

Administration report of the
Public works department. in the
state of Bombay.
For the year 1940/41,

CONTENTS

I.—DIRECTION .. .. .	..
II.—ADMINISTRATIVE MEASURES .. .. .	..
III.—TERRITORIAL CHANGES .. .. .	..
IV.—DETAILED REVIEW .. .. .	..
Important works carried out under the following heads :—	
A—CIVIL BUILDINGS	
Central Services—Archæological Works	2-3
Provincial Services—Land Revenue, Excise, Forest, Registration, General Administration, Residences for Heads of Provinces, Provincial Councils, Residences, Secretariat and Head Quarters, Establishment, Administration of Justice, Jails and Convict Settlements, Police, Educational, Medical, Agriculture, Stationery and Printing, Civil Works, Public Health and Miscellaneous Departments	3-9
Government Central Stores, Workshop and Training Centre, Dapuri	9-10
B—ELECTRICAL	
Electric Licences—Electric Duty, Electrical Works	10-12
C—COMMUNICATIONS	
(1) Communications financed from ordinary Revenues	13-14
(2) Communications financed from Petrol Tax Fund	14-19
(3) Communications financed from Provincial Road Fund	19-20
(4) Deposit Contribution Works	20-21
(5) Arboriculture	21
(6) Scarcity Works	21
D—MISCELLANEOUS.	
Public Health, Water Supply and Drainage Works, etc.	21-22
E—TECHNICAL PAPERS	22
F—RAILWAYS	22-23
G—DEVELOPMENT SCHEMES	23-24
APPENDICES.	
I—Statement showing Expenditure on Civil Works	25-26
II—Statement of roads not within Municipal Boundaries maintained by Public Works and Local Authorities	27-29
III—Statement of surfaced roads of various classes and motorable earth roads	30-31
IV—Statement showing Expenditure on Provincial Buildings and Roads in the Province of Bombay, 1921-22 to 1940-41	32-38
V—Statement showing Expenditure on District Local Board Roads in the Province of Bombay (original works and repairs) from 1921-22 to 1940-41	39-42
VI—Statement showing Expenditure on Establishment in the Roads and Buildings and Irrigation Branches of the Public Works Department from 1921-22 to 1940-41 and percentage on the total outlay on works and repairs during the period in both the branches	43-48
VII—Statement showing the programme of Road Development Works in the Province of Bombay since the institution of the Petrol Tax Fund to end of the year 1940-41 together with expenditure to the end of that year	49-52
VIII—Statement showing Expenditure on works and repairs under the Provincial Road Fund	53-54
IX—List of members of the Board of Communications as on 31st March 1941.	55
X—List of members of the Standing Advisory Committee for the Back Bay Reclamation Scheme as on 31st March 1941	56

LIST OF ILLUSTRATIONS.

	<i>Facing page</i>
Public Works Department Division Map	At the beginning
Two diagrams showing Public Works Expenditure during the period from 1889-90 to 1940-41	26
Diagram showing expenditure on Irrigation Works in the Public Works Department from Loan Funds, Revenue and Contribution during the period from 1922-23 to 1940-41	26
Diagram showing expenditure on Provincial Buildings and Roads in the Province of Bombay during the period from 1921-22 to 1940-41	38
Diagram showing expenditure on District Local Board roads in the Province of Bombay (Original Works and Repairs) during the period from 1921-22 to 1940-41	42
Diagram showing expenditure on Establishment in the Roads and Buildings and Irrigation Branches of the Public Works Department and Percentages to the total outlay on Works and Repairs during the period from 1921-22 to 1940-41	48
Diagram showing the progress of Electrical Development in the Province of Bombay—(Units sold)	At the end,
Photographs—	
Watrak River Pitching at Kaira and	13
Macchin River Bridge	13
Bridge No. 182 in Mile 115/7 of the Karwar-Bellary- Road	16
Bridge over the Kundalika River	18

PROVINCE OF BOMBAY

PUBLIC WORKS DEPARTMENT

DIVISION MAP

1940-41

Scale - 105 Miles to 1 Inch

A R A B I A N
S E A

SIND PROVINCE

A Nasik Irrigation
B Ahmednagar
C Poona Irrigation
and Research.
D Nira Canals.

DECCAN IRRIGATION.

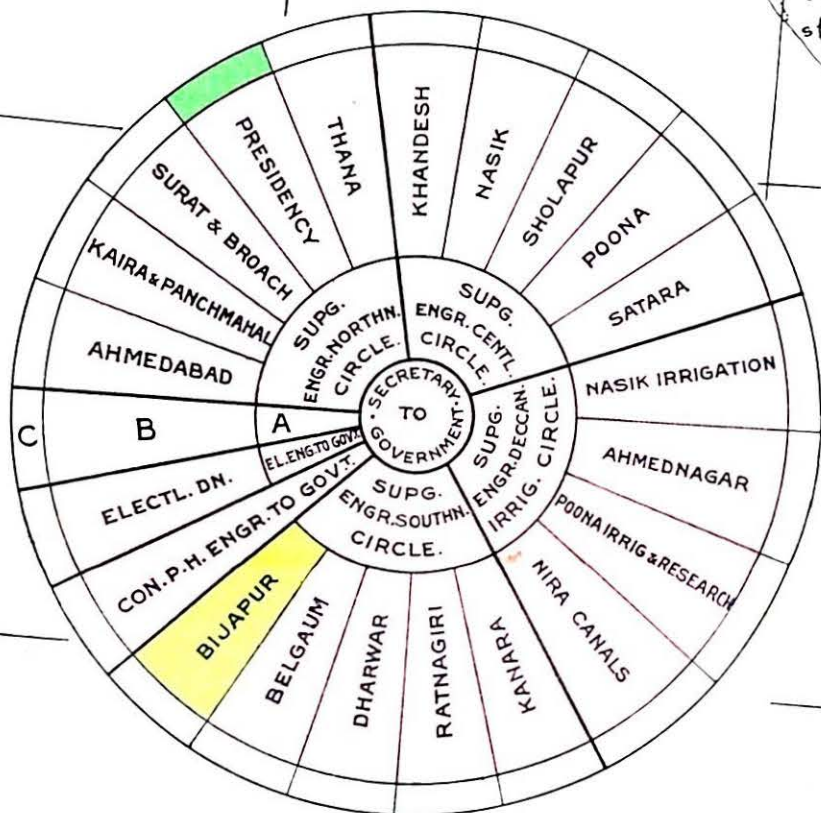
Jurisdiction of
Con P.H. Engineer to Govt. - Whole Province.
of Electrical Engineer - Do

CENTRAL INDIA
AGENCY

CENTRAL
PROVINCES

HYDERABAD

MYSORE



Secretary ----- is a Chief Engineer.
Administrative Zone 'A' ----- }
Executive Division Zone 'B' ----- } have Permanent Circles & Divisions... Pink.
Zone 'C' shows nature of Executive Division in Zone 'B' ----- } as follows - Temporary Division ----- Yellow.
Road & Buildings Divisions ----- Green.
Mixed & Miscellaneous Divisions ----- White.

DIAGRAM SHOWING PUBLIC WORKS DEPARTMENT ADMINISTRATION

Note - The above diagram does not include the four temporary divisions for the field investigations, survey and preparation of schemes for the village water supply, which were closed during the year.

PUBLIC WORKS DEPARTMENT.

Province of Bombay.

ADMINISTRATION REPORT WITH A DETAILED REVIEW OF THE CIVIL WORKS FOR THE YEAR 1940-41.

I.—DIRECTION.

During the year under report the following officers continued to hold the posts shown :—

Mr. C. E. Aitken, C.I.E., B.Sc. Chief Engineer and Secretary to
(Edin.), I.S.E. Government.

Mr. R. H. Hammett, M.Inst. Deputy Secretary to Govern-
C.E., I.S.E. ment in charge Roads, Build-
ings and Electricity.

Mr. U. N. Mahida, B.E., I.S.E. Deputy Secretary to Govern-
ment in charge Irrigation and
Railways and Public Health
Works.

Mr. P. F. Dias, J.P. .. Assistant Secretary to Govern-
ment.

II.—ADMINISTRATIVE MEASURES.

Government issued orders in connection with the guarantee for direct appointments to the Bombay Service of Engineers, Class I and Class II, and the Bombay Subordinate Engineering Service, to students passing out of the College of Engineering, Poona.

In respect of appointments to the Bombay Service of Engineers, Class I and Class II, the guarantee is given to students who enter the College in 1940 and onwards and who will graduate in 1943 and onwards. Subject to certain terms and conditions the guarantee provides for—

(a) one appointment to the Bombay Service of Engineers, Class I, annually with effect from the year 1943 with one additional appointment in 1945 and every third year thereafter; and

(b) two appointments to the Bombay Service of Engineers, Class II, annually with effect from the year 1943 with one additional appointment in 1944 and every third year thereafter.

The guarantee given in respect of appointments to the Bombay Subordinate Engineering Service provides for three appointments annually to that service with effect from the year 1941 to be made from students passing the Diploma Course in Civil Engineering at the College of Engineering, Poona, subject to certain conditions.

The above guarantees have been given subject to such future alterations as may be considered necessary by Government from time to time.

III.—TERRITORIAL CHANGES.

The four Public Works Department Divisions, which were specially created last year for field investigations, survey and preparation of schemes for the provision of adequate drinking water in villages where such supplies are scarce, were closed during the year.

The continuance of the temporary Bijapur Division was sanctioned for a further period of 3 years from the 1st March 1940.

The following temporary sub-divisions were continued during the year :—

Dohad Sub-division in the Kaira and Panch Mahals Division ;

Hubli Irrigation Sub-division in the Dharwar Division ; and

Bijapur Tank Sub-division in the Bijapur Division.

A temporary sub-division, with headquarters at Jhalod, was opened in the Kaira and Panch Mahals Division on the 23rd April 1940 in connection with scarcity works in the Jhalod Mahal and was closed on the 27th August 1940.

The Minor Tank Sub-division in the Poona Division was abolished with effect from the 11th September 1940.

IV.—DETAILED REVIEW.

A.—CIVIL WORKS.

(i) *Central.*

The administrative control of the Central Works in this Province, with the exception of Archæological works, Trigonometrical Stations and the Primary Protected Bench Marks, was transferred to the Central Public Works Department with effect from the 1st April 1940.

Archaeological Works.

No important works under this head were carried out during the year but a sum of Rs. 31,312 was spent on repairs and maintenance.

(ii) Provincial.

					Rs.
<i>Land Revenue—</i>					
Works	..	..	..	..	1,438
Repairs	..	..	..	..	6,018
					<hr/> 7,456
<i>Excise—</i>					
Works	..	..	..	..	10,660
Repairs	..	..	..	..	19,864
					<hr/> 30,524
<i>Forest—</i>					
Works	..	..	..	..	3,016
Repairs	..	..	..	..	10,535
					<hr/> 13,551
<i>Registration—</i>					
Works	..	..	..	..	155
Repairs	..	..	..	..	173
					<hr/> 328
<i>General Administration—</i>					
<i>(a) Residences of Heads of Provinces—</i>					
Works	..	..	..	..	31,816
Repairs	..	..	..	..	1,99,393
					<hr/> 2,31,209
<i>(b) Provincial Legislatures—</i>					
Works	..	..	..	..	284
Repairs	..	..	..	..	12,444
					<hr/> 12,728
<i>(c) Secretariat and Head Quarters Establishment—</i>					
Works	..	..	..	..	1,692
Repairs	..	..	..	..	14,856
					<hr/> 16,548

	Rs.
<i>(d) Commissioners and District Officers—</i>	
Works	89,666
Repairs	1,31,891
	<u>2,21,557</u>

An expenditure of Rs. 43,818 on account of payment of compensation for the resumption of the Travellers' Bungalow from the District Local Board, Ahmedabad, for the purpose of accommodating certain Government offices there and of Rs. 10,285 on the work of certain additions and alterations to the Historical Museum at Satara (now converted into Revenue Offices) was incurred during the year under report under this head.

	Rs.
<i>Administration of Justice—</i>	
Works	1,46,965
Repairs	63,774
	<u>2,10,739</u>

The work of construction of the four storied structure containing the Barristers' Chambers, Offices, etc., in connection with the extension of the High Court Buildings, Bombay, mentioned in the last report, was in the final stage of completion during the period under review. The total expenditure on the work of superstructure from the date of commencement in March 1940 to the end of the period under report was Rs. 1,29,415. The construction of garages adjoining the new extension to accommodate 5 cars in each started in August 1940 was also completed during the year at a cost of Rs. 6,104. The question of making additions and alterations to the existing building by providing additional lavatories was under the consideration of the High Court authorities. The total expenditure on the whole scheme was Rs. 1,58,011.

	Rs.
<i>Jails and Convict Settlements—</i>	
Works	49,236
Repairs	56,114
	<u>1,05,350</u>

The construction of the new Sub-Jail at Nadiad in the Kaira District referred to in the last report was the only important work under execution during the year. The total outlay on this work which consisted of bathing platforms, grinding and kitchen rooms, fort-wall, water storage tanks, latrine blocks, roads and gutters, water supply arrangement, provision of (i) a walling of asbestos sheets,

(ii) expanded metal Metting to the windows, (iii) cupboards and (iv) deepening of wells, etc., was Rs. 65,428 inclusive of electric installation. This work was completed and handed over to the administrative department in February 1941.

<i>Police—</i>	Rs.
Works .. .. .	.. 6,04,654
Repairs .. .. .	.. 2,34,914
	<u>8,39,568</u>

The following works in connection with the scheme for "Constructing quarters for Police officers and men and buildings for Police stations, etc., in Greater Bombay"; were in progress during the year :—

- (1) additions and alterations to the Police Station at Bandra,
- (2) Police accommodation scheme at Vile Parle,
- (3) Police accommodation scheme at Kurla,
- (4) Police accommodation scheme at Andheri,

and

- (5) construction of quarters for 75 constables at Bandra.

Of these, the work mentioned at No. (1) which was in progress during the previous year was completed in all respects and handed over to the Police Department for occupation.

The works referred to at Nos. (2) and (3) have also been completed. The proposal to provide at these centres a compound wall, internal roads and garages for cars and lorries has since been approved by Government.

The work mentioned at No. (4) has been completed at a total cost of Rs. 1,09,084. It is proposed to provide at this centre a compound wall and gates.

The last work forms part of the general police accommodation scheme at Bandra and provides for the following items :—

- (1) two three-storied blocks of constables' quarters, one of 54 units and the other of 21 units,
- (2) sanitary arrangements for the proposed and existing structures,
- (3) an approach road in the compound for the block of constables' quarters of 21 units, and
- (4) garages for 2 motor cars.

This work was started in February 1941 and was in progress during the period under review. It is expected to be completed in August 1941.

In addition to the above, the six works noted below were also undertaken during the year and were in progress :—

(1) Construction of quarters for 4 Head Constables, I and II Grade, and 88 Constables (including Head Constables, III and IV Grade) of Gomtipur Police Station in Survey No. 95 of Sherkotda, Ahmedabad.

This Police Station is at present located in a hired building which provides accommodation for the Police Station on the ground floor and for the Sub-Inspector on the first floor. Only three men are accommodated in Government quarters, the rest living in rented ones. The present scheme provides for 4 blocks of 24 units each, 12 on the ground floor and 12 on the first floor with a kitchen, a bath-room, living room, verandah and two blocks of latrines of 12 seats each.

(2) Construction of a Police Station and Quarters for 2 Sub-Inspectors of Police— Sherkotda, Ahmedabad. This Station provides for offices of Inspectors and Sub-Inspectors on the ground floor and quarters for 2 Sub-Inspectors of Police on the first floor.

(3) Construction of a Block of a Police Station and Quarters for 2 Sub-Inspectors of Police and also quarters for 4 Head Constables (I and II Grade) and 66 Constables (including Head Constables, III and IV Grade) at Kagdapith in Survey No. 14 of Sherkotda, Ahmedabad.

An entirely new Police Station is to be opened in the area now administered by the Sherkotda Police Station so as to relieve the pressure of work. The estimate for this work provides for 3 blocks of constables' quarters accommodating 12 on the ground floor and 12 on the first floor. It also provides for a Police Station with quarters for 2 Sub-Inspectors of Police on the first floor. The site for this station has been taken from the Ahmedabad Municipality in exchange for another piece of Government land and as such it does not cost Government anything for the acquisition of the site.

(4) Construction of a Police Station and Quarters for two Police-Sub-Inspectors in the compound of the present Sherkotda Police Station on the Station Road, Ahmedabad. The present building is not suitable for modern requirements and has therefore to be dismantled and a new building erected on the same site according to the plans approved for the Police Scheme (Bombay Suburban District) with quarters for 2 Sub-Inspectors of Police on the upper storey.

