

ANNUAL REPORT
OF THE
PUBLIC WORKS DEPARTMENT



OF THE
CITY OF BOSTON
1924

ANNUAL REPORT
OF THE
PUBLIC WORKS DEPARTMENT
FOR THE
YEAR 1924



COMPLIMENTS OF

JOSEPH A. ROURKE,

Commissioner of Public Works

PLEASE EXCHANGE

ANNUAL REPORT

OF THE

PUBLIC WORKS DEPARTMENT

FOR THE

YEAR 1924



CITY OF BOSTON
PRINTING DEPARTMENT
1925

CONTENTS.

PART I.

REPORT OF THE COMMISSIONER OF PUBLIC WORKS.

	PAGE		PAGE
Appropriations	8	Contracts:	
Appropriations, special	8	High Pressure Fire Serv-	
Contracts:		ice	32
Ashes	27	Employees	35
Bridge work	20	Expenditures	12
Ferry work	21	Expenditures, by items, seg-	
Gas, furnishing same	22	regated budget	13
Gas, lighting streets with		Financial statement	17
same	22	General review	2
Hired teams	19	Maintenance, comparative	
Miscellaneous, Sanitary		table	16
Service	26	Organization	1
Offal	27	Pavements, area of	33
Snow and ice	25	Pavements, changes in	35
Water pipes, laying	28	Pavements, length of	34
Water pipes, relaying	28	Pavements, miles of	34
		Revenue	17

PART II.—APPENDIX A.

Administration expenses, Central Office	42
---	----

APPENDIX B.

REPORT OF THE DIVISION ENGINEER OF THE
BRIDGE AND FERRY DIVISION.

(BRIDGE SERVICE.)

(PAGE 43.)

	PAGE		PAGE
Appropriations, special.....	43	Bridges, work done on:	
Appropriations, special, sum- mary of.....	43	Repairing wharf and Dredging Dock, Engine 31, Commercial street..	54
Bridges, work done on:		Expenditures.....	62
Beacon Street Bridge.....	45	Expenditures, special appro- priations.....	62
Braddock Park Foot- bridge.....	45	Expenditures, special appro- priations, summary of..	72
Cambridge Street Bridge (over Boston & Albany Railroad).....	45	Financial statement.....	62
Chelsea Bridge North....	46	List of Bridges:	
Chelsea Bridge South....	47	In charge of Bridge and Ferry Division, Bridge Service.....	73
Chelsea Street Bridge....	46	In charge of Bridge and Ferry Division and Park and Recreation Depart- ment.....	73
Commercial Point Bridge, Congress Street Bridge...	48	In charge of Park and Recreation Department, Maintained by Metropol- itan Park Commission..	73
Cottage Farm Bridge (over Boston & Albany Rail- road).....	49	Maintained by railroad corporation.....	73
Dartmouth Street Bridge, Dorchester Avenue Bridge, Harvard Street Bridge, Dorchester.....	51	Maintained by United States Government....	73
Huntington Avenue Bridge (over Boston & Albany Railroad).....	51	Of which Boston main- tains the part within its limits.....	73
Hyde Park Avenue Bridge, Meridian Street Bridge..	51	Of which Boston main- tains the wearing sur- face.....	73
Northern Avenue Bridge..	52	Of which Boston pays a part of the cost of main- taining.....	73
Redfield Street Bridge, Dorchester.....	53	Repairs on bridges.....	65
Reservoir Road Bridge, Brighton.....	53	Width of bridge openings...	74
Summer Street Bridge (over Reserved Chan- nel).....	53	Work done.....	43
Walworth Street Bridge (over New York, New Haven & Hartford Rail- road).....	53		

(FERRY SERVICE.)

(PAGE 55.)

	PAGE		PAGE
Appropriations	77	Expenditures.....	77
Appropriations, amount paid from.....	77	Expenditures, comparison of (five years).....	80
Appropriations, comparison of (five years).....	80	Expenditures and receipts since 1858.....	84
Appropriations, special.....	85	Ferryboats.....	55
Balance sheet	79	Financial statements.....	77
Comparative balance sheet (five years).....	80	Receipts at each ferry.....	86
Comparison of appropria- tions, receipts and ex- penditures (five years)....	81	Receipts, comparison of (five years).....	82
Difference in travel between ferries.....	87	Ticket statement.....	87
		Total travel on both ferries (six years).....	89
		Work done.....	55

APPENDIX C

REPORT OF THE DIVISION ENGINEER OF THE
HIGHWAY DIVISION.

GENERAL REVIEW.

(PAGE 90.)

(LIGHTING SERVICE.)

(PAGE 93.)

	PAGE		PAGE
Arc lamps, total cost per lamp, per annum.....	101	Incandescent lamps, total cost per lamp per annum,	102
Defects.....	95	Lamps, number of, installed during year.....	95
Electric lights, number and kind of.....	100	Lamps, discontinued.....	95
Electric lights, cost of.....	100	Lamps, repaired and altered,	96
Expenditures.....	93	Number and style of lamps, January 1, 1925.....	97
Financial statement.....	93	Outages on street lamps....	97
Gas lamps, number and kind of.....	99	Rebates.....	97
Gas lamps, total cost per lamp per annum.....	99	Repairs.....	96
		Revenue.....	93
		Work done.....	94

(PAVING SERVICE.)

(PAGE 90.)

	PAGE		PAGE
Granolithic sidewalks (between pages, 118, 119).		Street improvements (between pages 118, 119).	
Highways, Making of (between pages 118, 119).		Expenditures, objects of..	111
Cambridge street and Court street (between pages 118, 119).		Expenditures, detail of..	112
Garage, Albany street (between pages 118, 119).		General review.....	90
Stuart street (between pages 118, 119).		Macadam streets, maintenance of.....	117
Paving service (between pages 118, 119).		Permits.....	119
Reconstructing and repairing streets by contract (between pages 118, 119).		Permits, revenue from.....	119
		Snow and ice removed by contract.....	115
		Street openings.....	119
		Work done.....	90
		By contract, summary of,	103
		By day labor, summary of,	107

APPENDIX D.

REPORT OF THE DIVISION ENGINEER OF THE
SEWER AND SANITARY DIVISION.

(SEWER SERVICE.)

(PAGE 121.)

	PAGE		PAGE
Catch-basins, cleaned by contract.....	139	Pumping station, Calf Pasture, work done.....	160
Executions of court on account of land takings..	153	Pumping stations, equipment of.....	160
Expenditures:		Pumps, Calf Pasture, average lift and duty.....	160
Maintenance.....	129	Refuse, removing same from gate house.....	160
Maintenance, detail of...	137	Sewers built, charged to sewerage works.....	141
Maintenance, detail of, recapitulation of.....	138	Summary of sewer construction (twelve months)...	157
Sewerage works, detail of,	141	Summary of sewer construction (five years).....	159
Sewerage works, loan....	128	Work done.....	121
Financial statement.....	128	Work in charge of division..	121
Land-takings, executions of court.....	153		
Miles of sewers, February 1, 1925.....	158		
Pumping sewerage, average cost per million foot gallons.....	160		

(SANITARY SERVICE.)

(PAGE 123.)

	PAGE		PAGE
Appropriations	161	Cost of collecting and disposing of refuse by day labor (between pages 168, 169.)	
Ashes, collected by contract, number of loads	166	Final disposition of	168
Districts, map of	169	Garbage removed (five years)	165
Expenditures, items of	163	Number of loads collected from February 1, 1920, to January 29, 1925	165
Financial statement	161	Offal collected by contract, number of loads	166
Income	161	Waste and rubbish removed (five years)	165
Maintainance	161	Refuse collected, detail of (between pp. 168, 169)	
Materials:		Revenue	161
Amount expended on offal, ashes and rubbish by districts	164	Sanitary districts	169
Ashes and house dirt removed (five years)	165	Work done	123
Collected by districts	164	Work done for other services,	162
Cost of collecting and disposing of refuse by contract	164		

(STREET CLEANING AND OILING SERVICE.)

(PAGE 124.)

	PAGE		PAGE
Expenditures, distribution of,	170	Streets:	
Expenditures, items of	170	Cleaned, total cost of (between pages 174, 175).	
Financial statement	170	Swept by machines (between pages 174, 175).	
Macadam streets, cost of oiling	175	Treated with oil, cost of	175
Snow removed, cost of	173	Work done	124

APPENDIX E.

REPORT OF THE DIVISION ENGINEER OF THE
WATER DIVISION.

(WATER SERVICE.)

(PAGE 176.)

	PAGE		PAGE
Construction, cost of.....	184	Condemned.....	186
Elevators.....	185	In service, January 31,	
Expenditures.....	181	1925.....	187
Expenditures, detail of....	181	Installed.....	186
Expenditures, comparison of,	181	On hand January 31, 1925,	189
Financial statement.....	181	Repaired.....	189
Hydrants, total number of,		Set.....	189
January 31, 1925.....	189	Receipts, comparison of....	181
Hydrants, total number and		Revenue.....	181
kind of, established and		Service pipes:	
abandoned.....	189	Maintenance of.....	192
Income branch.....	185	Repairs, cost of.....	201
Main pipe, cost of extension,	193	Total number of lengths	
Main pipe work, mainte-		of.....	188
nance of.....	192	Water:	
Meter branch.....	186	Debt.....	184
Meter repairs.....	186	Sinking fund.....	184
Meters:		Water pipes, total length of,	188
Applied.....	186	Work done.....	176
Changed.....	186	Work done, detail of.....	176

(HIGH PRESSURE FIRE SERVICE.)

(PAGE 176.)

	PAGE		PAGE
Expenditures.....	205	Work done.....	176
Financial statement.....	205		

APPENDIX F.

REPORT OF THE BOSTON AND CAMBRIDGE
BRIDGE COMMISSION.

(PAGE 207.)

	PAGE		PAGE
Bridges in charge of com-		Drawtenders' report.....	211
mission.....	207	Expenditures.....	209
Draw openings.....	210	Work done.....	207



ANNUAL REPORT
OF THE
PUBLIC WORKS DEPARTMENT
FOR THE
YEAR ENDING JANUARY 31, 1925.

Boston, February 1, 1925.

HON. JAMES M. CURLEY,
Mayor of the City of Boston:

SIR,—In compliance with Revised Ordinances the annual report of the operations and expenses of the Public Works Department for the year ending January 31, 1925, is respectfully submitted. The Public Works Department, created by Ordinances 1910, chapter 9, now chapter 28 of the Revised Ordinances of 1914, was formed by consolidating the Engineering, Water and Street Departments.

ORGANIZATION.

The department is composed of five main divisions, viz.:

Central Office.—The Central Office is composed of the accounting force of the entire department under the charge of the secretary and chief clerk.

Bridge and Ferry Division.— This division, under a division engineer, has the charge and care of all bridges used as highways which are in whole, or in part, under the control of the city; the care and management of the ferries owned by the city, including boats, slips, drops, and buildings.

NOTE.—The Boston and Cambridge Division, so called, is not strictly speaking a division of the Public Works Department, as this work is in charge of a commission of two, one member appointed by the Mayor of Boston and the other by the Mayor of Cambridge, under the provisions of chapter 412 of the Acts of 1904; but because of the fact that the present Commissioner of Public Works is the Boston member of this commission and also because one half of the expense of this commission is defrayed by the Bridge Service, it is in this report treated as a division of this department.

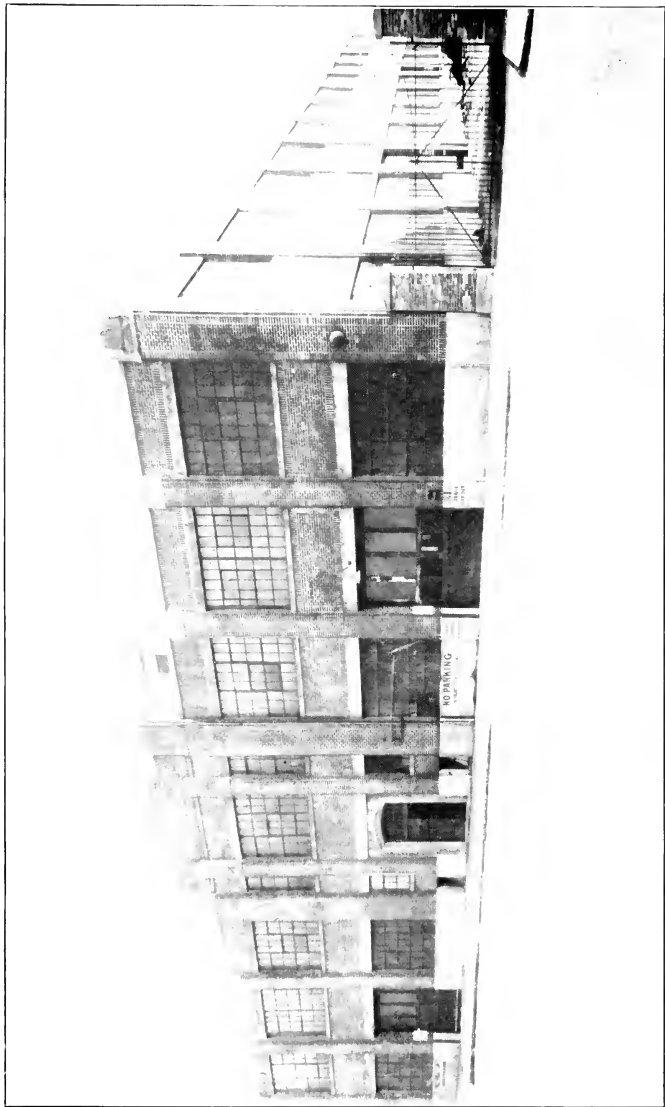
Highway Division.— This division, under a division engineer, has the care of the construction, reconstruction, and maintenance of roadways and sidewalks; the care of lamps and the lighting of streets, parks, and alleys.

Sewer and Sanitary Division.— This division, under a division engineer, has charge of the construction of sewers, catch-basins, and waterways; the collection and removal of ashes, garbage, and refuse; street cleaning; and the oiling and watering of streets.

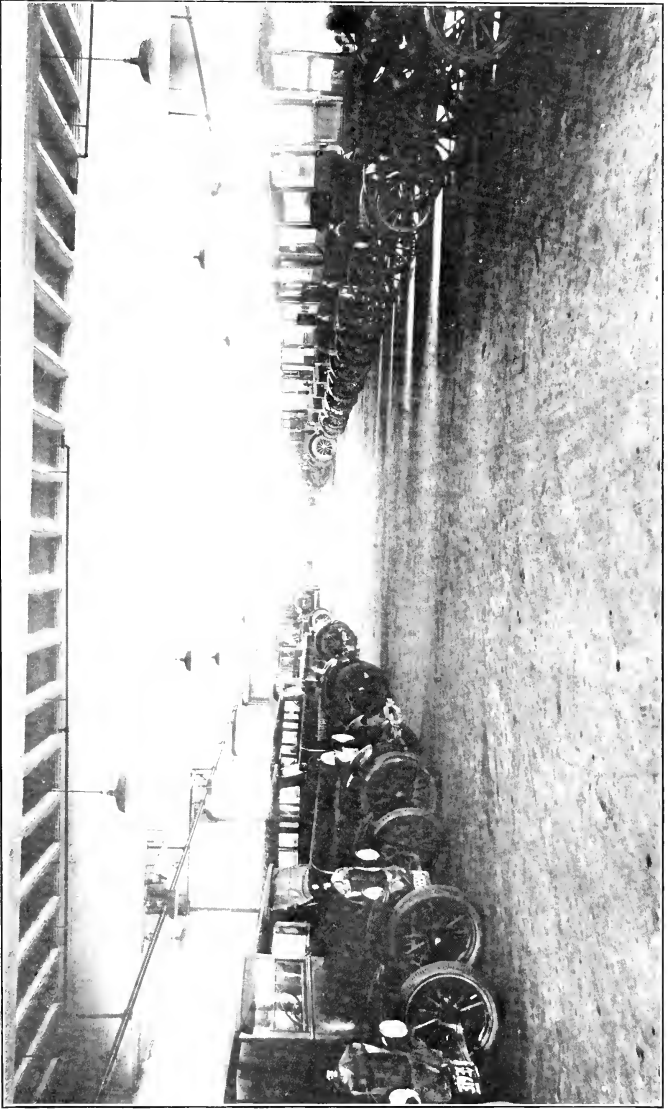
Water Division.— This division, under a division engineer, has the care of water pipes, installation of meters, water service, laying and relaying of water mains, and the high pressure fire service.

GENERAL.

The past year witnessed the completion of the Albany street garage in which are housed motor vehicles of all divisions operating within a limited radius from this location, and in which minor repairs are made on all motor equipment for the entire city. This garage is



PUBLIC WORKS DEPARTMENT GARAGE, 624 ALBANY STREET.



PUBLIC WORKS DEPARTMENT GARAGE, UPPER FLOOR.

active during every twenty-four hours of the entire year, and particularly are its services appreciated for the mobilization and equipment of vehicles and plows for snow work in the winter, for night street cleaning, and for emergency purposes.

We are still deficient in garages in the outlying yards, particularly in West Roxbury and in the Hancock street, Dorchester, paving yard, and a loan of \$50,000 should be obtained the coming year for the construction of a garage in the latter yard.

The Park Department has taken over for park purposes the property in East Boston where is now located our Public Works Department yard handling paving, sanitary, water and sewer activities. A new location must be sought elsewhere.

In order to catch up with the deferred reconstruction of bridges, we established a policy of rebuilding four railroad bridges and one drawbridge, all inside the debt limit, during the four years of the administration, as a result of which Cambridge Street Bridge, Allston, Beacon Street Bridge, and Chelsea South Bridge have been completed. Dartmouth Street Bridge is now being reconstructed; and a loan of \$100,000 inside the debt limit should be available for the reconstruction this year of the Massachusetts Avenue Bridge over the New York, New Haven and Hartford Railroad.

Congress Street Bridge has been in deplorable condition for some time past and should be replaced at once with a bascule draw span, at an estimated cost of \$800,000 and authority for a loan for this amount, outside the debt limit, should be sought from the Legislature. The above record of reconstruction within the debt limit justifies this request.

During the Peters administration a loan of \$1,000,000 outside the debt limit, was allowed by the Legislature for ferry improvements, including the construction of two new ferryboats. We have built two double teaming drops of modern design, and a contract has been

awarded for a second pair of drops, which are now nearing completion and which will greatly facilitate vehicle travel on and off the boats at the South Ferry.

Before similar drops can be installed at the North Ferry it will be necessary to provide new boats, in order to support properly the outboard end of the modern drop which rests on the boat itself. The "Hugh O'Brien," a side-wheel boat, was built in 1883 and should be scrapped and sold as junk. The "Governor Russell" was built in 1898 and is in fair condition for ordinary traffic with the old drops. The "General Sumner," built in 1900, is in very poor condition both for heavy traffic and for supporting the new drops. Hence an immediate necessity exists for the construction of two new steel boats of the Sullivan-Flaherty-Palumbo type, which are the only three modern boats now in service at the ferries, although the "Noddle Island" was rebuilt in 1921 and is a substantial wooden craft well fitted for service for many years. A loan of \$1,000,000 outside the debt limit, should be requested of the Legislature to provide for ferry improvements, including two new boats, and whatever balance remains to be utilized for drops.

Our paved roadways are rapidly deteriorating because of heavy traffic due to motor truck transportation, and particularly is this true of the heavily loaded trucks engaged in inter-city and state transportation. The state built and now maintains as a general traffic highway about a mile and a half of boulevard on Washington street, West Roxbury, northwest from the Dedham line, and this is the total contribution to the City of Boston from state highway funds. In addition to what might be called city highways, we must maintain and keep in good condition various main traffic arteries from the center of the city to the outskirts, from five to nine miles in length, which take care of this traffic, and yet the city receives not one cent of the income from motor vehicles collected by the state.

We have available each year but \$1,000,000 for the reconstruction and repair of streets by contract, a sum hopelessly inadequate for the purpose, and it is extremely unfair to the city to deny it a certain proportion of the receipts from automobile fees now spent by the State Department of Public Works on traffic highways in other parts of the state, than in the City of Boston.

At present, due to statutory limitations, we can spend only \$1,000,000 within the debt limit for sewerage works each year. This is hopelessly inadequate and the Legislature should be petitioned for authority to increase this amount to \$1,500,000. Such approval was refused by last year's Legislature; but when it is considered that twenty years ago we spent \$1,500,000 for sewerage works, and we are flooded with petitions for sanitary sewers for new dwellings throughout the city, and there is a continuous necessity for covering open brook courses in order that flood conditions in new and old built-up sections shall be avoided, the justice of this request becomes apparent.

At present we assess upon abutters for sanitary sewers \$2 per lineal foot of frontage on each side of the street, which was also established by law when the cost of sewerage works was much less than it is today. The average cost for such construction amounts to \$10 per lineal foot, and there is no reason why this assessment should not be increased by statutory amendment to at least \$4 per lineal foot.

Attention is again called to the relinquishment to the Massachusetts General Hospital of the North Grove street sanitary yard and the substitution of another yard either on the land of the Boston Elevated Railway or on that of the New York, New Haven and Hartford Railroad at Commercial street, on the waterfront, and the installation of an incinerator for the North and West Ends and city proper districts.

The disposal of litter and ashes in inland dumps, both in the day labor and contract districts, should be super-

seded within a short time by incineration which, when adopted, will include garbage. Within two years the South Bay dump will be filled, and whether or not incineration for this district is provided previously, another slip to handle refuse and ashes should be constructed alongside the existing garbage slip at Albany street in 1926, which will be in accordance with the requirements of the Coleman disposal contract under which the material must be received and disposed of by the contractor.

During the past ten years—from 1914 to 1923, inclusive—there was turned back into the city treasury from excess water revenue over \$2,000,000, a greater part of which should have been spent in reinforcing old main supply lines into the city. The two low service supply lines to the city are a 48-inch in Beacon street, laid in 1859, and a 30 and 36-inch in Tremont street, laid in 1847. The condition of the latter lines in Tremont street, between Castle street and the Common is such that the gates are kept closed and will be opened only for emergency purposes. These pipes cross the existing railroad bridge at Castle street in an overhead crossing and will have to be removed on account of the Tremont street widening.

In order that the low service supply to the city may be guaranteed, we should continue the existing 48-inch line which comes direct from the reservoir down Beacon street and Commonwealth avenue to Massachusetts, by extending it down Commonwealth avenue into the Common, thus replacing the Beacon street line which may go out of service at any time. The present 30 and 36-inch mains in Tremont street should be united into one 48 and carried in a tunnel either under Tremont Street Bridge or Berkeley Street Bridge and through Park square into Charles street and connect with the new 48-inch from Commonwealth avenue. A loan of \$800,000 outside the debt limit should be sought from the Legislature, in order that this work may be prose-

cuted immediately, since the safety of the city proper from conflagration depends particularly upon these two old existing pipe lines.

The next fiscal year will end on December 31, 1925, and the fourth quarter's water income will not be available as in previous years. In order to provide services in locations where no mains now exist, to practically complete the high pressure fire service, and to provide other necessary extensions, the City Council should be requested to approve a loan outside the debt limit for this work, in accordance with chapter 44, section 8, of the General Laws.

Respectfully submitted,

JOSEPH A. ROURKE,
Commissioner of Public Works.

**Expenditures Under the Maintenance Appropriation of the
From February 1, 1924,**

GROUP AND ITEM.	Central.	Bridge.	Ferry.
A. PERSONAL SERVICE AS PER SCHEDULE A:			•
1. Permanent employees.....	\$80,630 29	\$326,381 27	\$303,669 07
2. Temporary employees.....		18,859 57	11,373 89
3. Unassigned.....		5,259 83	7,196 77
B. SERVICE OTHER THAN PERSONAL:			
1. Printing and binding.....	600 00		406 71
2. Postage.....	200 16	129 68	4 00
3. Advertising and posting.....		19 20	44 45
4. Transportation of persons.....	231 31	556 62	83 95
5. Cartage and freight.....		3 94	317 10
6. Hire of teams and auto trucks.....		120 26	3,276 97
7. Heat.....			1,477 57
8. Light and power.....		9,438 39	6,323 09
9. Lighting streets, alleys and parks.....			
10. Rent, taxes and water.....		318 81	306 07
12. Premium on surety bonds.....	6 00		85 00
13. Communication.....	37 84	194 91	249 52
14. Motor vehicle repairs and care.....	291 25	2,449 72	49 60
15. Motorless vehicle repairs.....			
16. Care of horses.....			
18. Cleaning.....		15 00	36 00
19. Removal of ashes, dirt and garbage.....			
20. Disposal of ashes, dirt and garbage.....			
21. Removal of snow.....			
22. Medical.....			
23. Veterinary.....			
24. Blacksmith.....			
27. Testing materials and supplies.....			
28. Expert and architect.....			
29. Stenographic, copying and indexing.....			
32. Towing.....			340 00
35. Fees, service of venires, etc.....	12 00	42 00	
36. Boiler inspection.....		15 00	20 00
37. Photographic and blueprinting.....		7 50	
39. General plant.....	91 75	35,901 70	69,797 07
40. Harness, etc., repairs.....			
41. Horseshoeing and clipping.....			
42. Repairing streets, etc.....			

Several Services by Items of the Segregated Budget.
to January 31, 1925.

Lighting.	Paving.	Street Cleaning and Sanitary.	Sewer.	Water.	Totals.
\$6,642 73	\$938,522 94	\$1,505,222 04	\$378,060 77	\$815,074 02	\$4,354,203 13
.....	5,328 13	51,551 62	1,974 75	11,400 60	100,488 56
.....	19,580 15	49,667 26	12,919 43	21,791 23	116,414 67
.....	.....	770 00	204 00	364 85	2,345 56
30 00	396 27	291 52	264 06	536 87	1,852 56
30 00	86 35	79 50	17 00	32 50	309 00
15 00	862 73	211 90	1,261 11	9,074 50	12,297 12
.....	6 89	121 92	37 37	269 33	756 55
.....	34,300 26	107,535 97	60 00	305 35	145,598 81
.....	.....	.....	48 85	3,503 08	5,029 50
.....	1,805 83	3,892 24	3,245 39	1,850 56	26,555 50
802,771 91	.....	.....	.....	.....	802,771 91
.....	4,088 00	1,783 33	829 17	815 25	8,140 63
.....	9 00	3 00	.....	25 00	128 00
.....	1,675 08	1,434 18	711 30	1,916 26	6,219 09
193 54	10,468 04	20,921 84	1,596 85	6,933 09	42,903 93
.....	1,835 32	31,375 23	223 60	277 86	33,712 01
.....	.....	9 00	.....	.....	9 00
.....	169 30	268 20	83,594 16	28 90	84,111 56
.....	.....	368,184 00	160 76	.....	368,344 76
.....	111 73	350,418 25	.....	126 50	350,656 48
.....	76,479 05	.....	.....	.....	76,479 05
.....	.....	.....	38 00	.....	38 00
.....	55 00	505 11	.....	.....	560 11
.....	1,781 51	365 30	424 70	69 35	2,640 86
.....	.....	.....	.....	13 50	13 50
.....	.....	.....	.....	1,400 00	1,400 00
60 34	.....	.....	.....	.....	60 34
.....	.....	.....	.....	.....	340 00
10 00	726 00	759 00	173 00	1,211 00	2,933 00
.....	60 00	.....	47 00	.....	142 00
.....	135 00	.....	.....	11 50	154 00
18,445 17	6,731 23	30,079 90	24,168 46	85,249 21	270,464 49
.....	454 30	.....	15 75	19 50	489 55
.....	5,089 55	8,424 59	13 97	601 85	14,129 96
.....	12,110 47	.....	1,374 15	53,452 30	66,936 92

**Expenditures Under the Maintenance Appropriation of the
From February 1, 1924,**

GROUP AND ITEM.	Central.	Bridge.	Ferry.
C. EQUIPMENT			
2. Machinery.....			
3. Electrical.....			
4. Motor vehicles.....	\$1,255 08	\$4,925 54	
5. Motorless vehicles.....			\$900 00
6. Stable.....			
7. Furniture and fittings.....		129 40	17 80
9. Office.....	88 00		
11. Marine.....			3,959 02
13. Tools and instruments.....		1,875 77	4,016 11
14. Live stock.....			
16. Wearing apparel.....			97 50
17. General plant.....		144 41	2,196 65
D. SUPPLIES:			
1. Office.....	2,664 04	1,650 51	727 09
2. Food and ice.....	95 95	95 93	83 10
3. Fuel.....		4,442 56	75,278 43
4. Forage and animal.....			
5. Medical, surgical, laboratory.....			
7. Veterinary.....			
8. Laundry, cleaning, toilet.....	1 12	96 49	395 85
11. Motor vehicle.....	306 32	1,508 77	
13. Chemicals and disinfectants.....		1 30	253 10
16. General plant.....		1,456 87	4,056 20
E. MATERIALS:			
1. Building.....		229 16	140 52
2. Highway.....			
3. Bridges.....		34,689 99	
4. Ferries.....			13,319 21
5. Sewer.....			
6. Water.....			
9. Machinery.....		310 10	
10. Electrical.....		892 59	1,042 63
13. General plant.....		19 51	
F. SPECIAL ITEMS:			
2. Damages.....			
7. Pensions and annuities.....		5,194 72	10,554 27
11. Workingmen's compensation.....		694 28	833 15
Totals.....	\$86,511 11	\$458,071 30	\$523,527 46

Several Services by Items of the Segregated Budget.—Concluded.
to January 31, 1925.

Lighting.	Paving.	Street Cleaning and Sanitary.	Sewer.	Water.	Totals.
	\$6,850 00				\$6,850 00
				\$491 41	491 41
\$32 97	\$47,733 40	\$46,058 59	\$10,903 56	18,617 56	129,526 70
		17,587 48			18,487 48
	625 31	2,830 02	76 25	207 70	3,739 28
	439 65	83 25		2,259 31	2,929 41
	433 03		178 00	600 66	1,299 69
					3,959 02
	10,825 33	9,838 31	2,316 37	97,125 34	125,997 23
		7,000 00			7,000 00
	25 00	81 90	826 63	489 50	1,520 53
1,971 50	1,229 09	2,088 35	3,223 69	90 55	10,944 24
157 44	6,371 14	3,311 61	1,968 74	9,972 63	26,823 20
	297 56	2,566 71	317 45	55 25	3,511 95
	9,187 45	4,431 05	59,656 91	1,817 24	154,813 64
	23,112 20	96,790 05	1,587 11	2,692 51	124,181 87
			12 65		12 65
	28 25	231 10			259 35
	146 33	145 86	171 69	102 02	1,059 36
185 30	10,727 18	11,632 76	1,695 92	7,922 67	33,978 92
	153 15	190 75	262 19	59 60	920 09
	3,920 26	1,636 18	3,900 59	5,115 63	20,085 73
	1,198 71	2,382 21	2,667 67	359 70	6,977 97
	158,893 93	30,373 20			189,267 13
					34,689 99
					13,319 21
			12,812 03		12,812 03
				381,629 80	381,629 80
					310 10
	147 41	195 84	357 26	1,088 61	4,324 34
	14,538 36	38,234 48	9,998 37	4,349 96	67,140 68
				34,124 52	34,124 52
181 00	26,195 64	21,780 24	8,915 54	19,542 16	92,363 57
	5,594 87	19,028 85	2,616 52	3,251 81	32,019 48
\$830,726 90	\$1,451,541 38	\$2,852,373 69	\$635,928 74	\$1,608,320 10	\$8,447,000 68

**Personnel Expenditures Under the Maintenance Appropriation
From February 1, 1924,**

GROUP AND ITEM.	Central.	Bridge.	Ferry.
Commissioner.....	\$9,000 00		
Division engineers.....		\$3,750 00	\$1,250 00
Engineers in charge.....			
Clerks and stenographers.....	60,557 33	3,532 01	1,386 59
Messengers.....			
Assistant engineers (civil).....		11,657 89	
Draughtsman.....		6,776 41	
Instrumentmen.....		6,024 20	
Rodmen.....		447 05	
Inspectors.....		2,374 55	
Foremen.....		2,088 36	
Subforemen.....		5,559 00	
Address printers.....			
Blueprinters.....	4,345 86		
Chauffeurs.....	1,633 67	6,576 42	390 00
Cement testers.....	4,564 11		
Chief inspectors.....			
Chemist and assistant.....			
Claim agent.....	529 32		
Cashiers.....			2,005 48
Constables.....			
Coalpassers.....			
Captains.....			28,719 27
Drawtenders.....		227,387 68	
Deckhands.....			36,836 00
Engineers (steam).....			28,072 50
Electricians.....		1,888 40	1,888 40
Emergency men.....			
Feeders.....			
Gatemen (ferry).....			23,094 32
General foremen.....			3,008 22
Joiners.....			1,945 40
Laborers, janitors, teamsters, watchmen, stablemen, etc.....		15,452 47	25,387 66
Mechanics.....		29,683 50	25,319 48
Masons.....			
Meter readers.....			

of the Several Services by Items of the Segregated Budget.
to January 31, 1925.

