,81,800	6,78,403	10,59,252
29 Salem, South	..	..	..	6,59,100	10,46,669	8,48,650
30 Bharathapuzha Division	..	..	..	..	..	..
31 Coimbatore, North	..	..	..	12,51,100	22,11,655	15,88,184
32 Coimbatore, South	..	..	..	15,18,900	15,05,075	16,75,778
33 The Nilgiris	..	..	..	3,14,300	5,90,191	3,95,763
34 Malabar, North	..	..	..	9,67,900	20,92,276	12,42,219
35 Malabar, South	..	..	..	15,33,500	21,95,337	18,96,815
36 South Kanara	..	..	..	13,89,800	14,56,352	15,49,529
37 Transport and Machinery Division	..	..	..	..	..	..
38 Public Works Department Circles	..	..	..	1,12,600	..	..
Total	1,81,32,600	1,87,25,011	..	4,20,77,420	5,03,11,688	4,59,70,456

ANNEXURE 13 (c).

Statement showing Divisionwise Lapses of Grant on District Board Roads.

Serial number and name of division.	(1)	Original works.			Maintenance works.			
		Final allotment.		Expenditure.	Lapse.	Minimum allotment required for proper maintenance of roads.		Lapse.
		(2)	(3)	(4)		(5)	(6)	
		RS.	RS.	RS.	RS.	RS.	RS.	RS.
I Circle.								
1 Guntur, South ..	..	1,97,000	2,51,908	..	..	1,20,000	..	..
2 Guntur, North ..	..	2,32,000	2,31,771	229	..	1,29,500	..	316
3 Krishna ..	..	11,17,110	11,90,739	..	..	6,15,480	..	1,27,105
4 West Godavari ..	..	10,56,400	3,25,250	7,31,150	..	2,00,000	..	..
5 Rajahmundry ..	..	1,55,600	1,34,165	21,435	..	2,65,050	..	..
6 East Godavari ..	..	84,274	76,825	7,449	..	6,94,075	..	74,545
7 Visakhapatnam, South ..	..	1,15,900	1,18,750	..	..	3,65,865	..	18,657
8 Visakhapatnam, North ..	..	11,43,000	1,08,742	10,39,258	..	2,70,000	..	26,744
9 Anakapalle Special ..	..	..	..	..	..	..	..	..
10 Godavari Bridges ..	..	..	..	..	..	..	..	..
II Circle.								
11 Anantapur ..	..	24,50,600	17,98,671	6,51,929	..	2,36,800	..	84,938
12 Bellary ..	..	4,78,200	4,70,775	7,425	..	3,23,000	..	..
13 Chingleput ..	..	2,72,310	2,77,293	..	..	4,00,000	..	..
14 Chittoor ..	..	3,27,780	13,81,484	..	..	3,52,000	..	78,227
15 Uddappah ..	..	5,60,432	13,91,343	..	..	3,50,000	..	..
16 Kurnool ..	..	4,32,050	4,09,916	22,134	..	3,00,000	..	6,530
17 Nellore ..	..	5,23,900	5,08,196	15,704	..	3,00,000	..	..
18 North Arcot ..	..	6,06,527	6,80,906	..	..	4,00,000	..	37,129
19 Pennar Bridge Division ..	..	..	..	..	..	..	..	..
III Circle.								
20 South Arcot ..	..	5,17,190	4,23,928	93,262	..	7,25,630	..	23,881
21 Tanjore, East ..	..	1,31,000	93,625	37,375	..	4,84,500	..	..
22 Tanjore, West ..	..	4,13,560	4,75,195	..	..	7,14,640	..	..
23 Tiruchirappalli ..	..	2,39,000	2,55,603	..	..	9,18,380	..	42,100
24 Madurai ..	..	3,50,000	6,98,791	..	..	9,00,000	..	..
25 Ramanathapuram ..	..	9,16,200	7,61,830	1,54,370	..	8,16,450	..	..
26 Tirunelveli ..	..	7,60,650	7,86,338	..	..	8,86,800	..	..
27 Coleroon Bridge ..	..	..	..	..	..	..	..	..
IV Circle.								
28 Bharathapuzha ..	..	..	..	..	..	..	..	..
29 Coimbatore, North ..	..	1,94,000	1,98,247	..	..	9,58,900	..	..
30 Coimbatore, South ..	..	4,73,900	3,03,261	1,70,639	..	8,12,045	..	72,878
31 Salem, North ..	..	3,84,610	3,65,107	19,503	..	4,70,000	..	22,247
32 Salem, South ..	..	3,71,400	3,89,863	..	..	4,91,400	..	8,823
33 Malabar, North ..	..	6,34,800	1,43,945	4,90,855	..	4,31,120	..	16,690
34 Malabar, South ..	..	2,46,000	1,05,782	1,40,218	..	2,86,350	..	..
35 South Kanara ..	..	77,400	73,299	4,101	..	2,58,000	..	..
36 The Nilgiris ..	..	1,20,000	1,02,640	17,360	..	2,50,000	..	..
Total ..	..	1,55,89,000	1,45,34,188	10,53,605	..	1,47,25,985	..	1,86,606



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ADMINISTRATION REPORT OF THE

ANNEXURE 14.

Financial Statement of all Disbursements.

Serial number and name of division.	(1)	Total works expenditure—Government and District Board.		Tools and Plant—Expenditure (New Supplies and Repairs).		Pay of establishment.		Percentage of establishment charges to works including Tools and Plant.		Contingencies.		Total.
		(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	
		RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	
I Circle.												
1 Gunur, South ..	..	22,50,412	72,342	46,773	31,290	46,958	5.38	2,758	6,765	..	..	24,57,298
2 Gunur, North ..	..	21,87,201	87,151	44,729	29,454	44,343	5.21	5,971	4,216	..	..	24,03,065
3 Krishna ..	..	44,07,359	1,11,248	66,308	40,354	61,414	3.67	5,314	11,440	..	..	47,63,437
4 West Godavari ..	..	41,39,317	1,69,598	36,405	1,26,980	70,979	5.43	..	18,084	..	..	45,6,933
5 Rajahmundry ..	..	16,51,623	88,000	74,948	32,440	66,437	9.99	4,529	9,581	..	..	19,27,608
6 East Godavari ..	..	23,22,154	77,605	46,958	29,411	47,070	5.10	4,186	7,682	..	..	25,35,046
7 Visakhapatnam, South ..	..	33,35,025	1,06,484	50,326	27,436	51,156	3.74	6,676	8,888	..	..	36,85,991
8 Visakhapatnam, North ..	..	18,45,071	59,561	38,376	26,861	42,336	5.64	3,089	6,717	..	..	20,22,611
9 Anakapalle Special ..	..	6,71,986	51,201	21,543	32,828	34,040	12.21	1,933	355	..	..	8,13,886
10 Godavari Bridges Special ..	..	10,30,279	73,757	26,868	8,986	14,544	4.60	2,096	3,250	..	..	11,49,780
11 Circle Office ..	..	..	..	16,696	30,626	21,771	..	..	7,120	..	..	76,213
Total ..	..	2,38,90,927	8,96,947	4,69,990	4,16,666	5,01,098	5.59	37,152	84,088	..	..	2,62,96,868
II Circle.												
12 Circle Office ..	..	..	..	8,818	31,599	3,257	..	2,803	6,288	..	..	52,765
13 Anantapur ..	..	35,45,610	42,564	50,384	38,634	13,751	2.03	4,920	8,184	..	..	36,94,047
14 Bellary ..	..	31,26,502	69,920	86,453	38,817	35,010	3.86	4,264	13,144	..	..	31,96,422
15 Chingleput ..	..	39,27,610	2,14,368	56,315	31,759	24,574	3.19	3,734	9,881	84	..	43,19,666
16 Chittoor ..	..	34,01,564	1,21,745	59,146	37,052	29,597	3.22	3,436	9,950	..	..	36,49,656
17 Cuddapah ..	..	37,84,385	76,947	59,605	46,388	20,859	5.03	4,285	9,043	..	..	40,00,423
Total ..	..	2,80,62,203	49,73,051	5,15,924	3,15,357	1,72,661	2.97	35,362	90,031	34	..	29,22,976
III Circle.												
23 South Arcot ..	..	41,17,913	1,14,066	1,15,917	41,070	33,041	4.50	4,490	12,125	..	..	44,28,622
24 Tanjore, East ..	..	18,31,153	62,339	38,868	60,725	20,305	6.33	3,340	9,678	..	..	20,26,408
25 Tanjore, West ..	..	31,82,472	1,05,775	41,407	35,333	13,448	2.74	7,927	7,502	..	..	33,93,864
26 Tiruchirappalli ..	..	43,58,413	2,61,206	74,647	39,805	28,764	3.10	4,209	11,449	..	..	47,78,493
27 Madurai ..	..	42,51,680	10,798	67,244	40,322	27,995	3.18	18,144	2,402	..	..	44,18,585
28 Ramanathapuram ..	..	44,58,811	1,98,309	66,963	42,259	31,970	3.03	6,545	17,286	..	..	48,22,093
29 Tirunelveli ..	..	31,58,012	1,12,691	55,691	33,209	24,706	3.44	17,404	..	..	..	34,01,713
30 Coimbatore Bridge Division ..	..	2,56,144	3,369	14,370	8,245	3,413	10.22	680	3,369	..	..	2,90,670
31 Circle Office ..	..	..	..	31,994	19,499	8,239	..	..	5,347	..	..	65,079
Total ..	..	2,56,14,598	8,58,553	5,07,601	3,20,467	1,91,881	3.85	62,719	69,108	..	..	2,76,24,927
IV Circle.												
32 Bharathapuzha ..	..	7,69,416	163	11,479	19,128	12,530	5.60	780	1,619	..	..	8,15,135
33 Coimbatore, North ..	..	30,31,665	1,26,539	53,562	31,139	55,276	4.39	5,033	8,796	..	..	33,63,010
34 Coimbatore, South ..	..	35,46,517	2,04,333	85,840	37,946	17,103	3.75	3,550	7,725	..	..	39,03,069
35 Malabar, North ..	..	24,45,022	85,791	33,094	26,698	22,479	3.74	2,052	7,837	..	..	28,42,973
36 Malabar, South ..	..	31,93,304	2,01,538	41,690	28,734	20,140	2.67	4,305	8,121	..	..	34,97,832

Financial Statement of all Disbursements—cont.

Serial number and name of division.	(1)	Total works expenditures—Government and District Board.		Tools and Plant—Expenditure (New Supplies and Repairs).		Pay of Establishment.			Percentage of establishment charge to works expenditure including Tools and Plant.			Contingencies.		Litigations.	Total.				
		(2)	RS.	(3)	RS.	(4)	RS.	(5)	RS.	(6)	RS.	(7)	RS.			(8)	RS.	(9)	RS.
IV Circle—cont.																			
7 Salem, North	..	..	21,18,201	1,12,791	44,157	25,407	45,987	5.17	4,670	7,315	..	..	23,58,528						
3 Salem, South	..	..	19,59,410	1,23,731	39,946	25,305	18,297	4.01	4,909	10,405	..	..	21,82,003						
3 South Kanara	..	..	29,80,678	1,40,532	65,041	35,401	26,042	4.05	3,165	4,242	..	..	32,55,101						
3 The Nilgiris	..	..	8,48,645	52,185	37,657	27,792	13,590	8.77	552	2,977	..	..	9,83,398						
1 Circle Office	..	..	..	..	15,513	28,229	19,907	..	2,395	4,484	..	..	70,528						
Total	..	..	2,11,42,858	10,47,643	4,47,979	2,85,779	2,52,356	4.44	31,411	63,551	..	..	2,32,71,577						
Chief Engineer's Office	..	..	..	..	64,369	1,99,961	1,12,185	..	..	43,987	..	..	4,20,502						
Total	..	..	9,87,10,586	77,76,194	20,05,863	15,38,230	12,30,181	4.48	1,66,644	3,50,765	84	11,17,78,547							

NOTE.—The figures in respect of Chief Engineer's office are adopted from the appropriation accounts of 1952-53.

ANNEXURE 15.

Statement showing the works approved by Government under Post-War Road Development programme during and to end of the year 1952-53.

Government roads.					District Board roads.			
Serial number and name of division or circle.	During the year.		To end of the year.		During the year.		To end of the year.	
	Number.	Cost.	Number.	Cost.	Number.	Cost.	Number.	Cost.
	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
(1)	RS.		RS.		RS.		RS.	
I Circle—								
1 Visakhapatnam, North ..	..	..	1	3,00,000	..	..	148	21,65,700
2 Visakhapatnam, South ..	1	5,13,800	31	82,23,160	..	..	144	8,01,905
3 Godavari, East	1	16,300	28	1,20,52,650	1	47,000	17	7,42,000
4 Godavari, West	3	2,70,400	49	33,35,400	..	..	83	24,78,590
5 Rajahmundry	..	..	11	68,97,000	..	..	13	4,90,000
6 Krishna	..	..	12	10,99,120	12	4,08,900	93	38,75,070
7 Guntur, North	4	8,89,400	47	39,54,300	1	7,500	163	83,90,525
8 Guntur, South								
9 Godavari Bridges	..	..	1	4,80,000	..	..	..	..
II Circle—								
10 Anantapur	..	..	2	56,570	8	1,80,000	28	6,71,830
11 Bellary	5	44,300	23	25,19,300	5	1,50,000	43	25,15,900
12 Chingleput	2	4,64,300	30	54,73,500	1	6,000	41	7,43,450
13 Chittoor	..	..	28	14,41,600	3	84,000	62	12,64,200
14 Cuddapah	2	9,300	12	11,54,600	1	24,000	99	14,76,950
15 Kurnool	4	27,150	24	15,95,230	20	9,01,032	47	19,78,832
16 Nellore	3	10,35,300	33	23,07,610	2	90,000	63	16,39,070
17 North Arcot	..	..	34	41,57,875	..	..	135	15,70,430
18 Pennar Bridge	..	..	1	23,00,000	..	..	..	..
III Circle—								
19 South Arcot	1	25,000	49	21,27,201	..	..	116	22,97,760
20 Tanjore, East	..	..	20	40,81,182	6	2,18,500	92	19,73,170
21 Tanjore, West								
22 Tiruchirappalli	1	50,700	59	11,32,985	..	..	198	16,54,400
23 Madurai	1	1,00,000	81	20,21,900	..	..	114	17,38,040
24 Ramanathapuram	..	..	86	23,31,200	1	10,000	106	21,11,750
25 Tirunelveli	2	30,200	19	11,06,200	5	15,000	58	21,19,000
26 Coleroon Bridge	..	..	5	35,45,750	..	..	..	..
27 Pugalur Bridge	..	..	1	26,00,000	..	..	..	..
IV Circle—								
28 Bharathapuzha	..	..	..	..	..	..	..	..
29 Coimbatore, North	4	1,35,500	80	28,17,615	13	1,71,650	180	20,04,625
30 Coimbatore, South								
31 Malabar, North	1	15,200	37	18,25,720	2	1,94,800	67	16,25,771
32 Malabar, South	..	..	..	..	..	..	..	..
33 Salem, North	1	25,000	52	64,41,810	1	8,500	131	15,21,170
34 Salem, South	..	..	..	..	..	..	..	..
35 South Kanara	1	2,75,000	68	54,91,255	..	..	44	5,39,670
36 The Nilgiris	..	..	13	27,20,060	..	..	28	3,89,050
Total ..	37	39,76,850	928	9,55,99,793	82	25,16,882	2,318	4,87,61,753

ANNEXURE 16.

(i) Statement showing the technical sanctions to estimates during 1952-53.

For Government works.

Serial number and name of circle or division.	Original works.			Repairs.		Tools and plant and Repairs.		Avenues.		Total cost.			
	(1)	(2)	(3) RS.	Number.	(4)	(5) RS.	(6)	(7) RS.	(8)		(9) RS.	(10)	(11) RS.
<i>I Circle.</i>													
1 Circle office ..	..	6	3,16,000	..	206	30,47,372	7	11,125	..	..	13	3,27,125	
2 Guntur, South ..	..	3	15,900	..	36	14,05,850	31	1,08,315	41	35,706	251	32,07,287	
3 Guntur, North ..	..	..	..	..	117	28,73,800	29	2,05,100	2	4,200	117	15,60,070	
4 Krishna ..	..	7	41,700	..	172	29,77,660	36	1,97,700	34	74,500	194	31,95,100	
5 Godavari, West ..	..	1	21,000	..	126	14,53,800	42	1,51,800	14	26,750	229	32,23,110	
6 Rajahmundry ..	..	3	8,130	..	172	26,69,435	57	1,22,225	9	9,700	195	16,23,430	
7 Godavari, East ..	..	..	..	..	90	11,70,400	30	1,22,650	36	25,005	244	28,06,665	
8 Visakhapatnam, South ..	..	13	2,35,000	..	162	29,94,840	26	80,820	22	18,820	142	13,11,870	
9 Visakhapatnam, North ..	..	5	10,53,300	..	..	..	33	3,06,500	19	9,150	230	33,19,810	
10 Godavari Bridges ..	..	1	18,19,200	..	9	1,41,030	19	93,180	..	..	38	19,59,800	
11 Anakapalle ..	..	39	41,09,230	..	1,140	1,87,34,187	346	15,39,135	3	7,080	32	20,59,490	
Total ..	..	..	..	..	..	..	..	..	..	..	..	2,45,93,737	
<i>II Circle.</i>													
12 Circle office ..	..	..	..	..	205	21,94,410	12	39,490	..	..	264	22,41,350	
13 Anantapur ..	..	..	..	..	..	..	..	..	..	..	..	..	
14 Bellary ..	..	..	..	..	..	..	..	..	..	..	..	..	
15 Chingleput ..	..	8	13,19,300	..	250	31,70,450	70	2,44,250	34	41,000	362	47,75,000	
16 Chittoor ..	..	..	..	..	115	12,02,700	60	2,04,930	42	70,850	217	14,78,480	
17 Cuddapah ..	..	5	10,150	..	197	26,90,220	43	1,81,420	9	8,850	254	28,90,440	
18 Kurnool ..	..	4	1,26,802	..	254	31,48,009	8	33,932	57	69,950	323	33,78,693	
19 Nellore ..	..	2	29,400	..	192	27,36,850	46	1,83,350	23	17,100	263	29,66,700	
20 Arcot, North ..	..	2	18,600	..	151	19,06,200	53	1,16,493	18	59,160	224	20,95,453	
21 Pennar Bridge ..	..	..	..	..	..	..	15	24,000	..	..	15	24,000	
22 Transport and Machinery ..	..	..	..	..	..	..	76	3,79,184	..	..	76	3,79,184	
Total ..	..	21	14,99,252	..	1,364	1,70,48,839	383	14,07,049	190	2,74,160	1,958	2,02,29,300	

(ii) Statement showing the technical sanction to estimates for District Board works accorded by the Superintending Engineers and Divisional Engineers (Highways) during 1952-53.

Serial number and name of circle or division.	Original works.			Repairs.		Tools and plant new supplies and repairs.		Avenues.		Non-Road Works.		Total.	
	(1)	Number of works for which establishment were sanctioned.	Cost.	Number.	Cost.	Number.	Cost.	Number.	Cost.	Number.	Cost.	Number.	Cost.
				(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
			RS.		RS.		RS.		RS.		RS.		RS.
I Circle.													
1 Circle Office		14	8,17,200	..	..	..	..	..	..	4	2,76,000	18	10,93,200
2 Guntur, South		8	1,20,000	143	5,10,000	..	..	..	..	..	..	151	6,30,000
3 Guntur, North		2	39,900	9	12,500	..	..	..	..	..	..	11	52,400
4 Krishna		53	3,48,000	450	10,64,300	..	..	17	22,050	91	5,91,780	611	20,26,130
5 Godavari, West		24	2,47,950	224	16,39,150	..	..	3	3,900	59	1,22,190	310	20,03,190
6 Rajahmundry		38	5,75,600	288	17,11,000	..	..	1	4,200	95	4,76,500	422	27,07,300
7 Godavari, East		23	96,140	460	11,84,900	..	..	3	3,950	72	56,630	563	13,41,710
8 Visakhapatnam, South ..		..	..	202	6,42,490	..	..	..	..	56	1,20,570	258	7,63,000
9 Visakhapatnam, North ..		6	1,14,750	52	1,52,800	2	550	9	4,980	125	1,29,065	194	4,02,085
10 Anakapalle		..	..	..	..	..	..	..	..	..	..	..	..
11 Godavari Bridges		..	..	..	..	..	..	..	..	..	..	..	..
Total		173	23,59,540	1,828	69,07,230	2	550	33	39,030	502	17,72,735	2,538	1,10,79,085

II Circle.

12 Circle office		..	..	..	..	..	..	..	..	..	..	..	..
13 Anantapur		..	..	175	4,35,893	..	..	2	1,400	..	..	177	4,37,293
14 Bellary		..	..	..	..	..	..	..	..	..	..	..	..
15 Chingleput		16	96,700	405	7,00,620	3	2,680	3	3,460	16	68,700	443	8,72,160
16 Chittoor		41	2,20,030	286	2,98,922	..	..	12	10,620	..	..	339	5,29,572
17 Cuddapah		255	38,89,146	335	21,34,424	..	..	25	17,900	22	60,762	637	61,02,222
18 Kurnool		11	4,44,500	50	6,48,990	..	..	..	..	59	3,37,445	120	14,30,935
19 Nellore		2	41,000	197	25,03,536	48	1,89,830	18	15,490	..	..	265	27,49,336
20 Arcot, North		55	6,09,700	274	6,27,980	12	4,300	..	..	172	3,66,335	513	16,08,315
21 Ponnar Bridge		..	..	..	..	..	..	..	..	..	..	..	..
22 Transport and Machinery ..		..	..	..	..	..	..	..	..	..	..	..	..
Total		380	53,91,076	1,722	73,50,365	63	1,96,810	60	48,870	269	8,33,232	2,494	1,37,39,353

23 Circle Office		26	10,11,900	..	..	..	..	..	..	..	..	26	10,11,900
24 Arcot South		..	..	..	..	1	400	33	24,280	144	3,59,438	178	3,84,118
25 Tanjore, East		18	1,07,870	205	5,20,115	1	3,500	13	8,590	199	2,01,472	436	8,41,547
26 Tanjore, West		83	7,38,165	485	8,87,337	207	1,80,409	10	4,910	28	1,19,010	763	1,29,831
27 Tiruchirappalli		13	3,15,850	884	20,98,700	..	..	40	29,600	..	..	937	30,43,650
28 Ramana-thapuram		178	14,31,110	190	12,36,790	4	30,600	24	25,350	171	88,890	567	28,14,740
29 Madurai		212	12,72,230	254	18,08,295	2	10,400	1	4,500	111	9,06,500	580	40,01,975
30 Tirunelveli		49	3,96,400	190	11,68,000	1	6,000	15	4,900	75	62,100	330	16,37,700
Total		579	52,73,075	2,158	83,31,237	216	2,31,309	136	1,02,130	728	17,37,710	3,817	1,16,65,465
IV Circle.													
31 Circle Office		12	5,46,000	..	..	..	..	..	..	..	..	2	5,46,000
32 Coimbatore, North		29	1,45,270	323	8,64,215	1	8,500	5	7,800	103	4,16,775	521	14,42,560
33 Coimbatore, South		26	1,57,380	57	2,61,190	1	300	3	1,100	382	9,11,044	469	13,31,014
34 Malabar, North		2	62,200	185	6,01,325	..	..	1	1,080	60	3,18,275	248	10,42,880
35 Malabar, South		10	25,650	234	3,77,700	..	..	1	700	40	2,31,800	285	6,35,850
36 The Nilgiris		3	32,400	168	3,79,801	..	..	..	..	50	16,931	221	4,26,132
37 Salem, North		25	4,89,000	277	9,63,571	..	..	2	2,300	91	93,530	395	15,48,450
38 Salem, South		78	4,20,820	411	11,11,707	..	..	3	6,540	226	2,31,551	718	17,70,618
39 South Kanara		12	1,54,633	150	3,62,055	..	..	..	..	87	2,14,513	268	7,31,751
Total		197	20,3,403	1,814	49,81,563	2	8,800	15	19,520	1,099	24,34,469	3,127	94,77,755
Grand total		1,329	1,49,67,094	7,522	2,75,60,395	283	4,37,469	244	2,09,550	2,598	67,78,146	11,976	4,99,52,654

(iii) Statement showing the technical sanctions to estimates for Municipal and Panchayat Works accorded by the Divisional Engineers and Superintending Engineers during 1952-53.

Serial number and name of division.	Municipal works.		Panchayat works.	
	Number.	Total cost.	Number.	Total cost.
		RS.		RS.
I Circle.				
1 Circle office	19	1,00,370	10	2,90,200
2 Guntur, South	11	19,760	14	46,000
3 Guntur, North	..	..	61	3,94,430
4 West Godavari	42	1,00,700	113	8,54,345
5 Rajahmundry	..	..	27	1,00,900
6 East Godavari	..	..	20	70,770
7 Krishna	18	45,835	106	1,32,100
8 Visakhapatnam, North ..	..	..	16	61,510
9 Visakhapatnam, South ..	15	89,000	5	37,663
10 Anakapalle Special ..	..	..	..	..
Total ..	105	3,55,665	372	19,87,918
II Circle.				
11 Anantapur	..	..	..	..
12 Bellary*	..	..	..	..
13 Chingleput	20	84,820	62	2,21,450
14 Chittoor	39	1,50,522	..	..
15 Cuddapah	4	13,600	15	30,620
16 Kurnool	..	..	52	1,96,300
17 Nellore	6	9,010	18	67,740
18 Arcot, North	51	1,09,140	39	1,54,665
19 Pennar Bridge Division ..	..	..	..	..
20 Transport and Machinery ..	..	..	..	..
21 Circle office*	..	..	..	..
Total ..	120	3,67,092	186	6,70,735
III Circle.				
22 Arcot, South	27	95,210	11	33,925
23 Tanjore, East	31	1,01,555	20	47,770
24 Tanjore, West	17	26,020	17	38,620
25 Tiruchirappalli	101	2,93,150	..	..
26 Madurai	7	63,200	16	42,400
27 Ramanathapuram	79	3,27,230	62	1,04,720
28 Tirunelveli	..	..	82	1,75,400
29 Circle office	24	7,55,150	1	20,000
Total ..	286	16,61,515	209	4,62,835
IV Circle.				
30 Bharatapuzha	..	..	..	..
31 Coimbatore, North	22	51,490	6	9,600
32 Coimbatore, South	34	70,885	67	5,61,140
33 Malabar, North	20	62,836	10	47,125
34 Malabar, South	9	20,924	5	50,800
35 Salem, North	..	..	15	27,150
36 Salem, South	4	10,980	69	1,40,407
37 South Kanara	..	..	23	1,75,510
38 The Nilgiris	..	..	15	84,760
39 Circle office	17	4,45,910	3	54,800
Total ..	106	6,63,025	213	11,51,292
Grand total ..	617	30,47,297	880	42,72,780

* Figures are not available.