(5) Construction of a Police Station for 2 Sub-Inspectors of Police, at Navrangpura, Ahmedabad.

This station is to be constructed to the North of the Ellis Bridge Police Station and near the New Shahpur Bridge. The Police Station will be located on the ground floor and the quarters on the upper floor.

(6) Construction of quarters for men of Sherkotda Police Station, Ahmedabad.

Land has been acquired for constructing quarters for Sub-Inspector, 6 Head Constables and 136 Constables of the Sherkotda Police Station, Ahmedabad, at a cost of Rs. 29,013. The construction work will be taken in hand shortly.

		Rs.
<i>Education—</i>		
Works	.. ..	.. 1,62,979
Repairs	.. ..	.. 80,362
		2,43,341

Construction up to plinth level of the new Government Law College building, Bombay, on plots Nos. 19 and 34 in Block No. I of the Back Bay Reclamation Scheme which was reported to be in progress in the previous Report was completed in March 1941 at a cost of Rs. 41,438. The work of superstructure was in progress during the year. The construction of and improvements to certain buildings for Physical Education at Kandivli mentioned in the last year's report were in progress and the Hostel for lady students and quarters for the lady superintendent were nearly completed. The work of protecting wells and pump houses were also in progress during the year.

		Rs.
<i>Medical—</i>		
Works	.. ..	.. 1,41,353
Repairs	.. ..	.. 1,64,288
		3,05,641

The following important works were carried out during the year under this head :—

(1) extension and improvements to Bai Motlibai Hospital, Bombay,

(2) construction of a new Outpatients' Department and Laboratory on the ground floor, quarters for Nurses on the first floor and quarters for medical students on the second floor in the compound of the Cama and Albles Hospitals, Bombay,

(3) extension of the N. M. Mental Hospital, Thana,

(4) construction of quarters for 48 attendants at the Central Mental Hospital, Yeravda,

(5) providing additional accommodation for patients at the Central Mental Hospital, Yeravda,

(6) construction of an annexe for the treatment of outdoor tuberculosis patients in the Civil Hospital at Belgaum ;

and

(7) Construction of two bore wells in the compound of the Mental Hospital, Dharwar.

The New Outpatients' Department building in the compound of the Cama and Albless Hospitals, referred to at No. (2) above, has been designed to be a three-storied one having stone walls, R. C. C. beams and slabs. The ground floor is proposed to be used as an Outpatients' Department and will consist of (i) waiting hall, (ii) ticket office, (iii) dispensary, (iv) consulting rooms, (v) X-Ray and Ultra-violet Rooms and (vi) Laboratories. The first floor which consists of small and big rooms and two common rooms will be used as Nurses' quarters.

The work of the ground and first floor was nearing completion and that of the second floor was in progress during the year.

<i>Public Health—</i>			Rs.
Works	..	..	21,723
Repairs	..	..	23,134
			<hr/>
			44,857

The important work carried out under this head was the construction of semi-permanent stables for horses in the compound of the Haffkine Institute, Parel, consisting of (1) a block of stables for 18 horses and (2) a shed for horses in the Paddock. The floor of this structure is of cement concrete specially constructed with a non-slip surface.

<i>Agriculture—</i>			Rs.
Works	..	..	3,477
Repairs	..	..	11,221
			<hr/>
			14,698
<i>Veterinary—</i>			
Works	..	..	1,451
Repairs	..	..	6,327
			<hr/>
			7,778
<i>Industries—</i>			
Works	..	..	12,679
Repairs	..	..	3,008
			<hr/>
			15,687

The only important work carried out under this head was the dismantlement of the old corrugated sheet structure adjoining the new building of the Tanning and Leather Working School at Khar

(Chamdevaleki Wadi) in the Thana Division, and the construction of a pucca structure to accommodate the Superintendent's office, etc. The necessary sanitary and water supply arrangements were also made.

				Rs.
<i>Civil Works—</i>				
Works	..	..	..	31,025
Repairs	..	..	..	1,78,437
				2,09,462
<i>Stationery and Printing—</i>				
Works	..	..	..	1,303
Repairs	..	..	..	13,389
				14,692
<i>Miscellaneous Departments—</i>				
Works	..	..	..	52,367
Repairs	..	..	..	7,443
				59,810

The following four works were carried out under this head during the period under review for the use of the Labour Welfare Department :—

- (1) Workers' Recreation Pavilion at Worli,
- (2) Pavilion at Naigaum,
- (3) Gymnasium at the Development Department Chawls at Naigaum, and
- (4) Gymnasium at the Development Department Chawls at DeLisle Road.

				Rs.
<i>Special Development Programme—</i>				
Works	..	..	..	4,387
<i>50—Civil Works—Miscellaneous—</i>				
Works	..	..	..	2,130
Repairs,	..	..	..	45,355
				47,485

A statement showing the expenditure on Civil Works during the period under review has been included in this report as Appendix I. The statement showing expenditure on Provincial Buildings and Roads will be found in Appendix IV to this report with an explanatory graph following the same.

Government Central Stores, Workshop and Training Centre, Dapuri.

The outturn in the Workshop during the year was Rs. 2,21,602 as against Rs. 1,27,902 of the previous year. This was the largest output

since the year 1926-27, the average for the last several years being Rs. 1,50,000. After paying all charges for establishment, repairs, interest, depreciation on buildings and machinery, etc., there was a net profit of Rs. 20,126. The working for the year was, therefore, satisfactory.

The number of work orders opened was 599 and closed was 602 as against 456 and 474 respectively for the previous year.

Out of the three apprentices who completed their 5 years' training two were employed in the workshops. In 1940 a scheme for assisting persons affected by Prohibition was started and men were taken up for training in the Workshops. Six men were sent by the Employment Officer for training for 3 years and they were paid at Rs. 20 per mensem each. They were also provided with free quarters on the premises and after the stipulated period, they will be employed in the Workshops on payment according to their merits. Government has also sanctioned a revised scheme for admission and training of apprentices stipulating new educational qualifications.

The works of a varied and urgent nature undertaken in the Workshops included the erection of a new 34 B. H. P. Engine in the Machineshop No. 2. Various other works were completed such as parts for tidal apparatus for the Director, Central Irrigation and Hydrodynamic Research Station, Poona, mooring posts, gas retort, ventilators, 36" flap valve for Surat, 4' x 4' x 4' cast iron strainer for Dharwar Water Works, work for Photozinc office, etc. Nearly all the cast iron specials for the new Paterson filters at Kirkee Water Supply were manufactured at Dapuri at a cost of Rs. 43,000.

Cost of repairs to Road Rollers carried out amounted to Rs. 56,349. 46 Road Rollers were inspected of which 36 were steam, 9 Diesel and 1 petrol.

In addition to the above 60 cast iron socket gates, 16 C. I. ordinary Dapuri type gates and 22 M. S. gates for irrigation were manufactured at Dapuri costing Rs. 22,600.

B—ELECTRICAL.

Electric Licenses.

Eight new licences were granted during the year under report for the supply of electrical energy to Karwar, Athni, Kopargaon, Pachora, Belapur Town and Belapur Road, Dhond, Nira-Lonand and Koregaon, while several additional applications were under the consideration of Government. The sanctions granted in the past under Section 28 of the Indian Electricity Act, 1910, for the supply of electrical energy to Haveri, Panchgani, Nipani and Dohad were also converted into regular licences during the year. By the end of the year under review, electricity had been introduced in 62 centres in the Province, while 11 other centres were in the process of being electrified.

Electricity Duty.

The Electricity Duty was first imposed by the Bombay Finance Act of 1932 and has continued to be in operation. The duty was enhanced in respect of certain areas by the Bombay Finance (Amendment) Acts, 1938 and 1939. The receipts from the tax amounted to Rs. 32,84,463 during the year 1940-41.

During the year under report an expenditure as detailed below was incurred under all fund heads by the Electrical Branch :—

	Rs.
(1) New works and additions to the existing installations	87,679
(2) Repairs	1,55,508
(3) Tools and Plant	11,641
	2,54,828

One hundred and seventy-six original works were carried out in all as against three hundred and forty-seven during the previous year. The number of special repair works carried out was 90 against 93 of the last year.

The important original works carried out during the year were the following :—

- (1) Providing electric installation in the cells in the D. C. Jail, Yeravda,
- (2) Providing electric installation and a pumping set in the new Sub-Jail including Jailer's Quarters, Nadiad,
- (3) Providing electric installation in the New Government Law College, Bombay,
- (4) Providing electric installation in the Hostel for the Training College for Men, Poona,
- (5) Providing A.C. supply for X-ray units at the G. T. Hospital, Bombay,
- (6) Providing electric installation in the Outpatients' Department and Quarters for Nurses and Students in the Cama and Albless Hospitals, Bombay,
- (7) Providing additions to electric installation in the Central Hospital for Mental Diseases, Yeravda,
- (8) Providing additions to electric installation in the Haffkine Institute, Parel, Bombay,

- (9) Providing additions and special repairs to electric installation in the Haffkine Institute, Parel, Bombay,
- (10) Providing electric installation in the Executive Engineer's bungalow, Dhulia,
- (11) Providing electric installation in the Industrial Training Workshop, Ahmedabad,
- (12) Providing electric installation in the Workers' Recreation Pavilion at Naigaum,
- (13) Providing electric installation in the Workers' Recreation Pavilion at Worli,
- (14) Extending the existing suction pipe lines of the Victoria Swimming Bath and the outlet pipe line, Back Bay Bath, Bombay,
- (15) Providing electric installation in the Electrical Engineering Laboratory, R. C. Technical Institute, Ahmedabad,
- (16) Providing an electric pumping plant at the Borstal School, Dharwar,
- (17) Providing electric installation in the Police Buildings in connection with the Greater Bombay Scheme, and
- (18) Extending the power supply line from Wing to Nasrapur and from Shirwal to Padegaon, Lonand and Nira.

The first stage of the rural electrification scheme was completed during the year 1939-40. The next stage of the project was the extension of the transmission lines to Nasrapur and to Padegaon, Lonand and Nira and it has been completed. Supply is now available at low and medium pressures for use in the areas of the above villages and licences have been granted to supply energy at Shirwal, Lonand and Nira. Supply is now available in all these places.

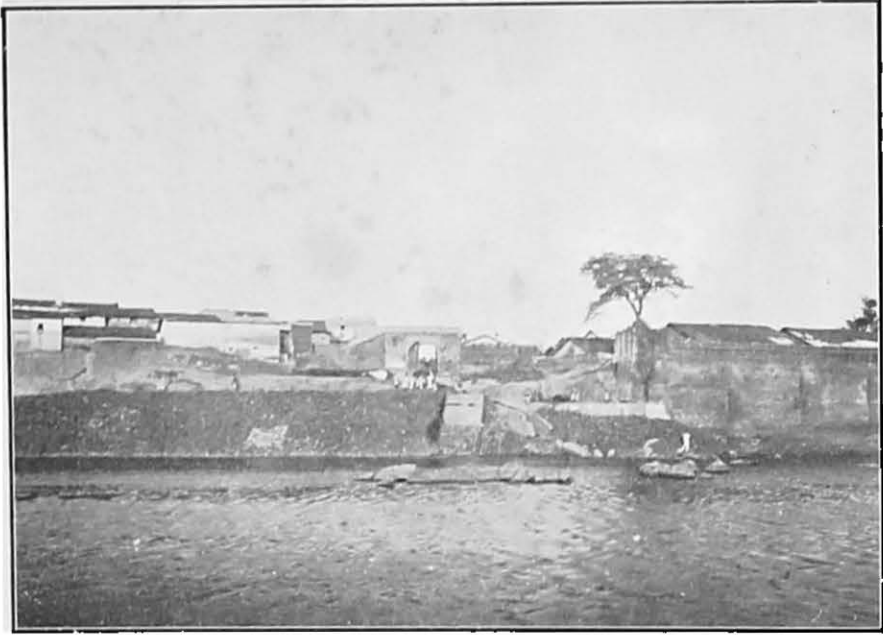
The revenue realized from the sale of electricity on the Bombay Development Scheme was Rs. 13,426 as against Rs. 13,227 of the last year, the expenditure thereon being Rs. 11,821 against Rs. 19,067 last year.

A graph showing the units of electricity sold during the year has been included in this report.

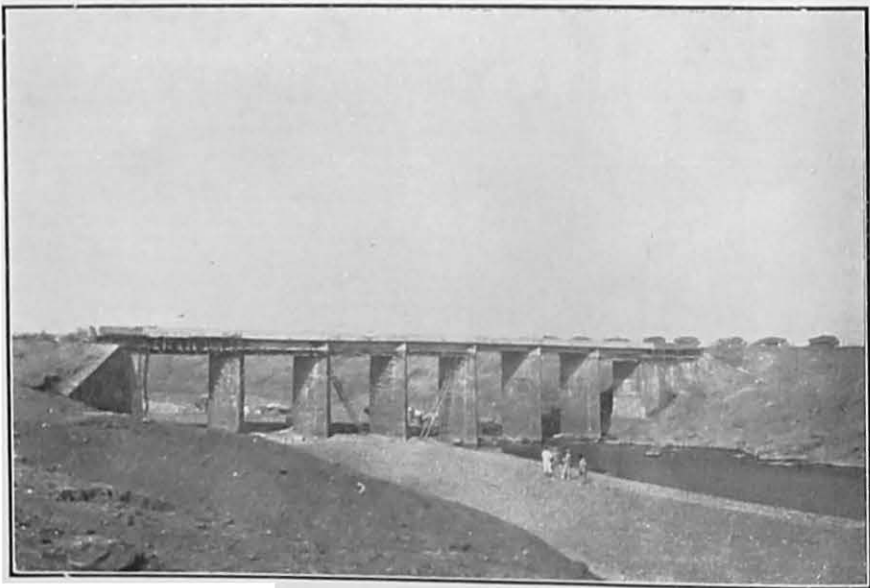
C—COMMUNICATIONS.

The expenditure under this head may generally be classified under the following three heads :—

- (i) works financed from ordinary revenues,
- (ii) works financed from Petrol Tax Fund, and
- (iii) works financed from the Provincial Road Fund.



Watrak River Pitching at Kaira.



Machhan River Bridge.

G. P. Z. P. 1941.

The amount spent on original works and repairs on communication works financed from ordinary revenues was Rs. 34,27,842 while those spent from the Petrol Tax and the Provincial Road Funds were Rs. 18,56,198 and Rs. 10,63,807 respectively.

(i) *Expenditure from ordinary revenues.*

The following were some of the important works either completed or in progress :—

- (1) Constructing a three stage landing at Dharamtar,
- (2) Widening the Bandra-Ghodbunder Road in Town Planning Scheme No. III, Bandra,
- (3) Widening the Mahim Causeway at Bandra. (This work was partly financed from the contribution made by the Bombay Municipality and partly from the Petrol Tax Funds),
- (4) Flood protective measures in connection with the Hope Bridge at Surat,
- (5) Protection of Kaira Town by pitching at north-west corner of Kaira Fort Wall,
- (6) Diversion of Kaira-Mehmedabad Road at Kaira Town,
- (7) Improving and widening the Machhan river bridge in mile No. 16/1 of Dohad-Jhalod Road,
- (8) Construction of a submersible bridge over the River Indrayani at Dehu in the Poona Division,
- (9) Construction of an R. C. C. submersible bridge over the Krishna River on the Karad-Bijapur Road,
- (10) Strengthening masonry works on the Bombay-Agra Road in the Khandesh and Nasik Divisions,
- (11) Improvements to the Taloda-Shahada Road (Section I from Taloda to Prakasha),
- (12) Taloda-Raisingpur Road, part I—earth-work and metalling,
- (13) Additions and alterations to the cause-way over the River Waghur in mile 20 of the Dhulia-Edlabad-Nagpur Road,
- (14) Remetalling and improving miles 237/3 to 243/4 of the Bombay-Agra Road,
- (15) Improving the Sadashivgad-Kadra Road,
- (16) Widening of Belgaum-Hungund Road, section from Kamatgi to Hungund,
- (17) Improvements to Sholapur-Hubli Road, section I, from Sholapur border to Bijapur, part I,

- (18) Improvements to Sholapur-Hubli Road, section II, from Bijapur to junction with Vengurla-Belgaum-Bagalkot-Bellary Road, part I,
- (19) Construction of Sindgi-Moratgi Road up to His Exalted Highness the Nizam's Dominions, and
- (20) Improvements to Beni Nalla Causeway in mile 158 of the Sholapur-Hubli Road.