Lighting.	Paving.	Street Cleaning and Sanitary.	Sewer.	Water.	Total.
					\$9,000
\$1,250 00	\$3,750 00	\$3,333 33	\$1,666 67	\$5,000 00	20,000 00
	750 00		2,005 16	3,500 00	6,255 16
3,592 73	27,808 24	4,113 12	5,179 39	79,422 40	185,591 81
	85 84				85 84
	6,200 24		8,373 88	9,550 82	35,782 83
	628 62		5,580 60	4,166 66	17,152 29
	4,994 26		11,696 08	8,592 33	31,306 87
	1,297 17		2,993 40		4,737 62
1,800 00	44,383 89	136,251 88	46,248 30	53,593 00	284,651 62
	24,826 61	41,274 85	6,039 62	20,651 16	47,880 60
	41,248 14			1,700 00	48,507 14
				1,150 01	1,150 01
					4,345 86
	4,334 00	30,604 37	7,411 00	20,456 00	71,405 46
					4,564 11
	1,250 44				1,250 44
	427 67				427 67
					529 32
					2,005 48
	2,005 48	4,760 82		6,247 80	13,014 10
			11,114 82		11,114 82
					28,719 27
					227,387 68
					36,836 00
	20,094 50		11,909 81	1,700 00	61,776 81
			3,776 80		7,553 60
				26,244 75	26,244 75
	1,056 50	11,962 25			13,018 75
					23,094 32
	2,921 78	6,016 44	2,482 88	4,944 58	19,373 90
					1,945 40
	547,505 19	1,178,471 49	115,670 50	236,832 13	2,119,319 44
	182,820 38	69,380 69	20,206 87	250,746 64	578,157 56
			14,792 60		14,792 60
				47,274 57	47,274 57

**Personnel Expenditures Under the Maintenance Appropriation of
From February 1, 1924,**

GROUP AND ITEM.	Central.	Bridge.	Ferry.
Medical inspectors		\$183 33	\$83 33
Oilers and firemen			80,232 50
Quartermasters			22,103 93
Sealers			
Sewer gatemen, cleaners, etc.			
Supervisors		3,000 00	
Storekeepers			
Stockkeepers			1,486 98
Superintendent and deputy			
Telephone operator			
Tollmen			20,459 01
Veterinarian			
Wharfingers			
Wharfmen			
Weighers			
Pavers			
Yardmasters			
Yardmen			
Permanent	\$80,630 29	\$326,381 27	\$303,669 07
Temporary		18,859 57	11,373 89
Unassigned (overtime and other departments)		5,259 83	7,196 77
Totals	\$80,630 29	\$350,500 67	\$322,239 73

the Several Services by Items of the Segregated Budget.— Concluded.
to January 31, 1925.

Lighting.	Paving.	Street Cleaning and Sanitary.	Sewer.	Water.	Total.
.....	\$366 66	\$2,058 29	\$91 67	\$550 00	\$3,333 28
.....	7,907 75	.....	62,178 00	3,139 00	153,457 25
.....	.....	.....	.....	.....	22,103 93
.....	.....	.....	.....	4,629 00	4,629 00
.....	.....	.....	30,421 51	.....	30,421 51
.....	2,607 12	3,509 59	.....	2,005 48	11,122 19
.....	.....	.....	.....	1,770 34	1,770 34
.....	.....	517 18	.....	.....	2,004 16
.....	1,417 95	.....	3,309 04	6,108 22	10,835 21
.....	.....	1,286 20	.....	1,090 00	2,376 20
.....	.....	.....	.....	.....	20,459 01
.....	500 00	2,250 00	125 00	125 00	3,000 00
.....	.....	3,357 62	.....	.....	3,357 62
.....
.....	1,486 98	1,586 94	.....	.....	3,073 92
.....	.....	.....	1,700 00	4,980 00	6,680 00
.....	.....	.....	.....	1,804 90	1,804 90
.....	5,847 53	1,486 98	3,087 17	7,099 23	17,520 91
\$6,642 73	\$938,522 94	\$1,505,222 04	\$378,060 77	\$815,074 02	\$4,354,203 13
.....	5,328 13	51,551 62	1,974 75	11,400 60	100,488 56
.....	19,580 15	49,667 26	12,919 43	21,791 23	116,414 67
\$6,642 73	\$963,431 22	\$1,606,440 92	\$392,954 95	\$848,265 85	\$4,571,106 36

Cost of Maintenance of the Public Works Department Since 1915.

DIVISION AND SERVICES.	1916-17.	1917-18.	1918-19.	1919-20.	1920-21.	1921-22.	Special Account, 1921-22.	1922-23.	1923-24.	1924-25.
Central Office.....	\$74,206 04	\$73,965 70	\$73,074 04	\$79,909 15	\$91,373 98	\$88,308 02	\$3,072 64	\$100,457 23	\$84,717 60	\$86,511 11
Bridge Service.....	277,847 65	304,720 63	323,601 28	363,130 05	410,216 53	392,589 05	15,805 42	382,413 98	387,290 23	426,330 81
Boston and Cambridge Bridges.....	18,945 39	21,587 66	23,942 63	26,390 52	26,783 42	27,999 77	2,433 95	27,669 10	30,832 74	31,740 49
Ferry Service.....	303,917 18	355,480 17	393,783 69	436,687 75	574,754 54	496,836 35	21,483 21	497,091 70	498,684 78	523,527 46
Lighting Service.....	772,769 97	773,541 76	549,350 56	714,821 55	722,134 24	722,091 55	134,127 03	734,059 09	747,191 63	830,726 90
Paving Service.....	802,150 73	949,803 41	1,006,628 46	1,063,059 16	1,023,332 59	1,110,496 07	34,869 68	925,828 45	1,140,959 74	1,208,503 43
Removal of Snow.....	303,570 39	203,210 45	138,659 39	78,802 12	663,111 55	215,399 21	6,611 10	416,720 51	364,713 64	349,375 57
Sanitary Service.....	969,438 86	1,031,156 99	1,106,933 20	1,265,581 65	1,508,102 71	1,629,078 98	105,288 95	1,831,685 38	1,895,984 45	\$2,073,913 32
Sewer Service.....	322,199 03	379,483 30	452,310 71	472,713 49	616,461 55	607,043 15	25,419 60	507,758 00	605,796 63	635,928 74
Street Cleaning Service.....	428,899 28	516,475 67	556,830 98	607,992 26	700,031 01	640,179 28	23,637 66	627,203 22	607,583 55	592,645 85
Street Watering and Oiling Service.....	121,450 68	110,488 14	137,150 39	118,014 00	186,763 20	145,454 29	491 24	122,865 88	108,842 33	79,476 90
Water Service.....	917,823 64	1,045,543 65	1,055,842 87	1,010,634 32	1,253,166 33	1,232,418 76	41,656 57	1,354,555 93	1,229,573 73	1,608,320 10
Totals.....	\$5,313,218 84	\$5,765,457 53	\$5,809,108 20	\$6,237,742 02	\$7,776,231 65	\$7,307,894 48	\$14,896 05	\$7,588,317 47	\$7,702,101 05	\$8,417,000 68

* Engineering and Water Departments were consolidated into the Public Works Department, February 1, 1911.

† Includes \$71,000 paid by Street Cleaning and Oiling Service.

‡ Includes \$92,445.71 paid by Street Cleaning and Oiling Service.

§ Includes \$142,724.96 paid by Street Cleaning and Oiling Service.

REVENUES 1924-25.

*On Account of the Public Works Department. Credited to
General Revenue, as per City Auditor's Statement.*

Bridge Service:		
Bridge repairs	\$875 74	
Rent	400 00	
Labor and material	80 78	
Maintenance, etc., Chelsea Bridge	25,000 00	
	<hr/>	\$26,356 52
Ferry Service:		
Tolls	\$80,102 17	
Free ferries	1 00	
Cleaning booths	48 00	
Commission on telephones	128 70	
Sale of old material	64 68	
Rents	417 16	
Headhouse privileges	400 00	
	<hr/>	81,161 71
Lighting Service:		
Lighting bridges	\$2,630 89	
Damages to lamp-posts	336 00	
	<hr/>	2,966 89
Paving Service:		
Sidewalk assessments	\$38,518 78	
Labor and materials	11,535 60	
Permits	33,320 47	
Sale of material	643 18	
Labor and material chapter 28, section 9 (or sections 9 and 10), Revised Ordinances	1,065 25	
Inspectors' services	1,995 00	
Rents	25 00	
Excess charges	75	
	<hr/>	87,104 03
Sanitary Service:		
Collection of waste	\$104,656 74	
Sale of manure	3,059 08	
Sale of old material	1 00	
	<hr/>	107,716 82
Street Cleaning and Oiling Service:		
Removing dirt	\$656 25	
Board of horse	283 50	
Sale of tank	150 00	
Oiling streets	22 00	
Sale of carts	40 00	
Rent	200 00	
	<hr/>	1,351 75
<i>Carried forward</i>		<hr/> \$306,657 72

<i>Brought forward</i>		\$306,657 72
Sewer Service:		
Entrance fees	\$9,285 01	
Labor and material	1,824 65	
Assessments	59 64	
Inspectors' services	124 11	
Pumping sewage	10,300 00	
Damage to automobile	117 75	
Sale of material	39 56	
Rent	10 00	
		21,760 72
Water Service:		
Rates, 1925	\$38,385 72	
Prior years	3,710,189 56	
		\$3,748,575 28
Fees	6,087 18	
Off and on	558 00	
Service pipes and repairs	97,380 71	
Sale of materials	3,062 52	
Damage to hydrants	665 32	
Relocating box	13 63	
Relocating hydrants	600 00	
Relocating pipes	365 64	
Establishing gate	287 29	
Elevator pipes installed	135 44	
Sale of gasolene	193 60	
Testing meters	225 00	
Sale of junk	3,768 60	
Sale of merchandise	93 00	
Fire pipes installed	59,927 94	
Interest on bank deposit	1,273 25	
Labor and material	4,289 74	
Board of horses	367 50	
Abandoning pipe	237 77	
Repairing pipes	287 57	
Sale of auto accessories	52 72	
Sale of lamp wick	80	
Repairs to fountains	77 84	
Water post changes	41 84	
Establishing hydrants	71 87	
Post hydrant rate	1,585 80	
Rebate on gasolene	8 00	
Furnishing water	5 50	
Drill returned	83 00	
Removing hydrants	125 00	
Pipes delivered	376 76	
Workingmen's compensation	69 00	
Total for Water Service		3,930,893 11
		<u>\$4,259,311 55</u>

CONTRACTS MADE BY PUBLIC WORKS DEPARTMENT FROM FEBRUARY 1, 1924, TO JANUARY 31, 1925.
Hired Teams.

District.	Awarded to	Double, per Day.	Single, per Day.	Trucks, per Day.	Paving Service.	Sanitary Service.	Sewer Service.	Street Cleaning and Oiling Service.	Total.
1 No. 1, South Boston and Dorchester North..	T. F. Meaney.....	\$6 95	\$4 55	23 00	\$10,660 14	\$4,496 66	.....	.....	\$15,156 80
1 No. 2, East Boston and Breed's Island.....	E. J. McHugh & Son.....	7 00	4 48	23 00	1,088 00	.....	.....	.....	1,088 00
1 No. 3, Charlestown.....	E. J. McHugh & Son.....	6 75	4 75	23 00	.....	.....	.....	\$57 50	57 50
1 No. 5, West Roxbury.....	M. McGinnis & Co.....	6 40	4 00	23 00	8,165 50	2,943 93	.....	.....	11,109 43
1 Nos. 6-9, Dorchester and Ashmont.....	M. H. Loomie.....	8 00	4 00	23 00	6,133 05	.....	\$56 00	.....	6,189 05
1 No. 7, Roxbury South and Jamaica Plain...	M. Doyle & Co., Inc.....	5 89	4 00	23 00	795 26	24,235 71	.....	.....	25,029 97
1 No. 8, South End and Roxbury North.....	Highland Contracting Com- pany.	7 70	6 00	23 00	5,162 95	17,595 45	.....	.....	22,758 40
1 No. 10, North and West Ends and Back Bay.	B. E. Grant Company.....	7 00	6 25	23 00	1,167 41	27,968 47	.....	.....	29,135 88
1 No. 11, Hyde Park.....	T. H. Corrigan & Sons.....	8 00	5 00	23 00	600 00	.....	.....	.....	600 00

1 Advertised and awarded to the lowest bidder.

**BRIDGE AND FERRY DIVISION (BRIDGE SERVICE).
Bridge Work.**

CONTRACT.	Awarded to	Dated.	Progress of Work.	Contract Estimated.	Amount Expended in 1924.
¹ Repairing fenders of Dorchester Avenue Bridge, over Fort Point Channel, city proper.	W. H. Ellis & Son Company.....	March 25, 1924.	Completed April 28, 1924.....	\$3,870 00	\$4,583 64
² Furnishing labor required to repair flooring of Meridian Street Bridge.	Boston Elevated Railway Company.	May 19, 1924.	Completed June 20, 1924.....	2,410 00	2,410 00
¹ Repairing fender piers and building pile supports of Northern Avenue Bridge.	W. S. Rendle & Son Company.....	June 23, 1924.	Completed Nov. 14, 1924.....	17,805 00	18,270 43
¹ Repairing piers and fender guards of Summer Street Bridge, over Reserved Channel, South Boston.	W. H. Ellis & Son Company.....	July 18, 1924.	Completed Oct. 2, 1924.....	9,273 00	8,019 55
¹ Repairing and strengthening Commercial Point Bridge.	P. A. Colleran.....	July 18, 1924.	Completed Sept. 17, 1924.....	1,874 00	2,194 40
Relocating cablehouses at Dartmouth Street Bridge.	Western Union Telegraph Company.	July 8, 1924.	Completed July 8, 1924.....	3,600 00	3,600 00
¹ Resetting draw track, Northern Avenue Bridge.....	E. J. Carnes Company.....	Aug. 21, 1924.	Completed Nov. 6, 1924.....	6,450 00	6,987 93
² Repairing sidewalk and flooring of Dorchester Avenue Bridge, over Fort Point Channel.	C. & R. Construction Company..	Aug. 28, 1924.	Completed Oct. 23, 1924.....	8,598 00	7,899 92
¹ Building two piers for Dartmouth Street Bridge, over Boston & Albany Railroad.	New England Foundation Company, Inc.	Sept. 5, 1924.	Completed Jan. 9, 1925.....	16,480 00	23,114 64
¹ Repairing foundation piling, Chelsea Bridge North..	William L. Miller Company.....	Sept. 27, 1924.	Completed Oct. 29, 1924.....	1,508 60	2,800 76
¹ Repairing fenders of Chelsea Street Bridge.....	Rendle Stoddard Construction Company.	Oct. 4, 1924.	Completed Jan. 3, 1925.....	4,124 00	4,468 53
¹ Painting draw span of Chelsea Bridge North.....	Murray Engineering Company..	Oct. 17, 1924.	Unfinished.....	5,500 00	2,337 50
¹ Repairing Huntington Avenue Bridge, over the Boston & Albany Railroad.	C. & R. Construction Company..	Oct. 31, 1924.	Unfinished.....	6,112 00	7,563 82
¹ Rebuilding Dartmouth Street Bridge, over the Boston & Albany Railroad.	C. & R. Construction Company..	Dec. 4, 1924.	Unfinished.....	72,455 50	Nothing.
¹ Repairing draw fender pier of Chelsea Bridge North..	William L. Miller Company.....	Jan. 24, 1925.	Unfinished.....	1,495 00	Nothing.

¹ Advertised and awarded to the lowest bidder.² Only bid; unadvertised.² Advertised and awarded to the second lowest bidder.

Ferry Work.

CONTRACT.	Awarded to	Dated.	Progress of Work.	Contract Estimated.	Amount Expended in 1924.
Teaming coal to ferryboats.	Delia Carter.	Feb. 1, 1924.	Completed Dec. 31, 1924.	* \$0 .275	\$2,689 47
Weighing and vending machines in ferryhouses.	Auto Sales Corporation.	Feb. 1, 1924.	Completed Dec. 31, 1924.	† 400 00	400 00
Repairs to middle pier, South Ferry.	Rendle-Stoddard Construction Company.	May 27, 1924.	Completed June 15, 1924.	1,500 00	1,500 00
Repairs and alterations to South Pier, South Ferry, East Boston.	W. H. Ellis & Son Company.	May 27, 1924.	Completed July 10, 1924.	1,500 00	1,500 00
Repairing ferry piers.	Rendle-Stoddard Construction Company.	June 18, 1924.	Completed July 26, 1924.	4,667 50	4,441 45
Rebuilding middle pier at the Boston landing of the South Ferry.	Rendle-Stoddard Construction Company.	July 8, 1924.	Completed Dec. 1, 1924.	13,057 50	32,656 13
Foundations for ferry bridges for the South Ferry.	Rendle-Stoddard Construction Company.	July 29, 1924.	Completed Dec. 2, 1924.	17,780 00	30,856 98
Two electrically operated ferry bridges with gallews, frames and accompanying machinery.	J. Edward Ogden Company.	Aug. 5, 1924.	Unfinished.	234,000 00	87,516 00
Repairing piers at the North Ferry.	W. H. Ellis & Son Company.	Aug. 7, 1924.	Completed Jan. 31, 1925.	17,820 00	17,544 00
Repairing north drop, North Ferry.	W. H. Ellis & Son Company.	Aug. 11, 1924.	Completed Aug. 11, 1924.	1,000 00	1,000 00
Repairing woodwork, iron work, etc., North Ferry.	Murray Engineering Company.	Aug. 11, 1924.	Completed Aug. 11, 1924.	8,163 76	3,000 00
Repairs on ferryboat "Noddle Island".	R. T. Green Company.	Sept. 26, 1924.	Completed Oct. 10, 1924.	1,574 00	1,574 00
Repairs to pontoon, North Ferry.	Murray Engineering Company.	Oct. 2, 1924.	Completed Oct. 4, 1924.	2,875 00	2,875 00
Repairing hull of ferryboat "John H. Sullivan".	R. T. Green Company.	Oct. 17, 1924.	Completed Oct. 29, 1924.	4,755 00	5,083 46
Repairing wharf at coal pocket, South Ferry, East Boston.	W. H. Ellis & Son Company.	Oct. 28, 1924.	Completed Jan. 6, 1925.	1,142 20	1,237 23
Repairing hull of ferryboat "Lieutenant Flaherty".	The Atlantic Works.	Nov. 10, 1924.	Completed Nov. 20, 1924.	2,208 00	2,159 55
Repairing hull of ferryboat "Ralph J. Paumbo".	The Atlantic Works.	Dec. 11, 1924.	Completed Dec. 3, 1924.	6,209 00	4,887 81
Repairing face of ferry drop, North Ferry.	Murray Engineering Company.	Dec. 6, 1924.	Completed Jan. 20, 1925.	2,500 00	2,500 00
Furnishing and installing ventilating system on ferryboat "Noddle Island."	The Atlantic Works.	Sept. 5, 1924.	Completed Oct. 28, 1924.	2,926 00	2,926 00

† Advertised and awarded to the lowest bidder.
 ‡ Advertised and awarded to the only bidder.

* Only bid; unadvertised.
 † Per year.
 ‡ Advertised and awarded to the second lowest bidder.
 § Per ton.

HIGHWAY DIVISION — LIGHTING SERVICE.
Contract in Force Made in Previous Years.

CONTRACT.	Awarded to	Dated.	Progress of Work.	Amount Expended in 1924.
Furnishing gas and for equipment and lighting of gas lamps for a period of ten years, from April 1, 1914, to March 31, 1924, inclusive.	Boston Consolidated Gas Company	Mch. 19, 1914.	Completed Mch. 31, 1924. . . .	\$31,972 65

* Advertised and awarded to only bidder.

LIGHTING SERVICE.

CONTRACT	Awarded to	Dated.	Progress of Work.	Price per Gas Lamp per Year.	Amount Expended.
Furnishing illuminating gas in the Charlestown district for a period of three months, from April 1, 1924, to June 30, 1924, inclusive.	Charlestown Gas and Electric Company.	May 14, 1924.	Completed June 30, 1924.....	\$11 00	\$3,388 70
Furnishing illuminating gas in the City of Boston, excluding Charlestown and Hyde Park, for a period of three months, from April 1, 1924, to June 30, 1924, inclusive.	Boston Consolidated Gas Company.	May 14, 1924.	Completed June 30, 1924.....	11 00	60,779 35
Furnishing gas and for the equipment and lighting of gas lamps for a period of ten years, from April 1, 1924, to March 31, 1934, inclusive.	Boston Consolidated Gas Company.	May 20, 1924.	Unfinished.....	11 00	143,565 99

:Only bidder; not advertised.

Miscellaneous.

CONTRACT.	Awarded to	Dated.	Progress of Work.	Contract Estimated.	Amount Expended in 1924.
¹ Removing six trees and six roots in Morton street at Selwyn street, Dorchester.	M. F. Gaddis.....	Feb. 6, 1924.	Completed Feb. 15, 1924.....	\$925 00	\$925 00
² Repairing bituminous pavement in any street upon which the maintenance guaranty has expired.	Central Construction Company..	Mar. 12, 1924.	Completed Jan. 31, 1925.....	82,200 00	94,061 51
¹ Laying bitulithic pavement and building sewerage works in Shawmut avenue, from Warrenton street to Roxbury street, city proper and Roxbury.	M. F. Gaddis	April 26, 1924.	Completed July 22, 1924.....	205,317 45	237,463 87
¹ Filling, building sewerage works and laying water pipes in Ashley street, from Breed street to Boardman street, East Boston.	A. Baruffaldi Company.....	June 23, 1924.	Unfinished.....	26,969 60	30,840 59
¹ Grading Harrishof street, from Warren street to Humboldt avenue, Roxbury, and Winton street, from Beech street about 640 feet southwesterly, West Roxbury.	J. C. Coleman & Sons Company..	Sept. 27, 1924.	Completed Nov. 5, 1924.....	4,254 00	5,433 90
¹ Removing walls and for filling in Cambridge and Court streets, from Charles street to Brattle street, city proper.	Coleman Brothers, Inc.....	Nov. 10, 1924.	Unfinished.....	15,370 00	1,384 65
² Furnishing electric lights, etc., of Municipal Garage on Albany street.	M. B. Foster Electric Company..	Oct. 8, 1924.	Completed Oct. 8, 1924.....	348 00	348 00
² Waterproofing brick and wall surfaces of Municipal Garage, Albany street.	Hampden Paint and Chemical Company..	Sept. 19, 1924.	Completed Sept. 19, 1924.....	987 00	987 00
¹ Furnishing and installing wire grille stock room, etc., in the Municipal Garage, Albany street.	P. J. Dinn & Co.....	Sept. 11, 1924.	Completed Sept. 14, 1924.....	3,603 00	3,603 00
¹ Furnishing electric door operator in the Municipal Garage, Albany street.	Reversible Motor Drive Company..	Sept. 12, 1924.	Completed Sept. 12, 1924.....	1,350 00	1,350 00
¹ Building gas pipe fence on easterly side of Everett street, southerly approach to bridge over Boston & Albany Railroad, Brighton.	P. J. Dinn & Co.....	Sept. 5, 1924.	Completed Nov. 25, 1924.....	1,145 00	1,145 00

¹ Advertised and awarded to the lowest bidder.² Advertised and awarded to the second lowest bidder.³ Only bid; unadvertised.

Removing Snow and Ice.

District.	Contractor.	Dated.	Progress of Work.	Price Per Cubic Yard.	Amount Expended in 1924.
District No. 1	Boston Contracting Company, Inc.	Dec. 11, 1924.	Unfinished	\$0 49	\$1,399 93
District No. 2	Coleman Brothers, Inc.	Dec. 19, 1924.	Unfinished	65	4,164 88
District No. 3	B. E. Grant Company	Dec. 11, 1924.	Unfinished	50	2,523 00
District No. 4	J. F. Kennedy Company, Inc.	Dec. 13, 1924.	Unfinished	67	2,101 46
District No. 5	J. P. McCabe	Dec. 11, 1924.	Unfinished	65	1,223 63
District No. 6	A. G. Tomasello & Son, Inc.	Dec. 19, 1924.	Unfinished	70	2,423 90
District No. 7	M. F. Gaddis	Dec. 13, 1924.	Unfinished	63	2,607 89
District No. 8	Beatty Construction Company	Dec. 13, 1924.	Unfinished	56	1,340 92
District No. 9	Standard Contracting Company	Dec. 11, 1924.	Unfinished	68	1,292 68
District No. 10	J. J. McCarthy & Co.	Dec. 11, 1924.	Unfinished	59	1,834 60

SANITARY SERVICE.
Miscellaneous.

CONTRACT.	Awarded to	Dated.	Progress of Work.	Contract Estimated.	Amount Expended in 1924.
1 Laying Portland cement, concrete pavement and building sewerage works in South Sanitary Yard, Albany street, city proper.	J. J. McCarthy & Co.....	June 23, 1924.	Completed Aug. 4, 1924....	\$18,810 00	\$18,374 86
2 Removing manure from the stables and yards in the various divisions of the department.....	J. A. Kelley.....	Feb. 1, 1924.	Completed Jan. 31, 1925....	* 7 51	7 51
3 Repairs to city stable, Highland street, Roxbury.....	J. A. Singarella.....	March 31, 1924.	Completed Aug. 28, 1924....	1,015 50	929 47
4 Furnishing combination motor street sprinkling and flushing trucks.	B. E. Grant Company.....	April 14, 1924.	Completed Oct. 31, 1924....	†32 00	†32 00
5 Repairing roof of stable, City Yard, Albany street.....	H. A. Smith.....	April 22, 1924.	Completed April 2, 1924....	970 00	970 00
6 Furnishing and operating electric sprinkler car for flushing streets.	American Car Sprinkler Company.	June 14, 1924.	Completed Oct. 31, 1924....	4,896 00	4,896 00
7 Wooden screen on Dorchester brook outlet.....	King and Kingsley.....	Aug. 26, 1924.	Completed Sept. 13, 1924....	1,400 00	1,464 98
8 High tension electric service at the Calf Pasture pumping station, Dorchester.	Edison Electric Illuminating Company.	Nov. 18, 1924.	Unfinished.....	†25,000 00	25,000 00
9 Electrical equipment for No. 1 and No. 2 pumping units, Calf Pasture pumping station.	W. Stingham Electric and Manufacturing Company.	Jan. 20, 1925.	Unfinished.....	41,840 00	
10 Building sewer works and water works in Hartslof st., from Warren street to Humboldt avenue, Roxbury.	J. Williams & Co.....	May 28, 1924.	Completed Aug. 16, 1924....	20,806 75	18,708 59

1 Advertised and awarded to the lowest bidder.

2 Advertised and awarded to the second lowest bidder.

3 Advertised and awarded to the only bidder.

4 Only bid; unadvertised.

5 Advertised and awarded to the highest bidder.

* Paid to the city.
† Per day.
‡ Per horse per year.

SEWER AND SANITARY DIVISION — SANITARY SERVICE.
Collecting and Removing Ashes, Store Dirt, House Dirt, Refuse and Garbage.

District.	Awarded to	Dated.	Progress of Work.	Bid Per Month.	Amount Expended in 1924.
¹ East Boston.	E. J. McHugh & Son.	Feb. 1, 1924.	Completed Jan. 31, 1925.	\$4,732 00	\$56,784 00
² Brighton.	P. F. Donovan.	Feb. 13, 1924.	Completed Jan. 31, 1925.	6,425 00	77,100 00
³ West Roxbury.	J. J. Moore.	Feb. 1, 1924.	Completed Jan. 31, 1925.	2,500 00	30,000 00
⁴ Dorchester.	J. C. Coleman & Sons Company.	Feb. 1, 1924.	Completed Jan. 31, 1925.	16,100 00	193,200 00
⁵ Hyde Park.	T. E. Bryan.	Feb. 1, 1924.	Completed Jan. 31, 1925.	925 00	11,100 00

¹ Advertised and awarded to the lowest bidder.

² Advertised and awarded to the second lowest bidder.

³ Advertised and awarded to the third lowest bidder.

Contract in Force made in Previous Years.

Contract.	Awarded to	Dated.	Progress of Work.	Bid Per Year.	Amount Expended in 1924.
¹ Disposal of garbage and refuse for ten years, from July 1, 1922, to July 1, 1932.	Coleman Brothers, Inc.	Dec. 31, 1921.	Unfinished.	\$345,000 00	\$345,000 00

¹ Advertised and awarded to the lowest bidder.

WATER DIVISION — WATER SERVICE.
Laying and Relaying Water Pipes.