ANNEXURE 17.

Statement showing the number of tender cases approved by the Superintending Engineers and Divisional Engineers.

Serial number and name of division.	Government roads.			District board roads.			Municipal works.		Grand total.
	Number approved by Divisional Engineer (Highways).	Number approved by Superintending Engineer (Highways).	Number sent up to Chief Engineer (Highways).	Number approved by Divisional Engineer (Highways).	Number approved by Superintending Engineer (Highways).	Number sent up to Chief Engineer (Highways).	Number approved by Divisional Engineer (Highways).	Number approved by Superintending Engineer (Highways).	
<i>I Circle.</i>									
1 Guntur, South	98	13	1	27	4	..	..	..	143
2 Guntur, North	65	6	..	3	..	..	..	..	74
3 West Godavari	164	39	..	12	2	1	..	..	218
4 Rajahmundry	19	43	4	14	18	..	..	..	93
5 East Godavari	56	40	..	93	6	..	..	..	195
6 Krishna	36	36	..	39	42	..	..	..	153
7 Visakhapatnam, South ..	55	18	..	145	15	..	1	..	234
8 Visakhapatnam North ..	12	44	12	28	23	..	..	..	119
9 Anakapalle Special	8	15	..	..	..	..	..	..	23
10 Godavari Bridges	4	2	5	..	..	..	..	..	11
<i>II Circle.</i>									
11 Anantapur	99	..	10	81	..	2	..	..	192
12 Bellary *	..	..	..	..	..	..	..	..	..
13 Chingleput	165	..	9	201	..	..	..	..	375
14 Chittoor	77	..	5	44	2	..	..	..	128
15 Cuddapah	108	..	5	127	..	1	..	..	241
16 Kurnool	42	..	98	84	..	17	..	..	241
17 Nellore	..	5	118	..	..	..	..	..	123
18 Arcot, North	114	48	..	366	13	..	..	..	541
19 Pennar Bridge	..	..	..	..	..	..	..	..	..
20 Transport and Machinery Division.	..	..	..	..	..	..	..	..	..
<i>III Circle.</i>									
21 Arcot, South	80	26	3	110	8	..	..	..	227
22 Tanjore, East	81	7	..	300	4	..	..	..	392
23 Tanjore, West	214	9	..	85	8	..	..	1	317
24 Tiruchirappalli	192	16	1	610	13	..	..	..	832
25 Madurai	214	13	..	343	4	..	..	..	574
26 Ramanathapuram	86	13	2	111	5	..	..	..	217
27 Tirunelveli	84	5	..	302	4	..	..	..	395
28 Coleroon	1	..	..	..	..	..	..	..	1
<i>IV Circle.</i>									
29 Coimbatore, North	103	5	..	328	5	..	..	..	446
30 Coimbatore, South	157	..	..	198	2	..	..	..	357
31 Malabar, North	94	12	2	107	11	1	..	..	227
32 Malabar, South	175	64	..	231	8	..	..	..	478
33 Salem, North	103	..	..	215	..	..	..	..	318
34 Salem, South	69	26	..	329	7	..	..	..	441
35 South Kanara	65	63	8	112	5	..	..	..	253
36 The Nilgiris	30	..	..	100	7	2	..	..	139
37 Bharatapuzha	..	..	..	..	..	..	..	..	..
Total ..	2,875	568	283	4,745	216	24	1	1	8,718

* Figures are not available.

ANNEXURE 18.

(i) Statement showing the number of agreements accepted by the Superintending Engineers and Divisional Engineers for Government Works.

Serial number and name of division.	Accepted by Divisional Engineer.		Accepted by Superintending Engineer.		Total.	
	Number.	Amount.	Number.	Amount.	Number.	Amount.
		RS.		RS.		RS.
<i>I Circle.</i>						
1 Guntur, South	182	14,23,700	3	1,17,000	185	15,40,700
2 Guntur, North	115	9,63,331	3	4,72,373	118	14,35,704
3 Godavari, West	311	21,43,137	22	9,77,032	333	31,20,219
4 Rajahmundry	70	7,64,229	10	1,30,673	80	8,94,902
5 Godavari, East	130	13,36,736	..	..	130	13,36,736
6 Krishna	129	19,16,000	17	8,38,000	146	27,54,000
7 Visakhapatnam, South	80	8,36,291	8	7,43,161	88	15,79,452
8 Visakhapatnam, North	84	10,47,116	23	6,00,122	107	16,47,238
9 Anakapalle Special	87	2,09,057	10	3,95,536	97	6,04,593
10 Godavari Bridges	33	70,096	7	7,58,659	40	8,28,755
<i>II Circle.</i>						
11 Anantapur	328	9,12,639	3	4,73,680	331	13,86,319
12 Bellary	..	..	..	..	..	..
13 Chingleput	295	21,53,336	6	2,82,114	301	24,35,450
14 Chittoor	236	14,21,240	..	..	236	14,21,240
15 Cuddapah	130	10,60,375	..	..	130	10,60,375
16 Kurnool	326	10,93,830	3	83,445	329	11,77,275
17 Nellore	295	16,06,614	2	5,24,395	297	21,31,009
18 Arcot, North	271	11,93,049	6	4,12,160	277	16,05,209
19 Pennar Bridge	8	21,900	1	8,437	9	30,337
20 Transport and Machinery	..	..	..	..	..	..
<i>III Circle.</i>						
21 Arcot, South	218	15,25,743	7	7,64,280	225	22,90,023
22 Tanjore, East	125	9,82,724	4	1,28,478	129	11,11,202
23 Tanjore, West	71	10,39,181	2	2,18,952	73	12,58,133
24 Tiruchirappalli	239	8,74,147	3	2,63,321	242	11,37,468
25 Madurai	442	18,64,289	3	1,96,946	445	20,61,235
26 Ramanathapuram	175	17,05,277	5	61,036	180	17,66,313
27 Tirunelveli	138	12,83,507	1	40,435	139	13,23,942
28 Coleroon	13	4,477	5	31,720	18	36,197
<i>IV Circle.</i>						
29 Bharatapuzha	30	2,600	2	2,72,500	32	2,75,100
30 Coimbatore, North	203	10,52,458	1	26,823	204	10,79,283
31 Coimbatore, South	294	11,26,721	3	90,741	297	12,17,462
32 Malabar, North	119	16,12,665	8	6,61,015	127	16,73,680
33 Malabar, South	231	2,40,679	8	1,94,283	239	4,34,967
34 Salem, North	120	5,16,234	2	1,065	122	5,17,349
35 Salem, South	156	6,52,267	..	30,717	157	6,82,984
36 South Kanara	299	14,60,619	9	5,65,754	308	20,16,373
37 The Nilgiris	83	3,17,679	..	..	83	3,17,679
Total ..	6,072	3,58,33,973	198	1,03,54,910	6,270	4,61,88,983

* Figures are not available.

(ii) Statement showing the number of agreements accepted by the Superintending Engineers and Divisional Engineers for District Board Works.

Serial number and name of division.	Accepted by Divisional Engineer.		Accepted by Superintending Engineer.		Total.	
	Number.	Amount.	Number.	Amount.	Number.	Amount.
		RS.		RS.		RS.
<i>I Circle.</i>						
1 Guntur, South	50	1,70,000	..	..	50	1,70,000
2 Guntur, North	54	1,18,180	..	..	54	1,18,180
3 Godavari West	69	8,39,000	..	..	69	8,39,000
4 Rajahmundry	186	8,64,043	..	..	186	8,64,043
5 Godavari, East	250	7,56,596	..	..	250	7,56,596
6 Krishna	217	5,13,000	..	..	217	5,13,000
7 Visakhapatnam, South	191	8,90,325	..	..	191	8,90,325
8 Visakhapatnam, North	111	3,26,409	..	..	111	3,26,409
9 Anakapalle Special	..	..	..	..	..	..
10 Godavari Bridges	..	..	..	..	..	..
<i>II Circle.</i>						
11 Anantapur	106	3,26,919	..	..	106	3,26,919
12 Bellary	..	..	..	..	..	..
13 Chingleput	284	7,93,843	..	..	284	7,93,843
14 Chittoor	164	3,23,468	..	..	164	3,23,468
15 Cuddapah	291	10,39,376	..	..	291	10,39,376
16 Kurnool	90	3,04,474	..	..	90	3,04,474
17 Nellore	293	8,18,389	..	..	293	8,18,389
18 Arcot, North	293	10,56,111	..	..	293	10,56,111
19 Pennar Bridge	..	..	..	..	..	..
20 Transport and Machinery Division	..	..	..	..	..	..
<i>III Circle.</i>						
21 Arcot, South	416	11,42,887	..	..	416	11,42,887
22 Tanjore, East	243	6,10,743	..	..	243	6,10,743
23 Tanjore, West	291	15,28,197	..	..	291	15,28,197
24 Tiruchirappalli	424	12,43,115	..	..	424	12,43,115
25 Madurai	1,781	30,67,393	..	..	1,781	30,67,393
26 Ramapathapuram	116	8,63,720	..	..	116	8,63,720
27 Tirunelveli	305	12,89,566	..	..	305	12,89,566
28 Coleroon Bridge	..	..	..	..	..	..
<i>IV Circle.</i>						
29 Bharatapuzha	..	..	..	..	..	..
30 Coimbatore, North	460	10,97,207	..	..	460	10,97,207
31 Coimbatore, South	550	16,43,859	..	..	550	16,43,859
32 Malabar, North	149	6,43,298	..	..	149	6,43,298
33 Malabar, South	239	7,44,136	..	..	239	7,44,136
34 Salem, North	219	4,76,290	..	..	219	4,76,290
35 Salem, South	234	5,96,156	..	..	234	5,96,156
36 South Kanara	143	3,60,819	..	..	143	3,60,819
37 The Nilgiris	102	3,79,524	..	..	102	3,79,524
Total ..	8,321	2,48,33,043	..	..	8,321	2,48,33,043

A.B.H.—8

ANNEXURE 19.

*Work done in the office of the Chief Engineer (Highways).*1. *Tenders—*

A. Government Roads—

	Number.	Cost, RS.
1. Total cost of works for which tender proposals were approved by the Chief Engineer (Highways).	38	10,15,967
2. Total cost of works for which tender proposals were recommended to Government and approved by them.	10	4,24,060

B. District Board Roads—

1. Total cost of works for which tender proposals were approved by the Chief Engineer (Highways).	8	1,11,078
2. Total cost of works for which tender proposals were recommended to Government and approved by them.	16	4,47,046

2. *Estimates.*—One hundred and thirty-nine estimates to a total cost of Rs. 4,63,64,380 were dealt with during the year 1952-53 against 143 estimates totalling to Rs. 516.9 lakhs in 1951-52.

	Number of works.	Amount. RS.
1 Road works	64	2,09,33,380
2 Bridges and culverts	67	2,47,67,000
3 Other works	3	4,58,000
4 Tools and plant	5	2,06,000
Total ..	139	4,63,64,380

The details of the estimates are given below :—

Serial number and date.	Description of work.	Estimate cost. RS.
<i>Road works.</i>		
1 April 1952 ..	Kundah bridge—Melkudah road diversion	21,000
2 Do. ..	Widening Rajahmundry-Kakinada road from miles 20.0 to 30.0.	17,200
3 Do. ..	Providing precasted in miles 138.1 to 139.0 of Cuddalore-Chittoor road.	..
4 Do. ..	Forming a road from the foot of the Minimalar Ghat to Paderu miles 6/2 to 23.0—Estimate for miles 9/0 to 11/0.	1,35,800
5 Do. ..	Forming a road from Venkatapuram to Muthupalli, Guntur district.	6,200
6 Do. ..	Cement concreting Masulipatnam-Hyderabad road from miles 34/0 to 39/5 + 354.	6,10,000
7 Do. ..	Providing asphalt concreting and other improvements to miles to 40/0 to 42/2 of Chingleput-Kancheepuram road.	1,87,000
8 Do. ..	Cement concreting Tenkasi-Madurai road miles 33 to 44 ..	9,00,000
9 Do. ..	Constructing a road from Edapal to Kunbramudu via Ayincheri.	2,65,000
10 Do. ..	Forming a road from the foot of the Minimalar Ghat to Paderu miles 6/2 to 23.0—Estimate for miles 8/0 to 9/0.	97,500
11 Do. ..	Providing track asphalt in miles 118/5-8 and 119/1-2 of Cuddalore-Chittoor road.	80,000
12 Do. ..	Metalling and improvements to Bellary-Cuddapah road ..	25,000
13 Do. ..	Improvements to Dornal pass road miles 54/4 to 69/0 Kurnool district.	5,90,000
14 Do. ..	Cement concreting Nellore-Bombay road from miles 325/3 to 327/4 + 300 within Bellary municipal limits.	2,54,000
15 Do. ..	Cement concreting Tellicherry-Coorg road miles 0/1 + 200 to 1/7 + 6 within Tellicherry municipal limits.	2,30,000
16 Do. ..	Cement concreting Cuddalore-Chittoor road—Provincial Highways.	6,90,000
17 Do. ..	Cement concreting Eluru Jangareddigudem—Provincial Highways—Miles 0/0—7/0.	8,70,000
18 Do. ..	Cement concreting Tanjore-Tiruchirappalli road miles 23/6 to 33/8.	6,66,000

Serial number and date.	Description of work.	Estimate cost. RS.
<i>Road works—cont.</i>		
19 May 1952 ..	Forming Karajady-Kundukadavu road	2,13,000
20 Do. ..	Tanjore district—New metaling Pattiswaram village road—Miles 2/0 to 2/4.	5,200
21 Do. ..	Nellore District—Formation of a road from Virur to Chejerla ..	22,080
22 Do. ..	Improvements to the missing link portions of the road from Velagalappalli to Kamavarappukota—Miles 3/0 to 8/4.	1,77,000
23 Do. ..	Forming a road from Kadabathur to Sinji	12,000
24 Do. ..	Improvements to Mangalore Agumbe Ghat	1,07,000
25 Do. ..	Forming an all weather road from Jiluganalli to Ankana-palem.	1,23,000
26 Do. ..	Cement concreting miles 14/0 to 15/4 of Great Western Trunk Road National Highway 4—Madras-Calicut Road.	1,40,300
27 Do. ..	Cement concreting miles 22/8 to 26/0 Kothapudi-Narasapur Ferry road.	4,40,000
28 June 1952 ..	Formation of a road from Bodinayakanur to Badimattu Madura.	7,00,000
29 Do. ..	Improving dustless surfacing to Tiruvathiyur-Ponneri-Minjur road miles 16/1 to 8.	18,000
30 Do. ..	Black-topping Jammalamadugu-Nellore Frontier Road—Miles 57 to 68/2.	22,500
31 Do. ..	Madras-Mahabalpuram road	3,03,000
32 Do. ..	Constructing a road from Dornal to Srisallam in Kurnool district.	12,00,000
33 Do. ..	Construction of Banganapalli-Bethemcherla road, Kurnool district.	3,07,000
34 Do. ..	Improvements to V.A.A. Road—Miles 38/2 to 79/2	15,10,000
35 Do. ..	Cement concreting the reaches miles 2/6 to 7/0 of Nellore-Bombay road—Provincial Highways.	4,68,000
36 Do. ..	Cement concreting Rajahmundry-Kakinada Road—Miles 0/0 to 10/3.	7,00,000
37 July 1952 ..	Metalling Nidadivole-Yernagudem road—Miles 0/0 to 14/0 ..	4,75,000
38 August 1952 ..	Forming and metalling Penugolam-Konjerla road	1,50,000
39 Do. ..	Widening the road margin in miles 22/1 of Masulipatam-Hyderabad road.	..
40 September 1952 ..	Road from Chinnathadagam to Mannarghat	10,00,000
41 Do. ..	Formation of a road to Kolli Hills	20,00,000
42 Do. ..	Forming an all graveling Kottapady-Kundakadavu road ..	13,30,000
43 Do. ..	Forming Rapur-Chitvel road miles 0/3 to 8/3	3,00,000
44 October 1952 ..	Construction of Groynes for protecting erosions on the left bank of Ozeru Vagu at Chalakurpet.	1,08,000
45 Do. ..	Providing black top surfacing to V.A.A. Road—Miles 8/0 to 12/0.	95,000
46 Do. ..	Black-topping Ootacamund-Gudalur Bridge road	5,000
47 November 1952 ..	Dustless surfacing from mile 154 to 155 of Chittoor-Anantapur road.	19,000
48 December 1952 ..	Acquisition of lands for winding Tanjore-Nagapattinam road.	..
49 Do. ..	Strengthening and widening the curves on road No. 30 from Mannargudi-Tiruvarur road.	56,000
50 January 1953 ..	Improvements to Visakhapatnam-Anantagiri Araku road at mile 33/2 to 79/2.	18,18,200
51 Do. ..	Conph. lting V.A.A. road miles 2/0 to 3/3	1,75,000
52 Do. ..	Forming a road Kapileswaram Ferry to Kottapeta	10,000
53 Do. ..	Forming a bye-pass road at Kadiri	70,800
54 February 1953 ..	Black-topping appropriate reaches in Nellore section—Madras-Calcutta Road—National Highway 5.	1,87,000
55 Do. ..	Formation of a road from Arkonam to Tiruvelangadu	..
56 Do. ..	Cement concreting Pollachi-Meenakari road mile 0/2 to 1/4 + 140.	2,50,000
57 Do. ..	Formation of a road from Tuticorin to Tiruchendur	4,00,000
58 March 1953 ..	Forming a road from Rampachodavaram Addotigala and thence to Cheruvukonimmapalem.	1,00,000
59 Do. ..	Widening and metalling the road between Kovvur Tallapadi ..	6,70,000
60 Do. ..	Formation of Chappropadam Thuddikadavi-Naduvil road ..	2,04,000
61 April 1953 ..	Chirakkal taluk—Forming Purirothol-Pullagome road ..	20,000
62 Do. ..	Forming a road from Alu to Mologavalli	2,60,000
63 May 1953 ..	Forming a road from Putlacheruvu to Marivimulla	1,21,000
64 July 1953 ..	Forming an all weather road from Allipalli to Medisettivaram via Sitanagaram.	1,46,000

Serial number and date.	Description of work.	Estimated cost.
		RS.
<i>Bridges and Causeways.</i>		
1 April 1952	Construction of bridges in Palamcottah-Nagalapuram road—Miles 35/6 and 36/3-6.	2,00,000
2 Do.	Constructing a bridge over Talapady river at mile 7/7 of Mangalore-Kanhangad Coast road.	2,00,000
3 Do.	Constructing a submersible bridge at mile 15/1 of Bisley Ghat road.	2,58,000
4 Do.	Constructing a Causeway at mile 13/5-6 of Penukonda-Madakasira road.	1,12,000
5 Do.	Constructing a bridge across Pugalur-National Highway - Benares Cape Comorin road.	26,00,000
6 Do.	Bridges across Tirur river at mile 26/3 of Poorapuramba-Tirur road.	50,000
7 Do.	Constructing a bridge at mile 6/6 of Singarapet-Tirupathur road.	34,500
8 Do.	Constructing a bridge at mile 5/5 of Pappir-kkippatt-Mallapuram road.	33,000
9 Do.	Constructing a bridge at mile 80/2 of Hampasagar-Mylam road - Bellary.	57,000
10 Do.	Construction of a Causeway across Pennar at mile 10/1 to 11/2 of Muddanur-Jammalamadugu road.	2,00,000
11 Do.	Constructing a submersible bridge across Cheyyar river at mile 7/1-2 of Uttiramerur-Conjeevaram road.	1,96,000
12 May 1952	Converting the existing low level causeway across the Koderuvanka on National Highway No. 7 (Benares Cape Comorin Road—Anantapur) into a high level perforated causeway.	78,700
13 Do.	Constructing a bridge at mile 50/2 of Kanhangad-Cheruvathur section of Bombay-Cape Comorin road.	3,62,000
14 Do.	Gowthami Bridge—Constructing a bridge across Alanur canal.	6,55,000
15 Do.	Constructing a bridge across Swarnanadhi near Puttige at mile 13/1 of Hariadka-Hebri road.	4,00,000
16 Do.	Construction of a bridge at mile 411/5 (Kootilangadi) of Madras-Calicut road.	47,000
17 Do.	Construction of a bridge over Champavathy river at mile 520/3-6 of Madras-Calcutta road.	13,20,000
18 Do.	Reconstruction of a bridge over Yaleru river near Yerravaram in mile 391/3 of Great Northern Trunk Road.	7,10,000
19 Do.	Improvements to Causeway at mile 27/5 of Thirumuzhi-Satyavedu road.	2,60,000
20 Do.	Constructing a bridge over Srikantapuram river in mile 19/8 of Talipramba-Iritty road.	1,80,000
21 Do.	Constructing a bridge across Kodamurutti at mile 1/1 of Ayyampet-Ganapathi Agraharam.	1,40,000
22 Do.	Constructing a bridge at mile 23/8-7 of Nellore-Bombay road.	86,000
23 June 1952	Bridge at mile 9/3 of Thiruvethiyur-Ponneri Panjetti road.	70,000
24 Do.	Constructing a bridge across Payaswami river at mile 52/8 of Kalladka-Kanhangad road.	10,10,000
25 Do.	Karimpuzha bridge at mile 47/6 of C.M.G. Road	17,000
26 Do.	Construction of a bridge across river Pogeru at mile 35/5 of Nellore-Bombay road.	3,15,000
27 Do.	Improvements to Vaigai Causeway at Madurai	1,50,000
28 Do.	Construction of a bridge across Kutticole river at mile 5/8 of Ballapatam-Taliparamba road.	2,22,000
29 Do.	Construction of a bridge at 6/5 of Ulleri Paramba road	2,10,000
30 Do.	Repairs to Flood damages to the Perlapalayam Causeway at mile 8/5-6 of Kortalayar bridge-Puttur road.	50,000
31 Do.	Sankarankoil-Koipatti road—Causeway at mile 13/6 and 16/1	1,50,000
32 July 1952	Reconstructing the bridge at mile 1/1 of Merkanam-Tindivanam road.	2,90,000
33 Do.	Constructing a bridge at mile 41 of Vizianagaram-Palconda road.	18,00,000
34 August 1952	Strengthening and widening the bridge at Benares-Cape Comorin road.	2,45,000
35 Do.	Construction of a over-bridge in McNichols road level crossing.	6,75,000
36 Do.	Constructing a bridge over Puchunagar river at mile 5/5 of Mudibidri-Bantval road.	4,40,000

Serial number and date.	Description of work.	Estimated cost.
		RS.
<i>Bridges and Causeways—cont.</i>		
37 September 1952	Construction of a Causeway at Madanapalle-Pileru road	12,000
38 Do.	Constructing a bridge at mile 66/7 of Calicut-Mysore Frontier road.	40,300
39 Do.	Construction of a bridge across Vasishta branch of Godavari National Highway-5.	2,00,000
40 Do.	Construction of a causeway at mile 19/7 of Devakottah-Devipatnam road.	2,00,000
41 Do.	Reconstructing the Shirur bridge at mile 79/7 of Mangalore-Balndur Coast road.	1,40,000
42 October 1952	Constructing a submersible bridge across river Gadilam in mile 110/2 of Vikravandy Lower Abicut road.	2,00,000
43 Do.	Construction of a bridge across River Perumbhai-Talliperumbhai-Payyanur road.	5,23,000
44 Do.	Constructing Masonry body walls for kutchu causeways in Chingleput and Chittoor districts.	52,500
45 Do.	Constructing a bridge at mile 20/6 of Chittoor-Kurnool road.	51,000
46 Do.	Constructing a pipe vented causeway at mile 24/5-6 of Palayamkottai-Tiruchendur road.	60,000
47 November 1952	Constructing a causeway at mile 13/5 to 10/1 of Uttiramerur-Conjeevaram road.	1,70,000
48 Do.	Bharathapuzha bridge—Malabar district	11,35,000
49 Do.	Constructing a bridge at mile 19/3-4 of Great Western Trunk Road—National Highway-4.	..
50 December 1952	Constructing a submersible bridge at Narshalla at mile 23/2 of Tornagalu-Sandur road.	1,00,000
51 Do.	Constructing a bridge across Kushavathi river at mile 3/6 of Kodikonda-Amalapuram road.	56,500
52 Do.	Constructing a bridge at mile 66/7 of Calicut-Mysore Frontier road.	1,69,000
53 Do.	Constructing a causeway at Gudlakamma river at mile 67/7-8 of Chinnaganjam-Ongole road.	2,12,000
54 Do.	Constructing a bridge across Eluru canal near Badampudi on Madras-Calcutta Road—National Highway-5.	1,45,000
55 January 1953	Constructing a causeway across the river Palar at mile 13/1-6 of Nelvoy-Tirukalikunram road.	4,25,000
56 Do.	Constructing a bridge across Kariangode river at mile 52/8 of Kanhangad-Cheruvathur road.	6,34,000
57 Do.	Reconstructing the culverts on Tellicherry-Bavali road between mile 23/0 to 31/0.	17,600
58 Do.	Constructing a bridge in mile 7/8 of Bhimdole-Chebrole road	31,400
59 Do.	Constructing a submersible bridge in Heu of high level bridge across Nagavalli 41/3-4 of Vizianagaram-Palkonda road.	7,00,000
60 Do.	Strengthening and widening the bridge at mile 166/4 (Kaveripatnam) of Benares-Cape Comorin road.	4,34,000
61 Do.	Construction of a bridge at mile 38/8 of Tiruvallur-Tiruttani road.	37,000
62 Do.	Constructing a bridge at mile 1/2 of the road from Vendra to Palacondur across Gashthanadhi and Velpu canal.	1,10,000
63 February 1953	Redecking the bridge at mile 15/3 of Tirur-Malapuram road	88,000
64 Do.	Constructing a bridge at Budameru at mile 28/4 of Nuzvid-Bezwada road.	1,75,000
65 Do.	Constructing a bridge over Gatana at mile 2/3 of Alangulam-Ambas mudram road.	1,85,000
66 March 1953	Construction of a bridge over Pennar river near Nellore on National Highway-5.	23,00,000
67 Do.	Constructing masonry structures in Chittoor-Gudiyatham road.	45,500
68 Do.	Construction of a bridge over the Pennar at Chennai in Cuddapah district on Chittoor-Kurnool road.	23,00,000
69 Do.	Constructing a bridge at mile 24/1 of Chittoor-Kurnool road	45,000
<i>Tools and plants.</i>		
1 April 1952	Estimate for conducting experiments in the Soil Research Laboratory for 1952-53.	10,000
2 May 1952	Purchase of twenty-three pump sets	75,000
3 September 1952	For the construction of a bridge over the Pennar at Nellore—National Highway-5.	1,05,000
4 March 1953	Maintenance of Lorry No. M.S.P. 3187 for 1952-53	13,000
5 Do.	Maintenance of Lorry No. M.S.P. 1817 for 1952-53	13,000

Serial number and date.	Description of work.	Estimate cost. RS.
<i>Other works.</i>		
1 May 1952 ..	Constructing a High School building at Pattikonda in Kurnool district.	1,16,000
2 June 1952 ..	Constructing a Board High School at Sankaranalankoll ..	2,06,000
3 Do. ..	Constructing a Board High School building at Koothanallur in Tanjore district.	1,36,000

List of tender proposals approved or recommended to Government by the Chief Engineer (Highways) during 1952-53.