The expenditure showing the lengths of metalled and unmetalled roads maintained by this Department and the District Local Boards during the year will be found in Appendix II annexed to this report. A statement giving the mileage of surface roads of various types and motorable earth roads is also included as Appendix III. The information regarding expenditure incurred by the District Local Boards on roads in their charge has been given in Appendix V to this report together with a graph representing the same.

(ii) Expenditure from Petrol Tax Fund.

The total amount expended on communication works from this source was Rs. 18,56,198. The amount held by the Government of India to the credit of this Government, to be allotted as and when required, was Rs. 34,52,770 as against Rs. 28,98,710 in the previous year.

All the works under this head were taken up after they were duly approved by the Board of Communications which met once during the year for transaction of business. The names of members of the Board of Communications as on the 31st March 1941 are given in Appendix IX to this report.

The following are some of the important communication works financed from Petrol Tax Fund, completed or in progress, during the year :—

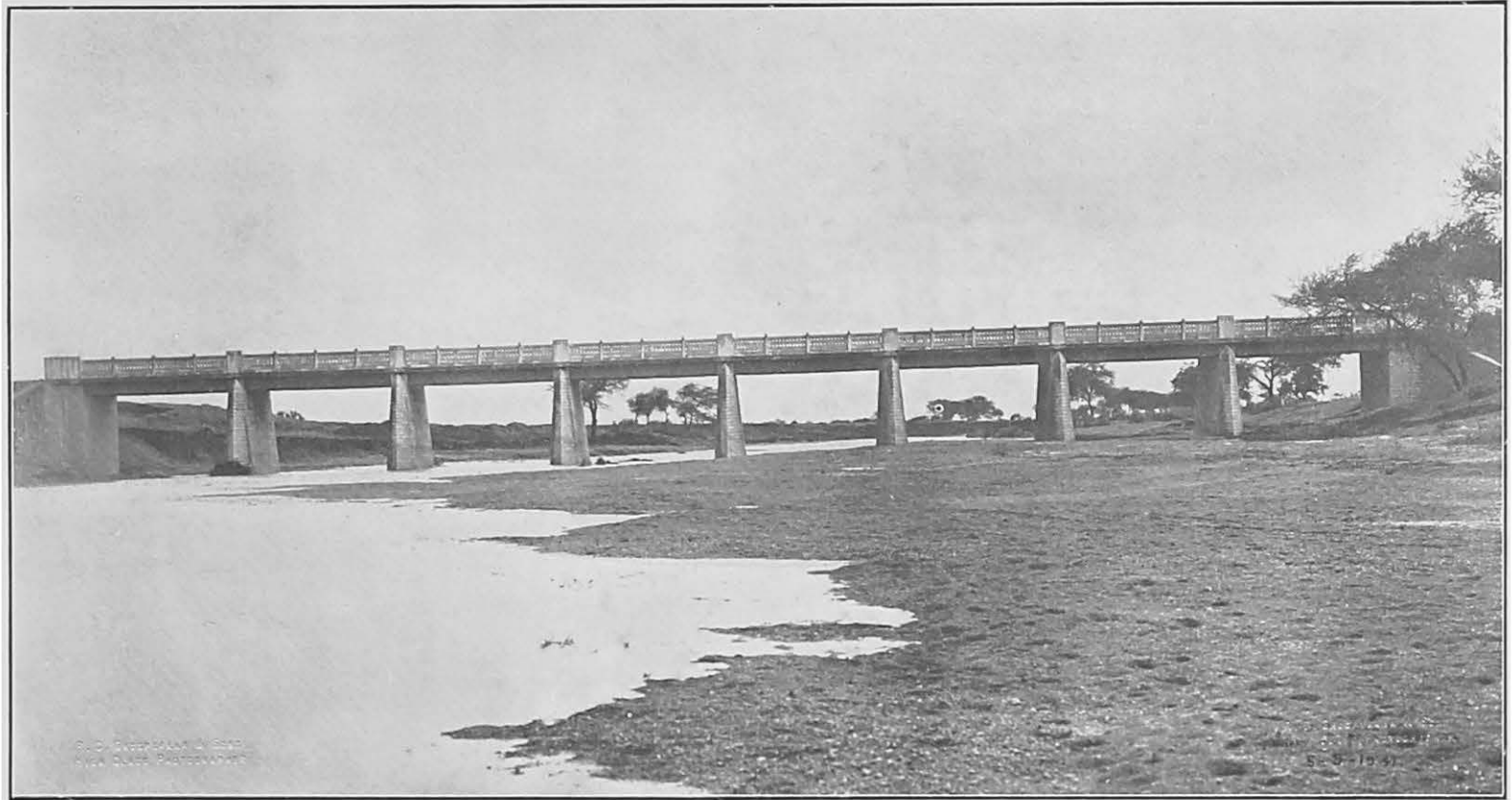
Northern Circle.

- (1) Constructing the Talasari-Vapi Road,
- (2) Widening of the Mahim Causeway at Bandra [*vide* remark below item (3) in sub-section (i) above],
- (3) Modernizing Alibag-Rewas Road,
- (4) Improvements to Dahanu-Jawhar Road,
- (5) Construction of a high level causeway over the Surya river on Mahim-Wada Road,
- (6) Providing stacking platforms for road-side materials along Bombay-Agra Road—miles 33 to 80,
- (7) Modernizing Bandra-Ghodbunder Road—miles 12/8 to 17/8.

- (8) Constructing a bridge over the Dharotha river in mile No. 13 of Talasari-Vapi Road,
- (9) Construction of an R. C. C. Bridge over the Ghoria Nalla in mile No. 54/5 of Bombay-Agra Road,
- (10) Modernizing Sion-Chembur Road,
- (11) Construction of a vented causeway over the Damanganga river on the Talasari-Vapi section of Bombay-Ahmedabad Road,
- (12) Improving miles 4 to 9/6 of the Matwad-Navsari Section,
- (13) Purchasing the old Narbada River Railway Bridge at Broach,
- (14) Constructing a bridge over the Velparva Khadi on the Vapi-Bulsar section,
- (15) Constructing a causeway with approaches over the Par river in mile No. 6 of the Vapi-Bulsar section,
- (16) Constructing a bridge over the Kolai Khadi in mile No. 4 of the Bulsar-Chikhli section,
- (17) Constructing a bridge over the Dharedi Khadi in mile No. 10 of the Bulsar-Chikhli section,
- (18) Constructing a bridge over the Bhuri Khadi in mile No. 14 of the Bulsar-Chikhli section,
- (19) Raising and widening the bridge over the Khari river in mile No. 9/8 of the Kaira-Bareja section,
- (20) Improving Kapadvanj-Bibipura Road—miles 1 to 8,
- (21) Constructing an R. C. C. Bridge over the Watrak River at Kaira, Kaira-Bareja section,
- (22) Constructing a road from Borsad to Bhadrans on the Jambusar-Borsad section,
- (23) Constructing a road from Limdi to Sanjeli,
- (24) Constructing Anas-Katwara Road,
- (25) Constructing Limdi-Pethapur-Chakalia-Dohad Road—sections I to III,
- (26) Constructing a road from Dholera town to New Dholera Port,
- (27) Improvements to Bavla-Bagodra Road,
- (28) Improvements to Broach-Bhesli Road,
- (29) Improvements to Dungri-Untadi Road,

Central Circle.

- (30) Improving the Dehu-Alandi section of Shelarwadi-Dehu-Alandi Road,
- (31) Improvements to Poona-Paud-Mulshi Road,
- (32) Improvements to Poona-Sholapur Road : providing conphalt surface in miles $1/1$ plus 480' to $1/3$ plus 20',
- (33) Providing cement concrete surface on the Fitzgerald Bridge, Poona,
- (34) Modernizing mile 3-13 of the Poona-Satara section of Bombay-Poona-Bangalore Road,
- (35) Bombay-Poona-Sholapur-Hyderabad Road—reconstructing and substantially improving miles 5/1 to 35 of the Poona-Sholapur section,
- (36) Making improvements to low-lying miles 75-84 on Poona side of Khandala on the Khandala-Poona section of Bombay-Poona-Sholapur-Hyderabad Road,
- (37) Concreting miles 8/2 to 13 of Poona-Satara section of Poona-Bangalore Road,
- (38) Construction of a linked road connecting Karad-Tasgaon and Karad-Bijapur Roads,
- (39) Providing cement concrete surface on the portion from Karad Town to Karad Railway Station,
- (40) Reconstruction of the dangerous masonry works on the Karad-Chiplun section and improvements to drains Nos. 95 and 173 of Chiplun-Karad-Jath-Bijapur-Sindgi-Raic h u r Road,
- (41) Causeway over the Shegaon Nalla in mile 139/5 of the Malsiras-Pandharpur section,
- (42) Improvements to the road, earth work and the masonry works of the Velapur-Mahad section,
- (43) Crossing over the Girna River at Thengoda in mile No. 34 of the Satana-Chandor section,
- (44) Modernising low lying miles between Ghoti and Igatpuri of the Vihigaon-Nasik section of Bombay-Agra Road,
- (45) Crossing over the Mor river in mile No. 3/7 of Bhusawal-Yawal Road,
- (46) Crossing over the Anwar Nalla in the Dhulia-Jalgaon Road, section I,



Bridge No. 182 in mile 115/7 of the Karwar Bellary Road.

G. P. Z. P. 1941.

- (47) Causeway over the Kan river near Sakri in mile No. 32/5 of the Pimpalner-Sakri section of Nawapur-Borzar-Warsa-Pimpalner-Sakri Road,
- (48) Improvements to miles 18-45 and 46-83 of the Shirpur-Raver section of Burhanpur-Raver-Yawal-Chopda-Shirpur-Shahada-Taloda-Raisingpur Road,
- (49) Improvements to Dondaicha-Shahada-Khetia Road,
- (50) Extension from Edlabad to Ichhapur of Dhulia-Bhusawal-Edlabad-Nagpur Road,
- (51) Improvements to Nawapur-Chinchpada Road,

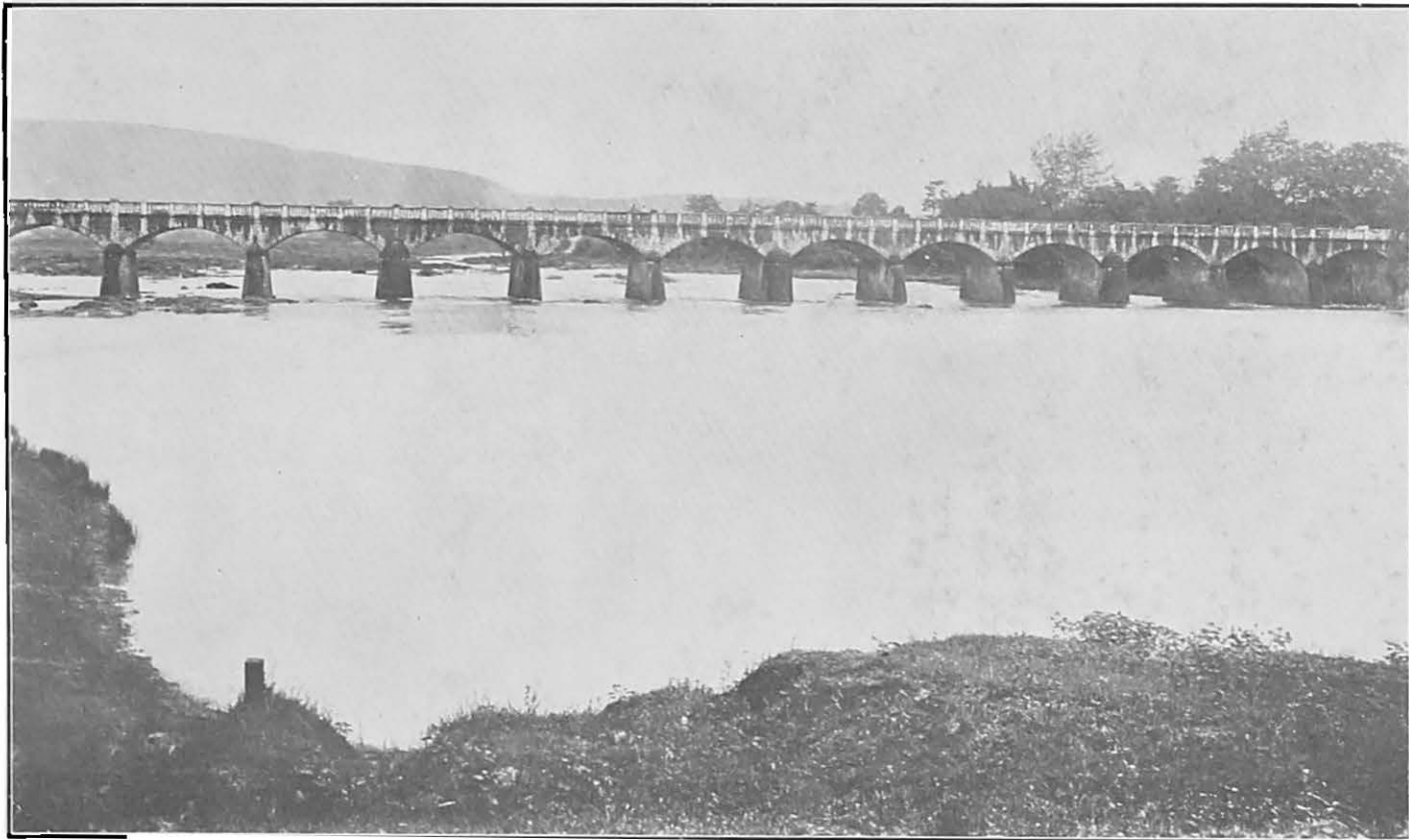
Deccan Irrigation Circle.

- (52) Constructing cross drainage works on Baramati-Sangvi Road,
- (53) Constructing an R. C. C. deck girder bridge over the Karha River near Saswad,
- (54) Constructing R. C. C. bridges over the various Nalas on Indapur-Nira Road,
- (55) Improvements to Indapur-Akluj-Sangola Road, section I,
- (56) Improvements to Indapur-Akluj-Sangola Road, section II,
- (57) Constructing a bridge over the river Nira at Sarati,
- (58) Constructing R. C. C. bridge of 6 spans over the nala in mile No. 30/5 of Nagar-Manmad Road,
- (59) Constructing R. C. C. deck girder bridge in mile No. 41/8 near Patoda on Pinpri-Jamkhed Road,
- (60) Modernising the surface with cement concrete slab in miles 3 to 4/3 of Poonā-Khadakwasla Road,

Southern Circle.

- (61) Improvements to the Sankeshwar-Kolhapur section of Poonā-Bangalore Road,
- (62) Improvements to Bijapur-Kagwad Road, section II,
- (63) Improvements to the Dharwar-Saundatti section of Dharwar-Saundatti-Yergatti-Gokak-Sankeshwar Road,
- (64) Improvements to section from Badami to border of Dharwar District of Kamatgi-Gadag Road,
- (65) Improvements to the Hubli-Gadag section of Karwar-Bellary Road,

- (66) Reconstructing bridge No. 182 in mile 115/7 of the Hubli-Annigeri section of Karwar-Bellary Road,
- (67) Constructing a bridge over the Kundalika River near Kolad in mile No. 26 of Dharamtar-Mahableshwar Road,
- (68) Constructing bridges over the Shastri and Sonvi Rivers on the Hatkhamba-Poladpur Road,
- (69) Constructing R. C. C. bridge over the Rajapur Creek at Rajapur in section II of Pali-Phonda Road,
- (70) Constructing a masonry bridge over the Piyali River in mile No. 4 of Kasarda-Janoli Road,
- (71) Diversion of the road outside Mahad Town and constructing a bridge over the Gandhari River in mile No. 55 of Dharamtar-Mahableshwar Road,
- (72) Improving the surface of Dharamtar-Mahableshwar Road, miles Nos. 1/3 to 62, part I, sections I to III,
- (73) Constructing bridges over the Vashisti River at Chiplun on Hatkhamba-Poladpur Road,
- (74) Improving miles Nos. 13 to 56 of Dharamtar-Mahableshwar Road,
- (75) Constructing masonry drains with R. C. C. slabs over 146 nallas on the Vadkal-Mahad and Mahad-Poladpur sections of Dharamtar-Mahableshwar Road,
- (76) Providing cross drainage works across seven big nallas on Malwan-Phonda Road,
- (77) Improving Khanapur-Yellapur Road, part I,
- (78) Improving Khanapur-Yellapur Road, part II,
- (79) Improving Yellapur-Sirsi Road, part I,
- (80) Improving Yellapur-Sirsi Road, part II,
- (81) Improving Sirsi-Kodkani Road,
- (82) Improvements to miles 0 to 71/5 of Kumta-Hubli Road,
- (83) Improving Karwar-Bhatkal-Madras-Frontier Road (Kumta-Honawar section),
- (84) Modernizing roads in and round about Karwar,
- (85) Reconstructing bridge No. 226-A in mile No. 27/4 of Karwar-Bellary Road,
- (86) Reconstructing six cross drainage works on Karwar-Bellary Road,



Bridge over the Kundalika River.