CONTRACT.	Awarded to	Dated.	Progress of Work.	Contract Estimated.	Amount Expended in 1924.
1 Congress street, from Franklin street to Atlantic avenue; South street, from Tufts street to Kneeland street; Kneeland street, from Utica street to Atlantic avenue, city proper; Burnham street, from Southampton street to South Bay avenue; Moore street, from Southampton street to South Bay avenue; South Bay avenue, at Moore street, Roxbury; Burgoyne street, from Beaumont street to Helena road, Dorchester; Province street, from Bromfield street to School street; and Province court, from Province street, city proper.	J. Williams & Co.....	Mar. 31, 1924.	Completed May 22, 1924....	\$8,703 00	\$8,499 90
1 Blue Hill avenue; Hazleton street, Hiawatha road, Morton street, Wildwood street, Dorchester; Florence avenue, Brighton; Partridge street, Pond View avenue, Walden road, West Roxbury Parkway, Woodbrier road, West Roxbury.	M. DeSisto Company.....	Mar. 31, 1924.	Completed June 27, 1924....	6,657 50	6,625 78
2 Arthur street, Charles River Reservation and Highborn street, Brighton; Beech street, Cornell street, Grandview street, Granville street and Winton street, West Roxbury.	J. A. Costello & Co.....	April 26, 1924.	Completed July 31, 1924....	6,865 00	7,443 65
1 Becket street, from Van Winkle street to Codman street; Norwell street, from Carmen street to Vassar street; Fairview street, from Adams street, Dorchester; Bayswater street, from Lillian street to Nancia street, East Boston; Randolph street, from Harrison avenue, city proper; Bowen street, from F street to Dorchester street, South Boston; and Leverett street, from Green street to Cotting street, city proper.	A. Grande.....	May 23, 1924.	Completed Aug. 23, 1924....	5,531 50	6,092 62

¹ Alhambra road, Granfield avenue, Orange street, Roselindale avenue, Washington street, West Roxbury Parkway and Willow street, West Roxbury; Lane park, Orchard road and Penniman road, Brighton.	M. DeSisto Company.....	May 23, 1924.	Completed Sept. 3, 1924.....	5,555 00	6,288 61
¹ Cleveland circle, Sutherland road, Commonwealth avenue, Colonial road, Brighton.	DeCristofaro & Brothers Company.	May 31, 1924.	Completed Oct. 25, 1924.....	16,912 50	16,279 95
¹ Old Colony Parkway, from Tolman street to Conley street, Dorchester.	J. Guarino & Co.....	June 14, 1924.	Completed June 19, 1924.....	1,219 00	1,355 37
¹ Branch street, Medway street, Dorchester; Atlantic street, Church street, Goodway road, Moody street, Pierpont road, Weld street, West Roxbury; Larch street, Perle street, Perthshire road and Redford road, Brighton.	M. DeSisto Company.....	June 23, 1924.	Completed Sept. 19, 1924.....	5,416 00	5,457 90
¹ Bismarck street, Germania street, La Grange street, West Roxbury; Ruskin road, Hyde Park; and Wabash street, Dorchester.	C. Russo.....	July 2, 1924.	Completed Aug. 20, 1924.....	3,220 00	3,380 93
¹ Claymoss road, Euston road, Ransom road, Brighton; Hollingsworth street, Dorchester; and Stratford street, West Roxbury.	A. Grande.....	Aug. 11, 1924.	Completed Oct. 25, 1924.....	5,360 00	5,605 66
² Poydras street and Tehapitoulas street, Hyde Park.....	J. T. Shea, Jr.....	Aug. 19, 1924.	Completed Sept. 17, 1924.....	2,680 00	2,999 10
¹ Bonad road, Hillside avenue, Marion avenue, Metropolitan avenue, Parkton road, Roberts avenue and Russett road, West Roxbury.	J. Williams & Co.....	Sept. 5, 1924.	Completed Oct. 3, 1924.....	3,094 50	2,937 31
¹ Pilgrim road, from Brookline avenue to Longwood avenue; Plymouth street, from Longwood avenue to Riverway; Riverway, from Plymouth street to Short street; and Short street, from Pilgrim road to Riverway, Roxbury; Oneida street, from Harrison avenue to Albany street, city proper; Redfield street, from Walnut street to Woodworth street; Allendale street, from Hill Top street; and Myrtlebank street, from Milton street, Dorchester.	M. DeSisto Company.....	Sept. 5, 1924.	Completed Nov. 12, 1924.....	5,951 75	5,867 18
⁴ West Roxbury Parkway (West Border road) from La Grange street to Pleasure drive, West Roxbury.	A. Cefalo.....	Sept. 11, 1924.	Completed Oct. 25, 1924.....	4,327 50	4,097 12

¹ Advertised and awarded to the lowest bidder.² Advertised and awarded to the second lowest bidder.³ Advertised and awarded to the third bidder.⁴ Advertised and awarded to one of the two lowest bidders.

Laying and Relaying Water Pipes. — Concluded.

CONTRACT.	Awarded to	Dated.	Progress of Work.	Contract Estimated.	Amount Expended in 1924.
¹ Cunningham street, from Hartford street to Woodcliff street, Dorchester.	J. Guarino & Co.	Sept. 30, 1924.	Completed Oct. 4, 1924.	\$800 00	\$846 50
¹ Central avenue, Greenwood avenue, Metropolitan avenue, Thatcher street and Westminster street, Hyde Park.	Vozzella & Capone.	Oct. 17, 1924.	Completed Dec. 3, 1924.	5,840 50	5,027 45
¹ Humphreys street, from Groom street to Dudley street,	V. Barletta.	Nov. 10, 1924.	Completed Nov. 15, 1924.	3,500 00	4,295 52
² Reed street, from Hunneman street to Thorndike street; Whiting street, from Warren street to Moreland street; Montrose street, from Warren street to Moreland street; Glenwood street, from Warren street to Cliff street, Roxbury.	J. Williams & Co.	Nov. 10, 1924.	Unfinished.	3,403 00	399 66
¹ Fernald terrace, Dorchester.	DeCristofaro & Brothers Company.	Nov. 20, 1924.	Completed Dec. 30, 1924.	1,983 25	1,948 30
¹ Billings lane, Maynard street, Schirmer road, West Roxbury; Elizabeth avenue, Goodenough street, Brighton, and Friendship road, Hyde Park.	A. Grande.	Nov. 24, 1924.	Completed Jan. 5, 1925.	4,139 50	3,876 78
¹ Church street, Greston road, Russett road, Theodore Parker road, West Roxbury; Duzbury road, Dorchester; and Glencoe street, Brighton.	DeCristofaro & Brothers Company.	Dec. 11, 1924.	Unfinished.	3,875 50	867 08
² Burley street, Dale street and Maynard street, West Roxbury.	L. Balboni.	Dec. 19, 1924.	Completed Dec. 30, 1924.	1,573 75	950 31

¹ Advertised and awarded to the lowest bidder.² Advertised and awarded to the second lowest bidder.³ Advertised and awarded to the third lowest bidder.¹ Advertised and awarded to one of the two lowest bidders.² Only bid; unadvertised.

Miscellaneous.

CONTRACT.	Awarded to	Dated.	Progress of Work.	Contract Estimated.	Amount Expended in 1924.
¹ Repairing artificial stone sidewalk blocks for Water Service.	J. J. McCarthy & Co.	April 5, 1924.	Completed Nov. 13, 1924 . . .	\$4,050 00	\$8,195 22
² Assembling 200 6-inch gate valves; 200 8-inch gate valves; 50 10-inch gate valves; and 200 12-inch gate valves.	McCulloch Manufacturing Co.	July 2, 1924.	Unfinished.....	13,350 00	12,483 47
³ Cleaning water pipes in Roxbury and Brighton.....	National Water Main Cleaning Company, Inc.	Aug. 5, 1924.	Completed Oct. 18, 1924 . . .	19,365 00	20,014 89
⁴ Repairing over trench with granite block pavement on Columbus avenue over New York New Haven and Hartford Railroad Bridge, Boston.	M. F. Gaddis.....	Aug. 9, 1924.	Completed Aug. 15, 1924.....	2,750 00	2,648 40
⁵ Furnishing and installing electric valve operating equipment on 36-inch valves at Copley square, Beacon street and Commonwealth avenue; and Huntington avenue, at South Huntington avenue.	Payne Dean Ltd.....	Sept. 27, 1924.	Unfinished.....	5,995 00	3,821 81
⁶ Building water pipe platform and blocking 12-inch water pipe on Blakenore street bridge, Mt. Hope District West Roxbury	C. & R. Construction Company.	Dec. 4, 1924.	Completed Dec. 8, 1924.....	710 00	710 00

¹ Advertised and awarded to the lowest bidder.² Advertised and awarded to the only bidder.³ Only bid; unadvertised.

High Pressure Fire Service.

CONTRACT.	Awarded to	Dated.	Progress of Work.	Estimated Cost.	Amount Expended in 1924.
<p>Hawkins street, from Sudbury street to Chardon street; Bowker street, from Sudbury street to Chardon street; Chardon street, from Green street to Portland street; Kneeland street, from Tyler street to Atlantic avenue; Atlantic avenue, from Kneeland street to Essex street; South street, from Kneeland street to Beach street; Chatham street, from Merchants row to Commercial street; Commerce street, from Commercial street to Atlantic avenue; Milk street, from Arch street to Washington street; Washington street, from Bromfield street to Milk street; Kilby street, from Milk street to State street; Doane street, from Kilby street to Broad street; Broad street, from Doane street to State street; State street, from Broad street to Commercial street; Hanover street, from Salem street to Washington street; Hanover street, from Portland street to Scollay square; India street, from India square to Custom House street; North street, from Merchants row to Union street; Union street, from Hanover street to Haymarket square; Sudbury street, from Friend street to Haymarket square; Custom House street, from India street to Broad street; Kingston street, from Essex street to Beach street; Fleet street, from Commercial street to Hanover street, city proper.</p>	C. & B. Construction Company.	April 8, 1924.	Unfinished	\$216,472 50	\$170,746 67

Advertised and awarded to the lowest bidder.

Area of Pavements.
Area in Square Yards and Character of Pavements on Accepted Streets, February 1, 1925.

District.	Sheet Asphalt.	Asphalt Concrete.	Granite Block.	Wood Block.	Plank on Bridges.	Brick.	Concrete.	Macadam.	Gravel.	Not Graded.	Totals.
Year 1923 report.....	898,238	1,002,076	2,721,651	290,963	31,360	88,699	47,926	5,926,385	462,929	86,991	11,557,218
Per cent.....	7.77	8.67	23.55	2.52	0.27	0.77	0.41	51.28	4.01	0.75	100.00
February 1, 1925.											
City Proper.....	361,645	248,369	891,496	194,670	6,492	13,415	3,404	298,387	2,130	16,217	2,036,225
Charlestown.....	6,609	414	278,998	2,622	2,112	756	672	152,095	719	57	445,054
East Boston.....	49,648	24,705	141,315	187	1,609	771	.....	456,871	6,881	865	682,852
South Boston.....	31,441	42,044	427,272	13,462	5,599	3,081	.....	384,012	12,987	40,103	960,001
Roxbury.....	170,880	125,818	399,370	25,242	1,417	44,814	14,606	854,233	23,846	945	1,661,471
West Roxbury.....	93,954	272,118	171,944	372	1,468	.....	24,453	1,131,239	69,127	22,503	1,787,178
Dorchester.....	91,026	225,916	279,811	41,951	5,124	25,461	13,333	1,619,180	99,103	9,056	2,412,961
Brighton.....	96,463	173,784	107,826	4,715	2,560	17	38,509	555,377	48,756	10,819	1,038,826
Hyde Park.....	14	32,381	12,672	1,683	3,368	.....	.....	338,031	215,204	9,567	612,920
Totals.....	* 901,680	† 1,145,549	‡ 2,710,704	287,904	29,749	88,315	§ 94,977	|| 5,780,425	478,753	110,132	11,637,188
Per cent.....	7.75	9.81	23.29	2.47	0.26	0.76	0.82	49.75	4.11	0.95	100.00

NOTE.—In the above table the city is subdivided substantially on the boundary lines between the districts as they existed when annexed to Boston. Territory annexed from Brookline is included in city proper.

* Of this amount 470 square yards is Unionite, and 114 square yards is rubber.

† Of this amount 771 square yards is asphalt block, 704,696 square yards is bitulithic, 1,614 square yards is Endurite, 959 square yards is Filbertine, 20,504 square yards is Simaseo, 283,399 square yards is Topeka, 133,606 square yards is asphalt concrete.

‡ Of this amount 945 square yards is cobble, 1,443,901 square yards is granite block paving on concrete base.

§ Of this amount 946 square yards is Blome Granitoid Concrete blocked pavement, 836 square yards is Sollamies.

|| Of this amount 2,239,695 square yards is bituminous macadam.

33,958 square yards public alleys included in this table.

299,732 square yards public streets in charge of Park Department included in this table.

71,341 square yards public streets in charge of Commonwealth of Massachusetts included in this table.

In addition to this table there are 6,891 square yards of accepted footways.

Length of Pavements.

Length in Miles and Character of Pavements on Accepted Streets, February 1, 1925.

District	Sheet Asphalt.	Asphalt Concrete.	Granite Block.	Wood Block.	Plank on Bridges.	Brick.	Concrete.	Macadam.	Gravel.	Not Graded.	Totals.
Year 1923 report	51.69	49.70	105.12	12.21	1.44	4.23	3.05	351.25	30.10	2.79	611.58
Per cent.	8.45	8.13	17.19	2.00	0.23	0.69	0.50	57.43	4.92	0.46	100.00
February 1, 1925.											
City Proper	21.17	10.90	37.42	8.02	0.27	0.63	0.55	17.28	0.30	0.01	96.55
Charlestown	0.41	0.63	12.15	0.11	0.08	0.03	0.03	10.56	0.07	.....	23.45
East Boston	2.17	0.90	6.51	0.01	0.10	0.04	.....	22.51	0.35	0.04	32.63
South Boston	2.51	2.06	17.76	0.78	0.25	0.13	.....	20.45	0.68	1.46	46.08
Roxbury	9.68	6.73	14.74	1.12	0.05	2.31	0.66	54.20	1.76	0.05	91.30
West Roxbury	6.30	13.91	3.72	0.01	0.07	.....	1.62	73.31	4.43	0.24	103.61
Dorchester	5.61	10.42	10.72	1.83	0.19	1.09	0.73	99.57	6.38	0.16	136.70
Brighton	3.77	8.35	0.92	0.11	0.15	.....	2.11	30.74	3.29	0.34	49.78
Hyde Park	.....	1.44	0.07	0.10	0.19	.....	.....	19.01	14.20	0.24	35.25
Totals	* 51.62	† 54.74	‡ 103.99	12.09	1.35	4.23	§ 5.70	¶ 347.63	31.46	2.54	615.35
Per cent.	8.39	8.90	16.90	1.96	0.22	0.69	0.93	56.49	5.11	0.41	100.00

NOTE.— In the above table the city is subdivided substantially on the boundary lines between the districts as they existed when annexed to Boston. Territory annexed from Brookline is included in city proper.

* Of this amount 0.02 mile is unionite and 0.00 mile is rubber.

† Of this amount 0.02 mile is asphalt block, 32.43 miles is bitulithic, 0.00 mile is Endurite, 0.06 mile is Filbertine, 1.18 mile is Simaseo, 14.96 miles is Topeka, 6.09 miles is asphalt concrete.

‡ Of this amount 0.04 mile is cobble and 46.51 miles is granite block paving on concrete base.

§ Of this amount 0.06 mile is Blome Granitoid concrete blocked pavement and 0.04 mile is Sollimacs.

¶ Of this amount 126.86 miles is bituminous macadam.

|| Of this amount 0.06 mile is Blome Granitoid concrete blocked pavement and 0.04 mile is Sollimacs.

6.46 miles public alleys included in this table.

7.24 miles public streets in charge of Park Department included in this table.

2.28 miles public streets in charge of Commonwealth of Massachusetts included in this table.

In addition to this table there are 1.35 miles of accepted footways.

The following changes in pavement were made during the year.

0.10 mile or 1,532 square yards sheet asphalt changed to bitulithic.
 0.00 mile or 25 square yards sheet asphalt changed to granite block.
 0.00 mile or 15 square yards sheet asphalt changed to concrete.
 0.00 mile or 3 square yards asphalt block changed to bitulithic.
 0.00 mile or 5 square yards asphalt concrete changed to sheet asphalt.
 0.00 mile or 18 square yards asphalt concrete changed to bitulithic.
 0.00 mile or 51 square yards asphalt concrete changed to concrete.
 0.00 mile or 145 square yards bitulithic changed to sheet asphalt.
 0.02 mile or 352 square yards Topeka changed to sheet asphalt.
 0.03 mile or 715 square yards Topeka changed to bitulithic.
 0.00 mile or 183 square yards Topeka changed to granite block.
 0.02 mile or 3,116 square yards granite block changed to sheet asphalt.
 0.00 mile or 114 square yards granite block changed to rubber.
 1.60 miles or 38,882 square yards granite block changed to bitulithic.
 0.11 mile or 3,013 square yards granite block changed to wood block.
 0.00 mile or 22 square yards granite block changed to brick.
 0.00 mile or 94 square yards granite block changed to concrete.
 0.00 mile or 233 square yards granite block changed to macadam.
 0.05 mile or 1,076 square yards wood block changed to sheet asphalt.
 0.00 mile or 34 square yards wood block changed to bitulithic.
 0.22 mile or 6,005 square yards wood block changed to granite block.
 0.01 mile or 300 square yards plank on bridges changed to granite block.
 0.03 mile or 459 square yards plank on bridges changed to wood block.
 0.02 mile or 345 square yards plank on bridges changed to concrete.
 0.03 mile or 500 square yards plank on bridges changed to macadam.
 0.00 mile or 184 yards brick changed to sheet asphalt.
 0.00 mile or 222 square yards brick changed to granite block.
 1.63 miles or 27,226 square yards macadam changed to sheet asphalt.
 1.29 miles or 61,814 square yards macadam changed to bitulithic.
 0.16 mile or 14,507 square yards macadam changed to granite block.
 0.52 mile or 12,430 square yards macadam changed to concrete.
 0.11 mile or 2,052 square yards gravel changed to sheet asphalt.
 0.35 mile or 10,878 square yards gravel changed to bitulithic.
 0.17 mile or 3,718 square yards gravel changed to granite block.
 2.01 miles or 32,442 square yards gravel changed to concrete.
 0.05 mile or 570 square yards gravel changed to macadam.
 0.00 mile or 136 square yards not graded changed to sheet asphalt.
 0.00 mile or 703 square yards not graded changed to granite block.
 0.00 mile or 38 square yards not graded changed to wood block.
 0.10 mile or 1,424 square yards not graded changed to concrete.
 0.00 mile or 21 square yards not graded changed to macadam.
 0.40 mile or 7,245 square yards not graded changed to gravel.

EMPLOYEES.

The following tables show the number of requisitions made on the Civil Service Commission for men; the number appointed, reinstated, died, resigned, transferred and retired; also the grade and number of employees in the department:

Requisitions made on the Civil Service Commission	42
Number of men called	109
Number of men certified	232

Number of men appointed	164
Provisional appointments made permanent	7
Promotions allowed	37
Reinstatements allowed	*22
Number of men resigned	26
Number of men died	41
Number retired under the Veterans' Retirement Act	4
Number retired under the Boston Retirement Act	91
Number of transfers to other departments	14
Number of transfers from other departments	42

The records of the department show that there are now 3,095 persons eligible for employment in the several divisions and of that number 3,016 were upon the January, 1925, pay rolls.

Grade and Number of Employees.

TITLE.	SERVICES.									Total.
	Central Office.	Paving.	Sewer.	Sanitary	Street Cleaning.	Ferry.	Bridge.	Lighting.	Water.	
Commissioner	1									1
Division engineers		1	1				1		1	4
Engineers in charge		1	1						1	3
Chief clerk	1									1
Clerks	39	19	6	3	1	1	2	1	39	111
Assistant engineers (civil)		12	19				9		5	45
Draughtsmen		5	10				5		3	23
Instrumentmen		13	23				6		7	49
Rodmen		5	10				1			16
Inspectors		37	40	47	40		3	1	32	200
Foremen		10	3	8	10		1		12	44
Subforemen			24	3			3			30
Blacksmiths and assistants			8	1	17				3	29
Blueprinters	3									3
Chauffeurs	1	3	5	10	8		4		14	45
Carpenters and assistants		21	4	3		5	14		5	52
Chief inspectors		1			1					2
<i>Carried forward</i>	45	160	126	88	60	6	49	2	122	658

* Seventeen on eligible list February 1, 1924.

Grade and Number of Employees.— Continued.

TITLE.	SERVICES.									
	Central Office.	Paving.	Sewer.	Sanitary.	Street Cleaning.	Ferry.	Bridge.	Lighting.	Water.	Total.
<i>Brought forward</i>	45	160	126	88	60	6	49	2	122	658
Cement testers and assistants.....	3									3
Chemist and assistant.....		2								2
Coal passers.....			7							7
Cashiers.....		1				1				2
Constable and inspector.....		1		3					4	8
Drawtenders and assistants.....							130			130
Deckhands.....						26				26
Engineers (steam).....		11	6			12			1	30
Electricians.....			2			1	1			4
Feeders.....		1		6	3					10
Firemen.....		3	12			26			1	42
Gatemen.....			4			15				19
General foreman.....		1	1	1	1	1			2	7
Harnessmakers and assistants.....				8						8
Head chauffeurs.....		4								4
Horseshoers.....				9						9
Janitors.....						1	1			2
Janitresses.....						7				7
Joiners.....						2				2
Laborers.....		320	83		140	11	3		184	741
Lampighter.....						1				1
Machinist and assistants.....			5			2	1		21	29
Meter testers.....									8	8
Meter readers.....									33	33
Masons (stone and brick).....			9						2	11
Medical inspectors.....		1		1	1					3
Oilers.....			17			18				35
Pipe fitter and assistant.....						2				2
Pavers.....		87	1						3	91
Plumbers.....				1					20	21
Painters.....		3	1	8		3	3			18
Captains.....						12				12
<i>Carried forward</i>	48	595	274	125	205	147	188	2	401	1,985

Grade and Number of Employees.— Concluded.

TITLE.	SERVICES.									Total.
	Central Office.	Paving.	Sewer.	Sanitary.	Street Cleaning.	Ferry.	Bridge.	Lighting.	Water.	
<i>Brought forward</i>	48	555	274	125	205	147	188	2	401	1,985
Quartermasters.....						12				12
Repairers.....		3	1						94	98
Roofer.....						1				1
Rammers.....		10								10
Rigger.....						1				1
Scalers.....									3	3
Sewer flushers.....			23							23
Supervisors.....		2		1			1			4
Stenographers.....		1	2					1		4
Stonecutters.....		10	2							12
Superintendents and deputy.....		1	1						2	4
Stockkeepers.....				1		1			1	3
Stablemen.....		13	3	29	30		1		1	77
Tankman.....						1				1
Teamsters and heplers.....		57	4	45	226				12	750
Telephone operators.....					1				1	2
Tollmen.....						12				12
Chief veterinarian.....		1								1
Watchmen.....		6	16	12	3		4		6	47
Weighers.....		1		1						2
Wharfingers.....		1		2						3
Wharfmen.....				4						4
Wheelwrights and assistants.....				5						5
Yardmen.....		7	2	13	2				7	31
Totals.....	48	708	328	644	467	175	194	3	528	3,095

**Number of Employees Actually Employed February 1, 1924, and
February 1, 1925.**

	Central Office.	Bridge.	Ferry.	Lighting.	Paving.	Sanitary.	Sewer.	Street Cleaning and Watering.	Water.	Total.
February 1, 1924	41	193	175	3	691	600	328	447	514	2,992
February 1, 1925	39	191	169	3	695	623	325	446	525	3,016

Total Eligible Force.

February 1, 1924	50	195	175	3	705	632	331	466	503	3,060
February 1, 1925	48	194	175	3	708	644	328	467	528	3,095

Appointments, Transfers, Resignations, Retirements, Deaths, etc., of Employees.

Died.	Retired, Act of 1922.	Retired Veterans, Act of 1911.	Transferred to Other Depart- ments.	Transferred to Other Services.	Resigned.	Discharged.	February 1, 1924.	SERVICES		January 31, 1925.	Transferred from Other Services.	Transferred from Other Depart- ments.	Reinstated.	Appointed.
								1924-1925.						
2			3	3			50	Central Office	* 48	4	2			
	7		1	1			195	Bridge	194	1	3		4	
3	4			4			175	Ferry	175	2	5		4	
							3	Lighting	3					
11	33	1	2	11	6		705	Paving	708	34	8	3	22	
7	12	1	2	17	8		632	Sanitary	644	6	7	2	44	
5	9	1	2	22	8		466	Street Cleaning	467	3	3		42	
6	14		1	2	2		331	Sewer	328	7	6		9	
7	12	1	3	9	2		503	Water	528	12	8		39	
41	91	4	14	69	26		3,060	Totals	3,095	69	42	5	164	

* Includes eight Central Office employees who are paid on Water Service pay roll.

PART II.

APPENDICES.

APPENDIX A.

CENTRAL OFFICE.

Appropriation	\$88,933 91
Expenditures from February 1, 1924, to January 31, 1925	86,511 11
	<hr/>
Balance unexpended and transferred to the City Treasurer	<u>\$2,422 80</u>

Expenditures.

Salary, commissioner	\$9,000 00
Salaries of clerks, stenographers, etc.	69,996 62
Automobile expense:	
Wages, chauffeur	\$1,633 67
Bay State sedan	1,181 81
Gasolene	236 39
Storage	150 00
Repairs	90 50
Supplies	103 12
Tires and tubes	68 52
Oil, grease, etc.	22 31
Registration	12 00
	<hr/>
	3,498 32
Printing	2,454 31
Stationery	454 78
Postage	211 56
Telephone tolls	37 84
Travel expenses, car fares, etc.	201 31
Typewriter	88 00
Inspection and repairs, typewriters	74 25
Books, papers, etc.	362 17
Sundries	125 95
Surety bond	6 00
	<hr/>
	<u>\$86,511 11</u>

APPENDIX B.

REPORT OF THE DIVISION ENGINEER OF THE
BRIDGE AND FERRY DIVISION.

BOSTON, February 1, 1925.

MR. J. A. ROURKE,
Commissioner of Public Works.

DEAR SIR,—I respectfully submit the following report of the income, expenditures, and operation of the Bridge and Ferry Division for the year ending January 31, 1925. The expenditures of the division in the regular maintenance appropriations of the department were \$981,598.76. Under special appropriations, \$595,354.24 additional was expended, making the total expenditures for the year \$1,576,953.

After years of litigation between the cities of Boston and Chelsea, the latter city has agreed to carry out the provisions of the findings of the Special Commission and the decree of the Supreme Court in regard to the bridges between Boston and Chelsea, constructed under the provisions of chapter 581, Acts of 1911, as amended by chapter 341, Acts of 1913. The city of Chelsea paid \$25,000 on January 1, 1925, as a first installment on the payment of \$100,000 to the City of Boston, agreed upon by Boston and Chelsea, on account of the maintenance charges of Chelsea Bridge and Meridian Street Bridge up to February 1, 1924.

The wearing surface of the following bridges has been changed from wooden sheathing to a more permanent type of pavement or they have been treated with a bituminous topping:

In some cases these jobs were occasioned by the complete rebuilding of the structure when it was deemed advisable to change from the lighter type of structure formerly in vogue, with wooden sheathing, to a permanent structure usually of steel incased in concrete with a paving of permanent type.

In other cases where the under plank has been down for some time but is still good for a few years, a bitumin-

ous top has been put on, particularly where the bridge is a large structure. The bituminous top costs much less than the wood block but needs attention at least once a year.

Wherever the job is comparatively small and the under plank has needed replacing, it has been deemed advisable to put tongued and grooved under plank down, on top of which is placed wood block with asphalt joints, so that the roadway should need no repairs for a considerable period of years.

Arlington Street Bridge (over Boston and Albany Railroad).— Wood block.

Ashland Street Bridge (over New York, New Haven and Hartford Railroad).— Granite block.

Ashland Street Bridge (over Stony Brook).— Bituminous top.

Babson Street Bridge (over New York, New Haven and Hartford Railroad).— Wood block.

Beacon Street Bridge (over Boston and Albany Railroad).— Granite block.

Belgrade Avenue Bridge (over New York, New Haven and Hartford Railroad).— Granite block.

Bennington Street Bridge (over Boston, Revere Beach and Lynn Railroad).— Wood block.

Berkeley Street Bridge (over Boston and Albany Railroad).— Bituminous top.

Blue Hill Avenue Bridge (over New York, New Haven and Hartford Railroad).— Bituminous top.

Boylston Street Bridge (over Boston and Albany Railroad).— Bituminous top, outside car tracks only.

Broadway Bridge (over Boston and Albany Railroad).— Wood block.

Brookline Avenue Bridge (over Boston and Albany Railroad).— Wood block.

Cambridge Street Bridge (Allston) over Boston and Albany Railroad. — Wood block.

Chelsea South Bridge.— Granite block and wood block.

Dana Avenue Bridge (over New York, New Haven and Hartford Railroad).— Wood block.

Everett Street Bridge (over Boston and Albany Railroad).— Bituminous top.

Glenwood Avenue Bridge (over Mother Brook).— Wood block.

Harvard Street Bridge (over New York, New Haven and Hartford Railroad).— Wood block.

Hyde Park Avenue Bridge (over Stony Brook).— Wood block.

Hyde Park Avenue Bridge (over Mother Brook).— Granite block.

Hyde Park Bridge (over electric connection).— Wood block.

Milton Street Bridge (over New York, New Haven and Hartford Railroad).— Wood block and bituminous top.

New Allen Street Bridge (over New York, New Haven and Hartford Railroad).—Wood block.

Sprague Street Bridge (over New York, New Haven and Hartford Railroad).—Bituminous top.

Watworth Street Bridge (over New York, New Haven and Hartford Railroad).—Wood block.

West River Street Bridge (over Mother Brook).—Wood block.

West Fourth Street Bridge (over New York, New Haven and Hartford Railroad, outside car tracks).—Bituminous top.

Beacon Street Bridge.

A contract was made January 3, 1923, with the Phoenix Bridge Company at a price of \$104,416.01, for replacing the old bridge with a new structure, using the existing abutments. The subcontractor for the approaches and concrete work was A. G. Tomasello & Son Company. The work of reconstruction was completed April 30, 1924.

The new structure is of steel encased in concrete. It has three main girders carrying a system of steel floor beams supporting two roadways with a concrete floor on which is laid granite block paving. The sidewalks have a granolithic surface and are carried on brackets from the two outside girders. All the metal below the floor is encased in concrete, and cast-iron plates are used over the railroad tracks to diminish the effect of locomotive exhaust. The bridge was widened on the westerly side so that it is now as wide as the street on either side. The water pipes have been placed under the railroad tracks so that with the new bridge a very much larger space is afforded for traffic than was the case with the old structure.

Braddock Park Footbridge.

Extensive repairs have been made to the corroded steel work of this bridge and adjacent steps and a complete new wooden flooring placed by the day labor force.

Cambridge Street, Allston, Bridge over Boston & Albany Railroad.

A contract was made June 22, 1922, with the Boston Bridge Works, Inc., at a price of \$133,621.78, for removing the old bridge and replacing it with a new structure, utilizing the existing abutments. The subcontractor for the approaches and concrete work was Cross & Roberts. The bridge was completed May 17, 1924.

The new structure consists of four steel trusses, carrying steel floor beams, encased in concrete and supporting a concrete floor with wood block paving. There are three roadways, the middle carrying two lines of street railway tracks. The bottom chords of the trusses are raised above the floor level so that the locomotive gases will not cause corrosion. The easterly sidewalk is built outside of the easterly truss, thereby widening the bridge and giving a greater width to the easterly roadway. On the west side of the bridge brackets are built out from the truss to carry the gas pipe, thereby removing the gas pipe from the roadway surface. These changes have made all the roadways wide enough to carry two lines of vehicles with ease. The approaches to the bridge are paved with granite block

Chelsea Bridge North.

Many of the piles supporting the sidewalk and roadway of the south approach to the swing draw at Chelsea Bridge North which were broken and decayed and several spur shores which had broken loose were repaired by the W. L. Miller Company, under a contract dated September 27, 1924. The work was completed on October 29, 1924, at a cost of \$2,800.76. A complete rebuilding of these pile approaches will be necessary in a few years.