Name of work. (1)	Value of work. RS. (2)	Sanctioned by Chief Engineer (Highways). (3)	Recommended to Government for sanction. (4)
1 Cement concreting Masulipatnam-Tiruvur road—M. 23 to 28/0.	30,385	....	G.O. Ms. No 2007, dated 6th May 1953 (No. 15279/53-H.R., dated 14th May 1953).
2 Forming a road from Chinnaganjam to Ongole.	59,254	....	Memorandum No. 45786-Q/53-2, P.W., dated 13th June 1953 (No. 15347/53-H.R., dated 29th June 1953).
3 Constructing a bridge across Cauvery near Pugalur—supply of grease boxes for roller bearings.	13,712½	Proceedings No. 26159/52-H.R., dated 28th February 1953.	....
4 Maintenance of Kasargod-Jaisoor road—M. 18 to 25.	10,507	Proceedings No. 53165/D2/52-H.R., dated 1st October 1952.	....
5 Maintenance of Kasargod-Jaisoor road—M. 25 to 31/3.	7,733	Proceedings No. 53165/D2/52-H.R., dated 1st October 1952.	....
6 Maintenance of Mudabidri-Guraviakere road—M. 7 to 14.	5,387	Proceedings No. 56722/52-H.R., dated 1st October 1952.	....
7 Ordinary repairs to Calicut-Vayithiri-Gudalur road—M. 28 to 39.	4,376	Proceedings No. 58402/D2/52-H.R., dated 2nd December 1952.	....
8 Maintaining Madras Tiruchirappalli-Dindigul road—M. 130-140/0.	5,861	Proceedings No. 69925/D2/52-H.R., dated 15th January 1953.	....
9 Cement concreting Salem Junction to Salem bye-pass road—M. 1/4 to 3/4.	47,717	....	Memorandum No. 10734-Q/53-3, P.W., dated 26th March 1953 (No. 74670/52-H.R., dated 2nd April 1953).
10 Maintaining G.S.T. road—M. 300/6 to 307/0.	10,500	Proceedings No. 73821/D2/52-H.R., dated 12th March 1953.	....
11 Constructing a R.C. Rigid frame cantilever type bridge at M. 331/1 of Madras-Calicut road.	41,200	....	Memorandum No. 39294-Q/53-2, P.W., dated 21st May 1953 (No. 2465 53-H.R., dated 1st June 1953).
12 Reconstructing the Culvert at M. 78/3 of Mangalore-Balindur Coast road.	7,636	Proceedings No. 1483/53-H.R., dated 3rd February 1953.	....
13 Reconstructing the Culvert at M. 12/1 of Balindur-Nagodi Ghat road.	11,453	Proceedings No. 751/53-H.R., dated 3rd February 1953.	....
14 Maintaining Madurai-Theni road—M. 19 to 23.	5,100	Memorandum No. 5394/D2/53-H.R., dated 23rd February 1953.	....
15 Constructing a bridge across Puchmugar river at M. 5/5 of Mudabidri-Buntval road tender.	4,29,421	Proceedings No. 8163/D2/53-H.R., dated 7th August 1953.	....
16 Reconstructing the culvert at M. 10/1 of Wandse-Halkal road.	14,366	Proceedings No. 9803/D2/53-H.R., dated 28th February 1953.	....
17 Cement concreting Tanjore-Tiruchirappalli road—M. 26/0 to 36/6 additional tons of work.	54,000	....	Memorandum No. 28599-Q/53-2, P.W., dated 15th April 1953 (No. 12682/D2/53-H.R., dated 28th April 1953).

Name of work. (1)	Value of work. (2)	Sanctioned by Chief Engineer (Highways). (3)	Recommended to Government for sanction. (4)
18 Contracts—Madurai division—Maintaining G.S.T. road—M. 312 to 317 0.	11,500	Proceedings No. 38257/D-2/52-H.R., dated 22nd July 1952.	....
19 Contracts—Madurai division—Maintaining G.S.T. road—M. 317 to 320.	11,500		
20 Contracts—Madurai division—Maintaining G.S.T. road—M. 320 to 324 6.	11,350		
21 Maintaining Tenkasi-Madurai road—M. 70/0 to 72/0 for 1952-53.	11,200		
22 Metalling Vridhachalam-Salem road—M. 62 to 68/0.	41,636	Proceedings No. 34168/D-2/52-H.R., dated 25th June 1952.	....
23 Maintaining Cuddalore-Ulundurpet-Salem road—M. 51 to 61/0.	1,325	Proceedings No. 33135/D-2/52-H.R., dated 22nd July 1952.	....
24 Maintaining Sattur-Siakasi road—M. 5/0 to 10/4 for 1951-52.	12,851	Memorandum No. 25354—D/52-H.R., dated 12th May 1952.	....
25 Maintaining Cuddalore-Ulundurpet-Salem road—M. 51 to 61/0.	15,984	Proceedings No. 25854/D2/52-H.R., dated 1st June 1952.	....
26 Cement concreting Koderu-Nallajerla road—M. 23, 8-24/1.	19,534	....	G.O. Rt. No. 1214, P.W., dated 10th August 1953. (No. 27293/D2/52-H.P., dated 25th August 1953).
27 Cement concreting Koderu-Nallajerla road—M. 24/1-3 to 31/2 A-phalitic concreting approaches.	22,077	....	Do.
28 Maintaining Chirala-Narasaraopet road—M. 35/3 to 37/2.	30,807	Proceedings No. 45732/D2/52-H.R., dated 23th August 1952.	....
29 Maintaining Godavari road, Kunavaram—M. 0/0 to 9/4.	16,522	Proceedings No. 47162/D2/52-H.R., dated 27th August 1952.	....
30 Maintaining Kakinada-Rajahmundry road—M. 16/4 to 20/4.	22,248	Proceedings No. 38249/D2/52-H.R., dated 13th September 1952.	....
31 Constructing a guide bank on left abutment—supply of laterite rough-stone.	75,000	Proceedings No. 47452/D2/52-H.R., dated 15th September 1952.	....
32 Maintaining Rajahmundry-Kakinada road—M. 30 to 36/7.	10,909	Proceedings No. 12791/D2/52-H.R., dated 10th April 1952.	....
33 Maintaining Rajahmundry-Kakinada road—M. 10/0 to 16/4.	26,208	Proceedings No. 17919/D2/52-H.R., dated 1st June 1952.	....
34 Maintaining Godavari road, Venkatapuram side—M. 30/4 to 40/0.	5,524	Proceedings No. 34138/D2/52-H.R., dated 23rd June 1952.	....
35 Forming a road from the foot of Minimalur Ghat to Paderu—M. 17/0 to 20/0.	5,440	Proceedings No. 34138/D2/52-H.R., dated 23rd June 1952.	....
36 Repairs to foot damages in Kakinada-Yanam road—M. 0/0 to 5/0.	8,142	Proceedings No. 34141/D2/52-H.R., dated 1st July 1952.	....
37 Special repairs to K.N.F. road—M. 11 to 21/0.	2,648	Do.	....
38 Constructing a bridge at Pedapalem road—M. 73/6 Krishna Western main canal.	18,870	....	G.O. Rt. No. 904, dated 23rd June 1952 (No. 26745/D2/52-H.R., dated 5th July 1952).
39 Constructing a guide bank on left abutment. Godavari Bridge work.	1,15,500	....	G.O. Rt. No. 971, dated 4th July 1952 (No. 28514/D2/52-H.R., dated 15th July 1952).
40 Forming a road from the foot of the Minimalur ghat to Paderu—M. 6/2 to 9/0.	78,798	Proceedings No. 35622/D2/52-H.R., dated 22nd July 1952.	....
41 Forming a road from the foot of Minimalur ghat to Paderu—M. 17/0 to 20/0.	11,110	Proceedings No. 60031/D2/52-H.R., dated 3rd February 1953.	....
42 Forming a road from the foot of Minimalur ghat to Paderu—M. 20/0 to 23/0.	5,625	Do.	....
43 Maintaining Yerravaram-Jannavaram road—M. 4/2 to 11/3.	8,406	Proceedings No. 43946/D2/52-H.R., dated 3rd February 1953.	....

Name of work.	Value of work.	Sanctioned by Chief Engineer (Highways).	Recommended to Government for sanction.
(1)	(2)	(3)	(4)
	RS.		
44 Maintaining Guntur-Amaravathi road—M. 1/2 to 8/0.	15,567	Proceedings No. 14054/D2/53-H.R., dated 28th March 1953.	....
45 Mettalling road from Duggirala to Padavallapudi—M. 7/2 to 12/1.	10,725	Proceedings No. 17452/D2/53-H.R., dated 10th April 1953.	....
46 Cement concreting Musulipatam to Hyderabad road—M. 31 to 34.	25,543	Do.	G.O. Rt. No. 2245, dated 22nd May 1953 (15491/D2/53-H.R., dated 1st June 1953).
47 Constructing a bridge across Upputeru on Gudivada-Bhimavaram road—quotation for R.S. dry packing.	14,485	Proceedings No. 2933/D2/53-H.R., dated 8th July 1953.	....
48 Cement concreting Masulipatam-Tiruvur road—M. 26 to 25/0.	23,939	Proceedings No. 73646/D2/52-H.R., dated 20th July 1953.	....

District Board Tender Rules—1st April 1952 to 31st March 1953.

Serial number and name of work.	Estimated cost.	Sanctioned by Chief Engineer (Highways).	Recommended to Government for sanction.
(1)	(2)	(3)	(4)
	RS.		
1 Contract—Forming a road from Kallavi to Hanumanthantham. Tender of Sri Ramaboyan at 5 per cent above estimate rate approved dispensing with tenders.	12,500	Proceedings No. 23452-D/4/52, H.R., dated 6th May 1952.	....
2 a) Constructing an underverned road dam across Budameru in M. 2/2 of Indupalli-Telepole road.	23,239	....	Endorsement No. 19865-D-4/52-H.R., dated, 19th May 1952.
(b) Constructing a bridge across Bandar canal at M. 39/3 on the road from M. 7/4 of M.H. road to Tarakalur.	14,300	....	....
3 Contracts—Tirunelveli District Board—Metalling Vallar-Kayalpatnam road. Acceptance of tender of unregistered contractor—Approved.	41,500	....	Endorsement No. 29486-D-4/52-H.R., dated 16th July 1952.
4 Tenders—Road maintenance—1952-53, District Board roads—Relaxation of jurisdiction and money limit sanction.	31,000	....	Endorsement No. 42445-D-4/52-1, dated, 26th July 1952.
5 Forming a diversion at M. 1/1-4 of Kundah-Melkundah road—Dispensing with call of tenders—Approved.	21,000	Proceedings No. 48833-D-4/52-H.R., dated 5th September 1952.	....
6 Contract—Buildings—Tanjore District Board—Board High School, Peralam—Construction of a temporary shed—Entrustment of the work to the unregistered contractor—Approved.	3,100	....	Endorsement No. 39305-D-4/52-2, dated 8th August 1952.
7 Contracts—Tanjore District Board—Construction of bridge across Pethara-anar at M. 1/1 of Achuthamangalam-Manakkal Road—Entrustment—Approved.	15,754	....	Endorsement No. 48026-D-4/52-1, dated 29th August 1952.
8 Contracts—Malabar District Board—Maintenance of Meppadi-Churalamala road for 1952-53—Entrustment to unregistered contractor—Proposal—Approved.	10,000	....	Endorsement No. 3663-D-4/52-4, dated 29th August 1952.
9 Contracts—O.R. to Karthikulam-Tholpatty road—Estimate Rs. 19,000 for 1952-53—Entrustment of contractors.	19,000	Proceedings No. 52263-D-4/52-H.R., dated 7th October 1952.	....
10 Contracts—West Godavari District Board—Forming all weather road from Allipalli to Mediset varigudem (via) Seethanagaram—Entrustment to Sri Y. Seethaya—Action ratified.	1,45,000	....	Endorsement No. 52159-D-4/52-1, dated 1st October 1952.
11 Contracts—Krishna District Board—special repairs to Telaprolu-Arugolalu Ogirala road for 1951-52—Entrustment to Sri Alla Appa Rao—Action ratified.	31,000	....	Endorsement No. 56580-D-4/52-1, dated 28th October 1952.

Serial number and name of work.	Estimated cost.	Sanctioned by Chief Engineer (Highways).	Recommended to Government for sanction.
(1)	(2)	(3)	(4)
	RS.		
12 Tender—Ootacamund District Board—Constructing a new school building for Ambalavayal School—Negotiated offer—Estimate Rs. 12,000—Dispensing with call of tenders—Approved.	12,000	Proceedings No. 57136-D-4/52-H.R., dated 13th October 1952.	....
13 Contracts—South Arcot District Board—Constructing bridge at M. 15/5 of Thyagadurgam-Manalurpet road—Entrustment—Approved.	17,281	....	Endorsement No. 5495-D-4/52-1, dated, 14th October 1952.
14 Basic Education—Madurai District Board—Construction of a building for the Basic School at Jathika-andanpatty—Entrusting the work to private body—Action approved.	4,943	....	Endorsement No. 59737-D-4/52-2, dated 31st October 1952.
15 Communications—Guntur District Board—Formation of Rupanganthla village road—acceptance of tender of unregistered contractor—Approved.	6,979	....	Endorsement No. 69656-D-4/52-1, dated, 31st December 1952.
16 Contracts—Ullal Panchayat—South Kanara District—Constructing of foot-bridge over Ullal river in Old Jeppu road—Acceptance of premium offer of Sri Hajee M. Kunhalikutty, serang—Approved.	8,000	....	Endorsement No. 63610-D-4/52-1, dated 10th December 1952.
17 Contracts—Maruteru Panchayat Board—West Godavari District—Tenders for surface dressing with precoated chips for.	4,600	Proceedings No. 71306-D-4/52-H.R., dated 3rd February 1953.	....
18 Tirunelveli District—Construction of a bridge across river Gatana at M. 2/3 of Ambasamudram-Alangulam road—Excess cost of earth work—Execution through original contractor.	12,400	Proceedings No. 2503-D-4/53-H.R., dated 25th February 1953.	....
19 Works—Nilairi District Board—Excluding Post-war Road Development—Constructing a bridge at M. 17/6-7 of Ootacamund-Mysore road via Sigur—Premium offer—Dispensing with call of tenders—Approved.	17,686	Memo. 74754-D-4/52-H.R., dated 13th March 1953.	....
20 Contracts—Tirunelveli District Board—Reconstructing causeway at M. 7/8 of Tuticorn-Tiruchendur road—Entrustment.	45,000	....	Endorsement No. 8174-D-4/53-2, dated 18th March 1953.
21 Contract—Tirunelveli District Board—Maintenance of Sheranmahadevi-Panagudi road—1953-54—Jurisdiction—Approved.	22,000	....	Endorsement No. 16567-D-4/53-H.R., dated 23rd April 1953.
22 Post-war Road Development Matalling-Kollanchavandi-Kattugudalur road—00 to 8.4—Additional work Entrustment.	11,892	Proceedings No. 4693-D-4/53-H.R., dated 27th May 1953.	....
23 Contracts—Guntur District Board—Formation of road from Iramulla to M. for District Road No. 43, Acceptance of tender of A. Pulla Rao.	28,000	....	Endorsement No. 7726-D-4/53-2, dated 15th May 1953.
RS.			
Total cost of works for which tender proposals were approved by the Chief Engineer (Highways)—No. 8			1,11,078
Total cost of works recommended to Government and approved by them—No. 16			4,47,646

ANNEXURE 20.

(i) Statement showing the contracts awarded since 1946-47.

Year.	Government roads.					
	Maintenance.		Surfacings.		Bridges, culverts, and canals.	
	Number.	Cost.	Number.	Cost.	Number.	Cost.
	(2)	(3)	(4)	(5)	(6)	(7)
		RS.		RS.		RS.
1946-47 ..	2,087	1,03,91,377	36	6,16,240	80	1,86,825
1947-48 ..	3,516	1,85,83,686	72	6,07,192	324	6,33,520
1948-49 ..	3,569	2,37,90,402	90	20,91,744	163	30,19,713
1949-50 ..	3,631	2,96,01,947	169	66,75,229	372	28,11,250
1950-51 ..	3,888	3,18,93,090	405	79,42,103	514	52,12,011
1951-52 ..	3,787	4,10,35,074	487	63,01,105	366	51,99,521
1952-53 ..	3,399	3,21,17,336	690	95,30,243	368	33,36,209

Year.	District board roads.						Total.	
	Maintenance.		Surfacings.		Bridges, culverts, and canals.		Num-ber.	Cost.
	Num-ber.	Cost.	Num-ber.	Cost.	Num-ber.	Cost.	(14)	(15)
	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
		RS.		RS.		RS.		RS.
1946-47 ..	3,908	63,57,633	29	3,23,805	131	2,52,845	6,271	1,81,28,725
1947-48 ..	4,611	83,95,396	114	12,06,933	274	5,64,000	8,911	2,99,90,727
1948-49 ..	4,945	1,10,18,993	89	12,38,877	403	9,21,674	9,259	4,20,84,603
1949-50 ..	5,067	1,31,98,933	220	34,55,378	269	22,59,252	9,728	5,83,01,989
1950-51 ..	5,333	1,49,00,947	237	34,43,615	332	35,01,012	10,714	6,68,92,781
1951-52 ..	5,767	1,65,97,371	431	38,25,215	392	34,93,002	11,280	6,64,56,288
1952-53 ..	4,613	1,60,33,963	380	22,19,258	359	23,04,209	9,809	6,61,46,133

(ii) Statement showing the contracts awarded during 1952-53.

Serial number and name of circle or division.	Government roads.						District board roads.						Total number.	Total cost.	
	Maintenance.		Surfacings.		Bridges, culverts, and causeways.		Maintenance.		Surfacings.		Bridges, culverts, and causeways.				
	Num-ber.	Cost.	Num-ber.	Cost.	Num-ber.	Cost.	Num-ber.	Cost.	Num-ber.	Cost.	Num-ber.	Cost.			
	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	
		RS.		RS.		RS.		RS.		RS.		RS.		RS.	
I Circle.															
1 Guntur, South	161	13,77,600	1	18,900	23	1,44,300	15	33,008	12	1,70,760	..	..	212	17,49,568	
2 Guntur, North	63	7,48,562	4	1,31,572	4	19,839	..	..	..	..	3	45,132	74	9,45,145	
3 Krishna	126	17,59,070	20	9,95,000	..	..	206	3,54,000	..	..	11	1,62,000	363	32,70,000	
4 West Godavari	198	31,54,335	..	..	5	20,322	13	2,30,351	..	..	2	3,43,596	218	37,54,604	
5 Rajahmundry	70	7,39,442	2	15,115	1	5,279	85	1,87,502	11	2,80,881	..	..	119	12,08,219	
6 East Godavari	54	7,11,000	36	6,01,000	6	36,000	87	14,43,000	..	..	12	2,76,000	195	30,67,000	
7 Visakhapatnam, South ..	69	10,30,329	4	60,494	..	..	137	45,639	49	1,74,571	4	50,620	263	13,61,653	
8 Visakhapatnam, North ..	107	16,17,233	..	..	..	..	111	3,26,409	..	..	..	..	218	19,43,647	
9 Anakapalle	7	1,10,120	..	..	85	4,97,774	..	..	..	..	..	..	92	6,07,894	
10 Godavari Bridges	..	..	..	..	40	7,71,576	..	..	..	..	..	..	40	7,71,576	
Total	855	1,12,47,566	67	18,22,031	164	15,01,190	674	26,21,909	72	6,08,212	32	8,77,343	1,794	1,86,79,396	
II Circle.															
11 Anantapur	106	9,63,925	18	2,40,548	1	34,043	106	2,98,801	..	..	..	..	281	15,42,317	
12 Bellary	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
13 Chingleput	136	5,51,217	132	15,99,459	33	2,84,774	217	4,48,282	15	74,951	61	3,33,623	594	32,92,306	
14 Chittoor	75	8,31,903	7	1,23,100	1	49,570	46	3,02,800	..	..	..	..	129	13,16,800	
15 Cuddapah	77	8,32,470	21	4,70,209	15	3,75,100	82	5,32,300	45	4,61,000	1	80,000	241	27,51,000	
16 Kurnool	110	17,56,189	25	3,26,015	5	72,350	89	5,10,350	..	..	4	94,000	233	27,50,804	
17 Nellore	227	10,92,525	46	4,59,893	22	54,201	289	8,10,390	..	..	3	2,749	587	24,19,753	
18 Arcot, North	122	10,11,473	32	1,71,553	3	19,341	266	4,00,000	2	4,308	1	2,678	426	16,09,383	
19 Pennar Bridge Division ..	..	..	..	..	3	21,900	..	..	..	..	..	..	3	21,900	
20 Transport and Machinery ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Total	853	70,44,629	281	33,37,993	83	9,11,209	1,095	33,03,923	62	5,40,259	70	5,13,950	2,444	1,57,12,763	

(ii) Statement showing the contracts awarded during 1952-53—cont.

Serial number and name of circle or division.	Government roads.				District board roads.			
	Maintenance.		Surfacing.		Maintenance.		Surfacing.	
	Num-ber.	Cost.	Num-ber.	Cost.	Num-ber.	Cost.	Num-ber.	Cost.
		RS.		RS.		RS.		RS.
III Circle.	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
21 Arcot, South ..	186	14,73,306	7	7,04,230	22	52,437	302	5,24,582
22 Tanjore, East ..	71	5,79,537	29	3,41,191	12	28,509	245	7,04,675
23 Tanjore, West ..	65	10,27,326	1	5,650	5	6,205	73	6,57,859
24 Tiruchirappalli ..	230	9,64,773	..	..	6	2,10,390	406	12,21,210
25 Madurai ..	224	15,03,166	6	33,909	3	45,900	220	10,06,000
26 Ramanathapuram ..	81	14,45,965	19	12,89,250	1	22,586	148	8,94,460
27 Tirunelveli ..	75	11,24,750	12	84,878	2	11,521	129	11,23,626
28 Coimbatore ..	..	..	..	..	1	2,500	..	..
Total	932	81,13,823	74	25,22,149	62	3,30,048	1,693	61,31,412
IV Circle.	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
29 Bharathapuzha ..	77	7,70,433	26	1,94,778	10	65,009	270	7,32,695
30 Coimbatore, North ..	182	6,59,503	93	4,22,333	14	34,875	136	10,30,391
31 Coimbatore, South ..	64	5,43,300	45	4,17,504	10	52,271	119	3,30,894
32 Malabar, North ..	103	13,09,337	..	..	..	..	61	1,53,058
33 Malabar, South ..	60	4,59,850	43	2,78,553	..	..	186	2,61,615
34 Salem, North ..	56	4,24,000	37	2,91,240	1	2,000	275	8,93,213
35 Salem, South ..	143	12,91,544	8	1,53,630	16	3,47,781	125	3,00,140
36 South Kanara ..	64	2,41,705	11	34,147	8	41,326	84	1,86,833
37 The Nilgiris ..	759	57,06,318	263	17,92,229	59	5,43,792	1,306	39,73,724
Total	3,339	3,21,17,386	690	95,30,243	363	33,36,209	4,613	1,60,38,963
Grand total	..	..	..	..	..	..	..	..

ANNEXURE 21.

(i) Statement showing the number of investigations since 1946-47.

Year.	Number of investigations.		
	Government.	District boards.	Total.
1946-47 ..	61	60	121
1947-48 ..	179	489	668
1948-49 ..	262	288	550
1949-50 ..	263	399	662
1950-51 ..	116	428	544
1951-52 ..	91	506	597
1952-53 ..	93	212	305
Total	1,065	2,382	3,447

NOTE.—Divisionwar particulars for the year 1952-53 are given in Statement (ii).