G. P. Z. P. 1941.

- (87) Diversion of Kumta-Hubli Road outside Sirsi Town,
- (88) Constructing a metalled road from Talikot to Salvadgi up to Nizam's Dominion, part I,
- (89) Improving Bijapur-Sindgi Road, section I,
- (90) Improving Bijapur-Sindgi Road, section II,
- (91) Improving Bijapur-Bagewadi Road,
- (92) Improving miles Nos. 0 to 6 of Kolhar-Talikot Road, section II,
- (93) Improving miles Nos. 7 to 18 of Kolhar-Talikot Road, section II,
- (94) Improving miles Nos. 1 to 30 of Kolhar-Talikot Road, section I,
- (95) Constructing a metalled road from Sindgi to British border via Yankanchi and Golgeri,
- (96) Reconditioning and asphaltting Bijapur-Kagwad Road, mile No. 1 and Bijapur-Sindgi road, miles Nos. 1 and 2,
- (97) Improving Nipani-Kaladgi Road,
- (98) Improving Indi-Shirdhon Road, and
- (99) Constructing a causeway over the Don Nalla near Talikot on Kolhar-Talikot Road, section II.

(iii) *Expenditure from Provincial Road Fund.*

The expenditure from the Provincial Road Fund during the year was Rs. 10,63,807 as against Rs. 5,97,275 in the previous year and Rs. 2,04,687 and Rs. 3,78,657 in the respective preceding years.

A statement giving the figures of expenditure on works and repairs under this head since the inception of the Fund to the end of the period under report is appended to this report as Appendix VIII.

The following important works financed from this Fund were either completed or in progress :—

- (1) Modernising Bombay-Poona Road with cement concrete surface (miles Nos. 25, 26, 27, 44 and 45),
- (2) Modernising Bombay-Poona Road with cement concrete surface (miles Nos. 30, 31, 42, 43, 53 and 54),
- (3) Constructing R. C. C. slab drain of two openings in mile No. 47/4 of Bombay-Agra Road,
- (4) Modernising miles Nos. 30 to 32/5 and 69 to 72 of Bombay-Agra Road,

- (5) Modernising miles Nos. 28, 29, 32/6 to 36 of Bombay-Nasik Road,
- (6) Constructing a slab drain of 4 openings in mile No. 50/6 of Bombay-Agra Road,
- (7) Constructing an R. C. C. slab drain of 3 openings in mile No. 39/8 of Bombay-Agra Road,
- (8) Improvements to Rander approach of Hope Bridge at Surat,
- (9) Constructing a road from Godhra to Pali passing through Baroda State limits,
- (10) Modernising Bombay-Poona Road, ghat portion (miles Nos. 66/0 to 70/2½),
- (11) Modernising Bombay-Poona Road, miles Nos. 98/0 to 107/4 : providing cement concrete slab 5" thick,
- (12) Modernising portion from miles Nos. 94 to 98 of Bombay-Poona Road,
- (13) Modernising portion from miles Nos. 81/7 to 94 of Bombay-Poona Road,
- (14) Modernising low-lying miles Nos. 91 to 93/2 between Ghoti and Igatpuri on Vihigaon-Nasik section of Bombay-Agra Road,
- (15) Modernising portion from mile stone 80 to 84 (Thal Ghat) of Bombay-Agra Road,
- (16) Realignment of Devi Ghat in mile No. 156 of Bombay-Agra Road, and
- (17) Constructing an R. C. C. bridge over nalla No. 248 in mile No. 131/3 of Bombay-Agra Road near Pimpalgaon Baswant.

Deposit Contribution Works.

	Rs.
Works .. .. .	.. 3,84,348
Repairs .. .. .	.. 58,006
	4,42,354

The following were some of the important works in progress under this head :—

- (1) Extension of the pier at Rewas ;
- (2) Kurla Drainage Scheme ;

- (3) Construction of a feeder channel to Gomti Tank at Dakor ;
 (4) Improvements to Chiplun Water Supply ;
 and
 (5) Construction of a boat jetty and dharmashala at Musakaji.

Arboriculture.

Nurseries were maintained at various places and the planting, watering and protection of road-side trees continued to receive attention as in the previous year.

The number of trees maintained at the various places along the roads in charge of this Department was about 7,37,097.

Scarcity Works.

A sum of Rs. 1,14,498 was spent on scarcity labour during the year and the average number of persons attending scarcity works in the Kaira and Panch Mahals Division alone was 1,39,700 per month. The works of constructing about 27 miles of Viramgam-Sitapur Road in the Ahmedabad Division and the road from Tuwa to Bordi in the Kaira and Panch Mahals Division and collecting metal on the quarries of Ghodra-Shehra Road, Godhra-Salia Road and road from Orwada via Morwa to Sant Frontier were some of the important works under this head.

D—MISCELLANEOUS.

Public Health, Water Supply and Drainage Works, etc.

The important works completed during the year under this head were the following :—

- (1) providing new 6" and 4" C. I. mains to the north-east of Jogeshwari, and
- (2) providing and laying a new 6" water supply main for Ghatkopar from the 48" Tansa main to the existing 5" main on Bombay-Agra Road.

In addition to the above, some important works such as (a) construction of a tank at Kharoda in the Dohad Taluka to provide a storage of water for domestic purposes for the villagers, (b) sinking a 6" diameter bore 800" deep at Limda Talao and also at Dhandhuka, were in progress under the Village Water Supply Scheme. Survey works for investigation of village water supply schemes in Gujarat Zone were also carried out.

The total revenue realized from the sale of water, premia and connection fees, etc., in connection with the Salsette Water Supply Scheme amounted to Rs. 6,89,680 for the year.

The maintenance and repairs of (1) Poona Water Works, (2) the Ambernath Water Works, (3) the Alandi Water Works, (4) the Matheran Water Works and (5) the Poona Sewage Pumping Station at Bahiroba were all under the control of the Consulting Public Health Engineer to Government, Poona.

The expenditure under the head "70-Capital Outlay on Improvements to Public Health", inclusive of the 10th instalment of Rs. 25,000 to the Military authorities for the purchase of the Kirkee Water Works, amounted to Rs. 33,351.

The work of providing a complete scheme of sewerage in the whole of the Koregaon Park area was taken up and nearly completed. The total length of sewers of 18", 15", 12", 9" and 6" diameters, laid is 14,796 running feet.

The following works were maintained as usual :—

- (1) Poona Cantonment Water Works,
- (2) Kirkee Water Supply including Holkar's Bridge Water Works and Pashan Water Works,
- (3) Public Health Laboratory in Poona Water Works,
- (4) Hedges of Mutha Right Bank Canal up to mile No. 10½,
- (5) Ambernath Water Works,
- (6) Bahiroba Sewage Pumping Station, and
- (7) " V " shaped drain in Koregaon area and Jamsetjee Bund.

18 pumping plants of water works were inspected and tested by the Mechanical Section and advice given where necessary.

E—TECHNICAL PAPERS.

No new technical paper was issued in the year.

F—RAILWAYS.

The railways situated within the Province of Bombay are not administered by this Government but are under the general control of the Railway Board.

No new traffic surveys of any railway projects were carried out during the year under review, nor were any new lines of railway opened for traffic.

The total length of the railways in the Province of Bombay, excluding Indian States but including Indian States Railway lines within the

British Territory open for traffic during the year under review was 2519·441 miles made up of as under :—

	Broad gauge miles.	Metre gauge miles.	Narrow gauge miles.	Total No. of miles.
Bombay, Baroda and Central India Railway.	531·253	120·909	142·809	794·971
Great Indian Peninsula Railway.	822·321	....	62·064	884·385
Madras and Southern Mahratta Railway.	....	587·875	....	587·875
Barsi Light Railway ..	....	....	113·000	113·000
Matheran Light Railway ..	....	....	12·610	12·610
Bhavnagar State Railway ..	....	48·970	8·440	57·410
Gaekwar's Baroda State Railway.	9·970	35·080	24·140	69·190
	1363·544	792·834	363·063	2519·441

G—DEVELOPMENT SCHEMES.

The following important works under this head were carried out :—

- (1) constructing Marine Drive to its full width from plot No. 86 to Chowpatty complete with drains, all concrete roads, central hedging and gas lighting, in Block No. I ;
- (2) constructing Marine Drive to its full width from Plot No. 86 to plot No. 207 complete with drains and lighting arrangements in Blocks Nos. I and II ;
- (3) constructing 40' carriageway of 120' road along storm water drain No. 6 between Blocks Nos. II and III from Marine Drive to Queen's Road Band Stand ;
- (4) constructing 50' wide road at the north end of the Lloyd Recreation Ground in Block No. I, Back Bay Reclamation Scheme ;
- (5) planting Royal Palms along the west footpath of the Marine Drive from Chowpatty to end of Block No. II ;
- (6) removing the existing vent shafts and refixing them to the nearest buildings in the Back Bay Reclamation Area ;
- (7) providing cement concrete footpaths along certain roads in Blocks Nos. I and II ;

- (8) providing three traffic roundabouts at the junction of certain roads in Block No. II ;
- (9) sanitary and anti-malarial works ; and
- (10) maintenance of the New Sea Wall and rubble mound.

Certain minor works such as surveys and layout of roads in Suburban Schemes, filling in low plots in Suburban Scheme No. 3, Chembur, Suburban Scheme No. 7-Khar, Suburban Scheme No. 16, Shahar (Andheri sector) and Suburban Scheme No. 17, Central Salsette Tramway at Kurla, and construction of small extensions of roads were carried out during the year. The roads and buildings in the Suburban Schemes pertaining to the late Development Department were also properly maintained by this Department.

A list of members of the Standing Advisory Committee for the Back Bay Reclamation Scheme will be found in Appendix X to this report.

Industrial Housing Scheme.

The works of providing (1) pipes in the rooms for drying clothes, (2) iron bars to windows in all the remaining chawls, and (3) cement washing the chawls from outside, all in the Development Department Chawls at Worli, were carried out during the year.

All the Development Department Chawls at Naigaum, DeLisle Road, Worli and Sewri were properly maintained at a cost of Rs. 1,32,181. These chawls are under the control of this Department since December 1937 and a detailed report of the administration of these chawls for the period under review has been published separately.

APPENDIX I.

Statement showing expenditure on civil works during the year 1940-41.

Service Heads.	Original Works.		Repairs.		Total.	
	Grants.	Outlay.	Grants.	Outlay.	Grants.	Outlay.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
<i>50—Civil Works—Central Suspense—Voted.</i>						
<i>50—Civil Works—Provincial.</i>						
Buildings—Charged ..	34,000	31,816	2,00,800	1,99,393	2,34,800	2,31,209
Buildings—Authorised	8,20,533	7,93,867	40,61,957	10,38,192	73,10,892	18,32,059
Communications ..	24,36,516	23,42,892		29,41,148		52,84,040
Miscellaneous ..	1,886	2,130		45,355		47,485
Establishment—charged	....	....	....	....	*3,99,007	2,86,688
Establishment—Authorised	....	....	....	....	*19,89,837	14,37,392
Tools and Plant—Authorised ..	....	....	....	....	*2,13,117	1,92,908
Grants-in-aid—Charged.	....	....	....	....	2,380	2,367
Grants-in-aid—Authorised ..	....	....	....	....	8,37,873	†8,35,385
Suspense ..	....	....	....	....	41,217	997
Charges in England—						
Establishment—Charged ..	....	....	....	....	50,220	50,153
Establishment—Authorised ..	....	....	....	....	5,320	5,613
Loss and gain by exchange—						
Establishment—Charged ..	....	....	....	....	48	87
Establishment—Authorised ..	....	....	....	....	7	11
Total, 50—Civil Works—Provincial.	32,92,935	31,70,705	42,62,757	42,24,088	1,10,84,918	1,02,06,444
<i>81—Capital Account of Civil Works—Outside the Revenue Account—Buildings</i> ..	<i>5,53,610</i>	<i>5,46,643</i>	....	....	5,53,610	5,46,643
Establishment—Charged ..	....	....	....	....	....	16,991
Establishment—Authorised ..	....	....	....	....	....	49,986
Tools and Plant ..	....	....	....	....	....	4,739
Total, 81—Capital Account of Civil Works ..	5,53,610	5,46,643	....	....	5,53,610	6,18,309

(a) Includes Rs. 18,56,198 on account of Central Road Fund.

* Grant for all P. W. Heads.

† Includes Rs. 1,17,612 on account of Central Road Fund.

APPENDIX I—*contd.*

Service Heads.	Original Works.		Repairs.		Total.	
	Grants.	Outlay.	Grants.	Outlay.	Grants.	Outlay.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Brought over	....	....	....	....	....	....

<i>31—Capital Account of Civil Works—Outside the Revenue Account—contd.</i>						
Provincial Road Fund.	....	....	....	....	10,72,688	*10,63,80'
District Local Fund..	....	....	....	....	....	....
Deposit contribution .	....	....	....	....	....	†5,36,18
Grand Total ..	38,46,585	37,17,348	42,52,757	42,24,088	1,27,11,216	1,24,24,45

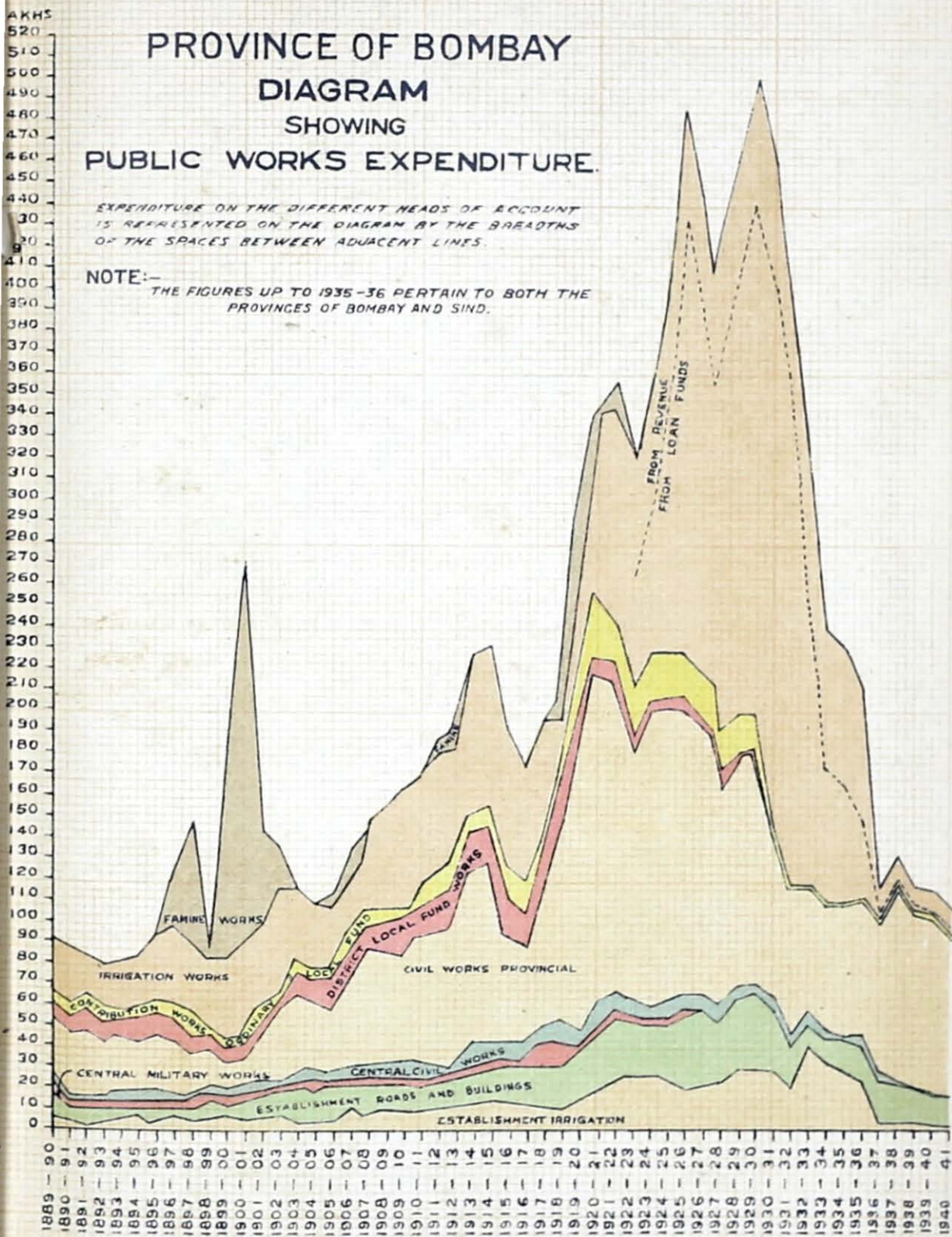
* Inclusive of Rs. 3,766 for special Tools and Plant and Rs. 2,26,162 for establishment a Tools and Plant.