A contract was awarded to the Murray Engineering Company, October 17, 1924, for cleaning and painting the steel work of Chelsea Bridge North draw span. The work will be finished in the spring of 1925. The City of Boston supplies the paint for the two finish coats, and the contractor the red lead paint for touching up rusty spots. The two finish coats are of blue lead and the paint weighs approximately eighteen pounds to the gallon.

Chelsea Street Bridge.

The Rendle-Stoddard Company was awarded a contract for repairing the fender guard on October 4, 1924. It was also found necessary to extend this fender guard down stream about twenty-five feet to protect the pile bridge properly from the large steamers now passing through this bridge. Spur shores have been fitted under the draw pier and some planking on the pier replaced. The work was completed January 3, 1925, at a cost of \$4,668.52.

Chelsea Bridge South.

As a preliminary step toward the building of a permanent new structure at Chelsea Bridge, over the south channel of the Mystic river, a temporary bridge was constructed alongside the existing bridge in 1913-14. The draw span of this temporary structure was the same as that used in the temporary bridge at the Chelsea Bridge North.

Various studies based on borings at the site were made for a permanent structure and a plan adopted on which licenses were obtained from the Public Works Department of the state and from the War Department. The plan provided for a bridge 365 feet long and 61 feet wide, having a 46-foot roadway and two 7½-foot sidewalks. It provided for a channel in the waterway 75 feet wide with a depth of 25 feet and with piers at such a depth that it would be possible ultimately to dredge the channel to 35 feet at mean low water.

The draw span consists of a four-leaf bascule draw of the Strauss type, with main trunnion supports 119 feet between centers, operated by electricity. The draw span is paved with wood block.

The approach spans are composed of deck plate girder and beam spans, supporting a floor of concrete; the roadway has a wearing surface of granite block and the sidewalks a granolithic surface.

Automatic gates of the yielding type protect the draw opening. These gates are designed to stop a two-ton automobile traveling at twenty miles an hour without damage to either the gate or the automobile.

The masonry foundations of the bascule span reach to a depth of 40 feet below mean low water on the southerly side of the channel and 45 feet below mean low water on the northerly side and are in hardpan. They were placed by the use of steel sheet piling coffer dams. The lower parts of the foundations are of concrete and were placed under water. From about 15 feet below mean low water to the top of the piers, the concrete and masonry was laid in the dry, although the water was allowed to flow over it after a few hours had been allowed for the setting of concrete and mortar. The foundations for the approach spans rest on piles. All concrete from about mean low water to the top of the piers is faced with granite masonry.

The draw fender pier is about 426 feet long, the oak

piling is from 60 to 65 feet long, and the timber in the construction is of yellow pine or Douglas fir.

The bridge was built under a contract with the Holbrook, Cabot & Rollins Corporation, approved May 2, 1922, and the work was completed July 19, 1924. A large part of the wood work was sublet to the W. L. Miller Company, the steel work to the Boston Bridge Works, Inc., and the paving and curbstones to C. W. Dolloff & Co.

On October 17, 1923, a contract for a new drawtenders' house was made with the W. L. Miller Company, and the work was completed December 26, 1923, at a cost of \$5,374.

The construction of this bridge has greatly facilitated the movement of traffic, both on the street and through the waterway, and heavy lighterage charges have been saved the firms up stream from the draw span.

An agreement of 1914 between the Boston & Maine Railroad Company and the City of Boston provided that the city should rebuild a part of the freight shed on Mystic wharf, which was torn down during the construction of the temporary bridge, the rebuilding to be done when the permanent bridge was constructed.

The Boston & Maine Railroad Company requested that in lieu of the rebuilding of the freight house that the city amend the agreement and pay the Boston & Maine Railroad Company the amount of money that would be required for the rebuilding of the freight house. It was finally agreed that an amendment be made to the agreement, providing that the city pay to the Boston & Maine Railroad Company \$4,750 and the amendment to the agreement will soon be signed.

Some claims on the part of the contractor for the rebuilding of Chelsea South Bridge are still outstanding, so that the cost of this construction has not been finally determined.

Commercial Point Bridge.

Patrick A. Collieran was awarded a contract for repairing and strengthening this bridge. The work consisted in refitting about six old spur shores, replacing girders, braces and girder caps where necessary and repairing the existing abutments by cleaning and filling the joints of the masonry with cement mortar and pinners. It was necessary to do considerable posting from new low water girders to strengthen the structure, as the tops of the

old piles were badly decayed. The contract was completed September 17, 1924, at a cost of \$2,194.40.

Congress Street Bridge.

Borings were made under a contract with Martin F. Gaddis, approved on August 23, 1923, for wash borings across the channel, to determine the material for the foundations of the proposed bridge. The contract was completed on October 2, 1923, at a cost of \$1,666.02.

Plans drawn for the construction and maintenance of a new permanent bridge were approved by the Department of Public Utilities on November 28, 1924. Application has also been made to the War Department for permission to build this bridge.

The new structure will be of masonry and steel, with a draw having a clear opening of not less than 75 feet for the passage of vessels. Pile and timber fender guards and piers will also be constructed.

A portion of the existing water pipe and tunnel will be changed by extending the westerly end of the pipe about 23 feet and building a new shaft at this point. The depth of channel will be increased to 25 feet at low water and the foundations of the new bridge built to allow the deeping of this channel to 30 feet at low water, if required by the Government.

The construction of this bridge will depend upon Legislative action authorizing a loan outside the debt limit to the amount of \$800,000.

Cottage Farm Bridge over Boston and Albany Railroad.

A contract was approved with Maurice M. Devine on August 5, 1924, for repairing the under part of the structure with gunite. This work was paid for by the Park Department but the engineering work and supervision was executed by the Bridge Service.

Some of the gunite of this bridge had become loose from the action of the locomotive gases. The loose material was removed and a new surface of gunite laid, which will probably last for five or six years, thereby protecting the steel and brick work of the structure.

Dorchester Avenue Bridge.

A contract was awarded to the W. H. Ellis & Son Company on March 25, 1924, for repairing the fenders of the Dorchester Avenue Bridge, over Fort Point chan-

nel. The faces of the waterways were repaired, fender guards, capsills, caps and other timber work renewed where directed, new piling was provided where necessary, spur shores refitted and corner irons placed. The cost of this work was \$3,896.60.

A contract was awarded to the C. & R. Construction Company for repairing the sidewalks and flooring on August 28, 1924. This work consisted of replacing parts of the downstream sidewalk on both sides of the channel by putting in new stringers, new planking and new surfacing. Incidentally it was necessary to renew the adjacent curbsticks, roadway planking, some roadway stringers, and to repave some of the roadway. Some work was also required in the roadways near the draw cracks, where in co-operation with the city the Boston Elevated Railway Company removed and replaced the car track and paved in the track. This contract was completed October 23, 1924, at a cost of \$7,899.22.

Dartmouth Street Bridge over Boston and Albany Railroad.

An order of the Public Utilities Commission, issued April 27, 1923, provides for the rebuilding of this bridge in accordance with plans submitted by this division. It provides for the removal of the present superstructure and for the construction of two new piers on which will be placed a steel bridge, the steel below the flooring to be encased in concrete. The middle truss will be removed and the girders of the bridge will be placed on the sidewalks, thus making a single roadway instead of the two roadways on the present bridge and improving traffic conditions. The roadway is to be paved with granite block and the sidewalks will have a granolithic finish. There will be no street car tracks on the structure.

In the belief that this work should be done in two parts, a contract was awarded on September 5, 1924, to the New England Foundation Company to build the piers. There are two piers of reinforced concrete supported on concrete columns which rest on a layer of hard clay, and the bottoms of the columns are at about elevation 24.

The columns were placed by excavating inside steel caissons until hard bottom was reached, then the footing was enlarged and the excavation filled with concrete. On account of vibration in the ground due to the very close proximity of the railroad tracks, it was deemed

advisable to leave the steel shells in position. It was necessary before constructing the piers to make some slight alterations in the sewer system by relocating sections of the drains which would interfere with the building of the piers. In building the piers old piling and some parts of an old pier were encountered, causing a slight delay in the work. The contract, amounting to \$27,193.69, was completed January 9, 1925.

A contract was awarded to the C. & R. Construction Company, approved December 4, 1924, for building the steel and concrete superstructure for \$72,455.50. Only the steel fabrication has been started.

Harvard Street Bridge, Dorchester.

In co-operation with the New York, New Haven & Hartford Railroad Company, the day labor force has laid a tongued and grooved yellow pine plank floor, on which has been placed a wood block pavement with asphalt joints, making a much more permanent pavement than the old wooden sheathing.

Huntington Avenue Bridge over Boston & Albany Railroad.

Under a contract approved October 31, 1924, the C. & R. Construction Company has removed all the loose concrete from the arches and beams on the under surface and has painted all exposed surfaces of metal work and the fences. The City of Boston supplied the paint for this work. Gunitite was applied to surfaces of metal exposed by the removal of loose concrete. The contract will be completed in the near future.

Hyde Park Avenue Bridge over Electric Connection, Hyde Park.

In co-operation with the New York, New Haven & Hartford Railroad Company, the wooden floor has been entirely renewed by our day labor force.

A 4-inch tongued and grooved yellow pine plank has been placed on new stringers furnished by the railroad company and a wood block wearing surface, with asphalt joints, set on the yellow pine plank.

Meridian Street Bridge.

The Boston Elevated Railway Company, in co-operation with the Bridge Service day labor force has com-

pletely renewed the wooden flooring of the draw span, doing the work on Saturdays and Sundays, shutting off all travel for two days and two nights in two consecutive weeks.

Northern Avenue Bridge.

June 23, 1924, a contract was awarded the W. S. Rendle & Son Company for repairing the fender piers and building pile supports. The planking on the draw pier was renewed and the greater part of the stringers and capsills were replaced with new material. All loose spur shores were refitted and additional piles were driven in the fender pier near the sweep of the ends of the draw, for the purpose of supporting the jacks for the blocking up and leveling of the draw span. New corner irons were provided where required. The work was completed November 14, 1924, at a cost of \$17,270.43.

The continued settlement of the main draw pier at this bridge has made necessary the resetting of the draw track and the end bearings of this bridge. A contract was approved August 21, 1924, with the Edward J. Carnes Company, to raise and block up the draw. The draw was swung off over the draw pier and jacked up on pile supports which had been previously placed. The existing track was then cleaned and reset on antimonial lead at proper grade. New landing blocks for the end supports were installed and the draw placed in proper working condition. The cost of this work, completed November 6, 1924, was \$6,938.73.

The great amount of teaming travel over this and other bridges in the city has prompted this department to obtain a wearing surface which would be of a lasting nature. From the standpoint of first cost the ordinary method of sheathing with a wooden flooring has proven the most economical. This involved, however, the closing of parts of this bridge and others to travel so frequently that it has become a matter of public inconvenience. An experiment was instituted on this bridge with the use of rubber pavement. In May a small section of the bridge over the draw pier was laid with this pavement which consists of blocks of composition rubber laid on a waterproofing compound and cemented together with a rubber cement. The rubber pavement was supplied by the Wright Rubber Products Company of Racine, Wis., and was laid by the Bridge Service force.

To date it has proven to be very successful and a severe test has been applied by the derailment of a freight car of the Union Freight Railroad. This car which ran over part of the pavement caused a slight depression in the surface which disappeared shortly after ordinary traffic had passed over it.

Redfield Street Bridge, Dorchester.

The railroad has renewed the wooden stringers, on which the day labor force placed yellow pine deck plank, covered by 2-inch spruce, on which was laid a bituminous top of tarvia, stone and sand.

Reservoir Road Bridge, Brighton, over Boston & Albany Railroad.

The wooden flooring of this bridge has been entirely renewed by the day labor force, in co-operation with the forces of the Boston & Albany Railroad Company.

Summer Street Bridge over Reserved Channel.

A contract was awarded to the W. H. Ellis & Son Company on July 18, 1924, for the repairs of the piers and fender guards. All old timbers and flooring were removed and replaced with new material. Old piles were removed and old spur shores refitted. The landings for the draw were repaired and readjusted and repairs made to the woodwork of the draw foundations. The capsills, stringers, caps and planking of the piers and fender guards were renewed where necessary. The work was completed October 2, 1924, at a cost of \$8,018.25.

Walworth Street Bridge over New York, New Haven & Hartford Railroad.

It was found that this bridge, formerly maintained by the railroad company, was in very poor condition, and the timber was very badly decayed.

The day labor force has completely renewed this bridge, putting in heavier timbers of yellow pine on which was placed a floor of 4-inch yellow pine tongued and grooved plank. For a wearing surface there was placed a wood block pavement, with asphalt joints. The approaches were also changed with bituminous macadam to meet the new grade.

Repairing Wharf and Dredging Dock, Engine 31, Commercial Street.

By request of the Fire Commissioner, estimates and a plan for repairs to the wharf and the dredging of the dock, to accommodate the fire boat, were prepared.

The contract with the Bay State Dredging Company was approved February 15, 1924. The work consisted of general repairs on the wharf including the driving of piling on the faces of the dock, replanking the runways and the deck of the wharf; also the dock itself was dredged to minus fifteen. The work was completed April 1, 1924, at a cost of \$4,184 29.

Miscellaneous.

During the past year many bridges which had spruce plank for wearing surfaces have been covered with a bituminous topping from $\frac{1}{2}$ inch to 1 inch thick, composed of broken stone and sand bound together with Tarvia. The results have been on the whole very satisfactory and will prove economical in the maintenance of the planking.

FERRY SERVICE.

The following steam ferryboats are in commission:

Name.	When Built.	Type.	Length.	Gross Tonnage.
Hugh O'Brien.....	1883	Side wheel	175 ft. 3 in.	645
Governor Russell.....	1898	Propeller	164 " 3 "	713
Noddle Island (rebuilt)...	1921	"	174 " 5 "	564
General Sumner.....	1900	"	164 " 3 "	450
John H. Sullivan.....	1912	"	172 " 3 "	527
Lieutenant Flaherty.....	1921	"	174 "	727
Ralph J. Palumbo.....	1921	"	174 "	755

"GOVERNOR RUSSELL."

On June 24, 1924, the ferryboat "Governor Russell" was taken out on the marine railway of R. T. Green's yard, Chelsea, for examination of a propeller. A broken tail shaft was found; the other tail shaft had been broken and renewed in December of the previous year. After receiving bids to make the necessary repairs, the stern bearing was plugged and the boat towed to the Atlantic Works, East Boston, and a new tail shaft, complete with sleeves and bushings, was installed. The cost of this work was \$853.

"NODDLE ISLAND."

On September 5, 1924, a contract with the Atlantic Works was approved for the sum of \$2,926 to install a ventilating plant on the ferryboat "Noddle Island." When the boat was built in 1920, an exhaust system of ventilation was installed. While this system was at first deemed sufficient to create satisfactory conditions below decks, it was soon decided that a supplementary system to introduce fresh air would be desirable. To this end, a turbine blower was installed with all necessary piping outlets and inlet. At the same time, the piping of the exhaust plant was also renewed with suitable gauge galvanized iron ducts. After the installation, all galvanized iron ducts, connections and fittings were given a coat of bitumastic enamel paint in an effort to prevent the rapid corrosion of this kind of piping on board ship. On September 19, 1924, the boat was taken out on the marine railway of R. T. Green's yard, Chelsea,

for general repairs to the hull. While extensive repairs were not contemplated, when an examination of the copper sheathing of the under water body of the boat was made possible, it was evident that a large number of sheets of yellow metal would be required to make satisfactory repairs. At the same time, one of the tail shafts was found so far down that a complete new stern tube and a new composition sleeve on the tail shaft were required. Miscellaneous work, such as painting the wood of the upper body of the hull, cleaning inlet boxes and strainers, and attaching four new propeller blades was also done. This work cost \$2,619.

“GENERAL SUMNER.”

On March 10, 1924, the ferryboat “General Sumner” was taken out on the marine railway of R. T. Green’s yard, Chelsea, for minor repairs to the hull. The hull was cleaned and painted and the inlet strainers were removed and cleaned. While the required repairs were not large, it was apparent from the condition of the planking and hull system generally that extensive repairs will be necessary shortly if the boat is to remain in commission. Perhaps the chief causes of damage are the heavy loads that are now carried (many of the coal trucks from adjacent yards weighing each in excess of fifteen tons when loaded, coupled with the fact that four lines of vehicles are now carried on the boat where the boat was originally designed for but two), and the strains set up as these excessive loads go on and leave the boat.

“JOHN H. SULLIVAN.”

A contract was awarded to the R. T. Green Company, Chelsea, Mass., on October 17, 1924, to repair the ferryboat “John H. Sullivan.”

The work done under this contract consisted of dry-docking the boat, cleaning, scraping and wire brushing the hull, backing out 5,054 defective rivets and driving new ones, electric welding 74 defective rivets, caulking 814 feet of seams, painting the hull with two coats of red lead and one coat of anti-fouling paint, allowing sufficient periods of time between coats for the paint to dry, spot welding 608 guard iron fastenings, and furnishing in place landing irons to take the ends of the new electrically operated ferry drops.

While this work was progressing it was found necessary to make further repairs, which consisted of rewooding

both stern bearings and fitting new keys for the wheels, raising both rudders, installing new blow backs on two sea cocks, packing main stuffing boxes, repairing one sponson brace, and renewing one disc and stem in one sea valve. The total cost of the repairs, including the extra work as noted above, was \$5,683.46. While the repairs to the hull were approximately as anticipated in the contract it may be mentioned that the deterioration of the rivets, plates and hull system generally is such that future repairs to the hull at greater cost may be required.

In connection with the contract for building the ferry bridges, both ends of this boat were strengthened and altered to fit the new drops, by the J. Edward Ogdan Company.

“LIEUTENANT FLAHERTY.”

A contract was awarded to the Atlantic works, East Boston, on November 10, 1924, to repair the hull of the “Lieutenant Flaherty.” The work done under this contract consisted of drydocking the boat, cleaning, scraping and wirebrushing the hull, electric welding 330 defective rivets, caulking and welding some seams, painting the hull with two coats of red lead and one coat of anti fouling paint, spot welding 1,241 guard iron fastenings, and furnishing in place suitable landing plates for the ends of the electrically operated ferry bridges. While the work was progressing, an extra work order was given to deliver on board a turbine generator furnished by the city, plug blow off openings, make new opening above braces, clean and drain bilges, furnish new guard timber on end, and effect minor repairs. The total sum paid the Atlantic Works for these repairs, including the extra work, was \$2,540.65. While the work required to make satisfactory repairs on hull at this time was not as extensive as anticipated, there are indications that future repairs will be more costly. Before the boat again went into service, the turbine generator, mentioned above, was installed in place of one of the two original generators which are connected up with reciprocating engines. Owing to the vibration set up in the boat when the old generators were running, it was thought advisable to use a turbine set in which there is no vibration. From the beginning the new generator has given complete satisfaction and that with a steam consumption much less than expected.

“RALPH J. PALUMBO.”

A contract was awarded to the Atlantic Works, East Boston, on December 11, 1924, to repair the hull of the ferryboat “Ralph J. Palumbo.” The work done under this contract consisted of drydocking the boat, cleaning and painting the hull in a manner similar to the “Lieutenant Flaherty,” backing out 910 defective rivets and driving new ones, backing out 10 defective rivets and replacing with tap rivets, electric welding 672 defective rivets, caulking and welding 260 feet of seams, spot welding 1,243 guard iron fastenings, rewooding one stern bearing, raising one rudder, installing a new turbine generator, furnished by the city, recanvassing and painting the upper deck, furnishing in place new boiler fronts, cleaning bilges, and making several minor repairs. The total cost amounted to \$5,750.37. The condition of the under water body of the boat is such that next year some plates will need renewal and further riveting will be required.

ELECTRICALLY OPERATED FERRY BRIDGES.

The satisfactory operation of the two electrically operated ferry bridges at the South Ferry, built last year, made it advisable to construct two more of a similar type. A contract was awarded to the Rendle-Stoddard Construction Company, Chelsea, Mass., on July 29, 1924, to build the necessary foundations at a cost of \$30,856.98. On August 5, 1924 a contract was awarded to the J. Edward Ogden Company, New York, to install two electrically operated ferry bridges with gallows frames and accompanying machinery, one at the northerly drop on the East Boston side and one at the southerly drop on the Boston side, at a contract price of \$234,000. This contract will complete the change from the old pontoon and wooden ferry bridges to the new steel type at the South Ferry.

The new steel ferry bridges have been built with a roadway of sufficient width to accommodate a double line of vehicles; the side walks are narrower than those on the wooden bridges. In this way, the movement of the vehicles is accelerated until the time of unloading and loading is not more than the time required for the movements of the pedestrians.

In the new installation, dead load counterweights,

located in the side towers operating by means of cables running over sheaves in the gallows frames, are capable of balancing all but about two tons of the dead load at the end of the bridge. The rest of the dead load and thirty-eight tons of the live load are taken care of by means of the live load counterweights. The live load counterweights consist of about twenty tons of cast iron for each bridge. The leads from the bridge to these counterweights run over sheaves in the gallows frames and down to a sheave in the middle tower of the gallows frame; from the counterweights, leads are taken up and over this sheave, hung on the leads from the end of the bridge and down to the electrically operated winch. In this way the counterweights correspond to the standing end of a two-part purchase on the leads from the bridge and get a lift of forty tons on the end of the bridge by means of twenty tons of counterweights. By means of an ingenious arrangement at the end of the bridge, the mooring of the boat is accomplished in a satisfactory manner, without any independent means for such purpose, through the pull exerted by the live load counterweights. After careful consideration, the normal pull on the mooring device was reduced by dividing the live load counterweight, so that only when the excessive loading of the bridge takes place, will the full effect of the counterweights (forty tons) be called into play.

To raise and lower the bridge, a master control is located at the end where the deckhand on the boat may step from the boat to the bridge; in this way additional hands to operate the installations are not necessary. By means of overload releases, relays, limit switches, slack cable releases and similar devices the safe operation of the bridges is insured as far as possible. Not only are these devices used to safeguard against errors in manual operations but they automatically take care of the effect of the rise and fall of the tide and such changes in the elevation of the boat as may be caused by changes in trim when loads go on or off. The supports for the canopies at the inshore ends of the north drop, Boston side, and south drop, East Boston, have been altered to furnish wider roadways, and new wire gates on steel frames have been constructed for the new conditions.

With the completion of these new ferry bridges, the city will probably have the largest and best set of ferry bridges extant.

FERRY PIERS.

Under a contract with the W. H. Ellis Company, dated August 7, 1924, considerable repairs to the North Ferry piers were completed on January 31, 1925, at a cost of \$20,638.82: This work included the rebuilding of the head of the north pier on the Boston side, by driving new piles, rebinding all three pier heads on the East Boston side, and fitting in place chafing irons on the wearing surfaces of certain of the piles in all the piers. The last item is an attempt to reduce the excessive wearing of the surface piles which are rapidly cut through by abrasion caused by the guard fastenings on the boats slipping by as they enter the slips. These chafing irons are attached to each fifth pile approximately, and from present indications, the irons accomplish all that was expected of them.

North Ferry Pontoon.—Repairs were made by the Murray Engineering Company, to the pontoon and drop of the North Ferry, Boston side, which were considerably damaged by a ferryboat on August 7, 1924. The work required the rebuilding and re-ironing of outshore end of the drop, fitting in place a new spring beam on the land end, taking the pontoon out of the water on a railway for calking, fastening of new blocking timbers, and resheathing complete with heavy yellow metal. When the bottom chords of the main trusses of the drop were uncovered, it was found necessary to make extensive repairs to replace the unsound timber. In order to expedite the work, an order was given to the W. H. Ellis Company, which was engaged in repairs to the adjacent pier, to drive a few temporary piles for construction purposes, block up the outshore end of the drop while the pontoon was being repaired, and build a new pile and timber guide for the drop to work against. The repairs to the pontoon were done under contract at a cost of \$2,875. The repairs to the drop were made by the day labor force of the Ferry Service aided by the Murray Engineering Company.

Under a contract made with the W. H. Ellis Company, dated October 28, 1924, the coal pocket dock at the South Ferry, East Boston, was repaired at a cost of \$1,455.56. This work consisted of rebuilding the foundation under the boiler and winch of the hoisting engine, driving new piles, fitting new caps and beams, laying a new deck, making fast new caps and covering

boards, and driving and fastening new chafing and mooring piles. These last piles are for mooring ferry boats when not in commission and are made fast to the outside caps of the dock by means of bolts and large cleats to prevent any side motion. This work was completed on January 6, 1925.

Under a contract made with the Rendle-Stoddard Company, dated June 18, 1924, some minor repairs were made on several piers at a total cost of \$4,133.75. Included in this work was the temporary straightening of pier head of the middle pier South Ferry, Boston, and the necessary driving of piles and timber work at the inshore ends of the piers of the south slip, South Ferry, East Boston, to fit the piers so that the boats can approach the new steel bridge more safely. Each pier was slightly extended on the inshore end to protect the concrete foundations of the new gallows frame and the chafing planking of the south pier was removed for a distance of about thirty feet so that the boat entering the slip would line up properly: This contract was completed on July 25, 1924.

Under a contract made with the Rendle-Stoddard Company, dated July 8, 1924, the middle pier of the South Ferry, Boston, about 130 feet long, was entirely rebuilt. In order to maintain the service at the South Ferry while the terms of this contract were being fulfilled, it was necessary to remove and rebuild first the upstream half of the pier while the downstream slip was being used and, on the completion of this phase, to complete the other half of the pier while the upstream slip was in commission. As on the corresponding East Boston side, the inshore ends of the piers of the north or upstream slip were built to conform to the line of the guards of the steel ferryboats. While this was a rebuilding of a former structure, the fact was considered that heavier loadings and heavier boats than the original pier was expected to resist, would act against the new pier; for this reason a more rugged and substantial installation was built. This work completed on December 1, 1924, cost \$32,656.13.

Yours respectfully,

JOHN E. CARTY,
Division Engineer.

BRIDGE SERVICE.

FINANCIAL STATEMENT, 1924-25.

Expenditures from Maintenance Appropriation.

Boston bridges	\$426,330 81	
Boston and Cambridge bridges	31,740 49	
		<u>\$458,071 30</u>

Total Expenditures.

From maintenance appropriations	\$458,071 30	
From special appropriations	317,758 25	
		<u>\$775,829 55</u>

EXPENDITURES ON BOSTON BRIDGES.

(1.) Administration:

Salaries:

Division engineer	\$3,750 00
Supervisor	3,000 00
Engineers and draughts-	
men	24,805 29
Foreman	2,088 36
Clerk	2,105 75
Inspectors	2,374 55
Medical inspector	183 33

Pensions:

Veterans	4,834 72
Laborers	360 00
Holiday time	2,043 50
Vacations	1,748 70
Pay to injured employees,	694 28
Printing, postage and	
stationery	1,542 29
Traveling expense	268 85
Telephone	34 88
Engineers' supplies and in-	
struments	228 93
Typewriter inspection	33 00
Advertising	139 69

\$50,236 12

(2.) Yard and Stockroom:

Yard:

Clerk, janitor and watchmen	\$3,837 26
Traveling expense	247 77
Tools, new	823 58
Tools, repairs	883 92
Telephone	139 24
Towels and furnishings	15 00
Supplies	85 64
Repairs at yard	5,937 95

 \$11,970 36

Stockroom:

Stock purchased during year	\$6,846 79
Stock used during year	7,035 81

 Decrease in stock 189 02

\$11,781 34

Automobiles.

	Truck, B-1.	Truck, B-2.	Foreman, B-3.	Supervisor, B-4.	Division Engineer, B-5.	Total.
Wages, chauffeur.....			\$933 00	\$1,526 57	\$1,151 57	\$3,611 14
Storage.....			138 25	150 00	150 00	438 25
Repairs.....	\$1,214 56	\$116 34	384 79	168 29	226 12	2,110 10
Supplies.....	17 86	16 48	101 57	30 97	13 41	180 29
Oil and gasoline.....	279 43	162 83	424 89	240 35	320 35	1,427 85
New tires and tubes.....	150 41	76 94	178 19	135 89	196 33	737 76
Repairs, tires and tubes..	4 00	28 75	150 70	25 75	49 60	258 80
Registration.....	2 00	4 00	12 00	12 00	12 00	42 00
New auto.....		1,655 00	461 50	574 00	1,400 00	4,090 50
Totals.....	\$1,668 26	\$2,060 34	\$2,784 89	\$2,863 82	\$3,519 38	\$12,896 69

BRIDGES.

Expenditures on Tide Water Bridges.

BRIDGES.	Draw- tenders' Salaries.	Mechanics' Wages.	Material.	Repair Bills.	Supplies.	Total.
Broadway.....	\$15,180 90	\$769 65	\$22 64	\$136 57	\$407 48	\$16,517 24
Charlestown.....	20,746 90	2,601 30	1,551 50	1,017 15	1,475 41	27,392 26
Chelsea North.....	17,433 56	4,117 99	464 25	4,863 83	1,515 96	28,395 59
Chelsea South.....	18,035 25	1,190 72	20 71	1,287 76	1,786 31	22,320 75
Chelsea Street.....	15,270 60	2,083 90	559 98	221 06	887 55	19,023 09
Congress Street.....	15,910 78	3,056 32	1,254 49	378 34	1,468 79	22,068 72
Dorchester Avenue.....	15,154 57	4,248 83	2,831 47	6,110 06	782 21	29,127 14
Dover Street.....	15,185 12	1,408 05	339 36	263 86	298 64	17,495 03
* L Street.....	15,154 13	1,027 67	580 62	711 02	448 45	17,921 89
Malden.....	15,730 69	785 65	124 92	807 28	932 09	18,380 63
Meridian Street.....	15,652 81	3,153 21	3,835 84	4,207 56	468 80	27,318 22
Northern Avenue.....	17,145 69	3,491 55	1,329 75	2,407 02	5,191 64	29,565 65
Summer Street.....	15,641 52	1,819 20	737 36	648 25	848 76	19,695 09
Warren.....	15,483 10	2,008 00	512 03	690 40	1,928 85	20,622 38
Totals.....	\$227,725 62	\$31,762 04	\$14,164 92	\$23,750 16	\$18,440 94	\$315,843 68

* Now Summer street over Reserved channel.

Repairs on Inland Bridges.

BRIDGE.	Labor and Materials.
Albany Street (over Boston & Albany Railroad).....	\$570 00
A Street (Stairs).....	247 00
Arlington Street.....	1 13
Ashmont Street (Peabody Square).....	97 76
Austin Street.....	1,672 87
Beacon Street (over Boston & Albany Railroad).....	35 19
Beacon Street (over outlet).....	1 09
Berkeley Street.....	383 22
Blakemore Street.....	889 52
Blue Hill Avenue.....	2,134 21
Boston Street (over Railroad).....	271 05
Boylston Street (over Boston & Albany Railroad).....	3,163 34
Braddock Park.....	500 06
Baker Street.....	41 00
Broadway (over Boston & Albany Railroad).....	941 07
Brookline Avenue.....	204 89
Broadway (over Foundry Street).....	1 44
Broadway (over Lehigh Street).....	59 27
C Street (Stairs).....	1 40
Charlesgate West (over Ipswich Street).....	1 09
Columbus Avenue.....	692 87
Clarendon Street.....	1 44
Dartmouth Street.....	301 44
Durham Street.....	185 25
Dorchester Avenue.....	271 00
Everett Street.....	1,139 44
Fairmount Avenue.....	941 92
Florence Street.....	238 58
Gainsborough Street.....	185 60
Huntington Avenue.....	63 21
Harvard Street.....	2,296 38
Hyde Park Avenue (over electric connection).....	1,698 84
Ipswich Street.....	1 09
Irvington Street.....	290 45
Massachusetts Avenue (over New York, New Haven & Hartford Railroad),	193 23
Massachusetts Avenue (over Boston & Albany Railroad).....	1 44
Metropolitan Avenue.....	257 55

Repairs on Inland Bridges — Concluded.