(ii) Statement showing the number of investigations in 1952-53.

Serial number and name of division.	Number of investigations.		
	Govern-ment.	District boards.	Total.
I Circle.			
1 Guntur, South ..	..	..	..
2 Guntur, North ..	..	1	1
3 Krishna ..	..	26	27
4 West Godavari ..	..	3	3
5 Rajahmundry ..	2	..	2
6 East Godavari ..	..	..	..
7 Visakhapatnam, South ..	1	1	2
8 Visakhapatnam, North ..	..	2	2
9 Anakapalle Special ..	1	..	1
10 Godavari Bridges Special ..	18	..	18
II Circle.			
11 Anantapur ..	1	11	12
12 Bellary ..	..	..	..
13 Chingleput ..	2	21	23
14 Chittoor ..	..	..	..
15 Cuddapah ..	1	2	3
16 Kurnool ..	..	..	..
17 Nellore ..	..	..	..
18 North Arcot ..	..	10	10
19 Pennar Bridge Division ..	..	..	..
20 Transport and Machinery Division ..	..	..	..
21 Designs Division ..	11	12	23
III Circle.			
22 South Arcot ..	..	..	..
23 Tanjore, East ..	1	10	11
24 Tanjore, West ..	..	..	..
25 Tiruchirappalli ..	..	..	..
26 Madurai ..	18	77	95
27 Ramanathapuram ..	3	4	7
28 Tirunelveli ..	12	14	26
29 Assistant Engineer (Highways), Bridges Division ..	17	4	21
IV Circle.			
30 Bharathapuzha ..	..	..	..
31 Coimbatore, North ..	1	7	8
32 Coimbatore, South ..	..	..	..
33 Malabar, North ..	..	2	2
34 Malabar, South ..	..	1	1
35 Salem, North ..	..	..	..
36 Salem, South ..	..	..	..
37 South Kanara ..	3	2	5
38 The Nilgiris ..	..	2	2
Total	93	212	305

ANNEXURE 22.

(i) Review of works costing over Rs. 1 lakh in progress.

Serial number, name of work and estimate cost (classification and division).	Expenditure during the year.	Expenditure to end of the year.	Remarks.
(1)	(2)	(3)	(4)
RS.	RS.	RS.	
A. GOVERNMENT ROADS.			
1. Bridges, culverts and causeways.			
1 Reconstructing the bridge in M. 331/3 of Great Northern Trunk road over Yeluru river near Yerravaram. Estimate Rs. 7,14,900. Excluding Post-war Reconstruction, Rajahmundry Division.	38,890	59,038	Work was in progress.
2 Constructing a bridge at M. 51/3 of Pamaru-Palacole road across Yenamaduru drain. Estimate Rs. 2,35,000. Post-war Road Development, Eluru Division.	98,643	2,02,814	Do.
3 Constructing a bridge across Upputeru on Gudivada-Bhimaram road. Estimate Rs. 8,55,000. Post-war Road Development, Eluru Division.	1,85,137	3,98,625	Do.
4 Reconstructing the collapsed bridge at M. 413/1-3 of Madra-Calcutta road over river Pampa. Estimate Rs. 2,75,000. Post-war Road Development, Rajahmundry Division.	53,101	1,68,686	Work was in progress and is expected to be completed during 1953-54.
5 Constructing a bridge across Champavathi river near Nathavalasa at M. 50/3-6 of Madras-Calcutta road. Estimate Rs. 13,00,000. Post-war Road Development, Visakhapatnam Division.	5,01,225	8,93,031	Work was in progress and programmed to be completed in 1953-54.
6 Constructing a bridge across Budamaru on Vijayavada-Nuzvid road. Estimate Rs. 1,70,000. Post-war Road Development, Krishna Division.	56,591	1,45,650	Work was in progress and expected to be completed during 1953-54.
7 Constructing a bridge across Gowthami branch of the river Godavari on National Highway No. 5. Estimate Rs. 1,03,53,000. Post-war Road Development, Godavari Bridge Division.	8,86,402	15,04,191	Pending final decision on the site for the bridge further work has been suspended.
8 Constructing a bridge across Eluru canal. Estimate Rs. 1,50,000. Post-war Road Development, Eluru Division.	40,867	49,867	Work was in progress.
9 Investigation and preparation of plans and estimates for the construction of bridge across river Godavari and diverting National Highway No. 5, Madras-Calcutta road. Estimate Rs. 2,00,000. Post-war Road Development, Godavari Bridges Division.	16,951	1,73,331	Do.
10 Constructing a bridge across Gowthami branch of river Godavari—Major supervision. Estimate Rs. 6,55,000. Post-war Road Development, Godavari Bridges Division.	64,108	1,20,595	Do.
11 Constructing a bridge across Boggeru at M. 31/5 of Nellore-Bombay road. Estimate Rs. 3,42,000. Post-war Road Development, Nellore Division.	1,24,778	1,24,778	....
12 Constructing a bridge across Pillaperu at M. 34/1-2 of Kanigiri-Badvel road. Estimate Rs. 1,95,000. Post-war Road Development, Nellore Division.	74,926	1,03,716	....
13 Constructing a bridge across Pennar river at Nellore on National Highway No. 5. Estimate No. C.R. 34 of 1950-51, Rs. 23,00,000. M.D. 5, Job No. 302. Post-war Road Development, Pennar Bridge Division.	5,00,857	21,27,653	Work was in progress.
14 Constructing a bridge across Pennar near Kalvapaile at M. 19/8 of Anantapur-Kalyandurg road. Estimate Rs. 3,80,000. Road Development Fund, Anantapur Division.	1,42,913	2,83,361	Do.
15 Constructing a bridge at M. 49/8 of Chittoor-Kurnool road. Estimate Rs. 1,50,000. Road Development Fund, Chittoor Division.	63,276	79,318	The deck slab and R.C. 'T' beam are to be laid for which steel was awaited.

(1) Review of works costing over Rs. 1 lakh in progress—cont.

Serial number, name of work and estimate cost (classification and division).	Expenditure during the year.	Expenditure to end of the year.	Remarks.
(1)	(2)	(3)	(4)
RS.	RS.	RS.	
A. GOVERNMENT ROADS—cont.			
I. Bridges, culverts and causeways—cont.			
16 Constructing a bridge at M. 0/5 of Chittoor-Aragonda road. Estimate Rs. 2,01,000. Post-war Road Development, Chittoor Division.	58,594	1,87,730	This is a contribution work by Chittoor Municipality. Work was almost completed. Formation of approaches was in progress.
17 Constructing a bridge across Novyal river at M. 27/1 of Karu-Kodumudi road. Estimate Rs. 2,70,000. Post-war Road Development, Tiruchirappalli Division.	27,577	27,577	Work in progress.
18 Constructing a bridge over Coleroon at Anaikeerancharam on Chidambaram-Srkali road. Estimate Rs. 28,00,000. Post-war Road Development, Coleroon Bridge Division.	2,56,143	9,99,656	Construction of north abutment and piers 1 to 10 up to 16 feet completed and load test of wells in piers conducted to examine the bearing capacity of the soil. Work in progress.
19 Constructing a causeway across Agnilar at M. 6/4 of Pattukottai-Arantangi road. Estimate Rs. 4,10,000. Post-war Road Development, Tanjore West Division.	40,005	40,005	Work in progress.
20 Constructing a bridge across Aghavalam river at M. 13/2 of A konam-Ocheri road. Estimate Rs. 2,00,000. Post-war Road Development, North Arcot Division.	11,624	11,742	Work could not be pushed through for want of steel.
21 Constructing a bridge across Bharathapuzha at M. 18/2 of Angadipuram-Kuttipuram-Cochin Frontier road. Estimate Rs. 18,50,000. Post-war Road Development, Bharathapuzha Division.	4,41,404	15,63,246	Major portion of the piers and right abutment were completed and bow-string girder spans concreted.
22 Constructing a bridge across Payaswami river at M. 52/8 of Kalladka-Kumbharad road. Estimate Rs. 10,00,000. Post-war Road Development, Bharathapuzha Division.	3,33,877	8,32,550	Major portion of the work in foundations, superstructure of 'T' beam and bow-string girders were completed. Work is held up on account of land acquisition.
23 Constructing a bridge across Novyal river at M. 333/1 of Madra-Kozh kode road. Estimate Rs. 2,00,000. Post-war Road Development, Coimbatore Division.	1,21,193	1,32,132	Work was expected to be completed before August 1953.
24 Constructing a submersible bridge at M. 15/0 of B sley Ghat road. Estimate Rs. 2,58,000. Post-war Road Development, Mangalore Division.	801	801	Work in progress.
25 Constructing a bridge across Swarnanadhi at Puttige at M. 13/1 of He l adka-Hebri road. Estimate Rs. 4,00,000. Post-war road Development, Mangalore Division.	2,01,188	2,95,112	Do.
26 Constructing Yekkar bridge at M. 14/6 of Mangalore-Kinnigole road. Estimate Rs. 1,25,000. Post-war Road Development, Mangalore Division.	10,966	1,06,638	Do.
27 Reconstructing the Kalmady bridge at M. 10/4 of Malpe-Udupi road. Estimate Rs. 1,80,000. Post-war Road Development, Mangalore Division.	57,290	57,290	Do.
28 Reconstructing the bridge at M. 4/8 of Kozhikode-Balusseri road. Estimate Rs. 1,90,000. Excluding Post-war Road Development, Kozhikode Division.	91,715	1,45,393	Do.
29 Constructing a bridge at M. 75/8 of Tal paramba-Payyanur road. Estimate Rs. 5,23,000. Post-war Road Development, Kozhikode Division.	28,947	28,947	Work not taken up. Expenditure incurred is the cost of steel.
30 Constructing a vented causeway at M. 13/4 of Dharmapuri-Tirupattur road. Estimate Rs. 1,14,000. Road Development Fund, Salem North Division.	31,802	1,30,891	Work in progress. The work could not be completed as programmed due to damages to built-up portions caused by floods.
31 Constructing a bridge at M. 66/7 of Chundlae-Myore Frontier road. Estimate Rs. 1,25,000. Road Development Fund, Kozhikode Division.	40,993	40,993	....

(i) Review of works costing over Rs. 1 lakh in progress—cont.

Serial number, name of work and estimate cost (classification and division).	Expenditure during the year.	Expenditure to end of the year.	Remarks.
(1)	(2)	(3)	(4)
RS.	RS.		

A. GOVERNMENT ROADS—cont.

I. Bridges, culverts and causeways—cont.

32 Constructing a bridge at M. 49/8 of Chundale-Mysore Frontier road. Estimate, Rs. 1,25,000. Road Development Fund, Kozhikode Division.	35,745	35,830	....
33 Constructing a bridge at M. 55/6 of Chundale-Mysore Frontier road. Estimate, Rs. 1,15,000. Road Development Fund, Kozhikode Division.	52,256	52,337	....
34 Constructing a bridge at M. 69/1 of Chundale-Mysore Frontier road. Estimate, Rs. 1,50,000. Road Development Fund, Kozhikode Division.	59,999	60,062	....
35 Constructing a bridge at M. 73/1 of Chundale-Mysore Frontier road. Estimate, Rs. 1,65,000. Road Development Fund, Kozhikode Division.	26,705	26,700	....
36 Constructing a bridge at M. 52/2 of Chundale-Mysore Frontier road. Estimate, Rs. 1,40,000. Road Development Fund, Kozhikode Division.	59,910	59,990	....
37 Constructing a causeway across river Palar in M. 13/5 to 14/1 of Uttiramerur-Kancheepuram road. Estimate, Rs. 1,70,000. Central Road Fund, Chingleput Division.	5,056	5,056	....
38 Constructing a causeway across river Palar in M. 7/1-2 of Uttiramerur-Kancheepuram road. Estimate, Rs. 1,96,000. Central Road Fund, Chingleput Division.	53,639	53,639	....
39 Constructing a bridge across Palar at M. 33/5 of Great Southern Trunk road. Estimate, Rs. 19,00,000. Post-war Road Development, Chingleput Division.	6,21,646	9,97,272	....
40 Reconstructing a bridge at M. 0/3 of Thiruvottiyur-Ponneri-Panjetty road. Estimate, Rs. 77,000/Rs. 1,15,000. Post-war Road Development, Chingleput Division.	70,528	1,56,919	....

II. Cement-concrete and black-top works.

1 Forming and providing cement concrete to Guntur-Bapatla-Chinnaganjam road. Estimate, Rs. 4,60,000. Road Development Fund, Guntur Division.	9,191	3,33,967	This is the first bit of road connecting with Ponneru, Bapatla and Chinnaganjam. Work completed but accounts have to be finalized.
2 Cement concreting Guntur-Pondugala road, M. 1/0 to 7/0. Estimate, Rs. 7,30,000. Road Development Fund, Guntur Division.	3,67,628	3,79,177	Cement concreting for M. 2-6-0 was completed. Work is in progress.
3 Cement concreting M. 31/0 to 34/0 of Masulipatnam-Vijayavada road. Estimate, Rs. 3,46,000. Road Development Fund, Krishna Division.	24,650	50,289	Work is in progress.
4 Cement concreting M. 23/0 to 29/0 of Masulipatnam-Tiruvur road. Estimate, Rs. 10,52,000. Road Development Fund, Krishna Division.	2,90,789	3,43,907	Do.
5 Widening and cement concreting Eluru-Jangareddigudem road, M. 0/0 to 7/0. Estimate, Rs. 8,70,000. Road Development Fund, Eluru Division.	3,75,715	4,00,408	Do.
6 Providing black-top surfacing to Great Northern Trunk road, M. 188/0 to 233/0. Estimate, Rs. 7,00,000. Post-war Road Development, Ongole Division.	2,76,849	2,76,849	Work was ordered to be taken up late in the year. Expenditure incurred was on the supply of bitumen. Work is in progress.
7 Cement concreting Madras-Calcutta road, 247/4 to 250/3 and 250/3 to 267/0. Estimate, Rs. 10,50,000. Post-war Road Development, Guntur Division.	1,00,253	10,63,900	Work is almost completed. The accounts have to be finalized.
8 Conphalt surfacing Guntur-Amaravathi road, M. 0/0 to 1/0. Estimate, Rs. 1,07,400. Post-war Road Development, Guntur Division.	3,610	1,23,009	Work lies in Guntur Municipality and one-fourth contribution has to be borne by the municipality. Work is completed and accounts have to be settled.

(i) Review of works costing over Rs. 1 lakh in progress—cont.

Serial number, name of work and estimate cost (classification and division).	Expenditure during the year.	Expenditure to end of the year.	Remarks.
(1)	(2)	(3)	(4)
RS.	RS.	RS.	

A. GOVERNMENT ROADS—cont.

II. Cement-concrete and black-top works—cont.

9 Black-topping Great Northern Trunk road, M. 23/0 to 241/1. Estimate, Rs. 1,32,100. Post-war Road Development—Guntur Division.	58,283	58,283	Work is in progress. Expenditure represents the cost of bitumen.
10 Cement concreting M. 39/0 to 41/0 of Masulipatnam-Vijayavada road. Estimate, Rs. 1,30,000. Post-war Road Development—Krishna Division.	1,00,899	1,00,890	Work is in progress and expected to be completed in 1953-54.
11 Widening and cement concreting Koderu-Nallajerla road, M. 24/0 to 54/0. Estimate, Rs. 11,04,000. Post-war Road Development—Eluru Division.	88,100	11,67,171	Work completed. Accounts have to be finalized.
12 Providing improved surfacing to M. 361/3 to 363/1 of Great Northern Trunk road in Rajahmundry Municipal limits. Estimate, Rs. 1,95,000. Post-war Road Development—Rajahmundry Division.	27,754	1,41,168	Do.
13 Cement concreting Kathapudi-Narapuram ferry road, M. 22/7 to 26/0. Estimate, Rs. 4,50,000. Post-war Road Development—Kakinada Division.	63,071	4,72,526	Work completed except gravelling the berms and laying slab in the gaps left over the culverts taken up for remodelling.
14 Cement concreting Rajahmundry-Kakinada road, M. 0/3 to 10/0 including strengthening of culverts. Estimate, Rs. 7,00,000. Post-war Road Development—Kakinada Division.	53,801	5,87,938	Work completed except providing cement concrete surfacing over some gaps on culverts.
15 Cement concreting M. 424/2 to 443/0 of Madra - alcutta road. Estimate, Rs. 13,20,000. Post-war Road Development—Visakhapatnam Division.	5,73,753	8,92,867	Work is in progress and is expected to be completed in 1953-54.
16 Providing surface dressing with pre-coated chips on M. 443/0 to 464/0, 495/5 to 499/5 and 15/4 to 16/4 of Vemalavasa cross road. Estimate, Rs. 8,00,000. Post-war Road Development—Visakhapatnam Division.	1,80,555	1,80,555	Work is in progress. Expenditure represents cost of bitumen.
17 Conphalt surfacing Visakhapatnam-Anantagiri-Araku Road, M. 2/0 to 3/3. Estimate, Rs. 1,52,000. Post-war Road Development—Visakhapatnam Division.	6,484	1,36,310	Work in progress.
18 Cement concreting M. 0/7 to 7/0 of Anakapalle-Madgolu road. Estimate, Rs. 5,53,000. Post-war Road Development—Visakhapatnam Division.	3,41,537	5,39,395	Do.
19 Providing conphalt surfacing to Visakhapatnam-Anantagiri-Araku Road, M. 0/7 to 2/0. Estimate, Rs. 1,00,000. Post-war Road Development—Visakhapatnam Division.	65,475	65,475	Do.
20 Blacktop surfacing in M. 290/0 to 296/5 of Madras-Calcutta road. Estimate, Rs. 1,23,000. Excluding Post-war Reconstruction, Krishna Division.	10,676	10,676	Do.
21 Blacktopping Madras-Calcutta road, M. 1-0/0 to 169. Estimate, Rs. 8,45,000. Post-war Road Development—Nellore Division.	3,47,083	3,47,083	....
22 Blacktopping in built-up areas M. 41/1-8 to 164/1-8. Estimate, Rs. 1,87,000. Post-war Road Development, Nellore Division.	99,508	99,508	....
23 Cement concreting Anantapur-Tadpatri road, M. 32/2 to 34/2. Estimate, Rs. 1,98,000. Road Development Fund—Anantapur Division.	1,31,443	1,39,419	....
24 Cement concreting M. 10/0 to 17/0 of Cuddalore-Chittoor road. Estimate, Rs. 6,90,000. Road Development—South Arcot Division.	3,53,400	3,63,848	Work in progress.
25 Cement concreting M. 0/0 to 1/6 of Cuddalore-Chittoor road. Estimate, Rs. 1,86,000. Road Development—South Arcot Division.	94,090	1,09,730	Do.
26 Cement concreting M. 1/6 to 10/0 of Cuddalore-Chittoor road. Estimate, Rs. 7,15,000. Post-war Road Development—South Arcot Division.	1,67,203	6,85,991	Do.

(i) Review of works costing over Rs. 1 lakh in progress—cont.

Serial number, name of work and estimate cost (classification and division).	Expenditure during the year.	Expenditure to end of the year.	Remarks.
(1)	(2)	(3)	(4)
RS.	RS.	RS.	
A. GOVERNMENT ROADS—cont.			
II. Cement-concrete and black-top works—cont.			
27 Cement concreting Chidambaram-Bhuvanagiri road—Estimate Rs. 6,40,000—Post-war Road Development—South Arcot Division.	1,163	5,76,115	Work completed but land acquisition is pending.
28 Cement concreting M. 5/0 to 8/4 of Tanjore-Tiruvadi road—Estimate Rs. 3,70,000—Road Development Fund—Tanjore West Division.	1,86,616	2,06,921	Main work completed. Metalling the berms was to be done for which tenders were called for.
29 Cement concreting M. 32/0 to 34/6 of Dindigul-Palni road—Estimate Rs. 2,17,000—Post-war Road Development—Madurai Division.	65,203	67,840	Work in progress.
30 Black-topping Thandigudi Ghat road—M. 0/0 to 18/0—Estimate Rs. 2,20,000—Post-war Road Development—Madurai Division.	1,16,803	1,44,357	Work in progress.
31 Cement concreting Madurai-Tenkasi road—M. 33/0 to 44/0—Estimate Rs. 9,75,000—Road Development Fund—Ramanathapuram Division.	3,13,135	3,68,600	Work was done in half widths for want of facilities for providing diversion. Further work in progress.
32 Cement concreting Cuddalore-Gilbert road—M. 122 to 126/3—Estimate Rs. 4,50,000—Post-war Road Development—North Arcot Division.	2,90,351	3,00,329	Work was in good progress.
33 Cement concreting Pollachi-Meenakari road—Estimate Rs. 2,75,000—Post-war Road Development—Coimbatore Division.	1,18,538	1,19,039	A length of two miles was concreted and work was in progress.
34 Cement concreting Coimbatore-Mettupalayam road—M. 0/3 to 22/6—Estimate Rs. 21,00,000—Post-war Road Development—Coimbatore Division.	43,151	20,63,358	This was an incomplete work of previous year. Work was completed excepting the gap of 100' between mile 17.5-6.
35 Providing dustle-surfacing to Mangalore-Baindur road and Mangalore-Baindur road—M. 0/1 to 2/1—Estimate Rs. 1,08,000—Post-war Road Development—Mangalore Division.	2,01,168	2,49,977	Work was nearing completion.
36 Cement concreting road from Salem Junction to Bye-pass road—M. 1/4 to 3/4—Estimate Rs. 1,65,000—Road Development Fund—Salem South Division.	1,20,487	1,40,322	Work was completed in all respects but final payment was not made.
37 Cement concreting Madurai-Calcot road—M. 35/7 to 36/1—Estimate Rs. 2,73,000—Road Development Fund—Palghat Division.	2,30,590	2,30,590	Work was almost completed except spreading of metal on berms.
38 Cement concreting Tellicherry-Coorg road—M. 0/0-2/0 to 1/6 plus 7—Estimate Rs. 2,30,000—Road Development Fund—Kozhikode Division.	1,29,381	1,34,430	....

III. New Formations.

1 Forming a road from Chinnaganjam to Ongole—M. 53/0 to 71/0—Estimate Rs. 6,85,000—Road Development Fund—Ongole Division.	23,611	2,65,195	Work is in progress.
2 Forming a road from Chodavaram to Ramana Adithichala and thence to Cheruvukomrapalem—Estimate Rs. 7,48,000—Post-war Road Development—Rajamundry Division.	1,09,117	3,70,951	Do.
3 Forming a road from Ramana Chodavaram to Bhatrachalam v.z., Marudumilli and Lakkavaram—Post-war Road Development—Rajamundry Division.	9,394	12,318	Investigation was completed and the estimates were under preparation by the Divisional Engineer (Highways).
4 Forming a road from M. 20/1 of Anakapalle to Madugole road to the foot of Minimallur Ghat road via Paleru—Estimate Rs. 14,35,000—Post-war Road Development—Anakapalle Special Division.	2,71,183	4,53,919	Work is in progress.

(i) Review of works costing over Rs. 1 lakh in progress—cont.

Serial number, name of work and estimated cost (classification and division.)	Expenditure during the year.	Expenditure to end of the year.	Remarks.
(1)	(2)	(3)	(4)
RS.	RS.	RS.	
A. GOVERNMENT ROADS—cont.			
III. New Formations—cont.			
5 Construction of a road from Banganapalle to Bethamcherla—Estimate Rs. 2,43,000—Road Development Fund—Kurnool Division.	32,160	1,23,249	In progress.
6 Forming a road from Ramanathapuram to Mandapam for a length of 3.1 miles 4 furlongs—Estimate Rs. 1,98,000—Post-war Road Development—Ramanathapuram Division.	92,575	2,33,400	Work was transferred from the control of Transport and Machinery Division to Ramanathapuram Division from 5th April 1952. Work completed but land acquisition proceedings not completed.
7 Forming the unformed link from Vellur to Karivellore road of Cape Comorin-Bombay road—Estimate Rs. 3,31,000—Post-war Road Development—Calicut Division.	31,749	2,59,861	Work was almost completed.

IV. Improvements and special repairs.

1 Metalling and construction of two bridges and ten culverts on Rajamundry-Maredumalli road, M. 47/0 to 49/2—Road Development Fund—Estimate Rs. 1,74,000.	..	..	Metalling and construction of nine culverts have been completed. Fresh administrative sanction for constructing remaining culverts and two bridges has to be sought for and proposals are awaited from Divisional Engineer (Highways).
2 Metalling Bapatla-Pedanandipadu road, M. 12/0 to 18/0—Estimate Rs. 2,15,000—Road Development Fund—Ongole Division.	58,352	3,13,302	Work is in progress.
3 Metalling Chintapalligudem road—Estimate Rs. 1,98,000—Road Development Fund—Visakhapatnam Division.	2,987	1,02,146	Do.
4 Widening Kathipudi-Narasapuram Ferry road—M. 68/0 to 8/3 from Razole to Narasapuram Ferry—Estimate Rs. 1,10,000—Road Development Fund—Kakinada Division.	1,353	1,353	Land acquisition is pending with Revenue Department.
5 Metalling the road from Tenali to Anantavaram—Estimate Rs. 2,40,000—Post-war Road Development—Guntur Division.	..	2,11,927	Metalling is completed in M. 1/0 to 4/0 and from 7/0 to 8/7. Revised estimate for the intervening miles is pending sanction.
6 Widening and metalling Godavari Flood Bank from Kovvur to Tallapudi—Estimate Rs. 4,16,000—Post-war Road Development—Eluru Division.	1,59,083	6,24,801	Work is in progress.
7 Metalling Nidadavolu-Yerragudem road—Estimate Rs. 4,75,000—Post-war Road Development—Eluru Division.	63,804	4,46,111	Do.
8 Metalling Dubacherla-Devulapalli road—Estimate Rs. 5,47,000—Post-war Road Development—Eluru Division.	63,640	3,36,075	Do.
9 Providing wearing surface to Ramanathapuram-Mandapam road M. 0/0 to 21/4—Estimate Rs. 10,93,000—Post-war Road Development—Ramanathapuram Division.	5,04,969	5,33,873	Metal shouldering with lime stone metal was done up to M. 7/6 and earthwork for berms up to M. 8/1.
10 Metalling Cuddalore-Vridhachalam road, M. 51 to 73—Estimate Rs. 2,10,000—Post-war Road Development—South Arcot Division.	1,20,253	1,20,253	Work nearing completion.
11 Widening the metalled width of Periykulam-Kuruvanthu road M. 0/3 to 34/4—Estimate Rs. 2,31,000—Road Development Fund—Madurai Division.	45,537	2,01,620	Do.
12 Improvements to Great Western Trunk road—M. 5 to 15 and cement concrete in M. 14 to 15—Estimate Rs. 1,40,000—Post-war Road Development—Chingleput Division.	1,12,923	1,12,923	....
13 Improvements to Madras-Mahaballipuram road—Estimate Rs. 3,24,000—Post-war Road Development—Chingleput Division.	1,61,624	1,61,624	....