† Inclusive of Rs. 93,829 on account of establishment Tools and Plant and audit and accounts.

PROVINCE OF BOMBAY DIAGRAM SHOWING PUBLIC WORKS EXPENDITURE.

EXPENDITURE ON THE DIFFERENT HEADS OF ACCOUNT IS REPRESENTED ON THE DIAGRAM BY THE BREADTHS OF THE SPACES BETWEEN ADJACENT LINES.

NOTE:-
THE FIGURES UP TO 1935-36 PERTAIN TO BOTH THE PROVINCES OF BOMBAY AND SIND.

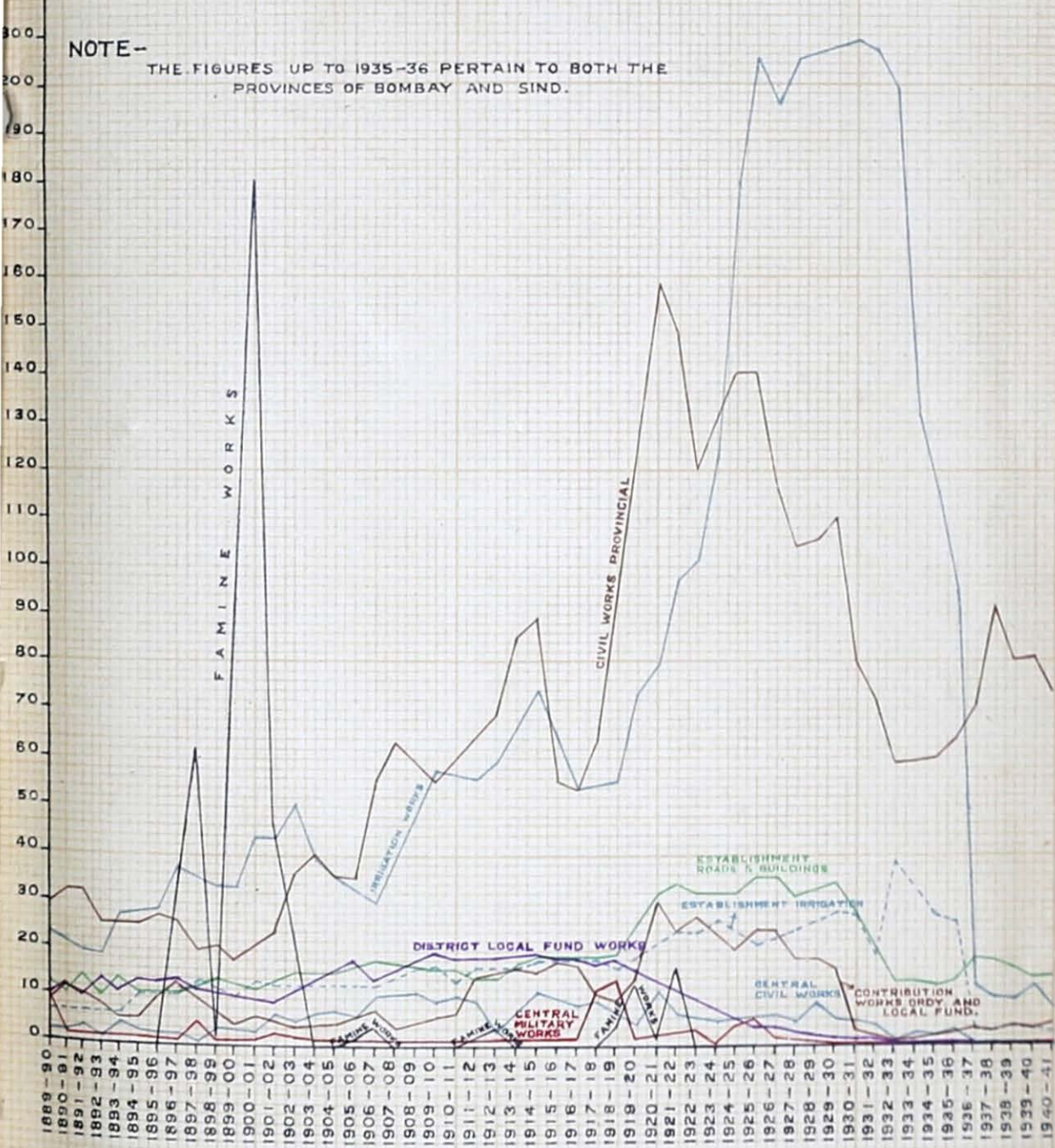


PROVINCE OF BOMBAY DIAGRAM SHOWING PUBLIC WORKS EXPENDITURE.

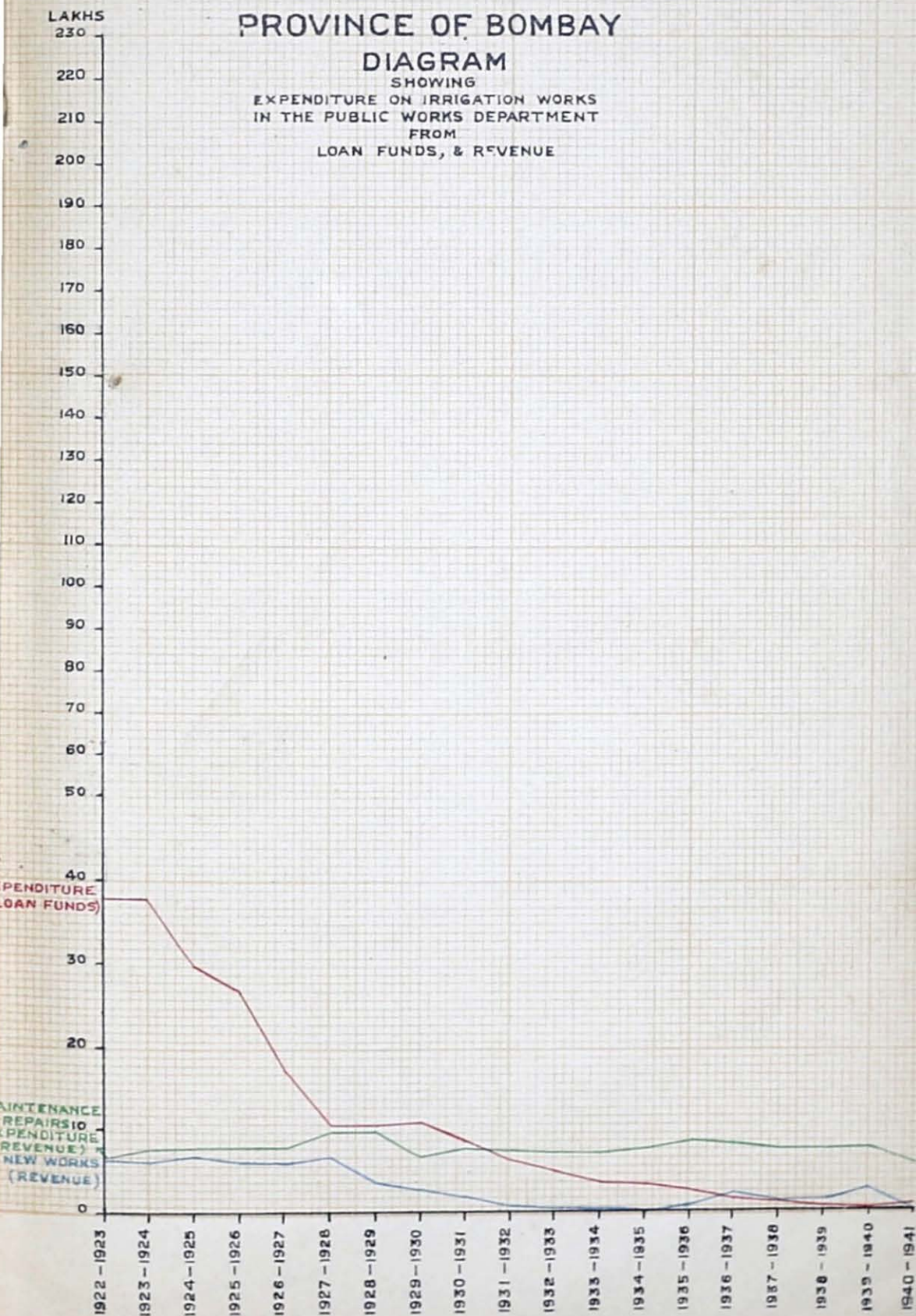
AKHS
100

NOTE-

THE FIGURES UP TO 1935-36 PERTAIN TO BOTH THE PROVINCES OF BOMBAY AND SIND.



PROVINCE OF BOMBAY
DIAGRAM
 SHOWING
 EXPENDITURE ON IRRIGATION WORKS
 IN THE PUBLIC WORKS DEPARTMENT
 FROM
 LOAN FUNDS, & REVENUE



APPENDIX II.

APPENDIX

Statement showing lengths of metalled and unmetalled
Local Boards in the Province of

Name of Circle.	Name of Division.	Length of metalled roads maintained by the Public Works Department.	Length of unmetalled roads maintained by the Public Works Department.	Length of metalled roads maintained by the Local Boards.
1	2	3	4	5
		Miles.	Miles.	Miles.
Northern Circle ..	Thana ..	471·99	.....	439·66
	Surat and Broach ..	245·21	2·17	165·96
	Kaira and Panch Mahals ..	340·62	13·76	107·09
	Ahmedabad ..	179·91	53·60	67·98
	Total ..	1,237·73	69·53	780·69
Central Circle ..	Poona ..	358·89	16·63	284·53
	Satara ..	458·86	39·87	335·62
	Sholapur ..	312·83	37·72	171·25
	Nasik ..	457·76	.....	190·79
	Khandesh ..	695·38	5·30	312·48
Total ..	2,283·72	99·52	1,294·67	
Deccan Irrigation Circle.	Ahmednagar ..	264·9	57·60	556·30
	Nira Canals ..	192·4	.....	.....
	Nasik Irrigation ..	47·00	.....	.....
	Poona Irrigation and Research.	8·05	.....	.....
	Total ..	512·80	57·60	556·30
Southern Circle ..	Belgaum ..	462·94	.....	310·21
	Dharwar ..	460·62	12·13	290·06
	Bijapur ..	365·71	40·73	220·57
	Kanara ..	466·46	105·72	95·56
	Ratnagiri ..	483·36	6·75	480·41
Total ..	2,239·09	165·33	1,396·81	
Grand Total ..	6,273·34	391·98	4,028·47	
Grand Total of the previous year.	6,193·17	419·30	3,947·83	

II.

roads maintained by the Public Works Department and the Bombay during the year 1940-41.

4 Length of unmetalled roads maintained by the Local Boards.	Total length of metalled roads.	Total length of unmetalled roads.	Remarks.	
			Metalled roads main- tained by the Public Works Department in Municipal limits.	Unmetalled roads main- tained by the Public Works Department in Municipal limits.
6	7	8	9	10
Miles.	Miles.	Miles.	Miles.	Miles.
241·81 550·90 82·18 284·59	911·65 411·17 447·71 247·89	241·81 553·07 95·94 338·19	26·73 1·96 17·85....	................
1,159·48	2,018·42	1,229·01	46·54	....
1,595·51 1,421·25 540·34 1,648·91 393·44	643·42 794·48 484·08 648·55 1,007·86	1,612·14 1,461·12 578·06 1,648·91 398·74	37·51 25·27 32·83 21·31 30·33	.... 1·31 1·28
5,599·45	3,578·39	5,698·97	147·25	2·59
352·90	821·20 192·40 47·00 8·50	410·50	6·30 4·60....	................
352·90	1,069·10	410·50	10·90	....
407·61 359·35 195·15 546·14 1,062·25	773·15 750·68 586·28 562·02 963·77	407·61 371·48 235·88 651·86 1,069·00	14·81 25·20 10·57 22·21 17·36	.... .... .... 0·75
2,570·50	3,635·90	2,735·83	90·15	0·75
9,682·33	10,301·81	10,074·31	294·84	3·34
10,201·29	10,141·00	10,620·59	288·06	8·02

APPENDIX

Mileage of surfaced roads of various classes and

Province or State. 1	Water bound			
	Stone metal only. 2			Kunkar, brick
	P. W. D.	Local.	Total.	P. W. D.
<i>Bombay.</i>	Miles.	Miles.	Miles.	Miles.
Northern Circle	1,070·02	748·97	1,827·99	45·31
Central Circle	2,302·06	1,147·89	3,449·95	23·72
Southern Circle	1,830·74	998·00	2,828·74	439·35
Deccan Irrigation Circle	721·48	333·42	1,054·90	....
Total ..	5,933·30	3,228·28	9,161·58	508·38

Province or State. 1	Bitumen, asphalt, tar or pitch grouted macadam. 6			Premix bitumen, tar or 7	
	P. W. D.	Local.	Total.	P. W. D.	Local.
	Miles.	Miles.	Miles.	Miles.	Miles.
<i>Bombay.</i>					
Northern Circle	15·12	6·09	21·21	91·19	..
Central Circle	16·71	..	16·71	50·38	..
Southern Circle	7·05	..	7·05	30·27	..
Deccan Irrigation Circle .. .. .	..	..	..	6·57	3·63
Total ..	38·88	6·09	44·97	178·41	3·63

III.

motorable earth roads as on 31st March 1941.

macadam.							
laterite or metal.		Other low type surfaces (morum, gravel, sand and clay).			Surface treated with tar, pitch, asphalt or bitumen.		
3		4			5		
Local.	Total.	P. W. D.	Local.	Total.	P. W. D.	Local.	Total.
Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.
170·89	216·20	10·05	331·51	341·56	31·50	0·75	32·25
....	23·72	102·85	1,611·77	1,714·62	11·21	....	11·21
398·81	838·16	155·21	1,927·62	2,079·83	14·20	....	14·20
....	....	58·72	352·93	411·65	7·02	....	7·02
569·70	1,078·08	326·83	4,220·83	4,547·66	63·93	0·75	64·68

asphalt, pitch.	Cement concrete or macadam.			Fair-weather motorable earth roads.			Other motorable roads which cannot be classified under previous heading.			Remarks.
	8			9			10			11
Total.	P.W.D.	Local.	Total.	P.W.D.	Local.	Total.	P.W.D.	Local.	Total.	
Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	
01·19	15·81	0·12	15·93	28·00	623·37	651·37	..	..	..
50·38	26·17	..	26·17	..	42·91	42·01	..	1,022·91	1,022·91	
30·27	..	..	..	18·50	571·76	590·26	..	192·37	192·37	
10·20	2·38	..	2·38	..	..	..	..	..	..
192·04	44·86	0·12	44·48	46·50	1,238·04	1,284·54	..	1,215·28	1,215·28	

APPENDIX

Statement showing the expenditure on Provincial Buildings and

1	1921-22		1922-23		1923-24		1924-
	50-C.W. Provincial.	81-C.W.	50-C.W. Provincial.	81-C.W.	50-C.W. Provincial.	81-C.W.	50-C.W. Provincial
	2	3	4	5	6	7	8
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
(i) Expenditure on buildings for original works ..	70,17,468	--	18,40,250	21,38,237	12,74,148	46,74,102	11,72,87
(ii) Expenditure on buildings for maintenance ...	11,03,937	--	13,79,087	--	15,99,041	--	14,09,217
(iii) Expenditure on metalled Provincial roads for original works ..	19,39,046	--	15,22,488	6,94,035	10,92,068	4,54,014	5,36,710
(iv) Expenditure on unmetalled Provincial roads for original works..	5,00,155	--	97,110	20,903	72,046	20,943	63,591
(v) Expenditure on metalled Provincial roads for maintenance ..	19,85,510	--	24,27,684	--	26,69,387	--	27,73,938
(vi) Expenditure on unmetalled Provincial roads for maintenance ..	2,53,711	--	2,35,032	--	2,83,378	--	2,81,022

IV.