BRIDGE.	Labor and Materials.
Norfolk Street.....	\$887 90
Neptune Road.....	116 38
New Allen Street.....	11 00
Oakland Street.....	243 43
Perkins Street (Foot).....	49 00
Redfield Street.....	992 63
Reservoir Road.....	199 78
Shawmut Avenue.....	12 94
Southampton Street.....	317 01
Summer Street (over A Street).....	1 83
Summer Street (over B Street).....	1 83
Summer Street (over C Street).....	33 09
Toll Gate Way.....	22 52
Tremont Street.....	214 50
Walworth Street.....	3,037 41
Webster Street.....	982 01
West Fourth Street.....	373 96
West Newton Street.....	578 69
Winthrop.....	47 41
Wadsworth Street.....	44 00
Cleaning bridges.....	7,429 33
Totals.....	\$35,572 98

SUMMARY OF EXPENDITURES.

Administration.....	\$50,236 12
Yard and stockroom.....	11,781 34
Automobiles and trucks.....	12,896 69
Tide water bridges.....	315,843 68
Inland bridges.....	35,572 98
Total.....	<u>\$326,330 81</u>

BRIDGES, REPAIRS, ETC.

CHELSEA BRIDGE NORTH.

Salaries of engineers.....	\$145 76
Transit Department pay roll.....	76 80
Murray Engineering Company.....	2,337 50
William L. Miller Company.....	4,303 73
M. F. Gaddis.....	666 03
<i>Carried forward</i>	<u>\$7,529 82</u>

<i>Brought forward</i>	\$7,529 82	
Advertising	14 50	
Material	2,166 02	
Repairs	453 40	
Traveling expense	8 35	
	<hr/>	\$10,172 09

CHELSEA STREET BRIDGE.

Rendle-Stoddard Company	\$3,968 24	
Repairs	326 70	
Advertising	13 65	
License	1 00	
Engineer's supplies	2 00	
	<hr/>	4,311 59

COMMERCIAL POINT BRIDGE.

Salaries of engineers	\$316 66	
P. A. Colleran	2,194 40	
Advertising	7 50	
Bituminous surface	230 00	
	<hr/>	2,748 56

DORCHESTER AVENUE BRIDGE.

Salaries of engineers	\$625 12	
C. & R. Construction Company	6,716 64	
Repairs	858 20	
Advertising	8 00	
Traveling expense	2 25	
Bituminous surface	193 55	
Material	597 78	
	<hr/>	9,001 54

HUNTINGTON AVENUE BRIDGE.

Salaries of engineers	\$559 13	
C. & R. Construction Company	7,564 32	
M. F. Gaddis	170 49	
Materials	570 36	
Advertising	7 00	
Traveling expense	8 90	
	<hr/>	8,880 20

MERIDIAN STREET BRIDGE.

Repairs	\$3,610 00	
Material	1,225 81	
Advertising	48 55	
	<hr/>	4,884 36

NORTHERN AVENUE BRIDGE.

Salaries of engineers	\$2,105 34	
Transit Department pay roll	278 40	
Edward J. Carnes	6,988 73	
C. & R. Construction Company	1,062 15	
W. S. Rendle Company	19,010 46	
Repairs	237 38	
Material	1,907 07	
Engineers' supplies	3 00	
Traveling expense	10 80	
Advertising	94 35	
Freight	68 38	
	<hr/>	31,766 06

Carried forward \$71,764 40

SUMMER STREET OVER RESERVED CHANNEL.

<i>Brought forward</i>		\$71,764 40
Salaries of engineers	\$291 52	
W. H. Ellis & Son Company	8,018 55	
Advertising	17 40	
Photographs	35 00	
Material	240 58	
Traveling expense	1 05	
	<hr/>	8,604 10

WEBSTER STREET FOOT BRIDGE.

Material	\$481 11	
Repairs	155 93	
Flagman	96 43	
Mechanics	132 00	
Transit Department pay roll	873 10	
	<hr/>	1,738 57

ALBANY STREET BRIDGE OVER BOSTON & ALBANY RAILROAD.

Repairs	\$93 79	
Transit Department Pay roll	346 40	
	<hr/>	440 19

AUSTIN STREET BRIDGE.

Bituminous surface		305 00
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BLAKEMORE STREET BRIDGE.

Material	\$50 00	
Bituminous surface	221 10	
	<hr/>	271 10

BLUE HILL AVENUE.

Bituminous surface		621 50
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BROADWAY BRIDGE.

Repairs		28 00
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BOSTON STREET BRIDGE.

Bituminous surface		196 50
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BROOKLINE AVENUE BRIDGE.

Bituminous surface		583 59
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BOYLSTON STREET BRIDGE OVER BOSTON & ALBANY RAILROAD.

Bituminous surface		344 50
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BERKELEY STREET BRIDGE.

Material	\$314 60	
Bituminous surface	234 40	
	<hr/>	549 00

BYRON STREET BRIDGE.

Bituminous surface		173 50
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BENNINGTON STREET BRIDGE.

Bituminous surface		164 80
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CHARLESTOWN BRIDGE.

Bituminous surface	\$646 50	
Transit Department pay roll	63 90	
	<hr/>	710 40

<i>Carried forward</i>		<hr/>	\$86,495 15
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	CENTRAL AVENUE BRIDGE.		
<i>Brought forward</i>	.	.	\$86,495 15
Bituminous surface	.	.	439 00
	CHELSEA BRIDGE SOUTH.		
Repairs	.	.	2 33
	CLARENDON STREET BRIDGE.		
Bituminous surface	.	.	143 65
	CONGRESS STREET BRIDGE.		
Repairs	.	.	89 12
	EVERETT STREET BRIDGE.		
Material	.	\$1,047 27	
Bituminous surface	.	601 10	
		<hr/>	1,648 37
	FAIRMOUNT AVENUE BRIDGE.		
Bituminous surface	.	.	286 10
	HARVARD STREET BRIDGE.		
Repairs	.	\$58 00	
Bituminous surface	.	976 50	
		<hr/>	1,034 50
	HYDE PARK AVENUE BRIDGE OVER STONY BROOK.		
Bituminous surface	.	.	950 00
	HYDE PARK AVENUE BRIDGE OVER ELECTRIC CONNECTION.		
Repairs	.	\$77 80	
Bituminous surface	.	900 00	
Transit Department pay roll	.	172 90	1,150 70
	MILTON STREET BRIDGE.		
Bituminous surface	.	.	419 50
	NORFOLK STREET BRIDGE.		
Bituminous surface	.	.	327 00
	NEITUNE ROAD BRIDGE.		
Material	.	\$196 60	
Bituminous surface	.	155 50	
		<hr/>	353 10
	REDFIELD STREET BRIDGE.		
Material	.	\$1,423 75	
Repairs	.	63 00	
Bituminous surface	.	300 00	
		<hr/>	1,786 75
	RESERVOIR ROAD BRIDGE.		
Advertising	.	.	22 30
	SPRAGUE STREET BRIDGE.		
Bituminous surface	.	.	353 71
	SOUTHAMPTON STREET BRIDGE.		
Bituminous surface	.	.	237 80
		<hr/>	\$95,739 08
<i>Carried forward</i>	.	.	

WARREN BRIDGE.		
<i>Brought forward</i>		\$95,739 08
W. H. Ellis & Son Company		881 73
WEST FOURTH STREET BRIDGE.		
Material	\$480 38	
Bituminous Surface	1,816 50	
		2,296 88
WALWORTH STREET BRIDGE.		
A. G. Tomasello & Son	\$800 93	
Repairs	78 00	
		878 93
Totals		<u>\$99,796 62</u>
BEACON STREET BRIDGE, REBUILDING.		
The Pheonix Bridge Company		\$18,650 85
Repairs		1,191 83
Installing lights		487 14
Material		56 50
Traveling expense		25 80
Photographs		15 00
Engineers' supplies		10 26
Salaries, engineers		162 50
		<u>\$20,599 88</u>
CAMBRIDGE STREET BRIDGE, REBUILDING.		
Boston Bridge Works		\$16,339 03
Material		56 50
Photographs		15 00
Traveling expense		2 10
Salaries, engineers		112 50
		<u>\$16,525 13</u>
CHELSEA BRIDGE SOUTH.		
Holbrook, Cabot and Rollins Corporation		\$130,845 35
W. L. Miller Company		3,209 10
Boston Bridge Works		551 11
Strauss Bascule Bridge Works		800 00
Photographs		100 00
Inspection of material		105 00
Water supply pipe		81 00
Light and power services		499 92
Paving draw span		650 00
Equipment tools		698 62
Repairs		587 98
Traveling expense		185 55
Engineers' supplies		12 78
Salaries, engineers		5,686 86
		<u>\$144,013 27</u>
CONGRESS STREET BRIDGE, PLANS, ETC.		
Engineers' supplies		\$35 84
Salaries, engineers		917 07
Advertising		16 15
Photographs		30 00
		<u>\$999 06</u>

DARTMOUTH STREET BRIDGE.

New England Foundation Company	\$23,114 64
Western Union Telegraph Company	3,233 35
The Pierce Company	840 20
Mark H. Lynch	692 85
M. F. Gaddis	761 38
Central Construction Company	18 63
Material	151 65
Advertising	30 50
Inspection of material	45 94
New York, New Haven & Hartford Railroad	11 10
Traveling expense	55 50
Engineers' supplies	224 58
Salaries, engineers	6,642 05
	<hr/>
	<u>\$35,822 37</u>

OLD HARBOR IMPROVEMENTS.

Engineers' supplies	<u>\$1 92</u>
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Expenditures from Special Appropriation in Charge of Bridge Service.

	Balances from 1923-24.	Total Credits, Including Balances Carried Over and Transfers.	Expended During Year 1924-25.	Balances Unexpended January 31, 1925.
Bridges, repairs, etc.....	\$2,245 40	\$113,245 40	\$99,796 62	\$13,448 78
Beacon Street Bridge, rebuilding.....	66,237 77	54,238 28	20,599 88	33,638 40
Chelsea Bridge South.....	34,840 24	184,840 24	144,013 27	40,826 97
Cambridge Street Bridge, rebuilding.....	33,420 05	33,420 05	16,525 13	16,894 92
Congress Street Plans, etc.....	24,845 97	24,845 97	999 06	23,846 91
Dartmouth Street Bridge.....		145,000 00	35,822 37	109,177 63
Dover Street Bridge ¹	80 17			
Hyde Park Avenue Bridge ²	515 98			
Sea wall, etc., Roxbury Canal ³	10,927 06			
Old Harbor Improvements ⁴	6,479 22	1 92	1 92	
Totals.....	\$179,591 86	\$555,591 86	\$317,758 25	\$237,833 61

¹ \$80.17 transferred to East Boston Ferry, Improvements.

² \$515.98 transferred to East Boston Ferry, Improvements.

³ \$10,927.06 transferred to East Boston Ferry, Improvements.

⁴ \$6,477.30 transferred to East Boston Ferry, Improvements.

BOSTON BRIDGES.

I.	Number wholly maintained by Boston:	
	In charge of Bridge and Ferry Division	65
	In charge of Bridge and Ferry Division and Park and Recreation Department	2
	In charge of Park and Recreation Depart- ment	18
		— 85
II.	Number of which Boston maintains the part within its limits:	
	In charge of Bridge and Ferry Division	6
	In charge of Park and Recreation Depart- ment	5
		— 11
III.	Number of which Boston pays a part of the cost of maintenance:	
	In charge of Bridge and Ferry Division	8
	In charge of Commissioners for Boston and Cambridge Bridges	6
	In charge of Commissioners for Granite Avenue Bridge	1
		— 15
IV.	Number of which Boston maintains the whole or a part of the wearing surface	33
V.	Number maintained by Metropolitan District Commission	6
VI.	Number maintained by railroad corporations:	
	1. Boston & Albany Railroad	4
	2. Boston & Maine and Boston & Albany Railroads	1
	3. Boston & Maine Railroad, Eastern Di- vision	1
	4. Boston, Revere Beach & Lynn Rail- road	1
	5. New York, New Haven & Hartford Railroad, Midland Division	13
	6. New York, New Haven & Hartford Railroad, Old Colony Division	4
	7. New York, New Haven & Hartford Railroad, Providence Division	16
		— 40
VII.	Number maintained by the United States Government	1
	Total number	<u>191</u>

Bridge Openings.

BRIDGE	STEAMERS.			SAILING VESSELS.			TUGS.			BARGES.			ALL OTHERS.			TOTAL NUMBER OF VESSELS.			Total Number of Cargoes.	Total Number of Openings.
	Day.		Total.	Day.		Total.	Day.		Total.	Day.		Total.	Day.		Total.	Day.		Total.		
	Day.	Night.	Total.	Day.	Night.	Total.	Day.	Night.	Total.	Day.	Night.	Total.	Day.	Night.	Total.	Day.	Night.	Total.		
Broadway.....	33	16	49	70	2	72	1,662	43	1,705	528	19	547	579	2	581	2,872	82	2,954	611	1,265
Charlestown.....	18	29	47	53	4	57	2,530	127	2,657	532	127	659	2,018	749	2,767	5,151	1,439	6,590	1,681	1,961
Chelsea North.....	1,077	56	1,133	67	1	68	9,511	1,181	10,692	1,486	116	1,605	2,164	1,086	3,250	14,308	2,440	16,748	2,442	6,127
Chelsea South.....	24	6	30	79	2	81	5,477	348	5,825	129	8	137	2,940	222	3,162	8,649	586	9,235	1,939	3,122
Chelsea Street.....	70	40	110	.....	.....	.....	1,646	447	2,093	318	51	369	954	96	1,050	2,998	634	3,632	730	1,820
Congress Street.....	141	34	175	79	3	82	2,646	252	2,898	604	32	636	806	66	872	4,276	387	4,663	833	2,510
Dorchester Avenue.....	55	6	61	72	3	75	1,639	81	1,720	506	35	541	575	32	607	2,847	157	3,004	606	1,589
Dover Street.....	2	1	3	71	4	75	1,607	89	1,696	516	41	551	618	30	648	2,808	165	2,973	614	1,445
L Street *.....	23	7	30	47	3	50	2,202	36	2,238	294	16	310	1,403	59	1,462	3,969	121	4,090	648	2,596
Malden.....	58	34	92	17	6	23	1,068	63	1,131	273	63	336	265	21	316	1,711	171	1,882	361	1,181
Meridian Street.....	935	487	1,422	62	11	73	6,553	1,365	7,918	994	298	1,292	3,267	444	3,711	11,813	2,605	14,418	1,769	7,911
Northern Avenue.....	855	551	1,406	82	1	83	4,729	599	5,328	824	433	1,257	2,254	214	2,468	8,744	1,798	10,542	2,338	4,861
Summer Street.....	118	14	132	77	2	79	2,618	296	2,914	599	99	698	822	57	879	4,234	468	4,702	797	2,625
Warren.....	124	198	322	52	3	55	2,441	503	2,944	975	96	1,071	1,365	627	1,992	4,957	1,427	6,384	1,528	3,225
Totals.....	3,533	1,479	5,012	828	45	873	46,329	5,430	51,758	8,605	1,434	10,039	20,060	3,705	23,765	79,337	12,480	91,817	16,917	42,241

* Now Summer street over Reserved channel.

GRANITE AVENUE BRIDGE.*

Granite Avenue Bridge is under the jurisdiction of a commission composed of the Mayor of the City of Boston and the chairman of the Board of Selectmen of the town of Milton.

The replacement of broken and bent angles in the lateral bracing system and other minor repairs were done this year.

Following is the financial statement:

Drawtenders' salaries	\$2,313 50
Fuel	31 50
Light	20 19
Office supplies	17 65
Material	24 58
Repairs	185 06
Supplies	3 75
	<hr/>
	<u>\$2,596 23</u>

* Maintained jointly by County of Suffolk and town of Milton.

Granite Avenue Bridge Openings from February 1, 1924, to January 31, 1925.

MONTHS.	STEAMERS.		SAILING VESSELS.		TUGS.		BARGES.		ALL OTHERS.		TOTAL NUMBER OF VESSELS.		Total Number of Carries.	Total Number of Openings.	
	Day.	Night.	Day.	Night.	Day.	Night.	Day.	Night.	Day.	Night.	Day.	Night.			
	Total.	Total.	Total.	Total.	Total.	Total.	Total.	Total.	Total.	Total.	Total.	Total.			
February.....			10		4		2		2		16		2	14	
March.....							2		2					2	
April.....	1		20		8		3		3		24		4	17	
May.....			12		4		7		2		19		2	16	
June.....	2	1	46		13		13		4		74		5	50	
July.....	1	1	88	16	5		80	34	114	170	63	233	45	129	
August.....	1	1	58	2	12		12	43	13	56	112	18	16	83	
September.....			14		7		7	25	10	35	47	10	4	41	
October.....			20		9		9	13	1	14	42	1	4	30	
November.....			14		7		7				21		4	13	
December.....			16		9		9				25		4	14	
January.....			8		3		3				11		2	6	
Totals.....	5	2	7	3	6	306	18	324	81	188	64	252	98	660	94

FERRY SERVICE.

FINANCIAL STATEMENT FOR THE YEAR ENDING JANUARY 31,
1925.

1. Receipts.

Total cash receipts during the year	\$81,161 71	
Cash in hands of tollmen at beginning of year	200 00	
		<hr/>
		\$81,361 71
		<hr/>
Cash paid over to City Collector	\$81,161 71	
Cash in hands of tollmen, January 31, 1925	200 00	
		<hr/>
		<u>\$81,361 71</u>

2. Appropriations and Expenditures.

Received from annual appropriation for Ferry Service		\$521,688 80	
Transferred from Sanitary Service		7,865 71	
			<hr/>
		\$529,554 51	
Transferred to ferry improvements		6,027 05	
			<hr/>
		\$523,527 46	
Unexpended balances from special appropriations, February 1, 1925	\$113,072 86		
Appropriation for East Boston Ferry improvements, etc	275,000 00		
Appropriation for ferry improvements, etc.	60,000 00		
Transferred from Bridge Service	2,857 00		
Transferred from Ferry Service	6,027 05		
Transferred from bridges, repairs, etc	9,000 00		
Transferred from Sanitary Service,	6,721 13		
Transferred from Roxbury sea wall, etc.,	10,927 06		
Transferred from Old Harbor improvements	6,477 30		
Transferred from Hyde Park Avenue Bridge	515 98		
		<hr/>	
<i>Carried forward</i>	\$190,598 38	\$523,527 46	

<i>Brought forward</i>	\$490,598 38	\$523,527 46
Transferred from Dover Street Bridge	80 17	
Transferred from Beacon Street	1,999 49	
	<hr/>	492,678 04
Total appropriations, transfers and balances carried over		\$1,016,205 50
Total expenditures		798,529 14
		<hr/>
		<u>\$217,676 36</u>
Unexpended balances of special appropriations, January 31, 1925		<u>\$217,676 36</u>

3. Result of Operations for the Year.

Receipts for the year (net income)		\$81,161 71
Ordinary expenses (maintenance appropriations)	\$523,527 46	
Interest paid on ferry debt	41,710 00	
Depreciation on ferryboats	57,315 17	
Decrease in value of machinery and tools	162 41	
Decrease in value of fuel on hand	2,729 93	
Decrease in value of supplies on hand	278 96	
	<hr/>	
Net outgo for the year		625,724 03
		<hr/>
Net loss for the year		<u>*\$544,562 32</u>

* Does not include expenditures for special appropriations.

4. Balance Sheet.

End of Fiscal Year, January 31, 1925.

ASSETS.	LIABILITIES.
AVAILABLE ASSETS: Cash on hands of tollmen at close of year..... Inventory of supplies, viz.: Fuel..... \$12,438 68 Supplies for maintenance..... 7,649 54 Rents receivable..... Total available assets..... \$20,777 43	CURRENT LIABILITIES: None.
CONTINGENT ASSETS: City Treasury..... 217,676 36	CONTINGENT LIABILITIES: Appropriations account..... \$217,676 36
FIXED ASSETS: Real estate, land and buildings ¹ Ferry-boats ² \$610,100 00 \$37,439 71 4,163 58 Machinery, tools, etc..... Total tangible assets..... \$1,710,157 08 Deficiency or loss by operation and maintenance of the ferries for sixty-seven years to date..... 9,282,426 39 \$10,992,583 47	FIXED LIABILITIES: Capital of the city invested in the ferries, viz.: Total expenditures of all kinds for sixty- seven years, including interest on ferry debt..... \$18,822,417 97 Less total receipts..... 8,047,510 86 10,774,907 11 \$10,992,583 47

¹ Original purchase..... \$276,375 00
 New buildings, drops, ships, cost to 1913, 607,523 64
 Land, Lincoln's Wharf, cost, 1887..... 5,562 52
 Land, Battery Wharf, cost, 1893..... 10,000 00

\$899,461 16
 New drops, South Ferry, cost to Febru-
 ary 1, 1925..... 330,000 00

\$1,229,461 16

² Assessors' figures
³ Total cost to date, per ferry books..... \$1,642,202 91
 Less boats sold, depreciation or de-
 stroyed..... 784,763 20

\$857,439 71

Comparative Balance Sheets at the Close of Each Year.

	January 31, 1921.	January 31, 1922.	January 31, 1923.	January 31, 1924.	January 31, 1925.
<i>Assets.</i>					
Cash, balance on hand.....					
Cash, tollmen's capital.....	\$200 00	\$200 00	\$200 00	\$200 00	\$200 00
Rents receivable.....	146 20	187 85	251 37	392 35	489 21
Fuel and supplies in stock.....	35,852 94	27,308 70	25,831 83	23,097 11	20,088 22
City Treasurer (balance of appropriation).....	947,082 35	263,531 73	255,944 84	113,072 86	217,676 36
Ferryboats (less depreciation).....	379,450 27	1,024,067 76	972,070 25	914,754 98	857,439 71
Machinery and tools.....	2,227 90	2,005 11	1,804 60	1,624 14	4,163 58
Real estate, land and buildings (assessors' valuation).....	610,100 00	610,100 00	610,100 00	610,100 00	610,100 00
Total tangible assets.....	\$1,975,059 66	\$1,927,401 15	\$1,866,202 89	\$1,663,241 44	\$1,710,157 08
Cost of avenues, etc., East Boston (previous to 1870) ¹	315,815 68	315,815 68	315,815 68	315,815 68	315,815 68
Deficiency of assets (loss).....	6,395,570 42	6,865,402 36	7,393,091 23	8,149,845 42	8,966,610 71
Totals.....	<u>\$8,686,445 76</u>	<u>\$9,108,619 19</u>	<u>\$9,575,109 80</u>	<u>\$10,128,902 54</u>	<u>\$10,992,583 47</u>
<i>Liabilities.</i>					
Capital invested by City of Boston to date.....	\$7,739,363 41	\$8,845,087 46	\$9,319,164 96	\$10,015,829 68	\$10,774,907 11
Appropriations account (credit balances).....	947,082 35	263,531 73	255,944 84	113,072 86	217,676 36
Total liabilities.....	<u>\$8,686,445 76</u>	<u>\$9,108,619 19</u>	<u>\$9,575,109 80</u>	<u>\$10,128,902 54</u>	<u>\$10,992,583 47</u>

Details of Capital Invested by the City of Boston.

Total expenditures to date per ferry books.....	\$15,113,454 44	\$16,309,053 08	\$16,865,009 88	\$17,658,444 98	\$18,501,559 12
Interest of debt for the year (per City Auditor's reports).....	15,211 67	29,795 00	49,585 00	44,585 00	41,710 00
Interest previous years, etc. (net debits, per City Auditor's reports)	279,148 85	279,148 85	279,148 85	279,148 85	279,148 85
Total expenditures.....	\$15,407,814 96	\$16,617,996 93	\$17,193,743 73	\$17,982,178 83	\$18,822,417 97
Deduct total receipts paid to City Collector.....	7,668,451 55	7,772,909 47	7,874,578 77	7,966,349 15	8,047,510 86
Excess expenditures, capital.....	<u>\$7,739,363 41</u>	<u>\$8,845,087 46</u>	<u>\$9,319,164 96</u>	<u>\$10,015,829 68</u>	<u>\$10,774,907 11</u>

¹ Included in deficiency of assets in Table 4.

Comparison of Receipts, Appropriations and Expenditures.

	1920-21.	1921-22.	1921-22. Special Account.	1922-23.	1923-24.	1924-25.
RECEIPTS.						
From foot passengers (tollmen).....	\$37,926 79	\$41,876 31		\$35,221 49	\$31,059 13	\$27,347 91
" foot passes (office sales).....	423 80	282 20		249 20	254 40	280 20
" extra passengers on teams (gatemmen).....	1,546 34	1,740 60		1,639 04	1,212 80	1,525 94
" team tickets (office sales).....	2,519 50	1,892 50		1,723 00	1,621 50	1,947 00
" strip team tickets (tollmen).....	17,151 00	16,147 00		17,766 50	15,442 00	13,201 50
" cash fares for teams (gatemmen).....	30,518 14	37,735 60		44,007 10	41,072 74	35,796 62
" free ferries July 4.....	1 00	1 00		1 00	1 00	1 00
Total from rates.....	\$90,086 37	\$99,675 21		\$100,607 33	\$90,663 57	\$80,103 17
From rents.....	553 27	547 35		495 98	398 02	417 16
" old material sold.....	280 78	116 86			122 03	64 68
" other sources.....	1,230 88	\$4,118 50		565 99	586 76	576 70
Total ordinary receipts.....	\$92,151 30	\$104,457 92		\$101,669 30	\$91,770 38	\$81,161 71
EXPENDITURES (ORDINARY).						
Office:						
Division engineer's salary (part)†.....	\$1,250 00	\$1,250 00		\$1,250 00	\$1,250 00	\$1,250 00
General foreman and cashier‡.....	4,700 38	4,786 00	\$65 75	4,800 00	4,968 59	5,013 70
Clerk.....	1,670 85	1,123 36	16 43	1,200 00	1,284 29	1,386 59
Retired veterans' pensions.....	5,257 47	5,442 26	536 67	6,165 56	7,449 09	7,633 27

* Includes \$2,500 received from sale of ferryboat, "General Hancock" and \$4,000 from sale of ferryboat "D. D. Kelly."

† Remainder paid by Bridge Service.

‡ Included in employees (wages) after February 1, 1916, in office books.

Comparison of Receipts, and Appropriations and Expenditures.—Concluded.

	1920-21.	1921-22.	1921-22. Special Account.	1922-23.	1923-24.	1924-25.
Retired employees' pensions	2,315 64	2,160 00	180 00	2,258 00	3,240 00	2,921 00
Medical inspector (part).....	83 33	83 33	.....	83 34	83 34	83 33
Stationery.....	198 99	271 09	28 92	173 70	160 54	43 04
Printing.....	1,653 24	1,713 44	229 80	1,661 81	1,178 60	986 60
Telephones.....	279 32	281 40	48 52	278 60	246 17	249 52
Advertising.....	60 15	104 45	12 10	98 55	33 00	38 50
Car fares.....	87 15	90 75	16 70	91 75	97 35	88 17
Postage.....	4 00	4 00	2 00	5 26	8 00	4 00
Premiums, surety companies	83 00	85 00	85 00	7 15	85 00	85 00
Total office expense.....	\$17,075 52	\$17,398 68	\$1,221 80	\$18,073 72	\$20,083 97	\$19,852 72
Ferryboats and landings:						
Employees (wages)\$.....	\$278,218 04	\$287,056 64	\$3,636 28	\$292,612 87	\$291,878 59	\$315,339 26
Fuel.....	130,594 17	81,725 66	.....	89,882 09	92,904 36	75,278 43
Training, weighing coal, etc.....	3,937 52	3,538 17	890 61	2,703 87	2,986 03	3,296 97
Supplies.....	9,992 80	11,480 09	1,525 03	13,066 28	15,567 00	22,490 54
Gas.....	2,466 80	1,301 87	110 43	1,005 89	1,007 43	752 33
Oil.....	2,313 66	2,450 00	376 03	2,230 73	1,769 82	2,543 80
Electric light.....	3,127 83	3,171 49	638 97	3,790 49	4,154 60	4,973 19
Towing teams by electric motors.....	352 96	266 65	49 58	120 31	166 13	604 57
Repairs of boats.....	82,796 80	57,133 95	7,429 84	36,479 53	50,977 87	51,230 02

Repairs of buildings, piers and drops.....	41,607 73	24,599 46	4,590 63	33,817 11	13,908 12	24,814 05
Furnishings.....	320 26	302 98	9 50	678 30	235 50	256 00
Other expenditures.....	1,950 45	3,410 71	1,004 42	2,630 48	3,025 36	2,095 58
Total.....	\$574,754 54	\$496,836 35	\$21,483 21	\$407,091 70	\$498,684 78	\$523,527 46
EXPENDITURES FROM SPECIAL APPROPRIATIONS.						
East Boston Ferry, improvements, etc.....	156,600 71	582,783 16		7,414 79	165,179 21	202,726 78
Ferryboats, repairs, etc.....	24,544 32	2,013 25		172 10	172 10	
Ferryboat "Noddle Island".....	59,676 62	98,754 21				8,290 30
Ferry improvements, etc.....					79,814 01	63,084 60
Total expenditures, regular and special.....	\$815,576 19	\$1,180,386 97	\$21,483 21	\$504,678 59	\$743,850 10	\$798,529 14
Balances in treasury unexpended.....	917,082 35	263,531 73		255,944 84	113,072 86	217,676 36
APPROPRIATIONS.						
Regular annual appropriations.....	\$492,607 43	\$501,856 57		\$497,091 70	\$498,684 78	\$521,688 80
Transfers from other sources †.....	82,901 97	3,106 95			122,293 34	1,838 66
East Boston improvements, etc.....	1,000,000 00					1,295,000 00
Ferryboat "Noddle Island".....	160,000 00					46,721 13
Ferry improvements, etc.....						\$ 77,884 05
Total.....	\$1,735,509 40	\$504,963 52		\$497,091 70	\$601,980 35	\$903,132 64

* Includes repairs of coal carts, analysis of coal, medical attendance, report of coal expert, photographs, expressage, expert's services, derrick hire, gas for heating purposes and caps for officers.

† Part of appropriations for Bridge and Ferry Division applied to "Ferry Services" and transfers from other appropriations.

‡ Transferred from other appropriations, \$22,263.34.

§ Appropriation from taxes, \$50,000. Transferred from ferryboats, repairs, etc., \$1,002.23. Transferred from other appropriations, \$30,000.

¶ Appropriation from loan inside debt limits, \$275,000. Transferred from other appropriations, \$20,000.

** Transferred from other appropriations, \$6,721.13.

‡ Transferred from taxes, \$60,000. Transferred from other appropriations, \$17,884.05.

Total Expenditures Upon Ferries Since 1858-59.