(i) Review of works costing over Rs. 1 lakh in progress—cont.

Serial number, name of work and estimate cost (classification and division).	Expenditure during the year.	Expenditure to end of the year.	Remarks.
(1)	(2)	(3)	(4)
RS.	RS.	RS.	
B. DISTRICT BOARD WORKS.			
I. Bridges, culverts and causeways.			
1 Constructing a bridge across Natapur Canal near Dommeru—Estimate Rs. 1,64,000—Road Development Fund—Eluru Division.	18,830	50,092	....
2 Constructing a bridge across Eluru Canal in M. 26/2 in 70/2 of Tallepuram village road near Chebrolu—Estimate Rs. 1,20,000—Road Development Fund—Eluru Division.	6,623	39,080	....
3 Constructing a bridge across G.N. canal at M. 1/1-2 of the road from Vendra to Palacoderu road to meet P.V. road—Estimate Rs. 1,10,000—Road Development Fund—Eluru Division.	29	1,20,673	....
4 Constructing a causeway across Pennar at M. 13/6 of Penukonda-Madakasira road—Estimate Rs. 1,12,000—Post-war Road Development—Anantapur Division.	480	22,231	....
5 Constructing a submersible bridge at M. 110/2 of Vikravandy Lower Anicut road—Estimate Rs. 2,20,000—Road Development Fund—South Arcot Division.	34,949	34,949	Work held up for want of steel.
6 Constructing a bridge across Kodamurutti river in Ayyampet Ganapathi Agraham road—Estimate Rs. 1,90,000—Road Development Fund—Tanjore Division.	87,460	87,460	Work in progress.
7 Constructing a submersible bridge across Vagali at M. 25/4 of Elayangudi-Paramakudi road—Estimate Rs. 3,85,000—Road Development Fund—Ramanathapuram Division.	2,36,201	2,74,866	Masonry up to bed block level was completed and R.C. slab for 32 vents out of 48 had also been completed.
8 Constructing a bridge across Gatana river at M. 2/3 of Ambasamudram-Alingulam road—Estimate Rs. 3,50,000—Road Development Fund—Tirunelveli Division.	93,663	1,51,083	Masonry for both the abutments and one pier completed. Work in progress.

II. Cement-concreting and black-top works—Nil.

III. New Formations.

1 Forming and metalling the road from Polukonda to Putlacheruvu Railway Station including construction of culverts—Estimate Rs. 3,22,000—Road Development Fund—Krishna Division.	1,23,473	2,13,297	Formation of road, construction of culverts and bridge work were completed. Materials were collected for soil stabilization.
2 Forming an all-weather road from Allipalli to Medvetivarigudem (via) Seetavaram—Estimate Rs. 1,46,000—Excluding Post-war Road Development—Eluru Division.	2,129	1,16,059	....
3 Forming a jeepable road from Zeelugumilli to Allipalli—Estimate Rs. 1,26,000—Excluding Post-war Road Development—Eluru Division.	15,607	25,838	....
4 Forming a jeepable road from Ankanpalam to Doramidi—Estimate Rs. 1,25,000—Excluding Post-war Road Development—Eluru Division.	8,443	8,443	....
5 Forming a road from Nandigama to Pokkur—Estimate Rs. 1,18,500—Post-war Road Development—Krishna Division.	46,825	68,407	....
6 Forming and metalling road from Panugolanu to Korgera (via) Vuthukuru—Estimate Rs. 2,00,000—Post-war Road Development—Krishna Division.	42,985	1,18,298	....

(i) Review of works costing over Rs. 1 lakh in progress—cont.

Serial number, name of work and estimate cost (classification and division).	Expenditure during the year.	Expenditure to end of the year.	Remarks.
(1)	(2)	(3)	(4)
RS.	RS.	RS.	
B. DISTRICT BOARD WORKS—cont.			
III. New formations—cont.			
7 Forming a road from Divili to Veeravaram—Estimate Rs. 1,55,000—Post-war Road Development—Kakinada Division.	..	1,47,927	....
8 Forming road from Boviva'sea to Vaddivada—Estimate Rs. 1,70,00—Post-war Road Development—Srikakulam Division.	..	34,135	....
9 Forming Balasava-Runkupeta road near Polank—Estimate Rs. 1,17,010—Post-war Road Development—Srikakulam Division.	..	4,780	....
10 Forming Kolleru-Budarisingi road—Estimate Rs. 1,60,000—Post-war Road Development—Srikakulam Division.	..	5,680	....
11 Forming Nandyal-Ongole road, Pitigayagula Konapalli (via) M.P. Cheruvu—Estimate Rs. 1,05,000—Post-war Road Development—Kurnool Division.	75,866	75,366	In progress.
12 Forming Pullalacheruvu Marivemula—Estimate Rs. 1,21,000—Post-war Road Development—Kurnool Division.	67,383	67,383	Do.
13 Forming a road from Elayirampannai to Guhinparai—Estimate Rs. 1,82,200—Post-war Road Development—Ramanathapuram Division.	6,332	47,895	Formation work was completed. Due to non-availability of cut-stone slabs, usual slab culverts could not be constructed and alternate estimate for construction of R.C. Pipe culverts were submitted and orders awaited.
14 Forming a road from Tuticorin to Tirupendur road—Estimate Rs. 4,08,000—Post-war Road Development—Tirunelveli Division.	41,400	4,00,296	Formation completed. The causeways at M 3/3 and 7/8 had to be constructed and work was in progress.
15 Forming a road from Taliparamba-Kanhirangod, Chapparapadavu-Naduvil road—Estimate Rs. 2,04,000—Post-war Road Development—Kozhikode Division.	12,088	1,71,102	....
16 Forming a road from Padiotchal to Pullingom—Estimate Rs. 1,54,000—Excluding Post-war Road Development—Kozhikode Division.	3,784	1,09,256	....
17 Forming a branch road from Cannanore-Irakkur road to Mayyil Kaveralam—Estimate Rs. 2,63,000—Excluding Post-war Road Development—Kozhikode Division.	8,152	99,711	....
18 Forming a road from Chapparapadavu to Kuttur—Estimate Rs. 2,39,000—Excluding Post-war Road Development—Kyzhikode Division.	6,285	1,21,803	....

IV. Improvements and special repairs.

1 Metalling unmetalled portions of Narasapur—Bhimavaram road—M 11/7 to 18/7—Estimate Rs. 1,59,000—Road Development Fund—Eluru Division.	30,634	83,399	....
2 Metalling Thullur-Thadikonda road—Estimate Rs. 2,45,000—Excluding Post-war Road Development—Guntur Division.	52,471	66,306	....
3 Metalling the road from Padapalem crossing (via) Nuthakki Ramachandrapuram Veeralapalem—Estimate Rs. 1,17,000—Post-war Road Development—Guntur Division.	17,431	22,655	....
4 Metalling the road from Repali to Thummela (via) Arappalli Nalluripalem and Peshumiraka—Estimate Rs. 4,30,000—Post-war Road Development—Guntur Division.	14	2,42,042	....
5 Metalling Aduvaladivi village road including construction of bridges—Estimate Rs. 3,50,000—Post-war Road Development—Guntur Division.	6,287	2,29,312	....

(i) Review of works costing over Rs. 1 lakh in progress—cont.

Serial number, name of work and estimated cost (classification and division).	Expenditure during the year.	Expenditure to end of the year.	Remarks.
(1)	(2)	(3)	(4)
RS.	RS.		
B. DISTRICT BOARD WORKS—cont			
IV. Improvements and special repairs—cont.			
6 Metalling the road from Arepalli to Padavada and on to meet M. 122 of Repali Pittalavaripalem—Estimate Rs. 1,14,000—Post-war Road Development—Guntur Division.	..	31,682	....
7 Metalling the road from M. 19/0 of road to Vallabhapuram (via) Munnaji Kallipallu and Pidapurru—Estimate Rs. 2,40,000—Post-war Road Development—Guntur Division.	..	299	....
8 Metalling Ponnur Pandrapadu road—Estimate Rs. 3,30,000—Post-war Road Development—Guntur Division.	12,850	1,48,098	....
9 Forming and metalling road from—Kondamudi to Nizampatnam (via) Padapadu and Rajaparra—Estimate Rs. 1,20,000—Post-war Road Development—Guntur Division.	..	46,946	....
10 Metalling miles 6.2 to 12.3 of Repali Pittalavaripalem road—Estimate Rs. 3,18,000—Post-war Road Development—Guntur Division.	..	1,71,147	....
11 Metalling the road from Pudivada to Pittalavaripalem—M. 12/3 to 10/1—Estimate Rs. 3,08,000—Post-war Road Development—Guntur Division.	..	1,27,328	....
12 Metalling the road from Pedanudi to Bhattiprolu (via) Peravalipalem, Peeraval and Chamali—Estimate Rs. 4,56,000—Post-war Road Development—Guntur Division.	1,139	2,08,681	....
13 Metalling Dosapadu-Jonnapadu, Kodavalli road—Estimate Rs. 3,50,000—Post-war Road Development—Krishna Division.	16,130	1,83,531	....
14 Metalling Vijayur-Telaprolu road. M. 6/4 to 9/2—Estimate Rs. 2,70,000—Post-war Road Development—Krishna Division.	42,420	2,19,798	....
15 Metalling Kaikalur-Kalidudi road, M. 4/0 to 7/3—Estimate Rs. 1,08,000—Post-war Road Development—Krishna Division.	15,420	87,438	....
16 Metalling Dammennu-Lankakoderu road—Estimate Rs. 6,61,000—Post-war Road Development—Eluru Division.	61,591	4,44,032	....
17 Metalling the road from Kovvali to Jogenipalem up to M. 7/7 of Eluru-Janzaredipudem road including formation—Estimate Rs. 1,50,000—Post-war Road Development—Eluru Division.	5,675	1,08,574	....
18 Metalling the road from Akividu to Chinakapavaram—Estimate Rs. 1,35,000—Post-war Road Development—Eluru Division.	..	..	....
19 Metalling the road from Ganapavaram to Kovvid—Estimate Rs. 1,40,000—Post-war Road Development—Eluru Division.	5,395	5,395	....
20 Metalling the road from Rajavaram to Ganapavaram (via) Kthunza, Podagatlapalli, Ithakot, Ganti, etc.—Estimate Rs. 1,47,000—Post-war Road Development—Rajahmundry Division.	..	1,40,070	....
21 Improvements to main necessary works on Komatipalli Gachhi road—Estimate Rs. 1,88,000—Post-war Road Development—Srikakulam Division.	..	1,03,030	....
22 New metalling Kowur-Ganavaram road—Estimate Rs. 2,50,000—Post-war Road Development—Kurnool Division.	19,050	1,05,610	In progress.

(ii) Review of works costing over Rs. 1 lakh completed during the year 1952-53

Serial number, name of work and estimate cost (classification and division).	Expenditure during the year.	Expenditure to end of the year.	Remarks.
(1)	(2)	(3)	(4)
RS.	RS.	RS.	
A. GOVERNMENT WORKS.			
I. Bridges, culverts and causeways.			
1 Constructing a bridge across Kodavanur at M. 6/2 of Dindigul-Aravakurichi road. Estimate Rs. 1,55,500. Post-War Road Development—Madurai Division.	22,165	1,84,948	Though the work was completed in March 1952, final bill was paid in March 1953.
2 Reconstructing the bridge across Sole-eri river at M. 45/5 of Tirunelveli-Sankarankoil road. Estimate Rs. 1,31,000. Post-War Road Development—Tirunelveli Division.	16,064	1,11,439	Work completed.
3 Widening the Kaveripattanam bridge at M. 166/4 of Benares-Cape Comorin road (Job No. 281 M.D. 7). Estimate Rs. 2,45,000. Post-War Road Development, —Salem North Division.	33,371	4,12,363	Do.
4 Constructing a bridge at M. 4/7-8 of Mangalore-Baindur road over Gurpur river near Kulur. Estimate Rs. 5,90,000. Post-War Road Development—Mangalore Division.	3,10,577	2,04,081	Do.
II. Cement concrete and black top works.			
1 Cement concreting Tanjore-Tiruchirappalli road M. 26/0 to 33/3. Estimate Rs. 6,56,000. Road Development Fund—Tiruchirappalli Division.	5,89,477	6,62,136	....
2 Cement concreting Ranipet-Krishnagiri road M. 90 to 100. Estimate Rs. 8,00,000. Post-War Road Development, —North Arcot Division.	74,024	7,49,815	Work was completed and road opened for traffic.
3 Providing 2" thick asphalt concrete surfacing to Calicut-Cannanore road at M. 41/3-6 to 43/4. Estimate Rs. 1,15,000. Post-War Road Development—Kozikode Division.	1,21,755	1,74,822	Work completed.
4 Providing asphaltic concrete surfacing and other improvements to Chingleput-Kancheepuram road M. 37 to 40. Estimate Rs. 1,87,000. Post-War Road Development—Chingleput Division.	—17,253	3,54,600	....
5 Providing dustless surfacing for road from Madanapalle to Madanapalle Railway Station. Estimate Rs. 1,53,000. Post-War Road Development—Chittoor Division.	57,087	1,54,300	....
III. New formations.			
1 Forming a road from M. 20/1 of Anakapalle-Madugole road to the foot of Himmalur Ghat (Plana). Estimate Rs. 2,57,000. Post-War Road Development—Anakapalle Special Division.	67,013	2,29,785	....

(ii) *Review of works costing over Rs. 1 lakh completed during the year 1952-53—cont.*

Serial number, name of work and estimate cost (classification and division).	Expenditure during the year.	Expenditure to end of the year.	Remarks.
(1)	(2)	(3)	(4)
RS.	RS.		
A. GOVERNMENT WORKS—cont.			
IV. Improvements and special repairs.			
Metalling Avenigedda-Vodur road. Estimate Rs. 2,90,000. Post-War Road Development—Krishna Division.	87,529	2,37,200	....
2 Improvements to Veagalapalle-Kamavaraipukota road. Estimate Rs. 1,50,000. Road Development Fund—Eluru Division.	..	1,65,715	....
3 Metalling road from Duggirala to Pedavadiapudi. Estimate Rs. 1,43,300. Post-War Road Development—Guntur Division.	93,226	1,56,643	....
4 Widening narrow portion of Narasim Prakkilanka road. M. 7/0 to 14/0. Estimate Rs. 2,25,000. Post-War Road Development—Guntur Division.	..	2,21,436	....
5 Metalling Mahabla-Nagarjunakonda road. Estimate Rs. 2,05,000. Post-War Road Development—Ongole Division.	7,411	1,52,052	....
6 Improvements to Visakhapatnam Anantagiri-Aaku road. M. 38/1 to 7/11. Estimate Rs. 18,18,200. Post-War Road Development—Visakhapatnam Division.	1,24,123	15,89,753	....
7 Improvements and special repairs to strategic road from Uravakonda to Thungabhadra (via) Alur and Adoni. Estimate Rs. 8,00,900. Excluding Post-War Road Development—Anantapur Division.	— 104	28,559	Work was completed long back and only adjustments were made during the year.
8 Improvements to Dornal Pass road. Post-war Road Development—Kurnool Division.	30,362	4,76,645	Work completed.
9 Improvements to Yerrand Ghat road. M. 6/3 to 19/1+167 feet. Estimate Rs. 2,12,000. Post-War Road Development—Salem South Division.	9,360	1,98,076	Work was completed in 1951/2 but final payment was made for 1952-53.

B. DISTRICT BOARD WORKS.**I. Bridges, culverts and cruseways.**

Nil.

II. Cement concrete and blackshop works.

Nil.

III. New Formations.

1 Forming a road from Rajasingamangalam to Elavangudi. Estimate Rs. 2,40,000. Road Development	70,040	1,83,413	Work complete
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Review of works costing over Rs. 1 lakh completed during the year 1952-53—cont.

Serial number, name of work and estimate cost (classification and division).	Expenditure during the year.	Expenditure during the year.	Remarks.
(1)	(2)	(3)	(4)
RS.	RS.	RS.	

B. DISTRICT BOARD WORKS—cont.**IV. Improvements and special repairs.**

1 Metalling road from Chandrapalem to Peruntalgudem. Estimate Rs. 1,42,000. Post-War Road Development, Kakinada Division.	..	1,39,723	
2 Metalling Kalyandrug-Kundurpet-Malayanar road. Estimate Rs. 1,05,000. Post-War Road Development, Anantapur Division.	18,351	1,03,104	Work was daily closed.
3 Metalling Thogur-Ayyampet road. Estimate Rs. 1,07,700. Post-War Road Development, Tanjore (West) Division.	7,840	94,490	Work completed.

ANNEXURE 23.

(i) Review of works costing less than Rs. 1 lakh each in progress during 1952-53.

Serial number and name of circle and division.	Government works.				District Board works.			
	Total number of works.	Total cost.	Total expenditure.	Remarks.	Total number of works.	Total cost.	Total expenditure.	Remarks.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		RS.	RS.			RS.	RS.	
<i>I Circle.</i>								
<i>I. Bridges, culverts and causeways.</i>								
1 Guntur, South .. .. .	..	..	..	....	..	..	..	....
2 Guntur, North	4	1,90,000	57,572	....	15	4,87,650	8,04,685	....
3 Krishna .. .. .	..	..	..	....	8	3,02,000	1,45,454	....
4 West Godavari	1	14,00	32,930	....	4	1,58,000	43,870	....
5 East Godavari .. .. .	..	..	..	....	5	2,40,000	1,22,047	....
6 Rajahmundry .. .. .	..	..	..	....	3	78,000	20,210	....
7 Visakhapatnam, South	4	1,81,500	58,968	....	..	..	..	....
8 Visakhapatnam, North	1	4,200	3,795	....	3	92,900	92,347	....
9 Anakapalle, Special .. .. .	..	..	..	....	..	..	..	....
10 Godavari Bridge Division .. .. .	..	..	..	....	..	..	..	....
<i>II Circle.</i>								
11 Anantapur	2	1,91,700	1,22,536	....	2	99,000	62,335	....
12 Bellary .. .. .	..	..	..	....	..	..	..	....
13 Chingleput	2	70,000	39,501	....	3	93,400	60,224	....
14 Chittoor	8	2,23,800	1,43,923	Works were nearing completion Certain works were held up for want of steel.	4	1,01,300	20,807	....
15 Cuddapah .. .. .	..	..	..	....	..	..	..	....
16 Kurnoor	5	3,93,000	2,15,739	....	4	2,20,200	82,610	....
17 Nellore	2	1,13,000	1,02,318	....	2	49,200	3,262	....
18 North Arcot	4	1,66,500	63,693	....	3	62,000	41,101	....
19 Pennar Bridge Division .. .. .	..	..	..	....	..	..	..	....
20 Transport and Machinery Division .. .. .	..	..	..	....	..	..	..	....
<i>III Circle.</i>								
21 South Arcot	..	9	3,34,200	1,32,014	5	2,33,500	1,11,800	....
22 Tanjore, East .. .. .	..	..	..	....	12	3,79,900	1,87,224	....
23 Tanjore, West .. .. .	..	..	..	....	2	1,14,00	60,789	....
24 Tiruchirappalli .. .. .	..	..	..	....	1	10,000	25	....
25 Madurai .. .. .	..	..	..	....	..	..	..	....
26 Ramanathapuram .. .. .	..	..	..	....	3	1,12,300	43,944	....
27 Tirunelveli	2	1,59,000	1,86,779	....	29	1,56,370	85,339	....
28 Coleroon Bridge Division .. .. .	..	..	..	....	..	..	..	....
<i>IV Circle.</i>								
29 Bharathapuzha .. .. .	..	..	..	....	..	..	..	....
30 Coimbatore, South	4	2,43,000	1,79,462	....	..	..	..	....
31 Coimbatore, North	9	61,100	10,774	....	..	..	..	....
32 Malabar, South	22	7,610	14,631	....	..	..	..	....
33 Malabar, North	5	1,05,450	30,657	....	..	..	..	....
34 Salem, South	2	74,000	518	....	26	6,05,440	2,13,038	....
35 Salem, North	2	65,000	33,403	....	15	3,61,420	2,74,332	....
36 South Kanara .. .. .	..	..	..	....	..	..	..	....
37 The Nilgiris	1	88,000	86,432	....	9	2,27,500	34,366	....
Total	99	27,24,860	14,70,548		161	43,09,080	20,96,939	

* Figures not available.

II. Cement-concrete and black-top works.

<i>I Circle.</i>								
1 Guntur, South .. .. .	..	..	..	....	..	..	..	....
2 Guntur, North .. .. .	..	..	..	....	..	..	..	....
3 Krishna .. .. .	..	..	..	....	..	..	..	....
4 West Godavari .. .. .	..	..	..	....	..	..	..	....
5 Rajahmundry .. .. .	..	..	..	....	..	..	..	....
6 East Godavari .. .. .	..	..	..	....	..	..	..	....
7 Visakhapatnam, South .. .. .	..	..	..	....	..	..	..	....
8 Visakhapatnam, North .. .. .	..	..	..	....	..	..	..	....
9 Anakapalle Special .. .. .	..	..	..	....	1	83,000	60,184	....
10 Godavari Bridge Division .. .. .	..	..	..	....	..	..	..	....

(i) Review of works costing less than Rs. 1 lakh each in progress during 1952-53—cont.

Serial number and name of circle and division.	Government works.				District Board works.			
	Total number of works. (2)	Total cost. (3) RS.	Total expenditure. (4) RS.	Remarks. (5)	Total number of works. (6)	Total cost. (7) RS.	Total expenditure. (8) RS.	Remarks. (9)
II. Cement-concrete and black-top works—cont.								
II Circle.								
11 Anantapur ..	..	..	..		..	..	..	Figures not available.
12 Bellary *	..	..	..		..	..	..	
13 Chingleput ..	..	..	..		..	..	..	
14 Chittoor ..	2	98,900	73,637	....	..	..	..	....
15 Cuddapah ..	..	..	..		..	..	..	
16 Karnool ..	..	..	..		..	..	..	
17 Nellore ..	..	..	..		..	..	..	
18 North Arcot ..	..	..	..		..	..	..	
19 Pennar Bridge Division ..	..	..	..		..	..	..	
20 Transport and Machinery Division.	..	..	..		..	..	..	
III Circle.								
21 South Arcot ..	..	..	..		4	80,400	16,384	....
22 Tanjore, East ..	..	..	..		8	1,03,400	48,430	....
23 Tanjore, West ..	..	..	..		..	..	..	
24 Tiruchirappalli ..	..	..	..		..	..	..	
25 Madurai ..	..	..	..		..	..	..	
26 Ramanathapuram ..	..	..	..		..	..	..	
27 Tirunelveli ..	..	..	..		..	..	..	
28 Coleroon Bridge Division ..	..	..	..		..	..	..	
IV Circle.								
29 Bharathapuzha ..	..	..	..		..	..	..	
30 Coimbatore, South ..	..	..	..		..	..	..	
31 Coimbatore, North ..	..	..	..		..	..	..	
32 Malabar, South ..	5	6,75,000	11,479	....	..	..	..	....
33 Malabar, North ..	..	..	..		..	..	..	
III. New formations.								
I Circle.								
1 Guntur, South ..	..	..	..		15	6,66,400	65,711	....
2 Guntur, North ..	..	..	..		17	7,87,900	2,12,623	....
3 Krishna ..	..	..	..		12	5,90,000	1,15,030	....
4 West Godavari ..	1	26,000	30,282	....	9	5,67,100	76,900	....
5 Rajahmundry ..	..	28,500	7,991	....	11	2,81,700	92,804	....
6 East Godavari ..	1	..	..	....	1	32,000	..	....
7 Visakhapatnam South ..	..	..	..		..	..	..	
8 Visakhapatnam North ..	..	..	..		5	3,37,900	2,34,225	....
9 Anakapalle Special ..	..	..	..		..	..	..	
10 Godavari Bridge Division ..	..	..	..		..	..	..	
II Circle.								
11 Anantapur ..	1	56,600	46,422	....	93	26,75,400	13,23,135	....
12 Bellary*	..	..	..		..	..	..	Figure not available.
13 Chingleput ..	..	..	..		5	1,16,000	59,926	....
14 Chittoor ..	2	32,300	36,047	Works were nearing completion.	..	..	..	....
15 Cuddapah ..	..	..	..		..	..	..	
16 Karnool ..	..	..	..		10	8,84,250	1,00,256	....
17 Nellore ..	..	..	..		23	10,95,780	1,31,184	....
18 North Arcot ..	..	..	..		73	6,91,910	5,31,177	....
19 Pennar bridge Division ..	..	..	..		..	..	..	
20 Transport and Machinery Division	..	..	..		..	..	..	
III Circle.								
21 South Arcot ..	..	..	..		31	3,02,590	1,40,226	....
22 Tanjore, East ..	..	..	..		11	1,34,530	50,974	....
23 Tanjore, West ..	..	..	..		29	2,90,200	1,55,511	....
24 Tiruchirappalli ..	..	..	..		83	6,92,490	4,77,695	....
25 Madurai ..	1	99,000	74,271	....	76	8,40,000	3,12,000	....
26 Ramanathapuram ..	..	..	..		65	9,21,470	5,25,850	....
27 Tirunelveli ..	..	..	..		39	5,97,300	2,05,063	....
28 Coleroon bridge Division ..	..	..	..		..	..	..	