Roads in the Province of Bombay from 1921-22 to 1940-41.

25	1925-26		1926-27		1927-28		1928-29	
	81-C.W.	50-C.W. Provincial.	81-C.W.	50-C.W. Provincial.	81-C.W.	50-C.W. Provincial.	81-C.W.	50-C.W. Provincial.
9	10	11	12	13	14	15	16	17
Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
36,09,799	12,24,807	38,98,209	22,22,421	17,71,645	9,72,027	13,90,972	9,61,174	19,07,442
--	15,22,903	--	15,95,217	--	17,04,033	--	16,43,248	--
24,18,810	8,30,136	11,41,309	11,19,552	4,09,201	7,95,102	6,26,052	7,40,068	5,42,195
1,14,266	1,36,210	33,048	2,50,893	--	1,65,007	--	1,05,960	--
--	23,30,514	--	30,98,522	--	32,12,327	--	30,99,797	--
--	2,53,438	--	2,55,920	--	2,82,958	--	2,67,776	--

APPENDIX

1	1929-30		1930-31	
	50-C.W. Provincial.	81-C.W.	50-C.W. Provincial.	81-C.W.
	18	19	20	21
	Rs.	Rs.	Rs.	Rs.
(i) Expenditure on buildings for original works	8,88,923	22,88,762	7,15,423	4,32,192
(ii) Expenditure on buildings for maintenance	15,91,742	....	15,54,193	....
(iii) Expenditure on metalled Provincial roads for original works ..	5,81,922	5,41,635	3,07,467	4,85,007
(iv) Expenditure on unmetalled Provincial roads for original works ..	1,11,174	....	81,815	....
(v) Expenditure on metalled Provincial roads for maintenance ..	30,95,981	....	29,37,136	....
(vi) Expenditure on unmetalled Provincial roads for maintenance ..	2,54,990	....	2,98,830	....
(vii) Expenditure from Road Development Fund in connection with Provincial roads for original works .. ..	....	....	3,00,076	....
(viii) Expenditure from Road Development Fund in connection with Provincial roads for maintenance ..	....	....	....	....

IV—contd.

1931-32		1932-33		1933-34	
50-C.W. Provincial.	81-C.W.	50-C.W. Provincial.	81-C.W.	50-C.W. Provincial.	81-C.W.
22	23	24	25	26	27
Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
2,88,811	20,397	2,51,734	1,839	2,46,766	11,002
18,73,726	....	9,88,704	....	11,83,317	....
1,39,416	2,91,305	1,26,240	1,55,554	1,17,268	51,711
29,564	....	23,447	....	23,622	....
28,68,480	....	23,36,968	....	24,82,335	....
2,30,071	....	1,61,682	....	1,60,738	.. .
7,35,418	....	9,06,785	....	8,08,461	....
....	....	13,078	....	26,253	....

APPENDI

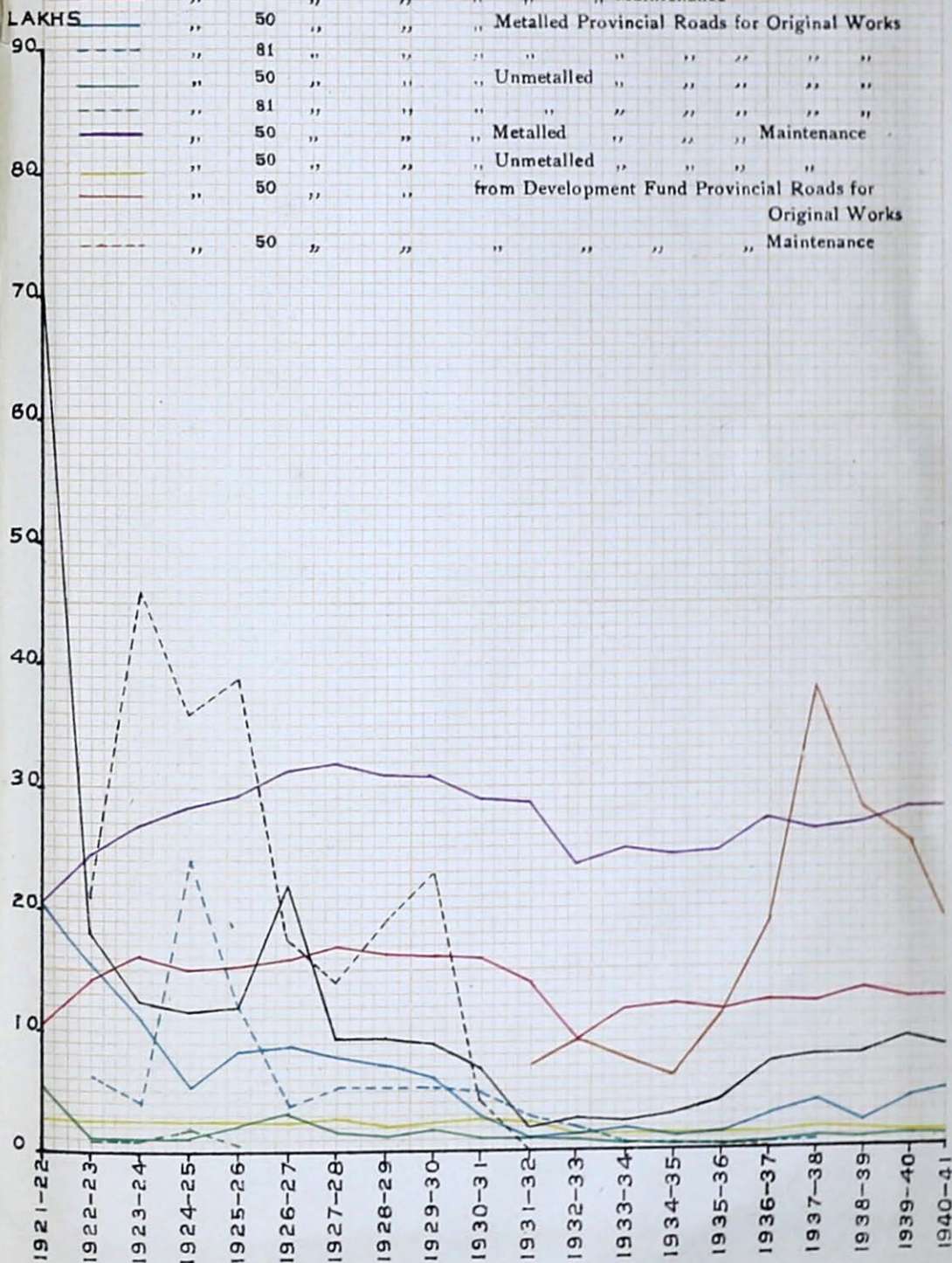
1	1934-35		1935-36		1936
	50-C.W. Provincial.	81-C.W.	50-C.W. Provincial.	81-C.W.	50-C.W. Provincial
	28	29	30	31	32
	Rs.	Rs.	Rs.	Rs.	Rs.
(i) Expenditure on buildings for original works	3,19,300	..	4,31,114	....	7,27,841
(ii) Expenditure on buildings for maintenance	12,07,928	..	11,94,726	....	12,69,204
(iii) Expenditure on metalled Provincial roads for original works ..	1,13,558	23,462	1,45,887	2,405	2,39,854
(iv) Expenditure on unmetalled Provincial roads for original works ..	7,724	..	4,620	....	28,464
(v) Expenditure on metalled Provincial roads for maintenance ..	24,45,526	..	24,60,631	....	27,00,519
(vi) Expenditure on unmetalled Provincial roads for maintenance ..	1,50,635	..	1,56,204	....	1,00,055
(vii) Expenditure from Road Development Fund in connection with Provincial roads for original works	6,77,174	..	11,00,200	....	10,28,778
(viii) Expenditure from Road Development Fund in connection with Provincial roads for maintenance .	44,383	..	16,500	....	44,726

IV—concl'd.

37.	1937-38.		1938-39.		1939-40.		1940-41.	
81-C.W.	50-C.W. Provincial.	81-C.W.	50-C.W. Provincial.	81-C.W.	50-C.W. Provincial.	81-C.W.	50-C.W. Provincial.	81-C.W.
33	34	35	36	37	38	39	40	41
Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
..	7,58,943	..	7,62,413	..	9,45,822	..	8,25,683	5,46,643
..	12,41,971	..	13,23,873	..	12,23,386	..	12,37,585	..
1,086	3,38,538	2,934	2,26,942	..	3,99,844	..	4,34,140	..
..	91,464	..	33,476	..	54,242	..	52,554	..
..	26,39,930	..	26,85,001	..	27,90,597	..	27,95,350	..
..	1,79,681	..	1,71,438	..	1,51,475	..	1,45,798	..
..	37,90,835	..	27,75,464	..	25,38,527	..	18,56,198	..
..	39,057	..	....	..	..	..	..	..

DIAGRAM SHOWING EXPENDITURE ON PROVINCIAL BUILDINGS AND ROADS IN THE PROVINCE OF BOMBAY.

—	Represents	50	C. W. Expenditure on Buildings for Original Works.
- - -	"	81	" " " " " " " " " " " "
—	"	50	" " " " " " " " " " " Maintenance
—	"	50	" " " " " " " " " " " Metalled Provincial Roads for Original Works
- - -	"	81	" " " " " " " " " " " Unmetalled " " " " " " "
- - -	"	50	" " " " " " " " " " " Unmetalled " " " " " " "
—	"	81	" " " " " " " " " " " Metalled " " " " " Maintenance
—	"	50	" " " " " " " " " " " Unmetalled " " " " " " "
—	"	50	" " " " " " " " " " " from Development Fund Provincial Roads for Original Works
- - -	"	50	" Maintenance



APPENDIX V

APPENDIX

Statement showing the expenditure on District Local Board Roads in the
1921-22

—	1921-22.	1922-23.	1923-24.	1924-25.
1	2	3	4	5
	Rs.	Rs.	Rs.	Rs.
(1) Expenditure on metalled District Local Board roads for original works in the Province of Bombay	1,80,641	2,11,788	2,45,635	1,85,618
(2) Expenditure on unmetalled District Local Board roads for original works in the Province of Bombay	1,60,724	94,250	1,28,734	1,17,791
(3) Expenditure on metalled District Local Board roads for maintenance in the Province of Bombay	4,51,946	5,68,794	5,44,584	5,68,349
(4) Expenditure on unmetalled District Local Board roads for maintenance in the Province of Bombay	5,18,795	4,55,687	5,30,217	4,92,900

—	1931-32.	1932-33.	1933-34.	1934-35.
1	12	13	14	15
	Rs.	Rs.	Rs.	Rs.
(1) Expenditure on metalled District Local Board roads for original works in the Province of Bombay	2,69,334	1,92,344	2,16,078	1,52,374
(2) Expenditure on unmetalled District Local Board roads for original works in the Province of Bombay	1,86,361	2,13,520	2,06,288	2,57,209
(3) Expenditure on metalled District Local Board roads for maintenance in the Province of Bombay	8,81,092	7,66,140	7,53,558	7,27,755
(4) Expenditure on unmetalled District Local Board roads for maintenance in the Province of Bombay	3,36,981	3,36,929	3,17,477	3,63,204

V.

*Province of Bombay (original works and repairs) from
to 1940-41.*

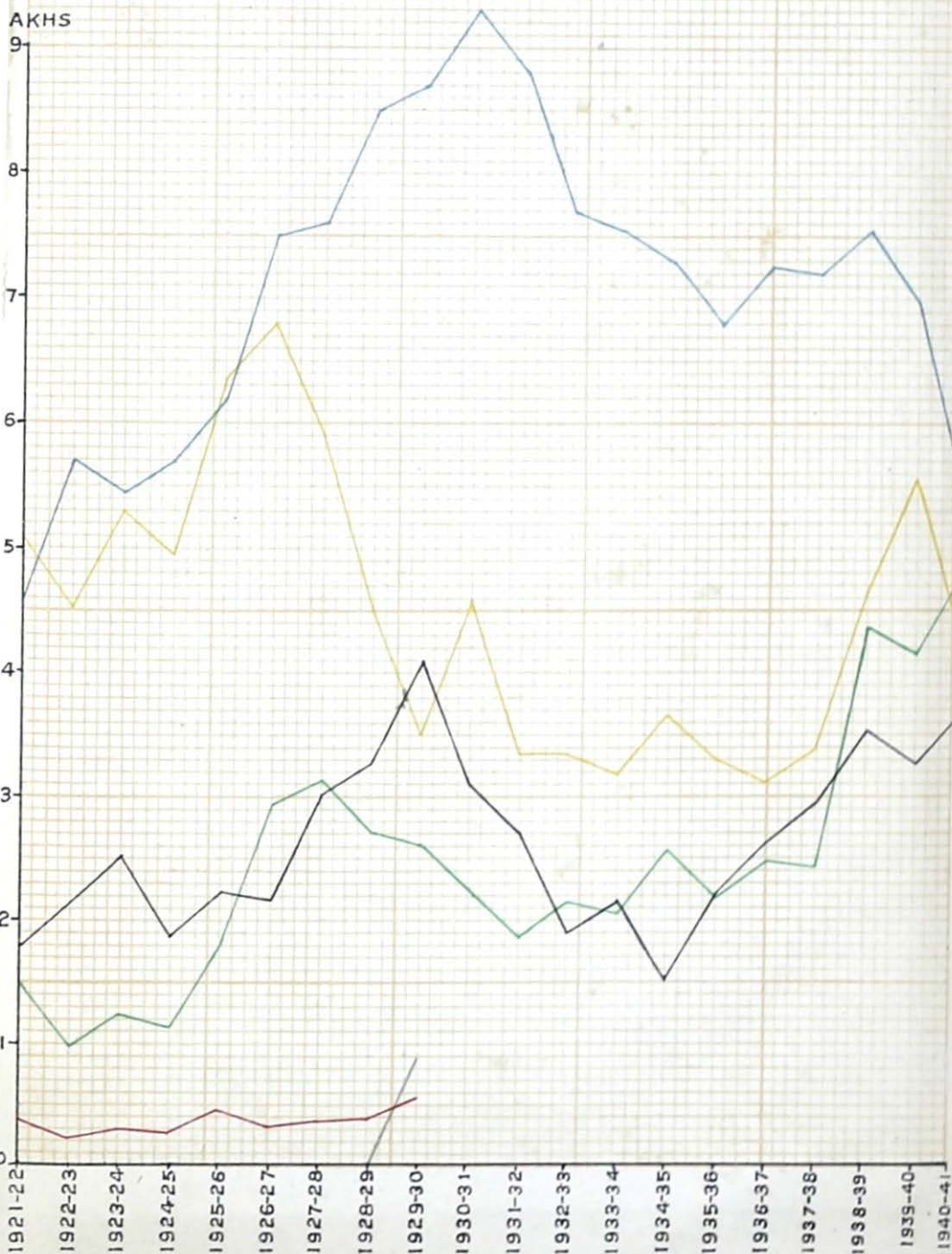
1925-26.	1926-27.	1927-28.	1928-29.	1929-30.	1930-31.
6	7	8	9	10	11
Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
2,22,685	2,14,017	2,08,423	3,29,532	4,11,234	3,07,573
1,78,703	2,97,654	3,18,374	2,72,491	2,62,260	2,28,956
6,21,726	7,48,360	7,59,703	8,51,468	8,73,140	9,31,651
6,36,110	6,79,365	5,91,524	4,57,202	3,51,071	4,62,352

1935-36.	1936-37.	1937-38.	1938-39.	1939-40.	1940-41.
16	17	18	19	20	21
Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
2,21,560	2,62,065	2,95,980	3,53,644	3,24,932	3,60,390
2,18,755	2,48,945	2,44,517	4,35,306	4,15,804	4,06,939
6,78,079	7,28,847	7,23,461	7,56,847	6,97,431	5,74,890
3,27,876	3,10,919	3,40,229	4,65,033	5,58,506	4,57,840

DIAGRAM SHOWING EXPENDITURE ON D.L.B. ROADS IN THE PROVINCE OF BOMBAY.

ORIGINAL WORKS AND REPAIRS.

— Expenditure on unmetalled D. L. B. roads for Maintenance in the Province of Bombay.
 — " " " Metalled " " " " " " " " " " " " "
 — " " " Unmetalled " " " " " " " " " " " " "
 — " " " Metalled and Unmetalled D. L. B. Roads for "Original Works" " " " "
 — " " " Metalled and Unmetalled D. L. B. Roads for "Original Works and Repairs in the Ratnagiri Dist. not included in the Province of Bombay."
 — " " " Metalled and Unmetalled D. L. B. Roads for "Original Works and Repairs in the Bijapur Dist. not included in the Province of Bombay."