Expenditures for avenues, paving, interest, etc., previous to the purchase of the ferries by the City	\$444,101 30
Purchase of the ferries April, 1870	276,375 00
Expenditures for ferryboats since April, 1870	1,642,202 91
Expenditures for new buildings, piers, drops, etc.,	607,523 64
Expenditures for tools and fixtures (prior to 1910)	14,752 46
Expenditures for land from Lincoln's Wharf in 1887	5,562 52
Expenditures for land from Battery Wharf in 1893	10,000 00
<hr/>	
Total expenditures on capital account	\$3,000,517 83
Expenditures for repairs of all kinds	2,420,706 58
Expenditures for fuel	2,466,506 91
Expenditures for salaries and wages	8,458,845 52
Expenditures for all other sources	2,475,841 13
<hr/>	
	<u>\$18,822,417 97</u>

Total Receipts from Ferries 1858-59.

Receipts from rents, etc., previous to purchase of ferries	\$29,588 56
Receipts from ferry tolls since purchase of ferries	7,733,434 55
Receipts from rents since purchase of ferries	70,291 20
Receipts from sale of ferryboats	152,567 44
Receipts from all other sources, per ferry books,	31,094 26
Receipts from all other sources, additional, per City Auditor	30,734 85
<hr/>	
Total receipts from all sources	\$8,047,710 86
Less amount with tollmen as capital	200 00
<hr/>	
Total receipts, auditor's reports	<u>\$8,047,510 86</u>

**REGULAR ANNUAL (ORDINARY) AND SPECIAL APPROPRIATIONS
(EXTRAORDINARY) OF THE FERRY SERVICE FOR THE YEAR
ENDING JANUARY 31, 1925.**

Appropriations (regular) for the year ending January 31, 1925	\$521,688 80
Transferred from Sanitary Service	7,865 71
<hr/>	
	\$529,554 51
Transferred to Ferry Improvements, etc	6,027 05
<hr/>	
	<u>\$523,527 46</u>
<hr/>	
Amount of expenditures (regular) for the year	<u>\$523,527 46</u>

SPECIAL APPROPRIATIONS.

EAST BOSTON FERRY IMPROVEMENTS, ETC.

Unexpended balance, February 1, 1924	\$110,315 47	
Loan inside debt limit	275,000 00	
Transfers to appropriation	20,000 00	
	<hr/>	
	\$405,315 47	
Expenditures for year 1924-25	202,726 78	
	<hr/>	
Unexpended balance, January 31, 1925	\$202,588 69	
<hr/>		
Expenditures for year made up as follows:		
Labor, Ferry Service employees	\$1,481 20	
Labor, Bridge Service employees	5,029 71	
Labor, Transit Department employes	297 00	
Travel expense	170 85	
Hardware, chain links, etc.	173 61	
Lumber	52 50	
Analysis of paint	50 00	
Canopy supports	39 58	
Gates	260 00	
Miscellaneous construction work	1,694 45	
Labor and materials and plant constructing pile fender at South Ferry	995 74	
Amount paid to J. Edward Ogden, Inc., under contract for two sets of gallow frames and accompanying machinery for South Ferry,	\$236,912 00	
Less deduction for electric current	171 95	
	<hr/>	
	\$236,740 05	
Less amount paid in 1923	129,909 50	
	<hr/>	
		106,830 55
Amount paid to W. H. Ellis & Son Company, under contract for ferry bridges, South Ferry, East Boston, cost of work	\$20,046 92	
Less amount paid in 1923	16,641 04	
	<hr/>	
		3,405 88
Amount paid to Rendle Stoddard Construction Company, under contract for foundations for ferry bridges for South Ferry (completed,) cost of work to date	\$30,856 98	
Less 7½ per cent retained	2,314 27	
	<hr/>	
		28,542 71
Amount paid to J. Edward Ogden, Inc., under contract for two electrical operating bridges with gallow frames and accompanying machinery (unfinished), cost of work to date	\$63,180 00	
Less 15 per cent retained	9,477 00	
	<hr/>	
		53,703 00
	<hr/>	
		\$202,726 78
<hr/>		
FERRYBOAT "NODDLE ISLAND."		
Unexpended balance February 1, 1924	\$1,569 17	
Transferred from Sanitary Service	6,721 13	
	<hr/>	
Expenditures for year 1924-25	\$8,290 30	
	<hr/>	
		\$8,290 30
	<hr/>	

Expenditures for year as follows:

Final payment to Richard T. Green Company on contract	\$1,290 30	
Execution of court in favor of Richard T. Green Company, on account of contract,	7,000 00	
		<u>\$8,290 30</u>

FERRY IMPROVEMENTS, ETC.

Unexpended balance, February 1, 1924	\$1,188 22
Appropriation from taxes	60,000 00
Transferred from other appropriations	17,884 05

\$79,072 27

63,984 60

Expenditures for year 1924-25

Unexpended balance, January 31, 1925 \$15,087 67

Expenditures for year made up as follows:

Advertising	\$19 30
Car fares	62 00
Photographs	20 00
Channel gutters furnished and set	479 50
Edgestone set, artificial stone sidewalks built, etc	1,818 00
Repaired head of centre pier, South Ferry, Boston side	1,360 03
Sheathing torn off and piles driven, South pier, East Boston side	2,146 34
Repairs to drops	8,163 76
General repairs on drops, piers, etc	1,566 72
Amount paid to Murray Engineering Company under contract for repairs to pontoons	2,875 00
Amount paid to Atlantic Works, repairing hull of ferryboat "Lieutenant Flaherty," cost of work to date (unfinished)	\$2,540 65
Less 15 per cent retained	381 10
	<u>2,159 55</u>

Amount paid to Rendle Stoddard Construction Company, under contract, rebuilding middle pier, etc., cost of work to date (completed)	\$32,656 13
Less 7½ per cent retained	2,449 21
	<u>30,206 92</u>

Amount paid to W. H. Ellis & Son Company, under contract for rebuilding piers at North Ferry (unfinished), cost of work to date	\$15,420 57
Less 15 per cent retained	2,313 09
	<u>13,107 48</u>

\$63,984 60

RECEIPTS AT EACH FERRY.

North Ferry.

FROM TOLLMEN.	Foot Passengers.	From Tickets.	Totals.
Boston side.....	\$9,016 97	\$4,335 50	\$13,352 47
East Boston side.....	8,640 28	4,714 00	13,354 28
Totals.....	\$17,657 25	\$9,049 50	\$26,706 75

From tollmen		\$26,706 75
From gatemen:		
56,789 foot passengers at 1 cent	\$567 89	
Cash fares for teams	25,367 73	
		<u>25,935 62</u>
Total at North Ferry		<u>\$52,642 37</u>

South Ferry.

FROM TOLLMEN.	Foot Passengers.	From Tickets.	Totals.
Boston side.....	\$5,114 86	\$2,692 00	\$7,806 86
East Boston side.....	4,575 80	2,063 00	6,638 80
Totals.....	\$9,690 66	\$4,755 00	\$14,445 66

From tollmen		\$14,445 66
From gatemen:		
29,609 foot passengers at 1 cent	\$296 09	
Cash fares for teams	10,490 85	
		<u>10,786 94</u>
Total at South Ferry		<u>\$25,232 60</u>

North and South Ferries	\$77,874 97
Tickets paid for at ferry office	2,227 20
Received in lieu of free ferries July 4, 1924	1 00
Total from rates	<u>\$80,103 17</u>
Rents for the year	417 16
Headhouse privileges	400 00
Care of public telephone booths	48 00
Commission on public telephones	128 70
Old material sold	64 68
Total receipts for year	<u>\$81,161 71</u>

TRAVEL ON THE FERRIES FROM FEBRUARY 1, 1924, TO JANUARY 31, 1925, INCLUSIVE.

	North Ferry	South Ferry
Foot passengers at 1 cent each	1,822,514	998,675
Foot passengers by ticket	20,923	2,205
Foot passengers free	—	1,584
Total foot passengers	<u>1,843,437</u>	<u>1,002,464</u>

One-horse teams, light motor trucks, pleasure carriages and runabouts,	282,189	132,571
Two-horse pleasure carriages, hacks and touring cars	260,331	78,666
Two-horse teams and motor trucks, Three-horse teams and heavy motor trucks	194,903	81,554
Four-horse teams	421	815
Handcarts, etc.	1,318	1,067
Drag wheels	2,277	821
Free teams, hacks and motor ve- hicles	3	1
	20,067	10,005
	<u>761,509</u>	<u>305,500</u>

Motor Vehicle Traffic (Reports of Captains).

February 1, 1924, to January 31, 1925.

	North Ferry.	South Ferry.	Total.
Runabouts	¹ 93,133	² 33,155	126,288
Touring cars	³ 296,339	⁴ 86,625	382,964
Trucks	⁵ 202,938	⁶ 90,717	293,655
Totals	592,410	210,497	802,907

¹ Includes 1,514 free.

² Includes 787 free.

³ Includes 9,130 free.

⁴ Includes 3,387 free.

⁵ Includes 7,029 free.

⁶ Includes 3,270 free.

Total paying foot passengers	2,844,317
Total free foot passengers	1,584
Total foot passengers carried	<u>2,845,901</u>
Total paying teams	1,042,564
Total free teams	27,988
Total teams carried	<u>1,070,552</u>

TOTAL TRAVEL ON BOTH FERRIES FROM FEBRUARY 1, 1919, TO
JANUARY 31, 1925.

	1919-20.	1920-21.	1921-22.	1922-23.	1923-24.	1924-25.
One-horse teams *.....	494,372	437,254	468,831	502,407	445,839	406,336
Two-horse teams †.....	330,023	314,109	309,529	341,257	314,672	291,710
Three-horse teams.....	4,372	4,105	1,605	1,850	1,548	1,249
Four-horse teams.....	4,542	3,774	4,311	6,061	4,816	2,105
Two-horse carriages, hacks ‡.....	173,821	226,742	299,791	368,711	366,846	338,031
Two-cent tolls, handcarts, etc....	4,935	5,224	4,122	4,333	4,409	3,098
Drag wheels, etc.....	6	1	.....	2	5	35
Paid teams at both ferries.....	1,012,071	991,209	1,088,189	1,224,621	1,138,135	1,042,564
Free teams at both ferries.....	17,447	16,650	22,458	29,349	26,197	27,988
Total teams at both ferries....	1,029,518	1,007,859	1,110,647	1,253,970	1,164,332	1,070,552
Foot passengers paid.....	4,424,773	3,987,785	4,390,781	3,711,491	3,244,419	2,844,317
Foot passengers free.....	4,500	3,305	4,479	1,865	1,650	1,584
Total foot passengers.....	4,429,273	3,991,090	4,395,260	3,713,356	3,246,089	2,845,901

NOTE.— Team travel includes automobiles.

* Includes one-seat automobiles. † Includes motor trucks. ‡ Includes two-seat automobiles.

APPENDIX C.

 REPORT OF THE DIVISION ENGINEER OF
 THE HIGHWAY DIVISION.

Boston, February 1, 1925.

MR. JOSEPH A. ROURKE.

Commissioner of Public Works.

DEAR SIR,— I submit herewith a statement of the activities and expenditures of the Paving and Lighting Services for the year ending January 31, 1925.

The maintenance expenditures of the Highway Division for the year were as follows:

Lighting Service	\$830,726 90
Paving Service	1,451,541 38
	<hr/>
	<u>\$2,282,268 28</u>

The department forces, in addition to patching and maintaining roadways, did considerable construction work in scarifying and preparing roadways for asphalt top to be installed by the patching contractor, in building bituminous macadam roadways and in relaying granite blocks with grouted joints.

Although the past winter was comparatively free from snow, the Champion blade plows attached to 5-ton motor trucks operated by the city and by contractors made a new record in keeping the main traffic arteries in first-class condition for travel.

A portable stone crusher was installed at the Massachusetts avenue lot, where vast quantities of paving blocks are stored, and all blocks not suitable for further use were converted into commercial broken stone for use in the City Proper and in other districts as required.

Two asphalt plants, one in Dorchester and one in Brighton, operated by the department forces, have been producing hot mix for the several districts as the occasion required.

The boilers of the steam road rollers are inspected each year by the state boiler inspector and, as a result of this inspection, there are four condemned rollers in the junk pile. Three of these rollers were replaced by one Buffalo-Springfield steam roller and two Acme gasolene rollers, making our roller equipment at present two gasolene and eight steam rollers. The older rollers were overhauled and repaired and made ready for the season's work.

The rolling stock is gradually changing from horse drawn to motor driven vehicles. The present equipment includes:

One 5-ton Pierce Arrow.

One 3-ton G. M. C.

Eighteen Reo trucks.

Ten Ford trucks.

Ten Ford sedans for foremen.

One Buick Touring, for Division Engineer.

One Buick Touring, for Chief Inspector.

It is recommended that nine Reo trucks, one Ford runabout, one snow loader, one wrecking car with derrick, and one stone loader be purchased this coming year, with the intention of further motorizing the service. It is expected, with the addition of new motor trucks, the use of carts and horses, of which there are 80, will be reduced to a minimum.

Tools and equipment have been kept in good condition by renewals and replacements except the carts, both single and double, which have been repaired extensively.

CONSTRUCTION.

Construction work was started early in the year. Twenty-two streets were rebuilt under repair and construction contracts in which 64,000 square yards of granite blocks were recut and relaid in a cement concrete base, and 110,000 square yards of Warrenite bitulithic pavement and 12,000 square yards of reinforced concrete roadways were laid.

A departure from bituminous surfaces to concrete was made this season when about 40,000 square yards of reinforced concrete, seven inches deep, were laid on twenty-two streets under the "Highways, Making of" appropriation. Sixty-five thousand square feet of artificial stone sidewalks were laid under a contract comprising a group of sixteen streets.

A flight of concrete steps with pipe rails was constructed in Northwood street, connecting Leyden with Gladstone street, East Boston. Some of the important contracts completed are Blue Hill avenue, west side, from Canterbury street to the Neponset river, surfaced with Warrenite bitulithic on a Telford base, thus completing the two roadways to Milton. Shawmut avenue, Roxbury street to the Boston & Albany Railroad bridge was rebuilt with Warrenite bitulithic on a 6-inch concrete base and the brick walks replaced with artificial stone.

Border street, East Boston, from Sumner street to Central square, was paved with new granite blocks on a 6-inch concrete base and new artificial stone walks were laid. Grove street, from Washington street to Centre street, West Roxbury, was constructed with Warrenite bitulithic on a 6-inch concrete base.

Very truly yours,

JAMES H. SULLIVAN,
Division Engineer.

HIGHWAY DIVISION — LIGHTING SERVICE.

FINANCIAL STATEMENT.

*Expenditures February 1, 1924, to January 31, 1925.**Electric Lighting:**Arc.*

Edison Electric Illuminating Company	\$438,886 80	
Charlestown Gas and Electric Company	24,672 13	
	<u> </u>	\$463,558 93

Incandescent.

Edison Electric Illuminating Company	\$90,111 94	
Charlestown Gas and Electric Company	17 95	
Charlestown Gas and Electric Company fire alarm lamps	200 56	
	<u> </u>	90,330 45

Gas Lighting:

Boston Consolidated Gas Com- pany	\$236,317 99	
Charlestown Gas and Electric Company	12,663 86	
Charlestown Gas and Electric Company fire alarm lamps	468 64	
	<u> </u>	249,450 49

Salaries and Wages:

Division Engineer (part of)	\$1,250 00	
Clerk	2,105 75	
Stenographer and clerk	1,486 98	
Lighting inspector	1,800 00	
Pensions	181 00	
	<u> </u>	6,823 73

Automobile Expense:

Gasolene, oil, etc.	\$168 51	
Registration	10 00	
Shoes and tubes, new and repairs, Supplies	41 32	
Supplies	6 56	
Repairs	51 42	
Storage	144 00	
	<u> </u>	421 81

<i>Carried forward</i>		\$810,585 41
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<i>Brought forward</i>		\$810,585 41
<i>Construction:</i>		
Installing lamps and posts and removing and relocating lamps, posts, etc.		4,820 00
<i>Office Expenses:</i>		
Printing	\$63 30	
Postage	30 00	
Stationery and periodicals	94 14	
		187 44
<i>Miscellaneous:</i>		
Travel expenses (car fares)	\$15 00	
Typewriter repairs and inspection	12 00	
Gas lamp posts	1,944 00	
Globes and shade frames	28 55	
Typewriting	60 34	
Advertising	30 00	
		2,089 89
Installing boulevard lamps on:		
Essex street	\$1,767 10	
Bowdoin street	604 90	
Columbus park	5,207 41	
Columbia road	809 80	
Blue Hill avenue	1,954 66	
Washington street	992 45	
Shawmut avenue	2,276 85	
		13,613 17
Total		\$831,295 91
Less rebate on installations		569 01
Total		\$830,726 90
<i>Revenue Credited to General Revenue.</i>		
Lighting Boston and Cambridge Bridges		\$2,630 89
Damage to posts		336 00
		\$2,966 89

The following is a statement of the work done during the year under the supervision of the Division Engineer.

Arc lamps have been provided for skating and tobogganing during the season at Franklin Field, Franklin Park and Wood Island Park the same as in years past.

Boulevard type white way lamps have been installed in Province street, School street to Bromfield street, Essex street, Washington street to Atlantic avenue, Shawmut avenue, Tremont street to Roxbury street, Washington street, Stuart street to Hollis street, Wash-

ington street, Castle street to Dover street, Columbus Park and Strandway, Massachusetts avenue, Southampton street to Shirley street, Bowdoin street, Quincy street to Olney street, Blue Hill avenue, Fremont street to Mattapan square. Thus throughout the city the lighting system has been increased, including the boulevard type and new magnetite arcs, by the installation of 162 lamps and 75 incandescents and 14 gas lamps at various locations. The usual amount of regulation and relocation of lamps and services made necessary by street construction, the building of sewers and other works has been conducted throughout the year.

Petitions and requests for new lamps received from citizens and from officials, also complaints in relation to the lighting service have been investigated and attended to. All streets in the underground district prescribed for the year have been inspected and the necessary changes and additions have been made.

The number of miles of streets and ways lighted by this service is as follows:

Public streets and alleys	615.35
Public footways	1.35
Park roads, footways and private streets and alleys approximately	309.10
	<u>925.80</u>

During the year the following defects were reported by the police: Arc lamps 8,321, incandescent 3,462 and gas lamps 3,081.

There are in operation 20,519 arc, incandescent and gas lamps divided as follows: 5,737 arcs, 4,913 incandescents and 9,729 single mantle gas lamps and 140 fire alarm gas lamps.

LAMPS INSTALLED.

Magnetite arc lamps	167
Tungsten lamps	95
Single mantle gas lamps	83
	<u>345</u>

LAMPS DISCONTINUED.

Magnetite arc lamps	5
Tungsten lamps	54
Single mantle gas lamps	69
Single mantle fire alarm gas lamps	2
Spot lights, police incandescent lamps	12
	<u>142</u>
Net increase	<u>203</u>

The following table shows the work of setting, repairing and altering lamp-posts, brackets, services, etc.:

	Set for Lamps.	Set in Place of Broken Posts.	Shifted to New Location.	Straight-ended.	Reset to Line and Grade.	Unused Posts Removed.	Repaired.	Laid.	Relaid.	Recon- nected.	Cleared	Set in Place of Brackets.	Shades.
Gas posts.....	83	132	36	25	36	63	13	83	21	132	276	3	21
Arc posts.....	167	1	12	1	18				3				{ Inst. Rem- 10 10
Tungsten posts.....	14		2		13				2				7
Tungsten fixtures.....	81		2										
Gas brackets.....						5							

Lamps of various types in use on January 1, 1925, as compared with the number in use on January 1, 1924:

	January, 1925.	January, 1924.	Increase or Decrease.
Single mantle gas.....	9,727	9,713	14
Fire alarm gas.....	140	142	—2
Magnetite series.....	5,737	5,575	162
Magnetite multiple *.....		* 23	
Tungsten incandescents.....	4,913	† 4,849	41
Spot light traffic police.....		12	—12
Totals.....	20,517	20,314	203

* Changed to 1,100 candle power incandescent.

† Thirty-four 60-candle power incandescent transferred to Metropolitan District Commission, January 1, 1925.

STREET LAMP OUTAGES.

Rebates for lamps not lighted on schedule time or out before the proper time have been received on the various monthly bills as follows:

DATE.	Incan- descent.	Gas.	Are.
February, 1924.....	\$7.61	\$114.21	\$189.27
March.....	63.70	57.48	380.63
April.....	31.16	9.09	144.95
May.....	4.10	12.85	45.50
June.....	5.02	3.86	34.77
July.....	1.63	5.62	41.32
August.....		6.29	
September.....	3.15	28.00	98.27
October.....	3.52	21.32	62.53
November.....	2.53	22.98	135.18
December.....	1.54	27.24	140.53
January, 1925.....	3.20	133.89	173.52
Totals.....	\$127.16	\$442.93	\$1,446.47

GAS LIGHTING.

There are 9,727 single mantle gas lamps and 140 single mantle fire alarm gas lamps.

The city furnishes the lamp-posts and the Gas Company sets the lamp-posts and provides service pipes laid from the gas mains to the top of the posts; maintains all such pipes and posts in good condition and repair; furnishes gas, lanterns, burners and all other necessary equipment including labor for lighting and care.

The lighting service provides for the gas, lighting and care of the fire alarm signal lamps and the Fire Department for the lanterns, posts, setting and repairing of same.

Gas Lamps.

LIGHTING CONTRACT.	Gas District.	Number of Lamps.	Type of Lamp.	Rated Candle Power.	Gas Consumed per Hour.	Hours of Burning per Annum.	Cost of Gas per Lamp per Annum.	Cost per Lamp for Lighting and Care per Annum.	Total Cost per Lamp to April 1, 1924.	Total Cost per Lamp from April 1, 1924.
Boston Consolidated Gas Company.	South Boston, East Boston, Dorchester, Roxbury, Brighton, West Roxbury	9,227	Single mantle.	60	3 feet.	4,000	\$11 00	\$15 20	\$26 20	\$26 20
		15	Single mantle. F. A.	60	3 feet.	4,000	11 00	15 20	21 00	26 20
		106	Open flame.	60	4 feet.	4,000	11 00	15 20	21 00	26 20
Charlestown Gas and Electric Company.	Charlestown	500	Single mantle.	60	3 feet.	4,000	11 00	15 20	21 00	26 20
		19	Single mantle.	60	3 feet.	4,000	11 00	15 20	21 00	26 20

ELECTRIC LIGHTING.

There are in use 5,737 magnetite arc lamps, 3,447 40 candle power, 1,374 60 candle power, 33 100 candle power, 25 200 candle power, 11 700 candle power tungsten lamps, and 23 1,100 tungsten lamps.

The electric companies provide and set the lamp-posts, except the lamp-posts for incandescent lamps supplied from underground circuits, furnish lamps, overhead wires, underground conduits, cables and connections and all other necessary equipments and maintain them in good condition and repair.

The lighting rates for electric lamps are in accordance with the following table:

DESCRIPTION OF LAMPS.	Fixed Costs per Lamp per Year to December 6, 1924.	Running Costs per Hour.	Fixed Costs per Lamp per Year from December 7, 1924.	Running Costs per Hour.
40 candle power incandescent lamp, series.....	\$10 80	.18 cent	\$10 00	.22 cent
40 candle power incandescent lamp, multiple.....	.....	.25 cent	10 80	.26 cent
60 candle power incandescent lamp, series.....	12 00	.2 cent	10 80	.26 cent
60 candle power incandescent lamp, multiple.....	.....	.3 cent	12 00	.30 cent
100 candle power incandescent lamp, series.....	18 00	.4 cent	13 50	.36 cent
100 candle power incandescent lamp, multiple.....	.....	.5 cent	13 50	.36 cent
200 candle power incandescent lamp, series.....	25 00	.1 cent	18 00	.60 cent
700 candle power incandescent lamp, multiple.....	30 00	1.5 cent	32 00	1.3 cent
1,100 candle power incandescent lamp, multiple.....	36 00	1.5 cent	34 00	1.4 cent

A discount of 10 per cent is made on the above rates for lamps in all sections of the city. A deduction at the rate of 1 cent per hour for lamps of 100 candle power or less and 5 cents per hour for all other lamps is made for outages.

Arc Lamps.

COMPANY.	Number of Lamps.	Connected.	Type of Lamps.	Type of Circuit.	Terminal.	Lighting Hours.	COST OF LAMP PER ANNUM.	
							To Decem-ber 6, 1924.	From Decem-ber 7, 1924.
Edison Electric Illuminating Company,	{ 1,785	Overhead.	Magnetite.	Series 6.6 amp. D. C.	528	3,828	\$79 60	\$93 42
	{ 3,647	Underground.	Magnetite.	Series 6.6 amp. D. C.	528	3,828	79 60	93 42
Charlestown Gas and Electric Company,	{ 224	Overhead.	Magnetite.	Series 6.6 amp. D. C.	528	3,828	79 60	93 42
	{ 81	Underground.	Magnetite.	Series 6.6 amp. D. C.	528	3,828	79 60	93 42

NOTE.—In the above the candle power figures are the official designations. The wattage figures are here eliminated.

Incandescent Lamps.

COMPANY.	Number of Lamps.	Type of Lamps.	Type of Circuits.	Candle Power.	Lighting Hours.	COST OF LAMP PER ANNUM.	
						To Decem-ber 6, 1924.	From Decem-ber 7, 1924.
Edison Electric Illuminating Company	2,016	Tungsten.	Series 6.6 amp. D. C.	40	3,828	\$15 92	\$18 42
	842	Tungsten.	Series 6.6 amp. D. C.	60	3,828	17 69	20 75
	11	Tungsten.	Series 6.6 amp. D. C.	100	3,828	29 98	27 28
	1,420	Tungsten.	Multiple D. C.	40	3,828	18 33	20 75
	532	Tungsten.	Multiple D. C.	60	3,828	21 44	23 48
	22	Tungsten.	Multiple D. C.	100	3,828	33 43	27 28
	25	Tungsten.	Series 6.6 amp. D. C.	200	3,828	63 28	40 97
	11	Tungsten.	Multiple D. C.	700	3,828	84 08	81 76
	23	Tungsten.	Multiple D. C.	1,100	3,828	87 52	87 59
	11	Tungsten.	Series 6.6 D. C.	40	3,828	15 92	18 42
	Charlestown Gas and Electric Company						

NOTE.—In the above the candle power figures are the official designations. The wattage figures are here eliminated.

HIGHWAY DIVISION — PAVING SERVICE.
Work Done by Contract.

	Old.	New.	Total, Old and New.
Edgestone set.....	59,940 linear feet.	37,431 linear feet.	97,374 linear feet.
Crushed stone foundation for edgestone.....		8,166 " "	8,166 " "
Concrete base laid.....	15,296 square yards.	121,219 square yards.	136,515 square yards.
Granite block paving laid, gravel base, gravel joints.....	4,823 " "	2,173 " "	7,296 " "
New granite block paving laid, asphalt joints.....		820 " "	820 " "
New granite block paving laid, gravel joints.....		8,717 " "	8,717 " "
Recent granite block paving laid, gravel joints.....		55,727 " "	55,727 " "
Second-hand granite block paving laid, gravel joints.....	5,518 square yards.	11,063 " "	17,211 " "
Sheet asphalt and binder laid.....		19,217 " "	19,217 " "
Bitulithic pavement laid.....		110,552 " "	110,552 " "
Concrete pavement laid.....		51,155 " "	51,155 " "
Wood block pavement laid.....	4,290 square yards.	2,602 " "	3,832 " "
Bituminous patching, full depth asphalt.....	18,951 " "	11,006 " "	33,557 " "
Bituminous patching, full depth bituminous concrete.....	16,004 " "		16,004 " "
Bituminous patching surface.....	7,741 " "		7,741 " "
Bituminous surface patching extra binder.....	173 cubic yards.		173 cubic yards.
Artificial stone sidewalks laid.....	6,209 square yards.	76,988 square yards.	83,197 square yards.

Work Done by Contract.—Concluded.

	Old.	New.	Total, Old and New.
Brick sidewalks laid.....	6,296 square yards.	607 square yards.	6,903 square yards.
Crushed stone sidewalks laid.....	1,203 " "	1,203 " "
Steel reinforcement furnished.....	300,980 pounds.	300,980 pounds.
Earth excavation.....	25,105 cubic yards.	25,105 cubic yards.
Rock excavation.....	1,715 " "	1,715 " "
Filling furnished.....	19,874 " "	19,874 " "
Crushed stone furnished.....	5,683 tons.	5,683 tons.
Loam furnished.....	151 cubic yards.	151 cubic yards.
Loam graded and seeded.....	3,260 square yards.	3,260 square yards.
Old concrete base removed.....	1,463 " "	1,463 " "
Covers, catch-basins Bradley heads set.....	509	509
Wood fence.....	230 linear feet.	230 linear feet.
Iron fence.....	387 " "	387 " "
Ground water drain.....	1,969 " "	1,969 " "
Dry wells.....	4	4
Cinders furnished.....	6,989 square yards.	6,989 square yards.
Concrete steps built.....	190 linear feet.	190 linear feet.

Explanation of Numerals on Preceding Pages.

Concrete base laid 4 inches thick.....	3,943 square yards.	136,545 square yards.
Concrete base laid 6 inches thick.....	132,602 " "	
Total concrete base laid.....		
2		
Second-hand granite block, formerly gravel roadway.....	613 square yards.	2,473 square yards.
Second-hand granite block, formerly macadam roadway.....	1,662 " "	
Second-hand granite block, formerly cobble gutters.....	198 " "	
Total second-hand granite block paving laid on gravel base with gravel joints.....		
3		
New granite block paving, asphalt joints, formerly granite block paving, gravel joints.....		820 square yards.
4		
New granite block paving, grout joints, formerly granite block paving, gravel joints.....		8,717 square yards.
4		
Recut granite block paving laid with grout joints, formerly gravel roadway.....	1,666 square yards.	55,727 square yards.
Recut granite block paving laid with grout joints, formerly macadam roadway.....	1,702 " "	
Recut granite block paving laid with grout joints, formerly gravel joints.....	28,147 " "	
Recut granite block paving laid with grout joints, formerly pitch joints.....	14,980 " "	
Recut granite block paving laid with grout joints, formerly grout joints.....	9,232 " "	
Total recut granite block paving laid with grout joints.....		
4		
Second-hand granite block paving laid with grout joints, formerly gravel roadway.....	2,087 square yards.	11,663 square yards.
Second-hand granite block paving laid with grout joints, formerly macadam roadway.....	985 " "	
Second-hand granite block paving laid with grout joints, formerly gravel joints.....	6,364 " "	
Second-hand granite block paving laid with grout joints, formerly pitch joints.....	2,227 " "	
Total second-hand granite block paving laid, grout joints.....		
7		
Formerly gravel roadway.....	2,796 square yards.	19,217 square yards.
Formerly macadam roadway.....	4,332 " "	
Formerly bituminous macadam roadway.....	12,089 " "	
Total asphalt pavement.....		

Explanation of Numerals on Preceding Pages.— Concluded.

Formerly gravel roadway.....	19,477 square yards.	
Formerly macadam roadway.....	8,606 " "	
Formerly bituminous macadam roadway.....	42,860 " "	
Formerly granite block with gravel joints.....	39,609 " "	
Total bitulithic pavement.....		110,552 square yards.
Formerly gravel roadway.....	39,385 square yards.	
Formerly macadam roadway.....	11,920 " "	
Total concrete roadway.....		51,155 square yards.
Formerly granite block, pitch joints.....		2,602 square yards
Formerly macadam roadway.....	11,243 square yards.	
Formerly wood block.....	1,077 " "	
Formerly granite block.....	2,286 " "	
Total bituminous patching full depth (new).....		14,606 square yards.
Laid with foundation.....	13,480 square yards.	
Laid on existing foundation.....	69,717 " "	
Total artificial stone sidewalks laid.....		83,197 square yards.