* Figure not available.

(i) Review of works costing less than Rs. 1 lakh each in progress during the year 1952-53—cont.

Serial number and name of circle and division.	Government works.			District Board works.		
(1)	Total number of work.	Total cost.	Total expenditure.	Total number of works.	Total cost.	Total expenditure.
	(2)	(3)	(4)	(5)	(6)	(7)
		Rs.	Rs.			Rs.
<i>III. New formations—cont.</i>						
<i>IV Circle.</i>						
29 Bharathapuzha ..	..	..	..	..	..	..
30 Coimbatore, South ..	..	..	..	..	..	..
31 Coimbatore, North ..	..	..	..	..	..	..
32 Malabar, South ..	..	..	..	..	..	..
33 Malabar, North ..	..	..	..	..	..	..
34 Salem, South ..	..	..	..	..	..	..
35 Salem, North ..	..	..	..	..	..	..
36 South Kanara ..	..	..	..	..	..	..
37 The Nilgiris ..	..	..	..	..	..	..
Total ..	6	2,42,500	1,95,013	685	1,41,55,410	58,85,776

IV. Improvements and special repairs.

<i>I Circle.</i>						
1 Guntur, South ..	4	2,54,000	98,320	..	..	90,653
2 Guntur, North ..	1	1,00,000	14,142	..	..	6,15,683
3 Krishna ..	..	..	..	..	..	47,018
4 West Godavari ..	..	..	..	..	..	88,890
5 Rajahmundry ..	1	33,000	11,805	..	..	28,216
6 East Godavari ..	..	..	..	..	..	1,92,002
7 Visakhapatnam, South ..	..	..	..	..	..	1,18,780
8 Visakhapatnam, North ..	..	..	..	..	..	49,239
9 Anakapalle Special ..	..	..	..	..	..	..
10 Godavari Bridge Division ..	..	..	..	..	..	..
<i>II Circle.</i>						
11 Anantapur ..	..	..	..	..	..	..
12 Bellary ..	..	..	..	..	..	..
13 Chingleput ..	..	..	..	..	..	..
14 Chittoor ..	..	..	..	..	..	..
15 Cuddapah ..	..	..	..	..	..	..
16 Kurool ..	..	..	..	..	..	..
17 Nellore ..	..	..	..	..	..	..
18 North Arcot ..	2	49,350	52,975	..	..	..
19 Ponnur Bridge Division ..	..	..	..	..	..	..
20 Transport and Machinery Division ..	..	..	..	..	..	..
<i>III Circle.</i>						
21 South Arcot ..	2	23,750	8,177	..	..	..
22 Tanjore, East ..	3	1,140	303	..	..	..
23 Tanjore, West ..	..	..	..	..	..	..
24 Tiruchirappalli ..	..	..	..	..	..	..
25 Madurai ..	2	1,35,000	32,408	..	..	..
26 Ramanaapuram ..	..	..	..	..	..	..
27 Tirunelveli ..	..	..	..	..	..	..
28 Coleroon Bridge Division ..	..	..	..	..	..	..
<i>IV Circle.</i>						
29 Bharathapuzha ..	..	..	..	..	..	..
30 Coimbatore, South ..	..	..	..	..	..	..
31 Coimbatore, North ..	..	..	..	..	..	..
32 Malabar, South ..	18	22,550	5,409	..	..	..
33 Malabar, North ..	..	..	..	..	..	..
34 Salem, South ..	2	29,000	15,931	..	..	..
35 Salem, North ..	..	..	..	..	..	..
36 South Kanara ..	..	..	..	..	..	..
37 The Nilgiris ..	..	..	..	..	..	..
Total ..	35	6,47,790	2,39,470	266	67,55,320	31,90,380

* Figures not available.

(ii) Review of works costing less than Rs. 1 lakh each completed during the year 1952-53.

Serial number and name of circle and division.	Government works.				District Board works.			
(1)	Total number of works.	Total cost.	Total expenditure.	Remarks.	Total number of works.	Total cost.	Total expenditure.	Remarks.
	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		RS.	RS.			RS.	RS.	
<i>I Circle.</i>								
<i>I. Bridges, culverts and causeways.</i>								
1 Guntur, South	1	73,500	58,674	....	..	..	..	....
2 Guntur, North	..	..	..	....	4	1,61,000	1,41,262	....
3 Krishna ..	..	..	..	....	..	..	..	....
4 West Godavari	2	15,500	10,323	....	6	40,100	39,920	....
5 Rajahmundry ..	..	..	..	....	..	..	..	....
6 East Godavari	..	..	..	....	..	..	..	....
7 Visakhapatnam South	..	..	..	....	..	..	..	....
8 Visakhapatnam, North	..	..	..	....	..	..	..	....
9 Anakapalle Special	..	..	..	....	..	..	..	....
10 Godavari Bridge Division	..	..	..	....	..	..	..	....
<i>II Circle.</i>								
11 Anantapur	1	96,600	61,002	....	..	..	..	....
12 Bellary*	..	..	..	....	..	..	..	....
13 Chingleput	..	..	..	....	2	45,000	34,700	....
14 Chittoor	6	1,18,300	1,09,400	....	..	..	..	....
15 Cuddapah	..	..	..	....	..	..	..	....
16 Kurnoor	1	53,000	50,537	....	..	..	..	....
17 Nellore ..	..	..	..	....	..	..	..	....
18 North Arcot	1	21,600	20,674	....	1	27,100	26,030	....
19 Pennar Bridge Division	..	..	..	....	..	..	..	....
20 Transport and Machinery division.	..	..	..	....	..	..	..	....
<i>III Circle.</i>								
21 South Arcot	4	49,400	49,053	....	2	54,870	56,013	....
22 Tanjore, East	..	..	..	....	2	28,000	26,006	....
23 Tanjore, West	1	4,900	4,393	....	1	25,300	25,102	....
24 Tiruchirappalli	..	..	..	....	5	1,43,800	1,46,959	....
25 Madurai	..	..	..	....	..	..	..	....
26 Ramanathapuram	16	42,950	40,556	....	..	..	..	....
27 Tirunelveli	..	..	..	....	..	..	..	....
28 Coimbatore Bridge division	..	..	..	....	..	..	..	....
<i>IV Circle.</i>								
29 Bharathapuzha	..	..	..	....	..	..	..	....
30 Coimbatore, South	4	87,000	86,485	....	..	..	..	....
31 Coimbatore, North	5	37,650	41,660	....	18	..	23,841	....
32 Malabar, South	28	1,30,800	1,22,702	....	..	..	..	....
33 Malabar, North	1	37,000	35,785	....	..	..	..	....
34 Salem, South	1	16,500	15,828	....	..	..	..	....
35 Salem, North	7	3,83,200	3,97,168	....	7	1,16,270	1,01,051	....
36 South Kanara	..	..	..	....	..	..	..	....
37 The Nilgiris	..	..	..	....	..	..	..	....
Total	79	11,67,900	11,04,685		48	6,41,440	6,29,884	

* Figures not available.

II. Cement-concreting and black-top works.

<i>I Circle.</i>								
1 Guntur, South	..	..	..	....	..	..	..	....
2 Guntur, North	..	..	..	....	..	..	..	....
3 Krishna ..	..	..	..	....	..	..	..	....
4 West Godavari	..	..	..	....	..	..	..	....
5 Rajahmundry	..	..	..	....	..	..	..	....
6 East Godavari	..	..	..	....	..	..	..	....
7 Visakhapatnam, South	..	..	..	....	..	..	..	....
8 Visakhapatnam, North	..	..	..	....	..	..	..	....
9 Anakapalle Special	..	..	..	....	..	..	..	....
10 Godavari Bridge division.	..	..	..	....	..	..	..	....

(ii) Review of works costing less than Rs. 1 lakh each completed during the year 1952-53—cont.

Serial number and name of circle and division.	Government works.				District Board works.			
(1)	Total number of works.	Total cost.	Total expenditure.	Remarks.	Total number of works.	Total cost.	Total expenditure.	Remarks.
	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		RS.	RS.			RS.	RS.	
<i>II. Cement-concreting and black top works—cont.</i>								
<i>II Circle.</i>								
11 Anantapur ..	..	..	..		..	..	..	
12 Bellary ..	..	..	..		..	..	..	
13 Chingleput ..	..	..	..		..	..	..	
14 Chittoor ..	2	1,20,000	84,986	....	..	..	..	....
15 Cuddapah ..	..	..	..		..	..	..	
16 Kurnool ..	..	..	..		..	..	..	
17 Nellore ..	..	..	..		..	..	..	
18 North Arcot ..	..	..	..		..	..	..	
19 Pennar Bridge division	..	..	..		..	..	..	
20 Transport and Machinery division.	..	..	..		..	..	..	
<i>III Circle.</i>								
21 South Arcot ..	..	..	..		..	..	..	
22 Tanjore, East ..	..	..	..		..	..	..	
23 Tanjore, West ..	1	22,000	22,387	....	..	..	..	....
24 Tiruchirappalli ..	..	..	..		..	..	..	
25 Madurai ..	..	..	..		..	..	..	
26 Ramanathapuram ..	..	..	..		..	..	..	
27 Tirunelveli ..	2	1,08,000	1,00,727	....	..	..	..	....
8 Coleroon Bridge Division..	..	..	..		..	..	..	
<i>IV Circle.</i>								
29 Bharathapuzha ..	..	..	..		..	..	..	
30 Coimbatore, South ..	1	23,000	15,072	....	..	..	..	....
31 Coimbatore, North ..	..	..	..		..	..	..	
32 Malabar, South ..	24	5,44,725	8,43,419	....	..	..	..	....
33 Malabar, North ..	..	..	..		..	..	..	
34 Salem, South ..	..	..	..		2	24,500	21,277	....
<i>III. New formations.</i>								
<i>I. Circle.</i>								
1 Guntur, South ..	..	..	..		..	..	..	
2 Guntur, North ..	..	..	..		..	..	..	
3 Krishna ..	..	..	..		..	..	..	
4 West Godavari ..	..	..	..		11	2,12,000	1,33,580	....
5 Rajahmundry ..	..	..	..		2	1,00,000	72,948	....
6 East Godavari ..	..	..	..		..	..	..	
7 Visakhapatnam, South ..	..	..	..		..	..	..	
8 Visakhapatnam, North ..	..	..	..		..	..	..	
9 Anakapalle Special ..	..	..	..		..	..	..	
10 Godavari Bridge ..	..	..	..		..	..	..	
<i>II Circle.</i>								
11 Anantapur ..	..	..	..		5	78,100	69,115	....
12 Bellary ..	..	..	..		..	..	..	
13 Chingleput ..	..	..	..		23	2,21,150	1,99,559	....
14 Chittoor ..	..	..	..		..	..	..	
15 Cuddapah ..	..	..	..		..	..	..	
16 Kurnool ..	..	..	..		5	78,000	63,933	....
17 Nellore ..	..	..	..		1	22,000	16,909	....
18 North Arcot ..	1	45,000	43,558	....	10	58,120	81,635	....
19 Pennar Bridge Division	..	..	..		..	..	..	
20 Transport and Machinery Division.	..	..	..		..	..	..	
<i>III Circle.</i>								
21 South Arcot ..	..	..	..		8	41,950	23,680	....
22 Tanjore, East ..	..	..	..		13	89,730	98,143	....
23 Tanjore, West ..	..	..	..		34	2,88,300	1,94,650	....
24 Tiruchirappalli ..	..	..	..		..	..	..	
25 Madurai ..	..	..	..		..	..	..	
26 Ramanathapuram ..	..	..	..		14	2,48,650	2,35,925	....
27 Tirunelveli ..	..	..	..		8	79,700	26,478	....
28 Coleroon Bridge Division	..	..	..		..	..	..	

* Figures not available.

* Figures not available.

(ii) Review of works costing over Rs. 1 lakh each completed during the year 1952-53—cont.

Serial number and name of circle and division.	Government works.				District Board works.			
	Total number of works. (1)	Total cost. (2)	Total expenditure. (3)	Remarks. (4)	Total number of works. (5)	Total cost. (6)	Total expenditure. (7)	Remarks. (8)
<i>III.—New formations—cont.</i>								
<i>IV Circle.</i>								
29 Bharathapuzha ..	..	..	..		..	..	..	
30 Coimbatore, South ..	..	..	..		..	..	..	
31 Coimbatore, North ..	..	..	..		14	40,900	40,900	....
32 Malabar, South ..	..	..	..		..	..	..	
33 Malabar, North ..	..	..	..		2	1,29,000	46,195	....
34 Salem, South ..	..	..	..		..	..	..	
35 Salem, North ..	..	..	..		10	1,50,200	86,084	....
36 South Kanara ..	..	..	..		..	..	..	
37 The Nilgiris ..	..	..	..		..	..	..	
Total ..	1	45,000	43,558		160	18,32,300	13,89,634	
<i>IV. Improvements and special repairs.</i>								
<i>I Circle.</i>								
1 Guntur, South ..	..	..	..		..	..	..	
2 Guntur, North ..	..	..	..		..	..	..	
3 Krishna ..	..	..	..		..	..	..	
4 West Godavari ..	..	..	..		5	3,07,500	2,72,432	....
5 Rajahmundry ..	..	..	..		3	76,400	53,840	....
6 East Godavari ..	..	..	..		..	..	..	
7 Visakhapatnam, South ..	..	..	..		..	..	..	
8 Visakhapatnam, North ..	..	..	..		..	..	..	
9 Anakapalle Special ..	..	..	..		..	..	..	
10 Godavari Bridges ..	..	..	..		..	..	..	
<i>II Circle.</i>								
11 Anantapur ..	..	..	..		..	..	..	
12 Bellary ..	..	..	..		..	..	..	
13 Chingleput ..	..	..	..		12	2,31,250	2,23,996	....
14 Chittoor ..	..	..	..		..	..	..	
* Figures not available.								
<i>III Circle.</i>								
16 Kurnool ..	..	..	..		2	1,00,000	27,214	....
17 Nellore ..	..	..	..		3	41,300	35,684	....
18 North Arcot ..	..	..	..		..	..	..	
19 Pennar Bridge Division ..	..	..	..		..	..	..	
20 Transport and Machinery Division ..	..	..	..		..	..	..	
<i>III Circle.</i>								
21 South Arcot ..	..	..	..		1	80,800	78,140	....
22 Tanjore, East ..	..	..	..		4	1,48,750	1,61,505	....
23 Tanjore, West ..	..	..	..		3	68,950	61,530	....
24 Tiruchirappalli ..	..	..	..		2	21,300	21,733	....
25 Madurai ..	..	..	..		..	..	..	
26 Ramanathapuram ..	..	..	..		..	..	..	
27 Tirunelveli ..	..	..	..		..	..	..	
28 Coleroon Bridge Division ..	..	..	..		..	..	..	
<i>IV Circle.</i>								
29 Bharathapuzha ..	..	..	..		..	..	..	
30 Coimbatore, South ..	..	..	..		..	..	..	
31 Coimbatore, North ..	..	..	..		1	12,715	12,715	....
32 Malabar, South ..	..	..	..		..	..	..	
33 Malabar, North ..	..	..	..		..	..	..	
34 Salem, South ..	..	..	..		5	61,000	59,020	....
35 Salem, North ..	..	..	..		11	1,59,320	1,50,317	....
36 South Kanara ..	..	..	..		..	..	..	
37 The Nilgiris ..	..	..	..		..	..	..	
Total ..	58	9,40,758	7,65,369		52	13,29,485	11,63,326	

ANNEXURE 24.

Statement showing the quantities of materials used, etc.

Serial number and materials.	(1)	Brought forward from the previous year.		Purchased during the year.		Utilized on works during the year.		Balance on hand.	
		Quantity.	Cost.	Quantity.	Cost.	Quantity.	Cost.	Quantity.	Cost.
		(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
			RS. IN LAKHS.		RS. IN LAKHS.		RS. IN LAKHS.		RS. IN LAKHS.
(i) Government Roads.									
1 Steel (in tons)	..	3,302.01	14.05	2,740.55	12.88	5,977.17	9.66	65.39	17.27
2 Cement (in tons)	..	4,312.38	3.09	23,293.67	21.82	20,961.08	22.85	6,644.97	2.06
3 Bitumen (in tons)	..	4,432.22	12.92	19,817.05	80.14	15,334.41	64.80	8,904.86	34.26
4 Oils (in gallons)	..	40,030.80	1.57	75,122.95	2.93	81,026.09	2.23	34,127.66	2.27
5 Fuel oils (in gallons)	..	45,775.00	.63	54,345.45	1.29	79,160.05	1.37	20,860.40	0.60
6 Coal (in tons)	..	456.84	.18	3,110.51	2.46	2,817.77	1.57	749.58	1.07
7 Timber (in c. ft.)	..	5,831.36	.48	2,922.66	0.11	2,902.94	0.14	5,831.08	0.45
8 Hume pipes (in r. ft.)	..	10,775.60	.84	9,244.00	1.49	6,272.00	1.05	5,747.60	1.28
9 Other materials (in tons)	..	82,786.80	2.08	6,87,466.00	25.59	506,367.00	19.79	720,252.00	27.67

(ii) District Board Roads.

1 Steel (in tons)	..	2,555.09	12.03	390.63	1.39	106.20	0.91	2,839.52	12.56
2 Cement (in tons)	..	1,474.07	1.25	6,131.10	4.56	7,549.88	5.22	55.29	0.59
3 Bitumen (in tons)	..	24.21	0.06	1,113.54	5.42	870.05	3.93	267.70	1.55
4 Oils (in gallons)	..	836.00	0.03	704.25	0.29	705.25	0.29	835.00	0.03
5 Fuel oils (in gallons)	..	1,436.00	0.02	1,767.00	0.05	1,815.00	0.06	1,468.00	0.01
6 Coal (in tons)	..	..	..	..	..	..	..	..	..
7 Timber (inc. ft.)	..	1,225.94	0.09	240.41	0.03	..	..	125.00	0.02
8 Hume pipes (in r. ft.)	..	13,254.00	1.07	48,852.65	2.21	14,113.70	1.34	47,992.95	1.94
9 Other materials (in tons)	..	23,128.00	1.99	64,055.00	5.03	61,466.00	4.20	15,717.00	2.37

NOTE.—The particulars under "District Board Roads" do not include information relating to Malabar North, South Kanara, Salem, Coimbatore and Kurnool Divisions.

ANNEXURE 25.

Inventory of plant and machinery as on 31st March 1953.

Serial number, name of plant and machinery.	Number available.	Serial number, name of plant and machinery.	Number available.
I CIRCLE.			
<i>Guntur, South.</i>		<i>East Godavari—cont.</i>	
1 Lorries	7	4 Tar boiler	1
2 Power rollers	17	5 Heat masters	2
3 Tar boiler	1	6 Conphalt mixer	1
4 Heat master	1	<i>Visakhapatnam, South.</i>	
5 Grader	1	1 Lorries	8
<i>Guntur, North.</i>		2 Jeep	1
1 Lorries	8	3 Power rollers	19
2 Jeeps	2	4 Tar boilers	3
3 Power rollers	11	5 Heat master	1
4 Cement concrete mixers	4	6 Vibrators	2
<i>Krishna.</i>		7 Cement concrete mixers	7
1 Lorries	5	8 Barrow mixers	2
2 Jeeps	2	9 Water tank	1
3 Power rollers	18	<i>Visakhapatnam, North.</i>	
4 Tar boilers	5	1 Lorries	3
5 Conphalt mixers	2	2 Jeeps	2
6 Cement concrete mixers	2	3 Power rollers	11
7 Stone crusher	1	4 Tar boiler	1
<i>West Godavari.</i>		5 Cement concrete mixer	1
1 Lorries	7	6 Barrow mixers	2
2 Jeeps	3	7 Water tank	1
3 Power rollers	19	<i>Anakapalle—Special.</i>	
4 Tar boilers	3	1 Lorries	4
5 Cement concrete mixers	3	2 Jeeps	3
6 Air compressors	4	3 Power rollers	2
7 Pumps	5	4 Cement concrete mixers	2
8 Boring set	1	5 Air compressors	4
9 Grader	1	6 Pump	1
<i>Rajahmundry.</i>		<i>Godavari Bridges—Special.</i>	
1 Lorries	4	1 Lorries	15
2 Jeeps	4	2 Jeep	1
3 Power rollers	15	3 Pontoons	421
4 Steamer	1	4 Bull dozers	2
5 Heat master	1	5 Grader	1
6 Cement concrete mixer	1	6 Double Nissen sheds	2
7 Air compressor	1	7 Tractor	1
8 Stone crusher	1	8 Single Nissen sheds	2
9 Welding set	1	9 Welding set	1
10 Ramped cargo lighter	1	10 Cutter's rowing boats	2
<i>East Godavari.</i>		11 Tipping trucks	45
1 Lorries	3	12 Angle irons	93
2 Jeeps	2	13 Sheet piles	50
3 Power rollers	8	14 Trolley track	2,017
		15 Pully block	1

Inventory of plant and machinery as on 31st March 1953—cont.

Serial number, name of plant and machinery.	Number available.	Serial number, name of plant and machinery.	Number available.
II CIRCLE.			
<i>Anantapur.</i>		<i>North Arcot.</i>	
1 Rollers	11	1 Rollers	18
2 Lorries	2	2 Lorries	4
3 Jeeps	2	3 Jeep	1
4 Concrete mixer	1	4 Concrete mixers	2
5 Vibrator	1	5 Asphalt mixer	1
6 Heat master	1	6 Vibrator	1
<i>Chittoor.</i>		7 Pump set	1
1 Rollers	21	8 Tar boiler	1
2 Mixers	4	9 Heat masters	2
3 Tar boilers	4	10 Barrow mixers	12
4 Tankor	1	<i>Bellary.</i>	
<i>Kurnool.</i>		[Particulars not available.]	
1 Rollers	14	<i>Chingleput.</i>	
2 Lorries	11	1 Lorries	6
3 Heat sprae	1	2 Rollers	28
4 Trailer cart	1	3 Graders	2
5 Tarpaulin	1	4 Concrete mixers	5
6 Tent	1	5 Trailor water carts	4
7 Tractor cart	1	6 Barrow mixers	9
<i>Cuddapah.</i>		7 Colcrete mixer	1
1 Rollers	13	8 Tar boilers	2
2 Lorries	4	9 Heat masters	2
3 Tar boilers	3	10 Millers asphalt mixer	1
4 Asphalt mixer	1	11 Air compressors	2
5 Concrete mixers	2	12 Calyx drill	1
6 Heat sprae	1	13 Sump pumps	4
7 Jeeps	2	14 Avery testing machine	1
<i>Pennar Bridge Division.</i>		15 Vibrators	3
1 Lorry	1	16 Jeep	1
2 Mixers	4	17 Laboratory van	1
3 Jeep	1	<i>Transport and Machinery Division.</i>	
4 Pumps	2	1 Lorries	7
5 Diesel air compressors	2	2 Rollers	47
6 Welding set	1	3 Breakdown vans	2
<i>Nellore.</i>		4 Mobile workshop van	1
1 Rollers	21	5 Jeep	1
2 Tar boilers	2	6 Power graders	8
3 Heat master	1	7 Bull dozer	1
4 Lorries	8	8 Trail Master Graders	2
5 Mixers	4	9 Tractors	3
6 Stone crusher	1	10 Track tanker	1
		11 Clay diggers	2
		12 Drill sharpeners	4
		13 Oil furnaces	4
		14 Helman hand drills	3
		15 Spader	1

Inventory of plant and machinery as on 31st March 1953—cont.

Serial number, name of plant and machinery.	Number available.	Serial number, name of plant and machinery.	Number available.
II CIRCLE—cont.			
<i>Transport and Machinery Division—cont.</i>		<i>Transport and Machinery Division—cont.</i>	
16 Power winders	2	24 Electric meters	3
17 Wayer impactor small diesel engine.	1	25 Battery charges	2
18 Pavement breaker	1	26 Hand drilling machines	4
19 Calax drill	1	27 Generating sets	4
20 Core cutting drill	1	28 Cranes	2
21 Beam breaker	1	29 Engine blocks	31
22 Compressors	4	30 Vibrators	6
23 Road ripper	2	31 Pumps	8
		32 Tar boilers	2
III. CIRCLE.			
<i>South Arcot.</i>		<i>Tanjore West—cont.</i>	
1 Rollers	23	7 Nissen sheds	2
2 Lorries	5	8 Asphalt mixer	1
3 Concrete mixers	8	9 Viberator	1
4 Hand pumps	5	10 Stone crusher	1
5 Jeep	1	11 Grader	1
6 Tar boilers	4	12 Tipper van	1
7 Heat masters	2	13 Air compressor	1
8 Wheel barrows	4	14 Welding plant	1
9 Rotary drums	23	<i>Tiruchirappalli.</i>	
10 Water tanks	4	1 Rollers	20
11 Pontoons	5	2 Lorries	10
12 Asphalt mixer	1	3 Concrete mixers	2
13 Vibrators	5	4 Hand pumps	2
14 Stone crusher	1	5 Jeep	1
15 Ramped cargo lighter	1	6 Tar boiler	1
16 Trailer wagon carts	8	7 Heat masters	4
17 Water carts	6	8 Heat sprae	1
<i>Tanjore East.</i>		9 Nissen sheds	2
1 Rollers	13	10 Vibrators	3
2 Lorries	2	11 Grader	1
3 Concrete mixers	2	<i>Ramanathapuram.</i>	
4 Hand pumps	4	1 Rollers	31
5 Jeep	1	2 Lorries	6
6 Tar boiler	1	3 Concrete mixers	5
7 Heat sprae	1	4 Hand pumps	4
8 Wheel barrows	16	5 Jeeps	4
9 Rotary drums	9	6 Tar boilers	2
10 Water tanks	4	7 Heat masters	2
11 Pontoons	4	8 Rotary drums	16
12 Nissen sheds	2	9 Nissen shed	1
<i>Tanjore West.</i>		10 Asphalt mixer	1
1 Rollers	15	11 Viberator	1
2 Lorries	4	12 Tractors	9
3 Concrete mixers	2	13 Bull dozers	
4 Tar boilers	2	14 Graders	
5 Heat master	1	15 Seaman's mixer	1
6 Heat sprae	1	16 Air compressor	1
		17 Barrow mixers	3

Inventory of plant and machinery as on 31st March 1953—cont.