APPENDIX VI

APPENDIX

Statement showing expenditure on establishment in the Roads and Buildings and the percentage on the total outlay on works and

Year.	Expenditure on Establishment		
	50—Civil Works—Provincial	81—Civil Works	50—Civil Works—Central
1	2	3	4
	Rs.	Rs.	Rs.
1921-22	20,06,955	....	1,98,683
1922-23	20,14,640	8,34,450	1,78,163
1923-24	15,84,488	8,10,645	67,892
1924-25	16,80,892	12,25,632	1,10,721
1925-26	18,89,417	12,05,078	1,01,876
1926-27	25,30,286	5,97,486	1,68,896
1927-28	21,99,448	5,59,107	1,49,132
1928-29	22,40,393	6,56,713	2,29,540
1929-30	22,45,450	7,33,867	1,56,773
1930-31	25,51,711	1,80,139	1,72,163
1931-32	25,93,104	2,32,929	1,22,799
1932-33	23,74,603	71,981	85,143
1933-34	22,73,045	31,807	71,866
1934-35	21,88,729	38,278	62,472
1935-36	20,51,807	808	80,984
1936-37	23,14,593	619	61,850
1937-38	22,61,828	699	58,352
1938-39	20,85,355	....	10,113
1939-40	19,38,566	....	17,245
1940-41	17,79,944	66,927	-11,702*

*Represents the difference between the Establishment charges debited on the basis under

VI.

the Irrigation Branches of the P. W. D. from the year 1921-22 to 1940-41 and repairs during that period in both the Branches.

in the Roads and Buildings Branch

8—Mili- tary Works	Deposit Works	Total Establi- shment charges	Percentage on the total outlay on works and repairs in the Roads and Build- ings Branch
5	6	7	8
Rs.	Rs.	Rs.	
45,258	2,84,992	34,35,888	19.26
71,481	77,143	31,75,877	20.79
38,560	6,88,354	31,89,939	19.88
27,862	2,52,556	33,15,663	19.67
69,049	2,58,535	35,23,955	20.66
5,882	3,94,389	36,96,939	23.76
5,042	2,97,270	32,09,999	24.96
2,240	2,56,180	33,85,066	25.03
3,638	2,34,897	33,74,625	25.26
2,415	85,444	29,91,872	32.35
3,182	44,132	29,96,146	38.70
3,334	17,156	25,52,217	39.79
3,810	30,502	24,11,930	37.97
2,693	47,694	23,39,866	35.82
1,539	54,593	21,98,731	35.75
1,124	57,679	24,35,874	31.66
998	47,319	23,47,689	24.46
769	65,701	21,61,938	25.28
810	63,725	20,09,191	23.37
547*			
....	79,566	10,26,437	22.98

of estimated figures and those on the basis of actuals to end of March final kept suspense.

APPENDIX

Year	Expenditure on Establishment			
	68—Construction of Irrigation, Navigation, Embankment and Drainage Works	XVII—Works for which capital accounts are kept	18—Other Revenue Expenditure financed from Ordinary Revenue	XLI—Receipts from Electricity schemes—Hydro-Electric Schemes
	9	10	11	12
	Rs.	Rs.	Rs.	Rs.
1921-22	11,53,734	13,85,960	6,68,651	....
1922-23	14,20,751	13,44,901	5,34,327	....
1923-24	21,87,793	14,43,222	4,32,013	....
1924-25	29,10,785	17,37,724	5,26,361	....
1925-26	32,21,647	17,99,343	5,19,228	....
1926-27	35,56,959	18,08,385	5,94,989	....
1927-28	36,98,956	19,20,773	7,80,312	....
1928-29	39,04,670	21,35,939	6,16,601	....
1929-30	42,26,873	21,08,302	6,18,312	....
1930-31	42,88,966	18,31,149	5,99,621	....
1931-32	40,37,972	16,34,011	5,18,627	....
1932-33	28,70,427	23,53,971	4,01,329	....
1933-34	17,60,090	28,83,531	5,14,407	....
1934-35	15,36,830	30,98,255	4,55,037	....
1935-36	1,37,301	8,66,476	1,73,501	....
1936-37	74,021	8,24,868	1,63,507	....
1937-38	68,679	7,70,734	1,27,039	....
1938-39	53,922	8,22,086	1,39,881	....
1939-40	37,362	7,77,209	1,14,778	1,422
1940-41	52,969	7,96,162	43,795	3,749

Note.—The percentage of the establishment charges on the cost of works and repairs Buildings Branch (column 8). The reason is largely that the establishment charges in entirely on "revenue management" work on certain canal systems which has no cost of part of the time of Irrigation establishment spent on revenue management includ management" and not to execution of works and repairs. If these establishment cost of establishment in the Irrigation Branch the percentage on the cost of works and Branch is mainly due to decrease in outlay on "works" and "repairs". Establishment A mere overall percentage on expenditure on works is inaccurate.

The figures from the year 1921-22 to 1934-35 pertain both to the Province of Bombay

VI—contd.

in the Irrigation Branch

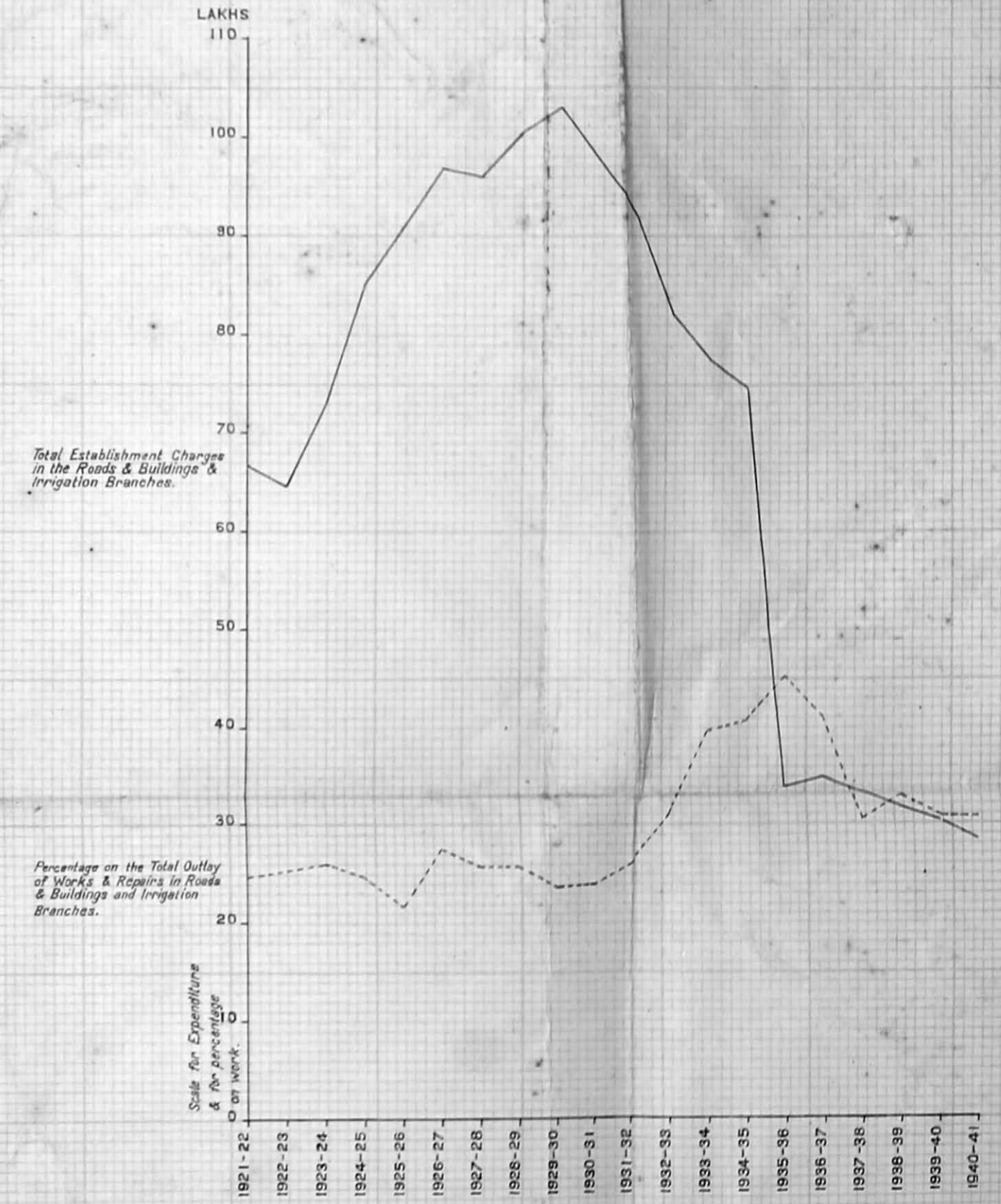
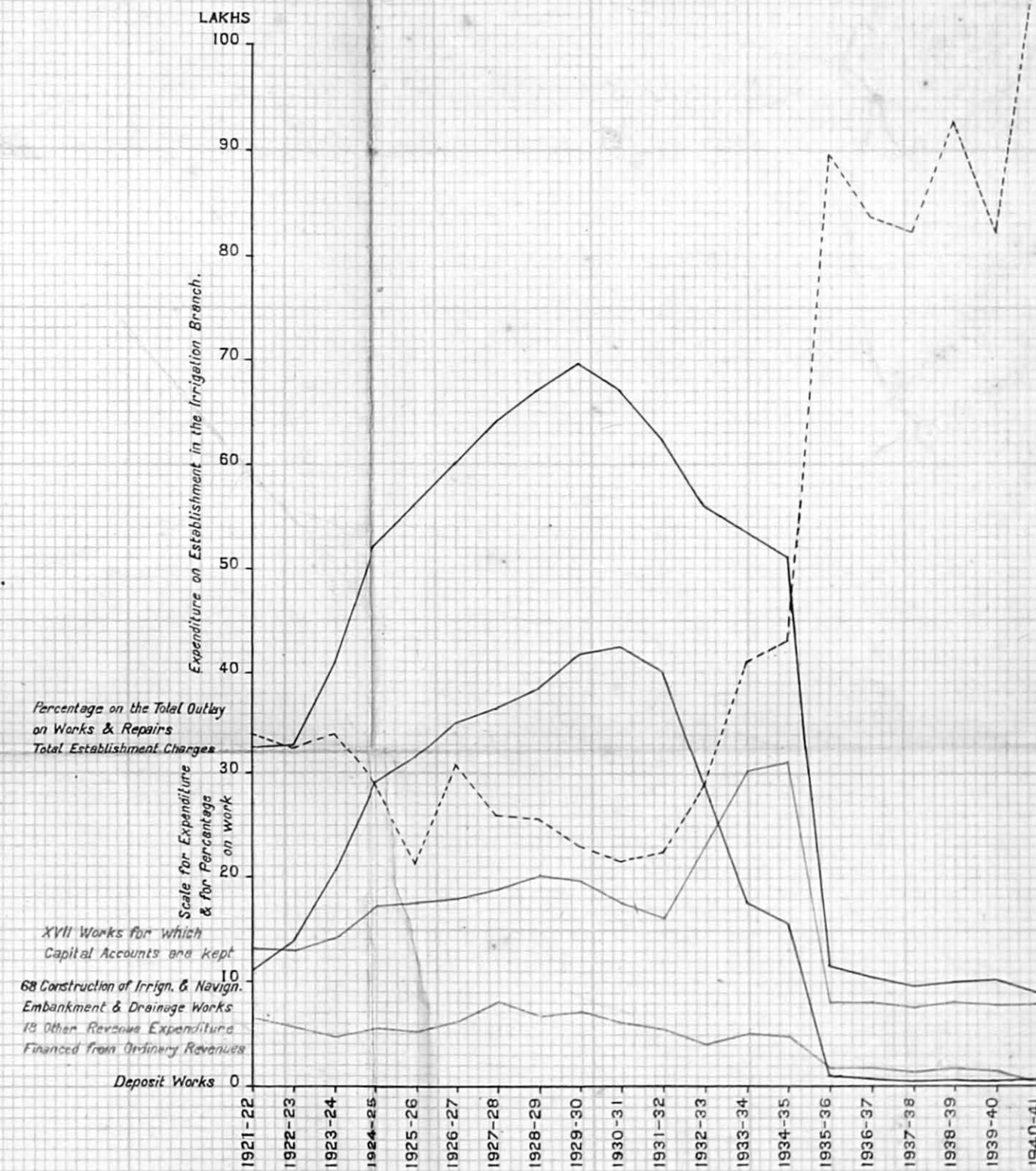
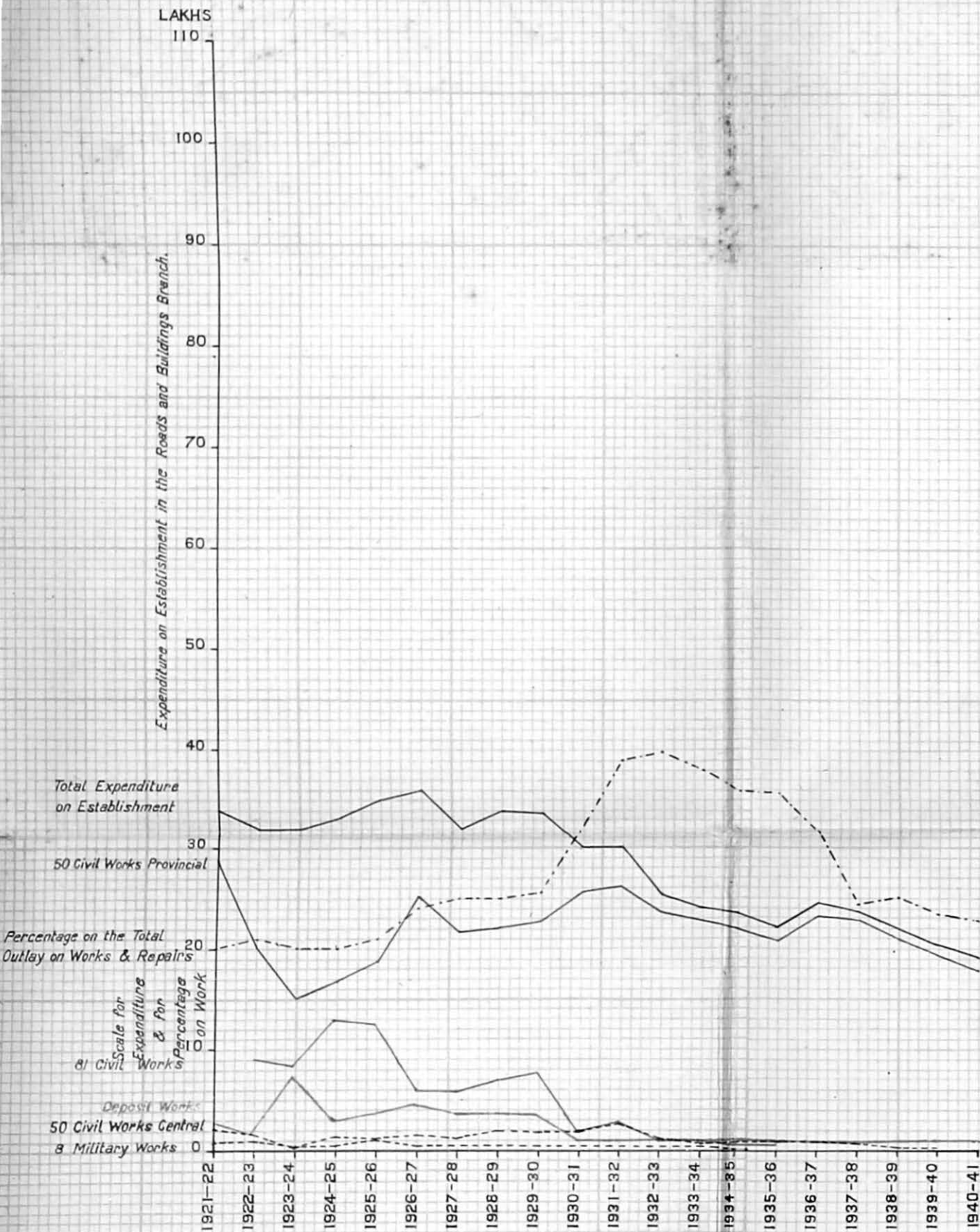
53—Capital Outlay on Electricity schemes— Hydro- Electric Schemes	Deposit Works	Total establishment charges	Percentage on the total outlay on works and repairs in the Irrigation Branch	Total Establishment charges in the Roads and Buildings and Irrigation Branches	Percentage on the total outlay of works and repairs in the Roads and Buildings and Irrigation Branches
13	14	15	16	17	18
Rs.	Rs.	Rs.		Rs.	
....	2,770	32,11,115	33·59	66,47,003	24·26
....	1,993	33,01,972	32·22	64,77,849	25·38
....	2,056	40,65,084	33·89	72,55,023	25·87
....	492	51,75,362	28·73	84,91,025	24·35
....	2,681	55,42,899	21·62	90,66,854	21·23
....	3,207	59,63,540	30·56	96,60,479	27·54
....	3,847	64,03,888	26·00	96,13,887	25·64
....	2,750	66,59,960	25·51	1,00,45,026	25·35
....	1,012	69,54,499	23·26	1,03,29,124	23·88
....	1,734	67,21,470	21·60	97,13,342	24·06
....	86	61,90,696	22·40	91,86,842	25·97
....	680	56,26,407	28·54	81,78,624	31·30
....	48,960	53,06,988	40·41	77,18,918	39·61
....	441	50,90,563	42·89	74,30,429	40·38
....	61	11,77,339	89·46	33,76,070	45·21
....	620	10,63,016	83·73	34,98,890	39·04
....	73	9,66,575	82·27	33,14,264	30·77
....	..	10,15,889	92·85	31,77,827	32·95
89,598	317	10,20,686	82·62	30,29,877	30·82
4,452	1,109	9,02,236	107·88	28,28,673	30·68

in the Irrigation Branch (column 16) is generally higher than that in the Roads and the Irrigation Branch include the cost of special Revenue Establishment employed connection with the execution of works and repairs, and that these charges also include the *control and distribution of water*, which is debited in the accounts to "revenue charges debited in the accounts to "revenue management" are deducted from the total repairs will not be so divergent. The increase in the rate per cent., in the R. & B. charges cannot be reduced in the same ratio in which expenditure on works is reduced.

and Sind.