Work Done by Paving Service Forces, During 1924-25 (Fiscal Year).

	Old.	New.	Total.
Edgestone set.....	32,577 linear feet.	4,078 linear feet.	36,655 linear feet.
Concrete base laid.....	.....	4,819 square yards.	4,819 square yards.
Roadway, granite block, gravel joints.....	44,747 square y. rds.	29 " "	44,776 " "
Roadway, granite block, grout joints.....	21,996 " "	11,759 " "	33,755 " "
Gutter, granite block, gravel joints.....	9,665 " "	1,224 " "	10,889 " "
Gutter, granite block, grout joints.....	115 " "	4 " "	119 " "
Flagging crosswalk, gravel joints.....	1,518 " "	33 " "	1,551 " "
Roadway, wood block, sand joints.....	5,562 " "	.....	5,562 " "
Asphalt penetration macadam surface placed.....	5,870 " "	43,143 square yards.	49,013 " "
Macadam surface patched.....	299,163 " "	.....	299,163 " "
Asphalt blanket coat.....	153,097 " "	.....	153,097 " "
Brick sidewalks laid.....	59,748 " "	412 square yards.	60,160 " "
Artificial stone sidewalks laid.....	6,765 " "	1,351 " "	8,116 " "
Sidewalk excavating, no sidewalk laid.....	.....	230 " "	230 " "
Roadway excavating, no roadway constructed.....	.....	.....	.....
Roadway excavating, roadway changed.....	.....	425 cubic yards.	425 cubic yards.
Gravel or crushed stone sidewalks surfaced.....	160,962 square yards.	.....	160,962 square yards.
Grading (no pavement laid).....	.....	6,018 cubic yards.	6,018 " "
Brick block pavement laid.....	1,849 square yards.	.....	1,849 " "
Concrete roadway laid.....	* 1,400 " "	.....	1,400 " "
Rubber pavement laid.....	.....	60 square yards.	60 " "

* Patched with asphalt cement and sand.

FINANCIAL STATEMENT, PAVING SERVICE.

MAINTENANCE.

Appropriation		\$1,502,997 89
Transferred to Lighting Service	\$15,869 17	
Transferred to Overseeing of the Public Welfare Department, Central Office	35,587 34	
		<u>51,456 51</u>
Expended during the year		<u>\$1,451,541 38</u> <u>1,451,541 38</u>

SPECIAL APPROPRIATIONS.

Highways, making of:

Amount expended during the year	\$401,906 64
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GRANOLITHIC SIDEWALKS.

Balance February 1, 1924	\$14,357 41
Appropriation from taxes	50,000 00
	<u>\$64,357 41</u>
Expended during the year	63,235 61
	<u>\$1,121 80</u>

RECONSTRUCTING AND REPAIRING STREETS BY CONTRACT.

Balance February 1, 1924	\$83,388 27
Appropriation from taxes	950,000 00
	<u>\$1,033,388 27</u>
Expended during the year	1,004,427 46
	<u>\$28,960 81</u>

STREET IMPROVEMENTS.

Balance February 1, 1924	\$38,980 62
Expended during the year	34,699 93
	<u>\$4,280 69</u>

GARAGE, ALBANY STREET.

Balance February 1, 1924	\$83,314 15
Transferred from Beacon Street Bridge	10,000 00
	<hr/>
Expended during the year	\$93,314 15
	88,544 16
	<hr/>
Balance January 31, 1925	<u>\$4,769 99</u>

CAMBRIDGE STREET AND COURT STREET.

Expended during the year	<u>\$5,965 10</u>
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STUART STREET.

Expended during the year	<u>\$627 86</u>
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PAVING SERVICE.

SUMMARY OF EXPENDITURES.

Paving Service	\$1,451,541 38
Highways, making of	401,906 64
Granolithic sidewalks	63,235 61
Reconstructing and repairing streets by contract,	1,004,427 46
Street improvements	34,699 93
Garage, Albany street	88,544 16
Cambridge street and Court street	5,965 10
Stuart street	627 86
Total	<u>\$3,050,948 14</u>

INCOME.

Statement showing the amount of bills and cash deposited with the City Collector from February 1, 1924, to January 31, 1925, and credited to General Revenue.

Edgestone and sidewalk assessments	\$48,457 22
Permits	33,766 97
Services of inspector	1,876 00
Labor, material furnished, etc.	13,339 72
Total	<u>\$97,439 91</u>

AMOUNT PAID INTO THE CITY TREASURY DURING THE YEAR.

Edgestone and sidewalk assessments	\$38,518 78
Permits	33,320 47
Service of inspector	1,995 00
Labor, material furnished, etc.	13,269 78
Total	<u>\$87,104 03</u>

Objects of Expenditures from the Various Appropriations, Classified by Districts, February 1, 1924, to January 31, 1925.

Districts.	Macadam Repairs.	Paved Street Repairs.	Removal of Snow.	Street Cleaning.	Edgestone and Sidewalk Repairs.	Street Work.	Schedule A, Miscellaneous.	Totals.
South Boston and Dorchester North.....	\$14,344 78	\$7,632 39	\$20,351 06	\$4,642 46	\$9,673 79	\$52,181 21	.....	\$109,065 69
East Boston and Breed's Island.....	7,181 76	3,845 44	7,707 52	1,196 39	9,718 48	112,918 66	.....	142,568 45
Charlestown.....	5,610 10	3,907 96	9,980 88	5,162 85	7,428 49	65,915 33	.....	98,005 61
Brighton.....	44,046 51	290 44	13,961 11	23,140 70	6,688 90	92,078 08	.....	180,205 74
West Roxbury.....	56,392 50	691 54	21,825 74	26,804 48	10,110 64	224,080 24	.....	339,905 14
Dorchester.....	20,003 75	3,016 00	14,655 11	11,493 93	23,839 49	59,423 52	.....	132,431 80
Roxbury South and Jamaica Plain.....	27,904 97	6,005 34	34,492 34	45,230 50	17,362 09	238,559 80	.....	369,555 04
South End and Roxbury North.....	24,458 48	19,079 96	50,383 78	2,959 01	32,968 79	298,680 38	.....	428,230 40
Ashmont.....	23,090 25	209 67	9,359 33	10,946 19	6,032 48	231,656 03	.....	281,263 95
North and West Ends and Back Bay.....	408 90	4,882 46	56,102 50	.....	5,256 57	153,796 79	.....	220,447 22
Hyde Park.....	14,691 04	.....	3,978 58	9,147 91	2,295 32	34,284 17	.....	64,397 02
Miscellaneous.....	.....	.....	.....	.....	.....	* 223,162 46	.....	684,842 08
Totals.....	\$237,833 04	\$49,561 20	\$243,037 95	\$140,724 62	\$131,375 04	\$1,788,736 67	\$459,679 62	\$3,050,948 14

* New garage, \$88,762.68; artificial stone sidewalks repairs and rebates, \$16,027.12; asphalt repairs, \$120,372.66.

SCHEDULE A.

EXPENDITURES FOR FISCAL YEAR 1924-25.

Salary of division engineer (part of)	\$3,750	00
Salary of division engineer in charge (part of)	750	00
Salaries of office clerks and stenographers	7,671	97
Salaries of assistant engineers (office work)	8,321	90
Salaries of permit office clerks	10,430	03
Salaries of permit office inspectors	18,290	44
Salaries of engineering inspectors (office work)	11,272	57
Salaries of district inspectors	3,342	47
Salary of medical inspector (part of)	366	66
Medical attendance on injured employees (outside)	121	15
Salary of general foreman	2,921	78
Salary of chief veterinarian (part of)	500	00
Salary of inspector of horses	1,486	98
Salary of constable and inspector	2,005	48
Pensions paid to veterans (retired)	7,870	25
Pensions paid to laborers (retired)	18,325	39
Compensation allowed injured employees	5,473	72
Vacations allowed laborers, mechanics, etc.	35,169	47
Holidays, not including holidays charged to street accounts	79,671	24
Postage	277	46
Printing	4,110	60
Stationery	1,226	32
Traveling expenses, carfares, etc.	904	83
Engineering supplies and incidentals	1,841	52
Stationery	\$616	39
Printing	197	45
Postage	65	76
Transit repairs	89	80
Transit and calculating machine	569	50
Miscellaneous	302	62
Supplies for laboratory	73	87
Artificial stone sidewalks, new, and repairs by department force (see reconstructing and repairing streets by contract and street improvements)	30,033	84
Asphalt and bitulithic pavement repairs. Temporary repairs, labor, teaming, materials (see also, reconstructing and repairing streets by contract and street improvements)	12,616	40
Brick block repairs, labor, teaming and materials,	552	64
<i>Carried forward</i>	<u>\$269,378</u>	<u>98</u>

<i>Brought forward</i>	\$269,378	98
Wood block repairs, labor, teaming and materials,	11,984	35
Crosswalks repaired, not included elsewhere	1,630	12
Fence repairs	7,209	23
Plankwalk repairs	1,845	72
Edgestone, sidewalks and gutters (new) not included elsewhere	9,315	35
Rent of land, wharves, etc.	4,088	00
Expense of stables, including drivers, feeders, fodder, horseshoeing, repairs to harnesses, wagons, carts, etc.	\$161,549	80
Amount earned by department teams	141,749	45
	<hr/>	
		19,800 35
Electric lighting at yards and stables	1,200	94
Gas lighting at yards and stables	252	18
Fuel for heating yards, buildings, offices and stables	4,690	30
Electrical appliances, labor and materials, yards and stables	31	67
Rent of towels	169	30
Stoves, pipes, grates, etc.	37	69
Telephone service	1,572	03
Ice	125	46
Signs, making and putting up, etc.	19,310	65
Tools, hardware, etc., new, cost of repairing, etc.,	33,033	77
Oil for lighting around defects, etc.	1,164	00
Expenses of yards, including salaries of general foreman, foremen, clerks, yardmen, watchmen, tool wagons, etc.	47,176	43
Repairs of yard buildings, stables, sheds, shanties, etc.	11,732	34
Sanding icy and slippery streets	4,721	20
Repairing culverts and building new culverts	8	97
Chests for central office, making of	133	71
Premium on surety bonds	9	00
Traverse street subway	1,276	50
Repairs to and inspection of typewriters	67	00
Trimming and removing trees	925	00
Painting traffic lines	1,243	50
Marking catch-basin locations	412	50
Repairs to snow dumps	76	83
Miscellaneous	97	04
Work done and material furnished individuals, corporations, etc.	6,138	27
Furniture	26	00
Photographs	120	00
Airdrome, East Boston	1,034	16
Dandie mixer	980	10
	<hr/>	
<i>Carried forward</i>	\$463,018	64

<i>Brought forward</i>		\$463,018 64	
Sanitary service, work done and material furnished		100 00	
Street Cleaning and Oiling Service, work done and material furnished		487 62	
Sewer Service, work done and material furnished,		110 70	
Water Service, work done and material furnished,		1,140 79	
Bridge Service, work done and material furnished,		43 52	
High Pressure Fire Service, work done and material furnished		670 50	
Park Department, work done and material furnished		419 42	
Steam rollers, cost of operating, repairs, etc.	\$16,833 69		
Less amount earned by steam rollers,	13,824 00		
			3,009 69
Gas rollers (two)			11,994 60
Steam roller			6,850 00
Stone crusher, South End District, operating, rental of crusher, supplies, etc.			15,913 30
Garage, Albany street, employees' wages, fuel, gasolene, supplies, etc.			12,457 90
Tractor "Bear"			5,200 00
Asphalt plant, Ashmont District			2,950 72
Tractors, mixers, etc., supplies, etc.			406 67
			<hr/>
Total			\$524,774 07
Credits:			
Automobiles:			
Amount earned by trucks	\$94,450 00		
Cost of operation, repairs, supplies, equipment, etc., including purchase of 5 Ford Sedans, 1 Pierce Arrow and 6 Reo trucks	76,253 52		
		\$18,196 48	
Asphalt Plant, Brighton District:			
Repairs, operating expense, materials, etc.,	\$35,315 30		
Less materials used on streets	53,755 39		
		18,440 09	
Stock:			
Materials delivered on streets	\$157,592 44		
Cost of materials	\$92,926 22		
Labor and teaming,	36,208 34		
		129,134 56	
			28,457 88
			<hr/>
			65,094 45
Total			<hr/> <u>\$459,679 62</u>

**Loads of Snow Removed from February 1, 1924, to January 31, 1925,
by Department Forces.**

DISTRICT.	Single.*	Double.†	Auto Trucks.‡	Cubic Yards.	Cost.§
South Boston.....	540	2,244	2,101	20,418	\$14,977 02
East Boston.....	1,087	287	.....	3,035	7,707 52
Charlestown.....	1,234	.....	.....	2,468	9,980 88
Brighton.....	274	193	388	3,455	13,961 11
West Roxbury.....	686	2,738	1,638	19,414	21,825 74
Dorchester.....	1,519	442	99	4,958	14,655 11
Roxbury.....	1,223	327	540	6,667	34,492 34
South End and North End.....	1,019	413	3,450	23,977	47,105 33
Ashmont.....	1,331	1,145	.....	6,097	9,359 33
North End (see South End.)					
Hyde Park.....	300	146	52	1,350	3,978 58
Totals.....	9,213	7,935	8,268	91,839	\$178,042 96

* Single loads, 2 cubic yards.

† Double loads, 3 cubic yards.

‡ Auto truck loads, 6 cubic yards.

§ Includes cost of plowing gutters, cleaning sidewalks, and picking ice not carted away. Also automobile snow plows furnished by contractors.

**Snow and Ice Removed by Contract from February 1, 1924, to
January 31, 1925.**

SNOW DISTRICTS.	Number of Loads.	Cubic Yards.	Cost per Cubic Yard.	Total Cost.	Remarks.
District No. 1.....	446	3,816½	\$0 70	\$2,671 56	1923 contract.
	291	2,857	49	1,399 93	1924 contract.
District No. 2.....	405	3,735½	70	2,614 85	1923 contract.
	1,093	6,407½	65	4,164 88	1924 contract.
District No. 3.....	550	5,662	65	3,680 31	1923 contract.
	472	5,046	65	2,523 00	1924 contract.
District No. 4.....	1,108	5,814	75	4,360 51	1923 contract.
	369	3,136½	67	2,101 46	1924 contract.
District No. 5.....	404	3,137	75	2,352 75	1923 contract.
	230	1,882½	65	1,223 63	1924 contract.
District No. 6.....	642	5,434	75	4,075 51	1923 contract.
	347	3,477	70	2,433 90	1924 contract.
District No. 7.....	638	6,569	70	4,598 30	1923 contract.
	535	4,139½	63	2,607 89	1924 contract.
District No. 8.....	431	3,905½	64	2,499 52	1923 contract.
	268	2,394½	56	1,340 92	1924 contract.
District No. 9.....	621	5,376	80	4,300 80	1923 contract.
	203	1,901	68	1,292 68	1924 contract.
District No. 10.....	698	5,814½	65	3,779 43	1923 contract.
	394	3,109½	59	1,834 60	1924 contract.

NOTE.— The capacity of the loads varies from three (3) to ten (10) cubic yards.

**Loads of Dirt and Street Cleanings Removed from February 1, 1924,
to January 31, 1925.**

DISTRICTS.	Single.*	Double.†	Auto Trucks.‡	Cubic Yards.
South Boston.....	157	405	424	3,511
East Boston.....	210	132	—	474
Charlestown.....	748	—	—	748
Brighton.....	1,143	326	1,781	12,481
West Roxbury.....	2,756	2,668	1,446	16,768
Dorchester.....	453	538	8	1,577
Roxbury.....	5,122	1,080	2,216	20,578
South End.....	—	—	—	—
Ashmont.....	1,870	721	—	3,312
North End.....	165	—	—	165
Hyde Park.....	2,443	778	43	4,257
Totals.....	15,067	6,648	5,918	63,871

* Single loads, 1 cubic yard.

† Double loads, 2 cubic yards.

‡ Auto truck loads, 6 cubic yards.

PUBLIC WORKS DEPARTMENT — HIGHWAY DIVISION — PAVING SERVICE.

Maintenance of Macadam Streets.

Cost by Years of Resurfacing or Patching from February 1, 1920, to January 31, 1925.

	1920.	1921.	1922.	1923.	1924.
Total length of macadam in miles.....	375.28	366.10	358.47	351.25	\$ 347.63
Total area of macadam in square yards.....	6,538,199	6,232,041	6,079,424	5,926,385	\$ 5,789,425
Total cost of resurfacing of macadam *.....	\$289,635 97	\$301,051 59	\$69,752 09	\$57,883 32	\$40,032 79
Total cost of patching of macadam †.....	\$248,468 81	\$251,521 06	\$173,332 36	\$196,758 28	\$251,028 22
Cost of resurfacing per mile over entire mileage.....	\$771 78	\$822 32	\$191 86	\$164 79	\$115 16
Cost of resurfacing per square yard over entire area.....	\$0 044	\$0 0483	\$0 0115	\$0 0097	\$0 0069
Length of macadam resurfaced yearly in miles.....	16.2	19 07	5.538	3.322	1.905
Cost per mile of macadam resurfaced yearly.....	\$17,878 76	\$15,786 66	\$12,595 00	\$17,424 23	\$21,014 58
Area of macadam resurfaced yearly in square yards.....	229,680	254,321	75,646	47,870	27,461
Cost per square yard of macadam resurfaced yearly.....	\$1 26	\$1 183	\$0 9221	\$1 2091	\$1 46
Area of macadam patched yearly in square yards.....	540,690	686,709	483,013	324,187	\$ 452,200
Cost per square yard of macadam patched yearly.....	\$0 459	\$0 366	\$0 359	\$0 6069	\$0 555
Binders used in resurfacing (per cent):					
Water.....	.1200	.1022	.2129	.0000	.0000
Tar preparation.....	.3569	.4420	.0180	.0000	.0000
Asphalt preparations.....	.5231	.4558	.7691	1.0000	1.0000

* By resurfacing is meant entire area of street excavated and resurfaced with not less than four inches of new material.

† By patching is meant scattered areas of depressions, etc., which are filled with new material from a depth of one half inch up, and in some cases blanket coated with bituminous binder.

‡ Of this amount 126 86 miles or 2,239,695 square yards is bituminous macadam. || 299,163 square yards patched; 153,997 square yards tar blanket coat.

Edgestone and Brick Sidewalk Recapitulation for 1924.

DISTRICTS.	Edgestones, Linear Feet.	Brick, Square Yards.
South Boston Paving District, No. 1.....	398	—
East Boston Paving District, No. 2.....	232	—
Charlestown Paving District, No. 3.....	—	—
Brighton Paving District, No. 4.....	1,129	—
West Roxbury Paving District, No. 5.....	301	—
Dorchester Paving District, No. 6.....	120	100
Roxbury Paving District, No. 7.....	545	312
South End Paving District, No. 8.....	—	—
Ashmont Paving District, No. 9.....	1,250	—
North End Paving District, No. 10.....	—	—
Hyde Park Paving District, No. 11.....	103	—
Totals.....	4,078	412

New Granolithic Sidewalks Laid by Department Forces During 1924.

DISTRICTS.	Square Feet.	Location of Work.
South Boston.....	—	
East Boston.....	1,096	Sumner and Orleans streets, at new fire house.
Charlestown.....	1,197	Park street.
Brighton.....	—	
West Roxbury.....	—	
Dorchester.....	—	
Roxbury.....	2,474	Centre street.
South End.....	4,949	Sterling street, Province street, Decatur street.
Ashmont.....	2,439	Welles avenue, Roslin street, Walnut street.
North End.....	—	
Hyde Park.....	—	
Totals.....	12,155	

PUBLIC WORKS DEPARTMENT.

HIGHWAY DIVISION PAVING SERVICE DETAIL OF WORK DONE BY CONTRACT AND CHARGED TO APPROPRIATION "HIGHWAYS MAKING OF."

Contract No.	Description of Work	Location	Length in Feet	No. of Squares	Total Cost	Amount Paid Contractor	MATERIALS						LABORERS						WORK DONE																												
							Cement		Gravel		Sand		Lime		Stone		Days		Hours		Cement		Gravel		Sand		Lime		Stone																		
							Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Number	Hours	Number	Hours	Number	Hours	Number	Hours	Number	Hours	Number	Hours	Number	Hours																	
1-103	Paving of Main Street from 10th to 11th Street	W. 10th St.	192	540	\$418.42	\$418.42	12.50	250	5.20	100	1.00	10	200	4000	200	200	4000	200	200	4000	200	200	4000	200	200	4000	200	200	4000	200	200	4000	200	200	4000	200	200	4000	200	200	4000	200	200	4000	200	200	4000
1-104	Paving of Main Street from 11th to 12th Street	W. 11th St.	150	450	\$345.00	\$345.00	10.00	200	4.00	80	1.60	8	160	3200	160	160	3200	160	160	3200	160	160	3200	160	160	3200	160	160	3200	160	160	3200	160	160	3200	160	160	3200	160	160	3200	160	160	3200			
1-105	Paving of Main Street from 12th to 13th Street	W. 12th St.	120	360	\$270.00	\$270.00	8.00	160	3.20	60	1.20	6	120	2400	120	120	2400	120	120	2400	120	120	2400	120	120	2400	120	120	2400	120	120	2400	120	120	2400	120	120	2400	120	120	2400	120	120	2400			
1-106	Paving of Main Street from 13th to 14th Street	W. 13th St.	100	300	\$225.00	\$225.00	6.67	133	2.66	50	1.00	5	100	2000	100	100	2000	100	100	2000	100	100	2000	100	100	2000	100	100	2000	100	100	2000	100	100	2000	100	100	2000	100	100	2000	100	100	2000			

PUBLIC WORKS DEPARTMENT.

HIGHWAY DIVISION — PAVING SERVICE — DETAIL OF WORK DONE BY CONTRACT AND CHARGED TO APPROPRIATION "SPECIAL APPROPRIATIONS."

STREET	Feet	Contractor	Pavement	Length Feet	Width Yards	Total Cost	Amount Paid to Contractor	MATERIALS								EXPENSES					WORK DONE						Progress
								BEST-STONE		GRANITE BOULE		SIDEWALK BRICK		MISCELLANEOUS		Sagging	Inspection	Traveling, etc.	Advertising	Miscellaneous	Excavation and Filling	Laboratory test and Report	Base & Sub-base Load and Bedded	Ready to Paved and Approved	Vertical Surface Sub with Test	Miscellaneous	
								Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity													Cubic Yards	Linear Feet	Square Yards	Square Yards	Square Feet	Miscellaneous
1. Columbia St. - 1st Street		W. J. ...	Falling			\$7,965.30	\$1,194.65							\$2,508.90	\$2,003.05		\$5.00								Work not completed	1	
2. ...	51.00		Finished from 1921			\$8,762.68	71,887.81								925.00		\$9.00								Completed 1922	2	
3. ...							1,771.20																		Work done 1922-1-23	3	
4. ...						1,27.86								697.00	*	20.50										4	

* 18 hours up



PUBLIC WORKS DEPARTMENT

CITY OF MOBILE, ALA. HIGHWAY DIVISION - PAVING SERVICE LOG #

NO.	DATE	DESCRIPTION	AMOUNT
1	1-15-58	PAVING	100.00
2	1-22-58	PAVING	100.00
3	1-29-58	PAVING	100.00
4	2-5-58	PAVING	100.00
5	2-12-58	PAVING	100.00
6	2-19-58	PAVING	100.00
7	2-26-58	PAVING	100.00
8	3-5-58	PAVING	100.00
9	3-12-58	PAVING	100.00
10	3-19-58	PAVING	100.00
11	3-26-58	PAVING	100.00
12	4-2-58	PAVING	100.00
13	4-9-58	PAVING	100.00
14	4-16-58	PAVING	100.00
15	4-23-58	PAVING	100.00
16	4-30-58	PAVING	100.00
17	5-7-58	PAVING	100.00
18	5-14-58	PAVING	100.00
19	5-21-58	PAVING	100.00
20	5-28-58	PAVING	100.00
21	6-4-58	PAVING	100.00
22	6-11-58	PAVING	100.00
23	6-18-58	PAVING	100.00
24	6-25-58	PAVING	100.00
25	7-2-58	PAVING	100.00
26	7-9-58	PAVING	100.00
27	7-16-58	PAVING	100.00
28	7-23-58	PAVING	100.00
29	7-30-58	PAVING	100.00
30	8-6-58	PAVING	100.00
31	8-13-58	PAVING	100.00
32	8-20-58	PAVING	100.00
33	8-27-58	PAVING	100.00
34	9-3-58	PAVING	100.00
35	9-10-58	PAVING	100.00
36	9-17-58	PAVING	100.00
37	9-24-58	PAVING	100.00
38	10-1-58	PAVING	100.00
39	10-8-58	PAVING	100.00
40	10-15-58	PAVING	100.00
41	10-22-58	PAVING	100.00
42	10-29-58	PAVING	100.00
43	11-5-58	PAVING	100.00
44	11-12-58	PAVING	100.00
45	11-19-58	PAVING	100.00
46	11-26-58	PAVING	100.00
47	12-3-58	PAVING	100.00
48	12-10-58	PAVING	100.00
49	12-17-58	PAVING	100.00
50	12-24-58	PAVING	100.00
51	12-31-58	PAVING	100.00
52	1-7-59	PAVING	100.00
53	1-14-59	PAVING	100.00
54	1-21-59	PAVING	100.00
55	1-28-59	PAVING	100.00
56	2-4-59	PAVING	100.00
57	2-11-59	PAVING	100.00
58	2-18-59	PAVING	100.00
59	2-25-59	PAVING	100.00
60	3-4-59	PAVING	100.00
61	3-11-59	PAVING	100.00
62	3-18-59	PAVING	100.00
63	3-25-59	PAVING	100.00
64	4-1-59	PAVING	100.00
65	4-8-59	PAVING	100.00
66	4-15-59	PAVING	100.00
67	4-22-59	PAVING	100.00
68	4-29-59	PAVING	100.00
69	5-6-59	PAVING	100.00
70	5-13-59	PAVING	100.00
71	5-20-59	PAVING	100.00
72	5-27-59	PAVING	100.00
73	6-3-59	PAVING	100.00
74	6-10-59	PAVING	100.00
75	6-17-59	PAVING	100.00
76	6-24-59	PAVING	100.00
77	7-1-59	PAVING	100.00
78	7-8-59	PAVING	100.00
79	7-15-59	PAVING	100.00
80	7-22-59	PAVING	100.00
81	7-29-59	PAVING	100.00
82	8-5-59	PAVING	100.00
83	8-12-59	PAVING	100.00
84	8-19-59	PAVING	100.00
85	8-26-59	PAVING	100.00
86	9-2-59	PAVING	100.00
87	9-9-59	PAVING	100.00
88	9-16-59	PAVING	100.00
89	9-23-59	PAVING	100.00
90	9-30-59	PAVING	100.00
91	10-7-59	PAVING	100.00
92	10-14-59	PAVING	100.00
93	10-21-59	PAVING	100.00
94	10-28-59	PAVING	100.00
95	11-4-59	PAVING	100.00
96	11-11-59	PAVING	100.00
97	11-18-59	PAVING	100.00
98	11-25-59	PAVING	100.00
99	12-2-59	PAVING	100.00
100	12-9-59	PAVING	100.00

PUBLIC WORKS DEPARTMENT.

HIGHWAY DIVISION - PAVING SERVICE - DETAIL OF WORK DONE BY CONTRACT AND CHARGED TO APPROPRIATION "RECONSTRUCTING AND REPAIRING STREETS BY CONTRACT."

No.	Contract No.	Description of Work	Total Sq. Yds.	Total Est. Amt.	Actual Cost	Materials				Expenses				Work Done				Progress		
						Gravel		Sewer Pipe		Labor	Trucking	Materials	Miscellaneous	Paving	Miscellaneous	Gravel	Sewer Pipe		Sewer Pipe	Miscellaneous
						Quantity	Value	Quantity	Value											
						Est.	Actual	Est.	Actual	Est.	Actual	Est.	Actual	Est.	Actual	Est.	Actual		Est.	Actual
1	Completed September 1 1924	1	
2	Completed December 20 1924	2	
3	Completed July 20 1924	3	
4	Work done 1924	4	
5	Completed November 2 1924	5	
6	Completed November 14 1924	6	
7	Completed November 1 1924	7	
8	Work not started	8	
9	Completed December 22 1924	9	
10	Completed August 2 1924	10	
11	Completed December 5 1924	11	
12	Completed August 7 1924	12	
13	Completed July 11 1924	13	
14	Work done 1924	14	
15	Completed August 1 1924	15	
16	Completed August 26 1924	16	
17	Completed August 1 1924	17	
18	Completed August 1 1924	18	
19	Completed August 1 1924	19	
20	Completed August 1 1924	20	
21	Completed August 1 1924	21	
22	Completed August 1 1924	22	
23	Completed August 1 1924	23	
24	Completed August 1 1924	24	
25	Completed August 1 1924	25	
26	Completed August 1 1924	26	
27	Completed August 1 1924	27	
28	Completed August 1 1924	28	
29	Completed August 1 1924	29	
30	Completed August 1 1924	30	
31	Completed August 1 1924	31	
32	Completed August 1 1924	32	
33	Completed August 1 1924	33	
34	Completed August 1 1924	34	
35	Completed August 1 1924	35	
36	Completed August 1 1924	36	
37	Completed August 1 1924	37	
38	Completed August 1 1924	38	
39	Completed August 1 1924	39	
40	Completed August 1 1924	40	

1 credit \$28,913.43 2 credit \$22,244.00 3 credit \$22,244.00 4 credit \$22,244.00 5 credit \$22,244.00 6 credit \$22,244.00 7 credit \$22,244.00 8 credit \$22,244.00 9 credit \$22,244.00 10 credit \$22,244.00 11 credit \$22,244.00 12 credit \$22,244.00 13 credit \$22,244.00 14 credit \$22,244.00 15 credit \$22,244.00 16 credit \$22,244.00 17 credit \$22,244.00 18 credit \$22,244.00 19 credit \$22,244.00 20 credit \$22,244.00 21 credit \$22,244.00 22 credit \$22,244.00 23 credit \$22,244.00 24 credit \$22,244.00 25 credit \$22,244.00 26 credit \$22,244.00 27 credit \$22,244.00 28 credit \$22,244.00 29 credit \$22,244.00 30 credit \$22,244.00 31 credit \$22,244.00 32 credit \$22,244.00 33 credit \$22,244.00 34 credit \$22,244.00 35 credit \$22,244.00 36 credit \$22,244.00 37 credit \$22,244.00 38 credit \$22,244.00 39 credit \$22,244.00 40 credit \$22,244.00

PUBLIC WORKS DEPARTMENT.

HIGHWAY DIVISION — PAVING SERVICE — DETAIL OF WORK DONE BY CONTRACT AND CHARGED TO APPROPRIATION "STREET IMPROVEMENTS."