Serial number, name of plant and machinery.	Number available.	Serial number, name of plant and machinery.	Number available.
III CIRCLE—cont.			
<i>Madurai.</i>		<i>Tirunelveli—cont.</i>	
1 Rollers	30	6 Heat masters	2
2 Lorries	11	7 Nissen sheds	2
3 Concrete mixers	3	8 Graders	2
4 Hand pumps	2	9 Air compressor	1
5 Jeeps	4	10 Welding set	1
6 Tar boiler	1	<i>Coleroon Bridge Division.</i>	
7 Heat masters	2	1 Lorries	2
8 Nissen shed	1	2 Concrete mixers	3
9 Grader	1	3 Vibrators	2
<i>Tirunelveli.</i>		4 Graders	6
1 Rollers	23	5 Pulley blocks	6
2 Lorries	7	6 Winches	6
3 Concrete mixers	2	7 Boring set	1
4 Hand pumps	5	8 Trailer wagon cart	1
5 Tar boiler	1	9 Tipper vans	2
IV CIRCLE.			
<i>Salem, North.</i>		<i>Salem, South.</i>	
1 Rollers	14	1 Rollers	17
2 Lorries	4	2 Lorries	4
3 Jeep	1	3 Jeep	1
4 Tar boilers	3	4 Tar boilers	2
5 Concrete mixers	5	5 Concrete mixer	1
6 Pump sets	2	6 Heat master	1
7 Pile driving machine	1	7 Barrow mixers	11
<i>Malabar, South.</i>		8 Rotary tar mixers	6
1 Rollers	21	9 Viberator	1
2 Lorries	10	<i>Coimbatore, South.</i>	
3 Jeeps	2	1 Rollers	33
4 Tar boilers	2	2 Lorries	21
5 Concrete mixers	4	3 Jeeps	3
6 Heat master	1	4 Tar boiler	1
7 Barrow mixers	3	5 Concrete mixers	9
<i>South Kanara.</i>		6 Grader	1
1 Rollers	20	7 Heat masters	2
2 Lorries	6	<i>The Nilgiris.</i>	
3 Jeeps	2	1 Rollers	8
4 Tar boiler	1	2 Lorries	2
5 Concrete mixers	3	3 Jeep	1
6 Heat masters	3	4 Heat masters	3
7 Miller mixer	1	5 Stone crusher	1
<i>Coimbatore, North.</i>		<i>Malabar, North.</i>	
1 Rollers	19	1 Rollers	13
2 Lorries	7	2 Lorries	4
3 Jeeps	2	3 Jeeps	2
4 Tar boiler	2	4 Tar boilers	2
5 Heat-masters	2	5 Concrete mixers	2
6 Barrow mixers	3	6 Pump sets	2
		7 Heat master	1
		8 Viberator	1
		9 Asphalt mixers	2

ANNEXURE 26.

Statement of avenues.

Serial number and name of division.	Government roads.					
	Total mileage.	Number of avenues.	Number newly planted during the year.	Number of new plantations that have survived.	Expenditure.	Income.
(1)	(2)	(3)	(4)	(5)	(6)	(7)
I CIRCLE.					RS.	RS.
1 Guntur, South	397	47,037	3,036	2,796	47,069	..
2 Guntur, North	288	42,290	1,733	1,341	25,912	11,545
3 Krishna	464	35,947	8,085	7,753	90,778	8,582
4 West Godavari	512	14,241	2,384	1,792	30,158	3,399
5 Rajahmundry	461	46,211	647	647	3,457	4,061
6 East Godavari	266	15,969	1,401	1,126	17,049	9,988
7 Visakhapatnam, South	485	63,399	4,517	3,514	15,159	5,433
8 Visakhapatnam, North	528	4,980	6,279	1,931	47,881	85,888
9 Anakapalle Special	65	1,164	504	490	2,727	..
10 Godavari Bridges	..	..	..	..	..	..
II CIRCLE.					RS.	RS.
11 Anantapur	571	22,371	3,843	448	8,699	3,976
12 Bellary	557	..	..	..	..	..
13 Chingleput	658	54,092	11,472	9,593	81,067	8,041
14 Chittoor	734	55,419	4,334	3,598	26,502	..
15 Cuddapah	432	19,895	7,495	1,506	..	440
16 Kurnool	663	12,060	5,768	3,799	37,393	3,671
17 Nellore	609	64,122	9,077	4,989	8,470	1,452
18 North Arcot	656	99,701	13,299	12,599	43,097	37,310
19 Pennar Bridge Division.	..	..	..	..	..	..
20 Transport and Machinery.	..	..	..	..	..	..
III CIRCLE.					RS.	RS.
21 South Arcot	560	80,396	7,640	5,999	44,784	21,889
22 Tanjore, East	288	42,250	2,354	2,168	11,482	52,502
23 Tanjore, West	404	30,734	4,510	1,607	15,786	77,425
24 Tiruchirappalli	774	101,515	1,700	1,590	66,887	76,002
25 Madurai	656	1,390	2,928	1,817	4,641	25,199
26 Ramanathapuram	464	40,016	4,347	3,612	12,853	6,458
27 Tirunelveli	461	1,979	2,508	1,942	12,044	13,807
28 Coleroon Bridge Division.	..	..	..	..	..	..
IV CIRCLE.					RS.	RS.
29 Bharathpuzha	..	448	..	..	765	..
30 Coimbatore, North	497	26,905	10,905	9,193	72,576	4,772
31 Coimbatore, South	529	12,947	837	690	5,581	16,145
32 Malabar, North	359	23,599	1,826	1,826	6,008	6,104
33 Malabar, South	606	9,684	909	750	4,325	43,508
34 Salem, North	422	49,058	720	625	19,565	44,933
35 Salem, South	391	29,504	96	96	37,275	14,813
36 South Kanara	689	46,343	1,208	1,208	2,898	3,926
37 The Nilgiris	204	63	..	..	..	..
Total	15,650	1,095,729	156,422	90,045	7,46,979	5,89,269

Statement of avenues—cont.

Serial number and name of division.	District Board roads.					
	Total mileage.	Number of avenues.	Number newly planted during the year.	Number of new plantations that have survived.	Expenditure.	Income.
	(8)	(9)	(10)	(11)	(12)	(13)
					RS.	RS.
I CIRCLE.						
1 Guntur, South	374	20,504	350	275	8,977	..
2 Guntur, North	546	5,617	..	..	303	..
3 Krishna	920	17,960	3,180	2,933	21,912	573
4 West Godavari	580	6,692	305	295	4,115	755
5 Rajahmundry	349	9,218	226	226	731	660
6 East Godavari	570	10,511	444	284	2,413	1,989
7 Visakhapatnam, South ..	430	18,436	..	..	2,000	1,221
8 Visakhapatnam, North ..	391	544	6,667	2,333	1,784	701
9 Anakapalle Special ..	..	..	..	..	..	..
10 Godavari Bridges ..	..	..	..	..	..	..
II CIRCLE.						
11 Anantapur	807	7,149	610	200	4,389	914
12 Bellary	612	..	..	..	..	..
13 Chingleput	1,068	15,492	3,597	3,077	4,929	1,502
14 Chittoor	1,009	18,011	..	..	..	..
15 Cuddapah	626	3,600	2,720	979	..	537
16 Kurnool	608	7,213	425	320	..	..
17 Nellore	985	46,401	5,272	3,293	2,863	581
18 North Arcot	929	59,254	4,665	3,976	11,138	..
19 Pennar Bridge Division.	..	..	..	..	..	..
20 Transport and Machinery.	..	..	..	..	..	..
III CIRCLE.						
21 South Arcot	1,435	58,204	6,910	3,747	12,938	15,902
22 Tanjore, East	1,118	37,614	321	268	6,110	40,431
23 Tanjore, West	988	26,057	3,616	1,725	6,755	..
24 Tiruchirappalli	1,740	42,131	1,300	1,209	31,866	25,684
25 Madurai	1,260	1,220	1,683	2,014	..	8,133
26 Ramanathapuram	1,022	22,482	4,277	3,523	16,466	628
27 Tirunelveli	1,030	1,514	3,191	2,115	7,452	11,796
28 Coleroon Bridge Division.	..	..	..	..	..	..
IV CIRCLE.						
29 Bharathpuzha	..	..	..	..	..	..
30 Coimbatore, North ..	1,476	19,493	..	..	4,274	4,666
31 Coimbatore, South ..	1,076	6,965	295	255	250	2,524
32 Malabar, North ..	520	32,066	385	88	1,599	7,883
33 Malabar, South ..	503	26,672	25,309	1,100	2,326	31,358
34 Salem, North ..	887	38,317	584	540	3,060	58,018
35 Salem, South ..	808	24,524	42	42	19,512	..
36 South Kanara ..	778	20,446	848	848	..	1,895
37 The Nilgiris ..	393	..	..	..	..	..
Total ..	25,313	604,316	76,222	35,665	1,78,262	2,18,351

ANNEXURE 27.
(i) Statement showing the particulars of encroachments detected and disposed of during the year 1952-53 on Government roads.

Serial number and name of district.	Number of encroachments pending disposal at the end of the year.		Number of objectionable encroachments evicted during the year.		Number of unobjectionable encroachments licensed during the year.		Number of encroachments detected during the year.		Number of encroachments pending disposal at the commencement of the year.	
(1)	Municipal area.		Non-municipal area.		Municipal area.		Non-municipal area.		Municipal area.	
1 Anantapur ..	65	203	516	43	309	62	598	518	217	10
2 Bellary ..	..	..	..	..	..	..	..	..	..	..
3 Chingleput ..	..	..	..	..	..	..	..	..	..	..
4 Chittoor ..	..	..	..	..	..	..	..	..	..	..
5 Coimbatore ..	..	..	..	..	..	..	..	..	..	..
6 Cuddapah ..	..	..	..	..	..	..	..	..	..	..
7 Godavari, East ..	..	..	..	..	..	..	..	..	..	..
8 Godavari, West ..	..	..	..	..	..	..	..	..	..	..
9 Guntur ..	..	..	..	..	..	..	..	..	..	..
10 Krishna ..	..	..	..	..	..	..	..	..	..	..
11 Kurnool ..	..	..	..	..	..	..	..	..	..	..
12 Madurai ..	..	..	..	..	..	..	..	..	..	..
13 Malabar ..	..	..	..	..	..	..	..	..	..	..
14 Nellore ..	..	..	..	..	..	..	..	..	..	..
15 North Arcot ..	..	..	..	..	..	..	..	..	..	..
16 Nilgiris ..	..	..	..	..	..	..	..	..	..	..
17 Ramanathapuram ..	..	..	..	..	..	..	..	..	..	..
18 Salem ..	..	..	..	..	..	..	..	..	..	..
19 South Arcot ..	..	..	..	..	..	..	..	..	..	..
20 South Kanara ..	..	..	..	..	..	..	..	..	..	..
21 Tiruchirappalli ..	..	..	..	..	..	..	..	..	..	..
22 Tirunelveli ..	..	..	..	..	..	..	..	..	..	..
23 Visakhapatnam, South ..	..	..	..	..	..	..	..	..	..	..
24 Visakhapatnam, North ..	..	..	..	..	..	..	..	..	..	..
25 Visakhapatnam, North ..	..	..	..	..	..	..	..	..	..	..
Total ..	8,290	12,925	7,080	3,351	3,681	3,291	1,620	3,014	8,712	9,666

NOTE.—The Particulars in respect of Kurnool district are not available.

(ii) Statement showing the particulars of encroachments detected and disposed of during the year 1952-53 on District Board Roads.

Serial number and name of district.	Number of encroachments pending disposal at the end of the year.		Number of objectionable encroachments evicted during the year.		Number of unobjectionable encroachments licensed during the year.		Number of encroachments detected during the year.		Number of encroachments pending disposal at the commencement of the year.	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Municipal area.	Non-municipal area.	Municipal area.	Non-municipal area.	Municipal area.	Non-municipal area.	Municipal area.	Non-municipal area.	Municipal area.	Non-municipal area.
1 Guntur, South	12	83	185	33	2	17	56	6	89	31
2 Guntur, North	42	58	69	59	182	2	20	31	23	2
3 Krishna	..	..	..	..	..	..	..	..	..	..
4 West Godavari	..	..	..	..	..	..	..	..	..	..
5 Rajahmundry	..	..	..	..	..	..	..	..	..	..
6 East Godavari	..	..	..	..	..	..	..	..	..	..
7 Visakhapatnam	..	..	..	..	..	..	..	..	..	..
8 Visakhapatnam, North	..	..	..	..	..	..	..	..	..	..
9 Anantapur	..	..	..	..	..	..	..	..	..	..
10 Bellary	..	..	..	..	..	..	..	..	..	..
11 Chingleput	..	..	..	..	..	..	..	..	..	..
12 Chittoor	..	..	..	..	..	..	..	..	..	..
13 Cuddapah	..	..	..	..	..	..	..	..	..	..
14 Kurnool	..	..	..	..	..	..	..	..	..	..
15 Nellore	..	..	..	..	..	..	..	..	..	..
16 North Arcot	..	..	..	..	..	..	..	..	..	..
17 South Arcot	..	..	..	..	..	..	..	..	..	..
18 Tanjore, East	..	..	..	..	..	..	..	..	..	..
19 Tanjore, West	..	..	..	..	..	..	..	..	..	..
20 Tiruchirappalli	..	..	..	..	..	..	..	..	..	..
21 Madurai	..	..	..	..	..	..	..	..	..	..
22 Ramanathapuram	..	..	..	..	..	..	..	..	..	..
23 Tirunelveli	..	..	..	..	..	..	..	..	..	..
24 Coimbatore, South	..	..	..	..	..	..	..	..	..	..
25 Coimbatore, North	..	..	..	..	..	..	..	..	..	..
26 Malabar, South	..	..	..	..	..	..	..	..	..	..
27 Malabar, North	..	..	..	..	..	..	..	..	..	..
28 Salem, South	..	..	..	..	..	..	..	..	..	..
29 Salem, North	..	..	..	..	..	..	..	..	..	..
30 South Kanara	..	..	..	..	..	..	..	..	..	..
31 The Nilgiris	..	..	..	..	..	..	..	..	..	..
Total	177	1,528	66	2,133	928	949	242	1,014	215	554

ANNEXURE 28.

Statement of ferries maintained by the department.

Name of division.	Serial number and name of ferry.	Number and size of boats available.	Revenue (lease amount).
(1)	(2)	(3)	(4)
			RS.
Guntur, North ..	1. Kollur ..	18 to 23 tons	768
	2. Dharamkota ..	No departmental boats	1,400
Krishna ..	3. Iylur ..	One "A" class ballacut	1,234
	4. Someswaram ..	Ballacut	
	5. Lingala ..	Do.	
West Godavari ..	6. Madhavapatnam ..	Do.	
	7. Doddipatia ..	Do.	
	8. Koduru ..	Do.	
	9. Prakkilanka ..	Do.	
	10. Munugunulanka ..	Do.	
	11. Pedayodlagadi ..	Do.	
Rajahmundry ..	12. Bobberlanka ..	Steamer Helen	
	13. Deyipatnam ..	No Government boat	
	14. Kunavaram ..	Iron punt	
	15. Taliperu ..	No Government boat	
	16. Palemvagu ..	Ballacut	
	17. Kondapuramvagu ..	Do.	
East Godavari ..	18. Kapileswaram ..	12 Boats 24' x 5' x 2'	
	19. Kotipalli ..	4 do.	
	20. Yedumbaka ..	3 Boats 21'	
Visakhapatnam, North.	21. Sankili ..	1 Paddle boat	
	22. Calingapatnam ..	Do.	
	23. Navagam ..	Do.	
Nellore ..	24. Ferry across Pennar ..	1 Steam boat	2,450
Cuddapah ..	25. Ferry across River Pennar at M. 108/7 to 109/1 of Chittoor-Kurnool road.	1 Country craft	4,700
	26. Ferry across River Pennar at M. 10/4 to 11/2 of Muddanur-Jammalamadugu road.		92
	27. Ferry across Pennar at Petladurthi on Yerraguntla-Prodatur road.		8
South Arcot ..	28. Ferry at M. 1/1 of Markanam-Tindivanam road.	Ramped cargo lighter	10,268
Tanjore, East ..	29. Gopalamudram across Cole-roon.	1 boat of 18' x 4' x 3'	
	30. Elangudi across Odambokiar.	Do.	
	31. Engan ..	Do.	
Tanjore, West ..	32. Sundaraperumal Koil.	1 boat 10' diameter x 3'	75
	33. Parithikudi ..	1 boat 12' x 4' x 3'	40
Tiruchirappalli ..	34. Kamanaickenpalayam ..	4 of 12' diameter	5,040
	35. Velur (Pugalar) ..	6 do.	(Ferry closed—vide G.O. No. 615, P.W., dated 14th February 1953.)
	36. Manapalli (Nanniyur) ..	3 do.	850
	37. Kulittalai (Musiri) ..	8 do.	11,250
	38. Tirumanur ..	6 do.	7,550
	39. Thirumalayadi, Vythinatham-pettai.	4 do.	2,101
Madurai ..	40. Narikalpatty ..	1 boat 7' x 5' x 1' 6"	5
	41. Perichpalayam ..	1 do.	No bid.
	42. Mavurghat ..	1 do.	6
Ramanathapuram ..	43. Kottagudi ..	1 boat 20' x 3' x 1 1/2'	665
Tirunelveli ..	44. Vilathikulam ..	1 boat 32' x 5 1/2' x 2"	53
Salem, North ..	45. Eramathura Ferry ..		16
Malabar, South ..	46. Thiruthala Varandakutti ..	2 Nos. 20' x 3' = 6" x 1 x 9"	2,310
	47. Karimpuzha ..	2 do.	1,200
	48. Chunangod ..	1 do.	235
	49. Nangathiri ..	2 do.	10,160
	50. Mallur alias Challampara ..	2 do.	8,105
	51. Chamaravattam ..	2 do.	9,000

Statement of ferries maintained by the department—cont.

Name of division. (1)	Serial number and name of ferry. (2)	Number and size of boats available. (3)	Revenue (lease amount). (4)
			RS.
South Kanara	52. Bolar	6 Nos. 27' x 2½' x 2'	35
	53. Kulur	8 do.	2,563 (Closed on 1st July 1952.)
	54. Pavanje	8 do.	18,510
	55. Mulky	8 do.	17,660
	56. Chandragiri	5 do.	2,501
	57. Shine	5 do.	350
	58. Karingot	2 do.	1,600
	59. Chittari	2 do.	1,810
	60. Mogral	2 do.	610
	61. Kanipura	2 do.	650
	62. Uppala	2 do.	410
	63. Bekal	2 do.	600
	64. Kallathkare	2 do.	5,060
	65. Thekkil	2 do.	2,500
	66. Hosmat	2 do.	1,060
	67. Mabukal	10 do.	6,065
	68. Bhadraviri (Kalimapur)	10 do.	15,090
	69. Udiavara	10 do. (Motor boat to be provided.)	27,667 (1/3 of three years lease, Rs. 83,000.)
	70. Puttige	2 Nos. 27' x 2½' x 2'	1,205
	71. Halady	2 „ 27' x 2 x 1½'	3,760
	72. Gangoly	7 „ 27' x 2½' x 2'	5,100 (1/5 of five years lease, Rs. 25,500.)
	73. Hangarahole	2 do.	5,005
	74. Kandbur	2 do.	725
	75. Wandse	2 do.	900
	76. Jadkal	1 Nos. 24' x 2' x 1½'	105
	77. Pucha mogar	2 do.	270
	78. Malpe	2 do.	1,520
	79. Sonda	2 Nos. 27' x 2½' x 2'	1,000
Malabar, North	80. Ballapatam ferry	2 jangadams and 3 boats (25' x 4½' x 2½').	35,461
	81. Kuppam ferry	1 jangadam and 3 boats of 25' x 4½' x 2½'.	
	82. Ponnaram	1 jangadam and 1 boat (30' x 4½' x 2½').	
	83. Chalinjam ferry	1 jangadam and 2 boats (25' x 4½' x 2½').	
	84. Perumbal ferry	1 jangadam and 3 boats of 25' x 4½' x 2½'.	

ANNEXURE 29.

(i) Statement showing the names of Inspection Bungalows taken over during the year 1952-53.

I Circle, Kakinada	Nil.
II Circle, Madras—	

Nellore Division.—An Inspection Bungalow at Markapur near Markapur Railway Station at miles 23/1 of Podili Markapur road from Kurnool Highways Division was taken over during the year as per Chief Engineer's (Highways) Memorandum No. 198151-E/SE, dated 17th April 1952.

III Circle, Tiruchirappalli	Nil.
IV Circle, Coimbatore	Nil.

(ii) Statement showing the Inspection Bungalows maintained by the department during 1952-53.

Serial number and name of division. (1)	Class I. (2)	Class II. (3)	Class III. (4)	Rest-houses. (5)	Revenue. (6)	Cost of maintenance. (7)
					RS.	RS.
1 Guntur, South	..	..	..	..	..	..
2 Guntur, North	..	..	..	..	..	..
3 Krishna	..	..	..	..	..	..
4 West Godavari	..	5	..	..	33	1,798
5 Rajahmundry	..	5	..	2	115	5,042
6 East Godavari	..	..	..	..	..	..
7 Visakhapatnam South	..	..	..	..	..	..
8 Visakhapatnam North	..	1	..	..	57	345
9 Anakapalli	..	2	..	1	418	756
10 Anantapur	..	..	..	..	..	..
11 Bellary	..	..	..	..	..	..
12 Chingleput	..	..	..	..	..	..
13 Chittoor	..	1	..	..	..	650
14 Cuddapah	..	..	..	..	..	..
15 Kurnool	..	4	..	..	189	1,553
16 Nellore	..	1	..	..	18	..
17 North Arcot	..	..	..	..	..	..
18 South Arcot	..	..	..	..	..	..
19 Tanjore, East	..	..	..	..	..	..
20 Tanjore, West	..	..	..	..	..	..
21 Tiruchirappalli	..	1	..	..	1,033	3,422
22 Madurai	..	1	..	..	15	480
23 Ramanathapuram	..	..	..	..	..	..
24 Tirunelveli	..	..	..	..	..	..
25 Salem, North	..	..	..	..	..	..
26 Salem, South	1	..	..	..	170	173
27 Coimbatore, North	..	..	..	..	..	..
28 Coimbatore, South	..	2	..	..	151	530
29 Malabar, North	1	6	..	..	637	2,839
30 Malabar, South	..	2	..	..	40	846
31 South Kanara	..	..	..	..	..	..
32 The Nilgiris	..	2	..	..	1,183	138
Total	2	33	..	3	4,049	18,512

(iii) Statement showing the names of Travellers' Bungalows taken over during the year 1952-53.

I Circle, Kakinada—

Visakhapatnam South.—The Travellers' Bungalows at Yellamanchili and Sabhavaram were taken over from the District Board on 1st July 1952 with reference to Chief Engineer's (Highways) Letter No. 46382, L 4/52-1, dated 13th October 1952.

II Circle, Madras	Nil.
III Circle, Tiruchirappalli	Nil.
IV Circle, Coimbatore	Nil.

(iv) Statement showing the Travellers' Bungalows maintained by the department during 1952-53.

Serial number and name of division. (1)	Class I. (2)	Class II. (3)	Class III. (4)	Rest house. (5)	Revenue. (6)	Cost of maintenance. (7)
					RS.	RS.
1 Guntur, South	..	22	..	..	1,054	5,373
2 Guntur, North	..	11	..	..	638	6,641
3 Krishna	..	20	1	..	1,781	28,211
4 Godavari, West	..	16	..	..	1,293	8,965
5 Rajahmundry	..	8	..	..	..	..
6 Godavari, East	..	1	..	..	29	396
7 Visakhapatnam South	1	11	10	..	2,692	17,898
8 Visakhapatnam North	..	31	..	..	3,370	25,505
9 Anantapur	..	2	..	..	299	894
10 Bellary	..	4	..	2	*	*
11 Chingleput	2	2	..	2	541	6,776
12 Chittoor	..	4	16	..	*	*
13 Cuddapah	..	3	..	..	..	..
14 Kurnool	..	3	..	..	157	1,188
15 Nellore	..	..	..	..	..	..
16 North Arcot	..	3	..	..	207	4,676
17 South Arcot	2	6	..	5	3,793	4,957
18 Tanjore, East	..	1	2	2	691	3,501
19 Tanjore, West	..	2	..	8	1,185	6,023
20 Tiruchirappalli	..	2	9	8	3,976	13,996
21 Madurai	2	10	4	..	3,357	11,329
22 Ramanathapuram	7	7	..	2	17,500	4,499
23 Tirunelveli	..	..	..	..	..	..
24 Salem, North	1	11	..	2	..	6,605
25 Salem, South	..	8	..	1	9	11,636
26 Coimbatore, North	3	5	8	..	..	..
27 Coimbatore, South	..	9	..	9	..	..
28 Malabar, North	1	14	4	..	2,227	10,486
29 Malabar, South	..	22	..	5	3,400	27,954
30 South Kanara	7	35	15	..	..	5,244
31 The Nilgiris	..	..	..	..	..	..
Total	26	273	67	46	48,199	2,12,753

NOTE.—The Travellers' Bungalow at Thoppur and the Rest-house at Hanumantheertham were abolished since 20th December 1952 and 11th May 1951 respectively.

* Figures not available.