PROVINCE OF BOMBAY
DIAGRAM SHOWING EXPENDITURE
ON ESTABLISHMENT
IN THE
ROADS & BUILDINGS & IRRIGATION BRANCHES
OF THE
PUBLIC WORKS DEPARTMENT
AND
PERCENTAGE TO THE TOTAL OUTLAY ON WORKS AND REPAIRS.

NOTE:- THE FIGURES UP TO 1934-35 PERTAIN TO BOTH THE PROVINCES OF BOMBAY AND SIND.



APPENDIX VII.

Statement showing the programme of road development works in the Province of Bombay to end of the year 1940-41 together with the expenditure to end of that year.

Serial No.	Name of work.	Estimated cost.	Expenditure to end of 1940-41.
		Rs.	Rs.
<i>Class I.</i>			
1	Bombay-Agra Road	10,22,077	9,85,149
2	Bombay-Poona-Bangalore Road	23,19,383	21,61,467
3	Bombay-Koakan-Goa Road	35,71,455	28,66,633
4	Bombay-Ahmedabad,Rajputana Road	21,56,564	18,41,651
5	Surat-Dhulia-Bhusawal-Edlabad-Nagpur Road.	7,36,850	5,97,404
6	Ahmedabad-Kaira-Godhra-Indore Road	3,12,004	3,04,704
7	Bombay-Poona-Ahmednagar-Aurangabad Road.	9,783	9,698
8	Bombay-Poona-Sholapur-Hyderabad Road	4,06,426	3,78,085
9	Chiplun-Karad-Jath-Bijapur-Sindgi-H y d e r a - bad Road	9,62,528	8,54,889
10	Poladpur-Mahableshwar-Surul Road	27,325	26,373
11	Sholapur-Bijapur-Hubli Road	2,69,969	2,28,884
12	Ratnagiri-Kolhapur-Miraj-Bijapur-Hydera b a d Road	3,43,471	2,28,741
13	Karwar-Bellary Road	5,29,340	4,29,320
	Total, Class I Roads	1,26,67,175	1,09,12,908
<i>Class II.</i>			
14	Bandra-Ghodbunder-Thana Road	6,92,006	6,04,475
15	Dahanu-Vihigaon Road	1,54,217	1,31,900
16	Ahmedabad-Viramgam-Mandal Road	2,91,405	2,86,764
17	Alibag-Dharamtar-Pen-Campoli Road	80,492	78,898
18	Kaira-Mehmedabad-Mahuda-Dakor Road	56,221	55,638
19	Alibag-Revas Road	87,316	81,262
20	Ahmedabad-Ghogo Road	2,31,621	2,27,368

APPENDIX VII—contd.

Serial No.	Name of work.	Estimated cost.	Expenditure to end of 1940-41.
		Rs.	Rs.
<i>Class II—contd.</i>			
21	Ranpur-Dhanduka-Dholera Road ..	3,58,928	3,30,539
22	Kurla-Andheri-Versova Road	1,67,163	1,57,119
23	Mahim-Manor Road	67,116	69,189
24	Nasik-Poona Road	2,34,820	2,42,527
25	Nawapur-Borzar-Warsa-Pimpalner-Sakri Road.	18,903	8,926
26	Burhanpur-Raver-Yawal-Chopda-Shirpur-Taloda-Raisingpur Road	6,99,853	5,61,429
27	Sholapur-Osmanabad Road	52,000	25,864
28	Pimpalgaon-Vinchur-Aurangabad Road ..	25,005	5,000
29	Bhusaval-Yawal Road	35,968	4,974
30	Pimpalner-Satara-Chandor-Vinchur Road ..	1,63,000	1,498
31	Mahad-Bhor-Phalton-Malsiras Road ..	27,892	496
32	Ahmednagar-Dhond-Patas Road	17,491	13,081
33	Ahmednagar-Manmad-Malegaon Road ..	41,001	39,951
34	Ghoti-Rajur-Sangamner-Belapur-Newasa-Shevgaon-Paithan Road	1,71,218	1,69,754
35	Indapur-Baramati-Nira Road	1,61,568	95,275
36	Belgaum-Khanapur-Haliyal-Yellapur-Sirsi-Kodkani-Mysore Frontier Road	4,08,125	2,60,547
37	Havnur-Ekambi Road	77,271	71,932
38	Gotur-Tasgaon Road	44,328	41,320
39	Dharwar-Saundatti-Yergatti-Gokak-Sankeshwar Road	61,476	60,405
40	Kumta-Sirsi-Hubli Road	2,33,494	2,27,124
41	Kolhapur-Tikota Road	99,225	79,630
	Total, Class II Roads ..	47,59,123	39,32,885
<i>Class III.</i>			
42	Sion-Chembur Road	42,308	30,647
43	Tuwa-Bordi Road	75,079	2,557

APPENDIX VII—contd.

Serial No.	Name of work.	Estimated cost.	Expenditure to end of 1940-41.
		Rs.	Rs.
<i>Class III—contd.</i>			
44	Santa-Cruz-Juhu Road	47,605	35,615
45	Madhi-Buhari Road	38,689	38,685
46	Dungri-Untadi Road	15,791	16,334
47	Bhesli-Broach Road	1,78,130	76,445
48	Mandvi-Madhi Road	12,213	11,175
49	Limdi-Sanjeli Road	69,903	8,341
50	Anas-Katwara Road	1,11,310	11,997
51	Limdi-Pethapur-Chakalia-Dohad Road ..	2,86,526	81,633
52	Modernising Roads in Poona (I, II and III instalments)	5,87,625	5,77,333
53	Poona-Paud-Lonavla Road	93,235	16,020
54	Hadapsar-Saswad-Nira Bridge-Lonavla and Waduth-Satara Road	34,200	13,479
55	Osmanabad-Yedshi Road	11,806	11,310
56	Yedshi-Chausala Road	19,550	18,218
57	Nasik-Trimbak-Gundaghat Road	49,300	50,413
58	Camp-Deolali Road	92,434	90,291
59	Donaicha-Shahada-Khetia Road	96,034	40,002
60	Karad-Tasgaon Road	84,847	7,099
61	Poona-Khadakwasia-Singhad Road	57,611	45,212
62	Wadgaon-Pimpri-Shrigonda-Chincholi-Jamkhod Road.	50,571	35,649
63	Phaltan-Sangvi-Baramati-Diksha-Raishin-Karjat-Chincholi Road	1,93,603	1,54,097
64	Indapur-Akhij-Sangola Road	3,09,454	1,30,785
65	Kolhar-Talikot Road	34,601	31,853
66	Indi-Shirdhon Road	31,728	23,726
67	Bijapur-Bagewadi Road	1,06,739	88,905
68	Deogad-Kaladgi Road	28,947	25,319

APPENDIX VII—concl'd.

Serial No.	Name of work.	Estimated cost.	Expenditure to end of 1940-41.
		Rs.	Rs.
	<i>Class III—concl'd.</i>		
69	Kamadgi-Gadag Road	35,507	17,753
70	Dharwar-Goa Frontier Road	12,448	12,393
71	Karwar-Goa Frontier Road	16,686	15,192
72	Karwar-Bhatkal-Madras Frontier Road	1,59,884	1,44,801
73	Talikot-Salvadgi Road	96,712	9,155
74	Asphalting different sections of roads near and about Belgaum	2,29,249	2,26,201
75	Asphalting Provincial roads passing through Dhulia	1,04,900	1,04,542
76	Modernising of roads in and adjoining Ahmednagar City and Cantonment	2,02,951	1,88,565
77	Modernising of roads in and round about Karwar	1,53,478	1,40,418
78	Asphalting Provincial roads in Sholapur	84,584	41,292
79	Modernising of roads in Bijapur	1,43,667	1,02,226
80	Modernising of roads in Baramati Town	28,507	28,388
81	Repairs and maintenance of works financed from Road Account .. ..	....	1,44,940
82	Survey for the preparation of plans and estimates and trial borings	9,240	7,313
83	Road experiment works	1,63,189	1,51,116
84	Special tools and plant	1,48,530	1,40,381
	Grand Total ..	2,17,85,659	1,80,77,289

APPENDIX VIII.

Statement showing Expenditure on Works and Repairs under Provincial Road Fund.

No.	Name of work.	Expenditure incurred during the year			
		1937-38*	1938-39.	1939-40	1940-41
1	2	3	4	5	6
	<i>Thana Division.</i>	Rs.	Rs.	Rs.	Rs.
1	Modernising miles 25-27, 44 and 45 (furlongs 1 to 4) of the Bombay-Poona Road.	....	34,859	1,52,764	7,836
2	Modernising, with asphalt macadam, miles 25, 26 and part of 27 of the Bombay-Nasik Road.	....	40,001	10,871	....
3	Modernising miles 30, 31, 42, 43, 53 and 54 of the Bombay-Poona Road.	....	....	4,880	2,36,593
4	Constructing R. C. C. Slab drain in mile No. 47/4 of Bombay-Agra Road.	....	....	5,508	304
5	Modernising miles 30 to 32/5 and 69 to 72 of the Bombay-Agra Road.	....	....	....	1,33,822
6	Modernising Bombay-Nasik Road miles 28 and 29 (Group No. II), miles 32/6 to 36 (Group No. IV) of the Bombay-Nasik Road.	....	....	....	40,265
7	Constructing a Slab drain of 40 openings in mile No. 50/6 of the Bombay-Agra Road.	....	....	....	8,997
8	Constructing R. C. C. Slab drain of 3 openings in miles 39/8 of the Bombay-Agra Road.	....	....	....	4,985
	<i>Poona Division.</i>				
9	Modernising Bombay-Poona Road (Ghat-portion) miles 66 to 70½.	....	9,945	29,327	73,763
10	Modernising Bombay-Poona Road miles 98 to 107/4.	....	26,839	1,87,214	1,13,846
11	Modernising miles 94 to 98 of the Bombay-Poona Road.	....	....	....	6,226
12	Modernising miles 81/7 to 94 of the Bombay-Poona Road.	....	....	....	14,006

*The expenditure incurred during 1937-38 mainly related to repairs and survey works.

APPENDIX VIII—contd.

No.	Name of work.	Expenditure incurred during the year			
		1937-38.*	1938-39.	1939-40.	1940-41
1	2	3	4	5	6
	<i>Kaira and Panch Mahals Division.</i>	Rs.	Rs.	Rs.	Rs.
13	Constructing Godhra-Pali Road (a road from Godhra to Pali passing through Baroda State limits).	....	....	5,534	2,890
	<i>Surat and Broach Division.</i>				
14	Improvement to the Rander approach to the Hope Bridge at Surat.	....	....	500	49,970
	<i>Nasik Division.</i>				
15	Modernising low lying portion of the Bombay-Agra Road between Ghoti and Igatpuri of Vihigaon-Nasik section miles 91/0 to 93/2 of the Bombay-Nasik Road.	....	19,997	52,679	6,130
16	Modernising (with a cement concrete surface) miles 80 to 84 (Thal Ghat) of the Bombay-Nasik section of the Bombay-Agra Road.	....	....	13,618	66,018
17	Realignment of the Devi Ghat in mile 156 of the Bombay-Agra Road.	....	....	....	5,002
18	Construction of R. C. C. Bridge over nalla No. 248 in mile 131/3 of the Bombay-Agra Road near Pimpalgaon Baswant.	....	....	....	3,906
	Survey for preparation of plans and estimates in various divisions.	....	2,628	2,380	225
	Repairs .. ..	....	11,200	173	....
	Special Tools and Plants ..	....	15,764	3,583	3,766
	Add Establishment and tools and plant charges.	....	43,364	1,28,241	2,26,162
	Total ..	3,78,657*	2,04,687	5,07,275	10,63,807

Note.—The above expenditure is exclusive of Rs. 3,21,353 representing expenditure on approach Roads to villages incurred during 1939-40.

*The expenditure incurred during 1937-38 mainly related to repairs and survey works.

APPENDIX IX.

List of members on the Board of Communications on the 31st March 1941.

1. H. F. Knight, Esquire, C.I.E., I.C.S., Adviser to H. E. the Governor (*Chairman*).
2. The Chief Engineer and Secretary to Government, Public Works Department.
3. The Secretary to Government, Finance Department.
4. The Secretary to Government, Revenue Department.
5. The Secretary to Government, General Department.
6. The Commissioner, Northern Division.
7. The Commissioner, Central Division.
8. The Commissioner, Southern Division.
9. The Chief Engineer, Southern Command, Poona.
10. The Honourable Mr. R. H. Parker, Member, Council of State, Representative of the Standing Committee for Roads.
11. N. D. Deodhekar, Esquire, M.L.C.
12. Rao Bahadur G. K. Chitale, M.L.A.
13. Rao Saheb G. K. Desai, M.L.A.
14. Mr. Ismail Moosa Patel, M.L.A.
15. A Representative of the G. I. P. Railway.
16. H. E. Ormerod, Esquire, Representative of the Indian Roads and Transport Development Association, Ltd.
17. N. M. Chinoy, Esquire, Representative of the Western India Automobile Association.
18. G. H. Richmond, Esquire, Representative of the Bombay Chamber of Commerce.
19. K. C. Desai, Esquire, Representative of the Indian Merchants' Chamber.
20. M. L. Dahanukar, Esquire, Representative of the Maharashtra Chamber of Commerce.
21. The Deputy Secretary to Government, Public Works Department, Roads and Buildings. (*Secretary, Board of Communications*).

} Representatives, District Local Boards.

APPENDIX X.

List of members of the Standing Advisory Committee for the Back Bay Reclamation Scheme for the year 1940-41.

Name of Member.	Constituency.
1. Mr. L. A. Halsall (<i>Chairman</i>) ..	.. The Bombay Chamber of Commerce.
2. Mr. Manu Subedar ..	.. Indian Merchants' Chamber.
3. Mr. V. N. Chandavarkar ..	.. Millowners' Association, Bombay.
4. Mr. Hoseinbhoj A. Lalljee ..	.. The Bombay Municipal Corporation.
5. Mr. G. E. Terrey, M.Inst.C.E., Chief Engineer, Bombay Port Trust ..	} Nominated by Government.
6. Mr. N. V. Modak, City Engineer, Bombay Municipality ..	
7. Mr. F. H. Taylor, F.S.I., M.R.S.I., Manager, Land and Bunders, Bombay Port Trust ..	
8. Mr. K. S. Framji, C.I.E. ..	
9. Mr. H. Foster-King, F.R.I.B.A., Chartered Architect. ..	

ELECTRICITY SUPPLY OF THE BOMBAY PROVINCE. UNITS SOLD