ANNEXURE 30.
Intensity statistics.

Serial number and name of districts. (1)	Area (square miles). (2)	Miles of road. (3)	Area (mille of road). (4)	Population as per 1951 census. (5)	Population per mile of road. (6)	Number of vehicles. (7)	Number of vehicles per mile of road. (8)	Expenditure on roads. (9)	Expenditure per mile. (10)	Land revenue and cesses. (11)	Revenue per mile. (12)
1 Visakhapatnam, North	3,902	919	4	2,123,136	2,310	318	..	18,11,334	1,973	..	..
2 Visakhapatnam, South	5,201	930	3	2,072,698	2,115	3,094	71	40,41,883	4,124	..	..
3 East Godavari	2,788	1,046	3	2,414,808	1,467	117,941	..	50,86,852	3,080	..	..
4 West Godavari	2,988	1,092	2	1,897,727	1,555	405	..	40,43,179	8,702	..	..
5 Krishna	2,469	1,384	2	1,779,434	1,286	11,354	..	44,04,046	8,182	..	..
6 Guntur	2,745	1,303	3	2,549,986	1,588	55,817	35	44,62,211	2,780	..	..
7 Nellore	7,942	1,594	6	1,795,632	1,128	574,816	36	43,44,824	2,726	..	..
8 Kurnool	7,826	1,271	6	1,270,843	1,000	66,65	52	27,01,530	2,128	..	..
9 Bellary	5,872	1,169	6	1,240,988	1,061	1,230	1	31,65,523	2,708	..	..
10 Anantapur	6,765	1,773	6	1,361,556	988	8,010	7	34,67,997	2,531	..	..
11 Cuddapah	5,923	1,058	6	1,161,731	1,098	..	..	38,67,897	3,646	..	..
12 Chingleput	5,103	1,726	3	3,269,675	1,898	..	..	40,44,281	2,341	..	..
13 Chittoor	5,911	1,773	3	1,810,377	1,039	..	..	34,59,688	1,935	..	..
14 North Arcot	4,654	1,535	3	2,569,157	1,802	48,532	30	31,99,151	2,011	..	..
15 South Arcot	4,204	2,503	2	2,776,767	1,392	92,200	46	40,83,454	1,665	..	..
16 Salem	7,051	2,514	3	3,377,761	1,344	106,038	42	41,75,662	2,047	..	..
17 Tiruchirappalli	5,514	2,508	2	2,943,852	1,170	154,730	61	43,29,971	1,723	..	..
18 Tanjore,	3,740	2,798	1	2,982,670	1,066	129,352	46	50,04,446	1,789	..	..
19 Madurai	4,810	1,916	2	2,891,817	1,509	45,853	24	41,14,780	2,148	..	..
20 Ramanathapuram	4,849	1,456	3	2,080,519	1,400	37,455	25	44,89,244	3,023	..	..
21 Tirunelveli	7,090	1,491	3	2,445,967	1,640	7,457	5	32,00,451	2,47	..	..
22 Coimbatore	4,343	1,491	3	3,238,704	920	17,010	5	62,01,263	1,786	..	..
23 Nilgiris	844	597	1	311,729	522	2,72	4	8,51,095	1,426	..	..
24 Malabar	5,844	1,986	3	4,755,342	2,393	48,772	24	64,10,972	3,325	..	..
25 South Kanara	4,044	1,467	3	1,748,991	1,192	1,720	1	30,89,710	2,161	..	..
26 Tran-port and Machinery Division.	..	..	..	..	..	..	..	..	..	..	..
Total	127,764	41,488	3	56,952,332	1,373	1,531,431	36	9,80,63,968	2,330	..	..
										5,53,59,241	1,038

NOTE.—1. Figures in column (7) include motor vehicles and all other types of vehicles, viz., bullock-carts, etc.

2. Figures in column (12) were adopted from the statistics furnished by the Board of Revenue, Madras Residuary State; figures for Andhra area are not available.

3. Figures in columns (3) and (6) were adopted from the "District Census Hand-book, 1951" of districts published by the Superintendent, Census Operations, Madras.

4. Number of vehicles in respect of Guntur, Nellore, Kurnool, Bellary were adopted from the report for 1951-1952 while no such figures for Chingleput, Anantapur and Chittoor were available.

* Particulars are not available.

ANNEXURE 31.

Statement showing the numerical strength of employees in the department
as on 31st March 1953.

Serial number and name of circle and division.	Number of employees in each category.					Plant operators.	Workshops.	Petty supervisors.	Other work-charged establishments.	Total.
	Administrative.	Engineering.	Ministerial.	Inferior.	Menials paid from contingencies.					
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
I Circle.										
1 Circle Office	1	10	20	7	3	..	..	..	..	41
2 Guntur, South	..	19	32	22	8	15	..	62	14	172
3 Guntur, North	..	20	30	19	8	29	..	54	246	406
4 Krishna	..	35	44	34	18	71	..	231	476	909
5 West Godavari	..	35	25	36	20	88	..	153	432	789
6 Rajahmundry	..	33	24	38	15	50	..	88	241	529
7 East Godavari	..	24	32	21	8	30	..	88	136	339
8 Visakhapatnam South	..	29	36	28	16	..	..	103	392	519
9 Visakhapatnam North	..	21	15	36	13	25	..	98	369	577
10 Anakapalli, Special	..	14	11	14	6	15	..	20	8	88
11 Godavari Bridges Division	..	12	9	8	4	16	..	9	2	62
II Circle.										
12 Circle Office	..	5	15	3	..	..	..	..	..	23
13 Anantapur	..	19	19	38	13	30	..	73	330	522
14 Bellary	..	20	32	24	16	36	..	72	363	583
15 Chingleput	..	40	53	34	11	45	..	164	834	1,181
16 Chittoor	..	34	35	35	5	59	..	156	355	1,179
17 Cuddapah	..	30	24	33	17	25	..	96	300	..
18 Kurnool	..	26	34	26	7	56	..	100	540	789
19 Nellore	..	31	39	27	14	50	..	125	561	847
20 North Arcot	..	31	42	31	11	46	..	190	576	927
21 Pennar Bridge Division	..	5	6	4	6	6	..	17	..	44
22 Transport and Machinery Division*	..	15	22	10	2	99	102	11	39	300
23 Designs Office	..	7	3	4	1	..	..	..	..	15
III Circle.										
24 Circle Office	1	8	18	7	3	..	..	..	..	37
25 South Arcot	..	29	55	35	14	1	1	167	567	869
26 Tanjore, East	..	22	34	24	8	25	..	98	300	511
27 Tanjore, West	..	18	39	24	6	44	..	140	588	859
28 Tiruchirappalli	..	43	51	52	17	66	16	143	897	1,285
29 Madurai	..	26	46	38	6	83	..	160	620	979
30 Ramanathapuram	..	34	43	35	18	86	..	171	946	1,333
31 Tirunelveli	..	24	34	26	12	50	..	126	708	980
32 Coleroon Bridge	..	5	8	4	2	..	..	7	5	31

Statement showing the numerical strength of employees in the department
as on 31st March 1953—cont.

Serial number and name of circle and division.	Number of employees in each category.								Other work-charged establishments.	Total.
	Administrative.	Engineering.	Ministerial.	Inferior.	Menials paid from contingencies.	Plant operators.	Workshops.	Petty supervisors.		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
IV Circle.										
33 Circle Office	1	8	18	7	3	..	..	..	..	37
34 Bharathapuzha	..	6	10	5	2	1	..	6	5	35
35 Coimbatore, North	..	26	39	29	9	28	1	98	538	768
36 Coimbatore, South	..	26	27	23	9	55	..	95	317	557
37 Malabar, North	..	29	29	24	9	33	1	90	230	445
38 Malabar, South	..	22	32	11	8	62	..	92	..	227
39 Salem, North	..	14	37	21	15	34	..	100	588	809
40 Salem, South	..	21	30	23	7	35	1	104	500	721
41 South Kanara	..	26	38	29	11	41	..	73	353	571
42 The Nilgiris	..	12	19	13	1	2	..	37	196	280
43 Chief Engineer's Office	1	33	89	25	..	..	..	..	..	143
Total	4	947	1,298	987	382	1,444	122	3,622	14,042	22,848

NOTE.—(a) Figures in column (4) include all technical personnel from Divisional Engineers (Highways) down to tracers.

(b) Column (10) "Petty supervisors" represents maistries.

(c) Column (11) "Other work-charged establishments" are mainly gang coolies.

ANNEXURE 32.

District Statistics for the year 1952-53.

Serial number and name of district.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
		sq. miles.	Population as per 1951 census.	Number of vehicles.	Number of divisions.	Number of subdivisions.	Number of sections.	Number of villages less than 500 population.	Number of villages and towns more than 500 population.	Number of panchayats (major).	Number of municipalities.	Number of Aikas and centres under Pirka Development.	Length of Government roads as on 31st March 1953.	Length of district Board roads on 31st March 1953.
1 Visakhapatnam, North	..	3,902	2,123,136	318	1	3	14	1,806	1,262	12	2	4	528	391
2 Visakhapatnam, South	..	5,201	2,072,993	8,094	2	9	25	2,221	998	7	4	4	560	430
3 East Godavari	..	5,768	2,414,803	117,941	3	8	35	1,054	782	14	4	4	727	919
4 West Godavari	..	2,988	1,697,727	405	1	7	27	1,73	736	17	3	5	512	580
5 Krishna	..	3,499	1,779,434	11,854	1	8	25	189	805	9	3	4	464	920
6 Gunur	..	5,795	2,549,996	55,817	2	6	29	74	878	20	5	5	685	920
7 Nellore	..	7,942	1,795,632	574,616	2	5	25	624	949	11	1	4	609	985
8 Kurnool	..	7,836	1,270,843	66,785	1	3	17	176	677	12	2	6	663	608
9 Bellary	..	5,872	1,240,988	1,230	1	4	18	..	..	..	..	4	557	612
10 Anantapur	..	6,705	1,361,556	..	1	4	18	190	668	10	4	4	571	807
11 Cuddapah	..	5,923	1,161,731	8,010	1	6	13	283	584	7	2	4	432	626
12 Chingleput	..	3,103	3,269,675	..	1	5	29	906	1,031	16	2	4	658	1,068
13 Chittoor	..	5,931	1,810,377	..	1	5	16	902	1,019	12	2	4	734	1,009
14 North Arcot	..	4,654	2,859,157	48,532	1	5	21	397	1,430	14	7	4	656	929
15 South Arcot	..	4,204	2,776,767	92,200	1	6	23	560	1,702	14	4	5	580	1,435
16 Tiruchirappalli	..	5,514	2,943,882	154,730	1	6	41	334	1,179	23	4	4	771	1,740
17 Tanjore	..	3,710	2,882,670	129,852	3	6	32	774	1,506	23	6	4	692	2,106
18 Madurai	..	4,910	2,891,817	45,853	1	5	32	242	966	26	6	5	464	1,022
19 Ramanathapuram	..	4,849	2,030,519	37,455	1	6	22	1,854	966	26	6	5	464	1,022
20 Tirunelveli	..	4,343	2,445,967	7,457	1	5	17	189	829	37	5	6	461	1,080
21 Salem	..	7,051	3,371,769	106,038	2	8	26	435	1,370	16	2	6	813	1,695
22 Coimbatore	..	7,090	3,293,204	17,010	2	8	41	104	914	14	7	5	1,028	2,552
23 The Nilgiris	..	984	311,729	2,762	1	1	7	5	45	1	2	4	204	393
24 Malabar	..	5,844	4,758,342	48,772	3	7	36	217	1,292	9	5	5	965	1,023
25 South Kanara	..	4,044	1,748,991	1,720	1	6	19	24	618	6	2	4	689	778
Total	..	127,692	57,013,465	1,531,431	36	139	608	13,711	23,100	350	91	115	15,050	25,838

NOTE.—(1) Figures in columns (2), (3), (4), (5), (6), (7), (8), (9), (10), and (11) were adopted from the District Census Hand-book, 1951 published by the Superintendent, Census Operations.
 (2) Figures in column (4) include motor vehicles and all other types of vehicles, viz., bullock-carts, etc.
 (3) Number of vehicles shown against Gunur, Nellore, Kurnool and Bellary were adopted from the report for the year 1951-52 while the figures for Chingleput, Anantapur and Cuddapah districts were not available.
 (4) "Land Revenue" in columns (21) and (22) in respect of Andhra Districts are not available.

Serial number and name of district.	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)
	Total length of all roads.	Length of National Highways.	Length of Provincial Highways.	Length of Major district roads (Government, and district board).	Length of other district roads.	Length of village roads.	Revenue of the district.	Land cess payable to district board.	Minimum allotment for Government roads.	Average rate per mile.	Minimum allotment for district roads.	Average rate per mile.
1 Visakhapatnam, North	919	134	38	450	144	153	..	..	19,14,455	2,074	..	..
2 Visakhapatnam, South	989	132	37	474	100	277	..	..	17,46,048	1,800	..	..
3 East Godavari	1,068	132	37	732	446	206	..	..	30,01,718	1,950	..	..
4 West Godavari	1,382	47	47	539	149	310	..	..	18,40,978	1,637	..	..
5 Krishna	1,354	94	78	450	209	553	..	..	30,24,898	2,300	..	..
6 Gunur	1,695	96	103	862	165	371	..	..	30,35,168	1,947	..	..
7 Nellore	1,594	136	102	673	337	346	..	..	14,84,269	1,057	..	..
8 Kurnool	1,271	54	321	538	306	133	..	..	19,44,741	1,547	..	..
9 Bellary	1,165	106	253	613	197	350	..	..	16,08,489	1,376	..	..
10 Anantapur	1,378	106	161	552	245	91	..	..	15,51,115	1,191	..	..
11 Cuddapah	1,058	133	121	552	408	733	..	4,33,253	21,30,456	1,342	..	..
12 Chingleput	1,743	133	121	588	481	550	..	..	17,04,126	977	..	..
13 Chittoor	1,595	104	73	672	457	944	..	..	16,33,846	974	..	..
14 North Arcot	1,995	86	90	607	499	648	..	..	19,55,492	964	..	..
15 South Arcot	2,514	130	190	691	546	957	..	..	13,04,431	559	..	..
16 Tiruchirappalli	2,798	110	101	957	610	1,100	..	..	28,78,423	1,043	..	..
17 Tanjore	1,916	110	67	724	158	587	..	..	17,22,078	950	..	..
18 Madurai	1,486	95	71	563	302	450	..	..	15,69,698	1,159	..	..
19 Ramanathapuram	1,491	85	99	755	139	423	..	..	11,63,219	1,118	..	..
20 Tirunelveli	2,508	203	62	955	690	537	..	..	17,25,072	698	..	..
21 Salem	3,578	77	195	1,201	618	1,450	..	..	37,16,730	1,046	..	..
22 Coimbatore	1,697	42	104	92	52	396	..	..	5,90,191	995	..	..
23 The Nilgiris	1,983	..	335	818	57	396	..	..	42,87,415	2,157	..	..
24 Malabar	1,467	..	274	505	283	405	..	..	14,56,352	993	..	..
25 South Kanara	..	..	..	..	..	..	..	..	..	..	..	..
Total	41,488	2,002	3,154	16,070	8,112	12,150	5,33,59,241	84,52,510	5,03,11,688	1,240	..	..

* 2,154 miles include 9 miles of Provincial Highways under Cuddapah and South Kanara District Boards which are shown on District Board side in Annexure 4.

* Particulars are not available.

ANNEXURE 33.

Districtwise Cost Index.

Serial number and name of division.	(1)	Government.			Maintenance.			District Board.		
		Number of works let on contract.	Total Estimate cost.	Total contract value.	Percentage (+) or (-).	Number of works let on contract.	Total Estimate cost.	Total contract value.	Percentage (+) or (-).	
		(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
<i>I Circle.</i>										
1 Guntur, South	..	..	RS.	RS.	..	..	RS.	RS.	..	..
2 Guntur, North	..	161	14,00,000	13,77,800	- 2.1	..	..	..	..	..
3 Krishna	..	63	9,69,634	8,67,126	- 11.0	..	..	..	..	..
4 West Godavari	..	126	27,37,000	17,59,000	- 35.73	296	3,70,300	3,53,000	- 4.58	..
5 Rajahmundry	..	197	83,96,437	31,09,536	- 8.49	8	81,302	83,741	+ 1.69	..
6 East Godavari	..	76	7,32,261	6,80,349	- 7.1	35	1,85,380	1,87,502	+ 1.14	..
7 Visakhapatnam, South	..	96	14,47,800	14,30,000	- 1.23	99	8,35,150	8,39,610	- 5.13	..
8 Visakhapatnam, North	..	69	10,3,529	8,44,610	- 18.05	177	5,26,952	4,52,651	- 14.1	..
9 Anakapalle Special	..	66	10,89,508	11,21,219	+ 29.0	51	3,02,950	9,72,020	+ 2.9	..
10 Godavari Bridges Special	..	7	1,55,000	1,10,120	- 6.6	..	..	..	..	..
Total	..	861	1,29,58,169	1,12,99,580	- 12.86	666	24,12,034	22,83,424	- 5.12	..
<i>II Circle.</i>										
11 Anantapur	..	106	14,56,703	9,68,925	- 12.5	106	3,26,919	2,98,801	- 19.75	..
12 Bellary	..	..	..	..	..	..	..	..	..	..
13 Chingleput	..	150	25,49,400	19,18,560	- 6.39	131	6,03,019	5,62,587	- 6.70	..
14 Chittoor	..	75	5,77,884	4,43,207	- 23.3	43	2,21,103	1,85,724	- 16.02	..
15 Cuddapah	..	130	11,45,205	10,60,375	- 8.0	291	11,84,889	10,39,376	- 14.0	..
16 Kurnool	..	93	17,56,189	14,60,231	- 11.72	89	5,10,350	4,34,913	- 14.77	..
17 Nellore	..	141	24,08,536	19,22,829	- 20.0	128	6,38,786	4,70,090	- 25.00	..
18 North Arcot	..	151	19,06,200	12,02,493	- 31.67	233	7,05,740	5,23,798	- 25.76	..
19 Pennar Bridge division	..	..	..	..	..	..	..	..	..	..
20 Transport and Machinery division	..	..	..	..	..	..	..	..	..	..
Total	..	846	1,12,95,037	89,66,940	- 11.85	1,021	41,90,866	35,24,289	- 15.89	..

III Circle.

21 South Arcot	..	214	15,91,000	14,98,338	- 5.98	302	5,94,700	5,24,582	- 11.8	..
22 Tanjore, East	..	112	9,82,709	9,52,237	- 3.2	234	8,40,884	7,59,485	- 11.9	..
23 Tanjore, West	..	71	10,39,181	8,97,150	- 15.6	78	6,92,200	6,57,859	- 5.0	..
24 Tiruchirappalli	..	233	10,85,371	9,69,539	- 10.7	408	13,48,100	12,21,210	- 9.4	..
25 Madurai	..	224	16,13,500	15,37,066	- 4.0	220	10,00,000	9,34,000	- 6.6	..
26 Ramanathapuram	..	81	15,46,490	14,45,985	- 6.5	148	8,94,470	8,44,866	- 5.0	..
27 Tirunelveli	..	75	11,61,550	11,24,750	- 3.5	203	11,88,000	11,28,626	- 5.0	..
28 Coleroon Bridge division	..	..	..	..	..	..	..	..	..	..
Total	..	1,010	90,25,801	84,25,045	- 6.83	1,597	65,87,324	60,70,628	- 7.57	..

IV Circle.

29 Bharathapuzha	..	..	..	..	..	..	..	..	..	..
30 Coimbatore, North	..	72	9,57,073	8,42,473	- 12.0	268	6,38,245	5,75,317	- 15.5	..
31 Coimbatore, South	..	157	13,04,595	11,26,721	- 9.5	198	6,71,235	5,67,696	- 20.0	..
32 Malabar, North	..	103	11,62,833	11,82,086	+ 2.6	130	3,65,264	3,61,805	- 0.94	..
33 Malabar, South	..	108	14,29,987	13,09,337	- 8.4	61	1,97,135	1,88,058	- 7.0	..
34 Salem, North	..	103	7,35,403	7,17,193	- 2.48	215	3,82,815	3,31,040	- 13.68	..
35 Salem, South	..	93	7,15,240	6,52,267	- 9.0	275	8,98,218	7,80,740	- 14.0	..
36 South Kanara	..	143	19,19,360	21,29,226	+ 10.8	140	3,21,230	3,19,233	- 0.62	..
37 The Nilgiris	..	75	2,65,164	2,75,853	+ 4.03	90	2,22,218	2,23,251	+ 0.50	..
Total	..	854	84,89,105	81,85,156	- 3.58	1,378	36,96,360	33,42,140	- 9.58	..
Grand total	..	3,571	4,17,66,112	3,68,76,401	- 11.71	4,662	1,68,66,684	1,52,25,481	- 9.73	..

Districtuar Cost Index—cont.

Serial number and name of division.	Original works.				District Board.			
	Government.		Percentage (+) or (-).		Total estimate cost.		Total contract value.	
	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
<i>I Circle.</i>								
1 Guntur, South	..	RS. ..	RS. ..	RS. ..	..	RS. ..	RS. ..	RS. ..
2 Guntur, North	..	1,79,807	1,51,511	- 18.6	..	44,768	45,132	- 0.81
3 Krishna ..	..	..	..	..	3	..	..	..
4 West Godavari	..	..	..	..	..	..	..	..
5 Rajahmundry	5	24,579	26,322	+ 7.09	7	4,76,287	5,31,219	+ 11.50
6 East Godavari	3	19,222	20,394	+ 6.1	11	3,65,151	2,80,881	- 23.6
7 Visakhapatnam, South	..	..	..	..	12	2,76,450	2,74,782	- 0.6
8 Visakhapatnam, North	6	1,73,728	1,64,283	- 8.43	9	1,02,893	1,06,748	+ 4.0
9 Anakapalle Special	..	..	..	..	1	26,650	24,114	- 8.39
10 Godavari Bridges Special	40	7,93,000	8,58,865	+ 8.3	..	..	..	..
Total ..	66	11,90,886	12,21,376	+ 2.52	43	12,92,199	12,42,876	- 3.81
<i>II Circle.</i>								
11 Anantapur	..	2,76,700	1,79,547	- 3.8	..	..	..	..
12 Bellary ..	2	..	..	..	..	..	..	..
13 Chingleput	..	3,01,906	3,08,045	+ 20.3	20	3,98,997	3,91,366	- 1.91
14 Chittoor	7	84,630	78,643	- 7.6	1	6,094	6,048	- 0.76
15 Cuddapah	17	3,24,800	3,24,375	- 0.25	21	2,20,500	1,95,142	- 11.5
16 Kurnool...	5	72,350	65,377	- 9.63	12	4,46,865	4,63,007	+ 3.61
17 Nellore ..	2	41,000	34,905	- 15.0	13	2,14,610	1,86,617	- 15.0
18 North Arcot	3	93,600	40,707	- 45.83	60	6,95,920	5,82,313	- 23.5
19 Pennar Bridge division	4	30,337	30,337	..	..	..	..	..
20 Transport and Machinery division	..	..	..	..	..	..	..	..
Total ..	48	12,25,823	10,61,936	- 13.33	127	19,82,986	17,78,493	- 10.31
<i>III Circle.</i>								
21 South Arcot	..	27,610	27,405	..	16	2,27,827	2,14,840	- 5.7
22 Tanjore, East	4	..	..	..	10	10,972	9,218	- 19.1
23 Tanjore, West	..	..	..	..	10	49,903	49,767	- 0.3
24 Tiruchirappalli	..	..	2,05,624	- 4.7	13	30,000	21,905	- 2.7
25 Madurai	3	2,15,820	45,900	..	8	1,28,806	1,27,647	- 9.0
26 Ramanathapuram	3	45,900	20,086	- 11.0	7	1,86,046	1,87,678	- 21.0
27 Tirunelveli	1	22,586	11,521	- 41.2	85	3,52,738	3,39,257	- 4.0
28 Coimbatore Bridge division	2	19,800	2,503	..	..	..	..	..
Total ..	14	3,34,016	3,12,986	- 6.29	154	9,86,292	9,00,312	- 8.73
<i>IV Circle.</i>								
29 Bharathapuzha	..	..	..	..	..	..	..	..
30 Coimbatore, North	..	65,009	62,274	- 4.2	..	..	..	..
31 Coimbatore, South	19	3,12,000	2,78,513	- 9.0	62	3,51,373	2,88,611	- 24.5
32 Malabar, North	3	36,354	39,068	+ 7.16	94	6,39,712	5,81,712	- 10.0
33 Malabar, South	6	..	..	..	19	2,85,717	2,81,493	- 1.5
34 Salem, North	..	..	..	..	24	2,17,121	2,12,129	- 2.3
35 Salem, South	..	..	..	..	..	..	..	..
36 South Kanara	..	2,000	2,000	..	67	2,53,140	2,17,611	- 14.0 (Rebate)
17 The Nilgiris	11	72,450	85,208	+ 17.5	9	82,800	75,808	- 9.3
Total ..	8	41,826	41,826	..	14	1,58,293	1,72,167	+ 8.7
Grand total ..	39	5,29,639	5,08,887	- 3.91	289	20,18,165	18,39,531	- 9.34
	167	38,79,314	36,02,958	+ 6.20	613	62,79,642	57,51,212	- 8.41



PUBLIC WORKS DEPARTMENT

(Highways)

G.O. No. 2161, dated 1st June 1955

Administration Report—Highways Department—1952-53—Recorded.

--HAD--the following paper :--

From the Chief Engineer (Highways), dated 24th May 1954,
No. 22051-B-1/53-20.

Order—No. 2161, P.W. (Highways), dated 1st June 1955.

Recorded.

(By order of the Governor)

R. M. SUNDARAM,
Secretary to Government.

To the Chief Engineer (Highways).
„ the Controller of Stationery and Printing.
„ all Collectors (except Collector of Madras).
Copy to Health, Education and Local Administration Department.

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