Street	Tram	Location	Contract	Contract	Length Linear Feet	Width Feet Yards	Total Cost	Amount Paid to Contractor	MATERIALS								EXPENSES					Work Done	Progress													
									CURL-STONE		GRANITE BUMP		SIDEWALK DRIVE		MISCELLANEOUS		Engineering	Inspection	Traveling, etc.	Advertising	Miscellaneous				Excavation and Filling		Edging, Set and Reset	Brick, Sidewalk Laid and Repaired	Roadway Paved and Repaired	Asphalt Paved Sidewalk and	Miscellaneous					
									Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity									Cubic Yards	Linear Feet						Square Yards	Square Yards	Square Feet		
2nd Street	Near Market West						\$20.00							\$50.00																						
3rd Street	Near Market West				58		1,280.13	\$771.25						291.86	\$102.50	\$1.00	\$0.00																		Completed November 21, 1924	1
4th Street	Near Market West				100		10,791.00	12,700.00						510.34	371.74	2.85																			Completed July 8, 1924	3
Washington Street	Downtown	West End		M. E. Gaudin	2,745	11' 6"	22,650.92	19,305.16	\$15.76	\$1,700.00	16,700			\$79.20	282.87	216.74																			Completed June 12, 1924	4

STREET OPENINGS.

Under Classes 1 and 2 of the schedule of permit fees, permits were issued for openings in public ways as follows:

TO WHOM ISSUED.	Number of Permits.	Length in Feet.
Sewer and Water Services.....	2,472	39,552
Boston Consolidated Gas Company.....	1,747	43,050
Boston Elevated Railway Company.....	186	99,757
Dedham and Hyde Park Gas and Electric Company.....	110	6,804
Edison Electric Illuminating Company.....	4,275	299,250
New England Telephone and Telegraph Company, Quincy Market Cold Storage and Warehouse Company.....	169	13,004
Miscellaneous.....	51	987
Miscellaneous.....	790	104,934
Emergency permits.....	846	
Emergency permits used and returned.....	778	19,540
Totals.....	10,578	526,878

Making a total length of openings approximately one hundred miles.

Total of all permits issued 21,222.

Permits for other than street openings have been issued as follows:

Cleaning snow from roof	41
Erecting and repairing awnings	840
Erecting and repairing buildings	1,612
Painting or minor repairs on buildings	5,272
Moving buildings in streets	12
Feeding horses in streets	62
Placing signs flat on buildings	1,250
Projecting signs from buildings	129
Raising and lowering safes, etc.	124
Emergency permits for above	500
Special permits	802
Total	<u>10,644</u>

The revenue from issuing permits amounted to \$33,766.97, divided as follows:

Street openings	\$5,974 50
Other purposes	27,792 47
Total	<u>\$33,766 97</u>

Of this amount \$28,417.37 was deposited with the City Collector and \$5,349.60 was billed to public service corporations.

BONDS.

There are now on file 2,507 surety company bonds in amounts of one, three and twenty thousand dollars covering the city against claims for damages, etc, through the use of permits.

DEFECTS IN SIDEWALKS AND ROADWAYS.

Fourteen thousand six hundred and twenty nine notices were sent to the foremen of paving districts, contractors, public service corporations and others to make repairs to pavement defects for which they were responsible.

Eighty-one notices were sent to property owners to repair defective conditions for which they were liable.

APPENDIX D.

REPORT OF THE DIVISION ENGINEER OF
THE SEWER AND SANITARY DIVISION.

Boston, February 1, 1925.

MR. JOSEPH A. ROURKE,
Commissioner of Public Works.

DEAR SIR,— I submit herewith a statement of the activities, operations and expenditures of the various services of the Sewer and Sanitary Division for the year ending January 31, 1925.

The maintenance expenditures of the Sewer and Sanitary Division were as follows:

Sewer Service	\$632,455 15
Sanitary Service	2,852,373 69
Total	<u>\$3,484,828 84</u>

SEWER SERVICE.

During the year 1924-25 there were built throughout the city 10.468 miles of sanitary sewers and surface drains.

Two hundred ninety-one catch-basins were built or rebuilt, making a total number under the care of the Sewer Service on February 1, 1925, of 16,843.

Ten thousand three hundred twenty-seven catch-basins and 160 drop inlets were cleaned out by contract and a total of 34,176.85 cubic yards of material removed therefrom.

Two thousand nine hundred and four permits have been issued, as follows: 289 to district foremen, 299 to contractors, and 2,316 to licensed drain layers for repairing or laying new house drains.

Entrance fees to the amount of \$9,148.10 have been deposited with the City Treasurer for collection from

estates for which no sewer assessment was ever paid, in accordance with Ordinances of 1910, chapter 9, section 10.

Plans for the assessment of estates for sewer construction have been furnished the Board of Street Commissioners, representing 25,733.09 linear feet of sewers and appurtenances, costing \$247,886.16.

One thousand three hundred fifty-six complaints have been investigated and a report in writing has been made in each case.

In the city proper, the principal construction work was the building of the sewer in Congress street, between Atlantic avenue and Purchase street. The old sewer in Devonshire street opposite the First National Bank Building was rebuilt for the bank by the firm of Stone & Webster.

In Roxbury, new sewers were built in Elm Hill avenue, between Seaver street and Schuyler street; in Bolster street, between Mozart street and Wyman street; in Mark street, from Day street easterly, and in Harishof street, between Warren street and Humboldt avenue.

In South Boston, a small sewer was built in P street, between Columbia road and East Sixth street.

In Dorchester, another section of the Dorchester Brook sewer was built in Humphreys street and the sewer is now completed of the required size between Norfolk avenue at the Edison Plant and Dudley street.

In Brighton, Shepard brook, easterly branch, was built in private land between Everett street and Hichborn street, to care for the large manufacturing plants now being located here. Pipe sewer and surface drains were also built in Nottinghill road and Foster street.

In West Roxbury, pipe sewers have been built in the Parkvale road area, which will relieve floodings in a newly built-up area. Pipe sewers have also been built in Bradeen street, private land and Stellman road, and the outlet for the Germantown district has been completed through Washington street and East street to the state sewer in Dedham.

In Charlestown, a 10-inch pipe sewer was built in Crescent street between Roland street and Cambridge street.

In East Boston, the Moore street overflow has been rebuilt and extended to tidewater.

At the Calf Pasture pumping station, new iron floors and ladders have been built in the filth hoist house. A duplicate oil feed line has been installed for the new oil-burning boilers and a contract let for electrical motive power for No. 1 and No. 2 centrifugal pumps.

SANITARY AND STREET CLEANING SERVICE.

The collection and disposal of a city's waste is a problem involving matters of vital importance to the comfort, convenience and health of every citizen. A satisfactory solution of the problem presented by municipal waste will mean more than the efficient removal of useless or offensive material from the premises of the household. It will result in the passing of littered streets, befouled alleys, and rubbish covered vacant lots, and it will add much toward higher standards of community cleanliness.

The satisfactory solution of the waste problem in any large city is considered a municipal responsibility in the larger sense, but it also involves individual responsibility for every citizen. The citizen in many cases ignores this responsibility and nothing will bring more forcefully to the individual a sense of his duty than complete and efficient performance by municipal authorities of their own share of the work.

To secure sanitary economical methods of refuse collection, suitable equipment must be provided, and during the past year two large Pierce Arrow motor trucks have been added with special equipped bodies and nine steel bodied trailers. These trailers are specially constructed and well adapted for the transportation of garbage and have been used to advantage also in the transportation of rubbish and ashes.

The tendency for improvement in the design of equipment for the character of work to be performed in the Sanitary Service is manifest, since officials have begun to realize the betterments that can be made in equipment for a more sanitary collection. The Sanitary Service has at present eight Pierce Arrow trucks, 5-ton 10 cubic yard capacity, working on the collection of ashes; also three Reos and two Fords on the collection of garbage. This motor equipment has proven very satisfactory, and the motorization of the whole service could be consistently recommended.

During the past year the question of obtaining dumps for the disposal of ashes and rubbish in districts outside of the ten-year contract with the Coleman Company has become very serious. It is also only a question of a very short time before the large South Bay dump furnished by the Coleman Company under their contract will be filled, and it will become necessary to build a Receiving Station for ashes and rubbish at our Albany Street Yard. Such a station would not only result in a great saving on depreciation and equipment but would accelerate the collection of rubbish and ashes in the Roxbury, South End, and Back Bay districts, and could be so designed that at the expiration of the Coleman contract in 1932, with certain changes and additions, it would be available for an incineration plant.

Difficulty in obtaining dumps in the Charlestown district is also acute. It will be necessary to secure additional facilities in the near future for the disposal of the ashes and rubbish in this district.

Incineration, disposal by burning or destruction by fire, seems to be the only successful method from a sanitary standpoint of alleviating this nuisance.

STREET CLEANING.

Methods of street cleaning have undergone some changes in the past five or six years. Mechanical apparatus has taken the place of hand sweepers on most of our smooth streets. In Boston, as in all large cities, it is still necessary to use hand brooms and horse-drawn sweepers in some of our rough paved streets. I am firmly of the opinion that motor apparatus will have been so developed and perfected within the next few years that the elimination of all horses in the Street Cleaning Service will be possible.

The parking of automobiles seriously interferes with the operation of the Street Cleaning Department in all large cities. With the exception of the White Wings, or pick-up men, daylight cleaning has been abandoned. Night cleaning is less satisfactory and more expensive than day cleaning, but changed traffic conditions and parking have made it necessary.

The methods used in the City of Boston for street cleaning are quite satisfactory, but as a clean city is dependent upon well paved streets, until Boston has

finished its proposed paving program, we cannot expect to have a spotless town. The rapid growth of the smooth pavement in our suburban districts calls for an extension of the street cleaning activities to those sections of the city. This means an additional appropriation for the purchase of motor and other necessary equipment. With this additional motor equipment and the great improvement for its housing by the building of a municipal garage, this Service will be in a most advantageous position to produce better results in municipal cleanliness.

Yours respectfully,

E. F. MURPHY,
Division Engineer.

SEWER SERVICE.

The work of the Sewer Service is carried on under chapters 28 and 40, Revised Ordinances of 1914, and the following statutes:

- Chapter 426, 1897, as amended by 450, 1899 and 268, 1903.
- Chapter 383, 1903, as amended by 464, 1907.
- Chapter 550, 1907.
- Chapter 204, 1908.
- Chapter 514, 1908.
- Chapter 74, Special Acts, 1918.

THE DUTIES OF THE SEWER SERVICE.

1. Preparation of plans for sewerage works.
2. Construction and maintenance of all drainage works.
3. Investigation of complaints in regard to defective drainage.
4. The granting of permits for sewer construction.
5. The preparation of plans for the assessment of the cost of sewer construction.
6. The examination of the plans of other corporations proposing to construct works in public streets with reference to their probable interference with sewerage works.

Employees on pay roll January 31, 1924	326
Employees on pay roll January 31, 1925	323
Weekly pay roll for week including January 31, 1924	\$10,202 91
Weekly pay roll for week including January 31, 1925	\$11,224 30
Monthly pay roll January 31, 1924	\$400 00
Monthly pay roll January 31, 1925	\$400 00
Monthly pension roll January 31, 1924:	
Veterans	\$455 21
Laborers	\$421 52
Monthly pension roll January 31, 1925:	
Veterans	\$343 88
Laborers	\$240 76

Average weekly pay roll, including monthly roll
and exclusive of pension roll for fiscal year,
charged as follows:

Maintenance	*\$7,586 19
Construction	\$3,964 89
Average number of men employed	331
Men on pension roll January 31 1924:	
Veterans	9
Laborers	14
Men on pension roll January 31, 1925:	
Veterans	7
Laborers	8
Average number of horses maintained by the service during the year	17
Rate of wages paid to common laborers	\$4 50

* Includes amount charged to Paving Service, \$165.

Financial Statement from February 1, 1924, to January 31, 1925.

OBJECT.	Balances on Hand Feb. 1, 1924.	Appropriations Loans and Revenue.	Transfers to.	Transfers from.	Total Credits.	Expenditures During the Year.	Balances on Hand Jan. 31, 1925.
Sewer Service.....	.....	\$665,572 64	.....	\$29,643 90	\$635,928 74	\$635,928 74	
Sewerage works.....	\$52,470 15	1,000,610 60	.....	.....	1,053,080 75	853,784 21	\$199,296 54
Sewerage works Charles River Basin.....	58,541 63	.....	.....	.....	58,541 63	50,570 56	7,971 07
Totals.....	\$111,011 78	\$1,666,183 24	.....	\$29,643 90	\$1,747,551 12	\$1,540,283 51	\$207,267 61



MAINTENANCE EXPENDITURES FEBRUARY 1, 1924, TO
JANUARY 31, 1925.

SEWER SERVICE.

Improved Sewerage.

Pumping Station, Calf Pasture, inside	\$100,836 70	
Pumping Station, Calf Pasture, outside	36,034 40	
Pumping Station, Calf Pasture, engines	46,245 80	
Pumping Station, Calf Pasture, boilers	23,014 79	
Pumping Station, Union Park street	7,970 72	
Pumping Station, Summer street	1,381 71	
Pumping Station, Hyde Park	1,073 96	
		\$216,558 08
Moon Island		21,976 10
Main and intercepting sewers		16,177 70
		<u>\$254,711 88</u>

Stony Brook.

Maintenance		6,608 22
-----------------------	--	----------

Miscellaneous Maintenance Charges.

Cleaning catch-basins		110,872 22
Yards and lockers		292 96
Employed at yards		29,922 06
Automobiles	\$18,959 94	
Horses, carts, harnesses, etc.	9,566 36	
Teaming	11,431 04	
		<u>\$39,957 34</u>

Less amount earned by service teams and auto trucks	17,732 10	
		<u>22,225 24</u>
Cleaning sewers		53,283 60
Office salaries		19,227 78
Office expense		2,514 93

Repairing department buildings	\$2,506 25	
Repairing catch-basins, South Boston	1,344 38	
Repairing catch-basins, East Boston	1,501 98	
Repairing catch-basins, Charlestown	1,456 53	
Repairing catch-basins, Brighton	531 27	
Repairing catch-basins, West Roxbury	1,688 26	
Repairing catch-basins, Dorchester	4,042 74	
Repairing catch-basins, Hyde Park	166 58	
Repairing catch-basins, Roxbury	2,524 54	
Repairing catch-basins, city proper	4,352 72	
Repairing sewers, South Boston	2,699 48	
Repairing sewers, East Boston	5,241 16	
Repairing sewers, Charlestown	2,045 06	
Repairing sewers, Brighton	933 33	
Repairing sewers, West Roxbury	3,139 93	
Repairing sewers, Dorchester	5,612 35	

<i>Carried forward</i>	\$39,786 56	\$499,658 89
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<i>Brought forward</i>	\$39,786 56	\$499,658 89
Repairing sewers, Hyde Park	516 20	
Repairing sewers, Roxbury	4,992 24	
Repairing sewers, city proper	4,914 36	
		50,209 36
Pension roll (veterans)		4,872 05
Pension roll (laborers)		3,692 49
Annuities		351 00
Fuel and oil		2,630 86
Hardware tools, etc.		5,262 42
Engines and boilers		385 63
Sundries and miscellaneous charges		48,836 97
Telephones		367 78
House connections		11,581 69
Rubber goods		819 42
Gatehouse, Fenway		4,276 21
Stock		13,274 99
		<u>\$646,219 76</u>

Credit.

Stock transferred and used in construction	\$9,459 45	
Fuel and oil transferred and used in construction	831 57	
		10,291 02
		<u>\$635,928 74</u>

Charges to Various Parties for Work Done and Material Furnished, etc.

Frank Weiss	\$13 35
M. A. French	6 67
Metropolitan Water and Sewerage Division	10,300 00
Francis X. Courtney	15 49
Edward A. Moore	*21 47
A. A. Knight & Son Corporation	7 75
Humboldt Garage	7 50
Charles Breiding	3 88
Egleston Square Garage	15 00
F. C. Troop	15 00
Frank Mason	6 67
George E. Cherry	22 78
Cobb Theater	7 75
George C. Irwin Company	7 75
Nora Belideau	7 50
R. H. McDowell	7 67
The Employers Liability Assurance Corporation, Limited,	117 75
Louis Martinello	9 82
William Quinn	5 00
J. Miller	11 10
Leo Heller	91 00
J. P. Perry & Company, Inc.	7 50
Knickerbocker Garage	7 75
D. Carmody	7 50
Joseph Cagginano	7 75
P. F. Doyle	10 00
M. Berson	25 00
M. Berson	*2 13
Transit Department	33 00
	<u>\$10,801 53</u>
<i>Carried forward</i>	

<i>Brought forward</i>	\$10,801 53
Parkway Realty Company	†100 00
Lally Brothers	8 50
Frank Greens	4 00
H. P. Dodge	8 38
Maurice P. Horan	8 38
A. G. Tomasello & Son	563 57
New England Telephone and Telegraph Company	45 91
T. Dennehy	21 00
I. Lazarus	8 38
Park Department	74 15
Parkway Realty Company	†100 00
Park Department	22 10
Leo Heller	24 00
Lloyd H. Chase	10 00
Warren E. Locke	4 14
Dr. John Adams	8 50
L. V. Niles	34 00
Annie M. Carey	11 25
Abraham R. Taylor	8 38
Henry Lesser	8 50
H. J. Cassidy	10 75
Hotel Huntington	8 25
M. J. Creehan	11 88
William Manganiello	11 87
Margaret H. Lannon	2 40
Payson Dana	8 50
S. Esserman	3 50
Walter J. Dwyer	8 75
Michael Crehan	13 12
James A. Kennedy	7 80
Frank X. Weiss	13 23
A. J. Chapski	13 13
Arthur Harrington	15 00
Arthur Harrington	*10 96
B. W. Robinson	3 00
S. P. Brickley	1 50
Marden & Orlando Construction Company	†100 00
W. P. Gorman & Co.	†50 00
Supply Department	25 00
F. W. Burnham	10 75
Humboldt Avenue Garage	10 75
J. J. Kennedy	†115 44
Nicholas DeMassa	8 50
Anthony Esposito	8 50
F. L. Gale	3 26
G. R. Price	13 25
Martin M. O'Hare	16 50
Randall Faichney Company	15 00
Randall Faichney Company	*11 88
F. J. Reardon	11 50
T. F. Reardon	5 00
W. P. Gorman & Co.	†48 91
E. N. Samit	†96 25
A. A. Kincaid	13 25
J. Sperraza	13 25
George Gonia	8 50
Angelo Miceli	13 25
T. Hurney	11 75
<i>Carried forward</i>	\$12,628 80

* Uncollected 1924-25.

† Credited to Sewerage Works Appropriation.

<i>Brought forward</i>	\$12,628 80
Michael Cuddy	25 00
Mary Markowitz	35 06
A. J. Granara	8 50
Frank X. Weiss	18 23
Hugh J. Cassidy	13 00
S. H. Hudson	8 50
Jennie M. Miner	19 94
Max Novack	25 00
Boston Consolidated Gas Company	257 93
	<hr/>
Uncollected 1924-25	\$13,039 96
	46 44
	<hr/>
Bills deposited in other years paid 1924-25	\$12,993 52
	170 06
	<hr/>
Total amount collected	\$13,163 58
Entrance fees charged and collected in accordance with Ordinances of 1910, chapter 9, section 10	9,148 10
	<hr/>
	<u>\$22,311 68</u>

Sewer Service.—Maintenance Expenditures, Detail, 1924-25.

ACCOUNTS.	Total Expenditures.	Labor.	Teaming.	Stock.	Contracts.	Miscellaneous.
Automobiles (18).....	\$18,959 94	\$12,709 17	.....	.....	.....	Repairs..... \$874 30 Equipment..... 4,251 71 Supplies..... 1,033 76 Fees..... 91 00 \$6,250 77
Cleaning catch-basins.....	110,872 22	40,885 41	\$2,968 60	\$125 30	\$69,712 76	Transportation..... \$171 15 Advertising..... 9 00 180 15
Cleaning sewers.....	53,283 60	28,903 83	6,616 48	.....	17,615 53	Dumping..... 147 76
Engines and boilers.....	385 63	321 10	.....	.....	.....	Waste..... \$17 25 Repairs and inspections..... 47 28 64 53
Employed at yards.....	29,922 06	29,922 06	.....	.....	.....	Coal..... \$1,439 25 Oil and gasoline..... 1,191 61 2,630 86
Fuel and oil.....	2,630 86	.....	.....	.....	.....	Hose..... \$1,733 09 Hardware, repairs, etc..... 3,398 64 5,131 73
Hardware and tools.....	5,262 42	100 94	29 75	.....	.....	Transportation..... 442 37
House connections.....	11,581 69	9,927 19	193 11	68 20	950 82	Fodder..... \$2,592 73 Stable goods and supplies..... 67 87 Repairs, wagons and harnesses..... 317 66 Shoeing..... 505 31 3,483 57
Horses, carts, harnesses, etc.....	9,566 36	6,082 79	.....	.....	.....	.....
Maintenance, Stony Brook.....	6,608 22	5,958 45	598 49	51 28	.....	.....
Office expense.....	2,514 93	10 50	.....	.....	.....	Postage and printing..... \$467 24 Stationery and supplies..... 1,884 32 Miscellaneous..... 132 87 2,504 43

Sewer Service.— Maintenance Expenditures, Detail, 1924=25.— Concluded.

ACCOUNTS.	Total Expenditures.	Labor.	Teaming.	Stock.	Contracts.	Miscellaneous.
Office salaries.....	\$19,227 78	\$19,227 78				
Rubber goods.....	819 42					{ 90 pairs boots..... 48 coats..... 24 pairs mitts..... 46 hats..... } \$819 42
Stock.....	13,274 90	1,423 82	\$188 88	\$11,662 29		
Teaming.....	11,431 04	11,431 04				
Yard and locker.....	292 96	4 60				Gas and electricity..... \$178 16 Miscellaneous..... 110 20 288 36
Telephones.....	367 78					367 78
Back Bay Fens, gatehouses.....	4,276 21	2,123 23	4 00			Electricity..... \$1,192 52 Repairs, etc..... 956 46 2,148 98
Sundries.....	48,836 97	40,195 82	2,614 27	376 60		Repairs, etc..... \$2,462 79 Transportation..... 582 97 Workmen's Compensation..... 2,604 52 5,650 28
Repairing department buildings.....	2,506 25	474 89		311 26		Repairs..... 1,720 10
Repairing catch-basins, South Boston.....	1,344 38	893 34	133 75	317 29		
" " East Boston.....	1,501 98	717 43	274 75	509 80		
" " Charlestown.....	1,456 53	617 12	239 50	599 91		
" " Brighton.....	531 27	211 67	60 50	259 10		

" " West Roxbury.....	1,688 26	928 64	150 62	609 00		
" " Dorchester.....	4,042 74	2,118 74	522 00	1,402 00		
" " Hyde Park.....	166 58	125 68	33 50	7 40		
" " Roxbury.....	2,524 54	1,451 64	287 50	785 40		
" " City Proper.....	4,352 72	2,427 55	165 00	1,760 17		
Repairing sewers, South Boston.....	2,699 48	1,028 40	63 50	707 58		
" " East Boston.....	5,241 16	3,009 52	674 50	1,537 14		
" " Charlestown.....	2,045 06	1,184 01	215 00	646 05		
" " Brighton.....	933 33	665 62	69 36	198 35		
" " West Roxbury.....	3,139 93	2,188 42	282 50	669 01		
" " Dorchester.....	5,612 35	2,851 45	325 00	2,435 90		
" " Hyde Park.....	516 20	384 60	78 00	53 60		
" " Roxbury.....	4,992 24	1,147 19	263 38	3,581 67		
" " City Proper.....	4,914 36	2,339 95	331 50	2,242 91		
Annuitiess.....	351 00					351 00
Pension rolls, veterans and laborers.....	8,564 54	8,564 54				
	\$409,239 08	\$243,458 13	\$17,383 44	\$30,937 21	\$85,279 11	\$32,182 09
<i>Less Credits.</i>						
Treas Stock.....	\$17,752 10					
Fuel and oil.....	9,459 45			9,459 45		7,132 63
	831 57	11,431 04				
Totals.....	\$381,216 86	\$232,027 09	\$17,383 44	\$21,477 76	\$85,279 11	\$25,049 46

MISCELLANEOUS ACCOUNT, DETAIL.

<i>Labor.</i>		
Vacations	\$9,355	57
Sick leave	2,533	34
Snow removal and cleaning streets,	9,266	33
Salary, general foreman	1,198	75
Salary, inspector of castings	1,788	26
Workingmen's compensation	2,604	52
Repairing streets	1,174	21
New fence, Child Street Yard	1,034	23
Repairing buildings, Sanitary Ser-		
vice	1,285	95
Central office and other charges	4,091	83
Miscellaneous	671	08
Inspection—Complaints: Defective		
drainage, prevention of gasolene		
entering common sewers	7,796	27
	<hr/>	\$42,800 34
<i>Teaming.</i>		
Removing snow and cleaning streets,	\$2,437	52
Miscellaneous	176	75
	<hr/>	2,614 27
Stock	\$383	30
Transportation	582	97
Repairing streets	1,162	43
Medical attendance	38	00
Ice	220	10
Investigating leak, Washington		
street	822	07
Miscellaneous	213	49
	<hr/>	3,422 36
	<hr/> <hr/>	<u>\$48,836 97</u>

Sewer Service.—Maintenance Expenditures, Detail, 1924-25.

Accounts.	Total Expenditures.	Labor.	Teaming.	Waste.	Fuel.	Oil and Gasoline.	Packing.	Valves.	Transportation.	Stable.	Pipe Fittings and Miscellaneous.	Autos.
Pumping station, Calf Pasture:												
Inside.....	\$100,836 70	\$35,225 57	\$237 13	\$793 40	\$57,113 87	\$175 70			\$11 00		\$7,260 03	
Outside.....	36,034 40	31,423 22								\$976 00	3,330 41	\$304 77
Engines.....	46,245 80	37,369 06				1,837 51	\$923 18	\$1,095 59			5,020 46	
Boilers.....	23,014 79	17,133 50							101 29		5,881 29	
Moon Island.....	21,976 10	18,611 00	46 00	7 50	472 50	19 60					1,504 05	1,214 16
Main and intercepting sewers	16,177 70	12,395 91	1,815 00								1,396 79	
Pumping stations:												
Union Park street.....	7,970 72	6,045 33	206 00		569 16						1,150 23	
Summer street.....	1,381 71	781 08									600 63	
Hyde Park.....	1,073 96	907 57									166 39	
Totals.....	\$254,711 88	\$160,492 24	\$2,324 13	\$800 90	\$58,155 53	\$2,032 81	\$923 18	\$1,095 59	\$112 29	\$976 00	\$26,280 28	\$1,518 93

Recapitulation.— Maintenance, Detail, 1924-25.

	Improved Sewerage.	Outside Improved Sewerage.	Totals.
Labor.....	\$160,492 24	\$243,458 13	\$403,950 37
Contracts.....		85,279 11	85,279 11
Teaming, hired and city.....	2,324 13	17,383 44	19,707 57
Waste.....	800 90	17 25	818 15
Fuel.....	58,155 53	1,439 25	59,594 78
Oil.....	2,032 81	1,191 61	3,224 42
Packing.....	923 18		923 18
Valves.....	1,095 59		1,095 59
Transportation, etc.....	112 29	1,196 49	1,308 78
Horses, etc.....	976 00	3,483 57	4,459 57
Pipe fittings and miscellaneous.....	25,993 06		25,993 06
Telephone.....	287 22	367 78	655 00
Automobiles, repairs and supplies.....	1,518 93	6,250 77	7,769 70
Stock and miscellaneous supplies.....		49,172 58	49,172 58
	\$254,711 88	\$409,239 98	\$663,951 86
CREDITS.			
<i>Outside Improved Sewerage.</i>			
Labor.....	\$11,431 04		
Stock.....	9,459 45		
Miscellaneous.....	7,132 63		
		28,023 12	28,023 12
Totals.....	\$254,711 88	\$381,216 86	\$635,928 74

SUPPLIES, PUMPING STATION, CALF PASTURE.

- 2,887 pounds waste, 20 cents to 26 cents.
 308 pounds cotton rags, 16 cents.
 3,008 pounds grease, 15 cents.
 4,730 gallons engine oil, 21.3 cents to 23.8 cents.
 1 278.2 gallons cylinder oil, 29.5 cents to 32 cents.
 10 gallons lard oil, \$1.75.
 55½ gallons sperm oil, \$1.40.
 10 gallons air cylinder oil, 75 cents.
 765 gallons kerosene, 12 cents.

FUEL, ENTIRE SERVICE.

- 1,336,366.4 gallons fuel oil, \$57,108.87.
 172.12 tons anthracite, \$2,485.91.

Cleaning Catch-basins, 1924-25.

DISTRICTS.	Contractor.	Start and Finish of Work.	Price per Cubic Yard.	Cubic Yards Excavated by Contractor.	Contractor Received by Districts.	Total Basins Cleaned.	Total Drop Inlets Cleaned.	Average Cubic Yards per Basin.	Total Cost of Inspection.	Average Total Cost to City per Basin, Including Drop Inlet.
1. City proper.....	C. & R. Construction Company.....	{April 8, 1924 Jan. 31, 1925}	\$2 35	7,547 82	\$17,737 37	2,582	50	2,913	\$3,292 84	\$7 99
2. Back Bay, South End and Roxbury.....	M. H. Kelly.....	{March 31, 1924 Jan. 5, 1925}	1 78	7,999 86	14,239 76	2,068	28	3 86	2,808 98	8 13
3. South Boston.....	John J. Loonie.....	{March 31, 1924 Nov. 20, 1924}	1 64	4,035 88	6,618 85	1,131	21	3 56	1,171 76	6 76
4. Charlestown and East Boston.....	David W. Norton.....	{March 31, 1924 Nov. 4, 1924}	1 94	{1,076 63 2,459 72}	6,860 50	291 687	1 11	3 61	1,012 52	7 95
5. Brighton.....	Joseph A. Sprissler.....	{March 31, 1924 Oct. 15, 1924}	2 14	3,206 99	6,862 95	1,015	4	3 157	1,017 96	7 73
6. West Roxbury.....	Michael H. Loonie.....	{March 31, 1924 Oct. 17, 1924}	1 90	2,634 15	5,004 89	936	18	2 8	739 11	6 02
7. Dorchester and Hyde Park.....	John J. Loonie.....	{March 31, 1924 Jan. 25, 1925}	1 80	{4,811 51 374 29}	9,388 44	{1,458 159}	27	3 217	1,617 08	6 71
Totals.....				34,176 85	\$66,712 76	10,327	160		\$11,660 25	
Total cost: Contractors..... \$66,712 76										
Total drop inlets cleaned..... 160										
Inspection..... *12,803 54										
Advertising..... 9 00										
Miscellaneous..... 184 15										
<u>\$79,709 45</u>										
Total cubic yard, material removed, 34,176.85.										
Average cost per basin, including drop inlets, \$7.603.										
Average cubic yards material removed per basin, 3.30.										
Average cost per cubic yard removed, \$2.352.										

* General inspection, \$1,113.29.

Sewerage Works.

Expenditures, February 1, 1924, to January 31, 1925.

ACCOUNTS.	Labor.	Teaming.	Materials.	Miscellaneous.	Paid to Contractors.	Totals.
Engineer's salaries.....	\$106,013 05					\$106,013 05
Engineer's expenses.....	2,592 31	\$805 00	\$110 20	\$8,300 79		11,808 30
Pumping stations.....	1,878 65		190 19	2,087 06	\$10,233 53	14,989 43
Sundries.....	604 46					604 46
Land-takings and court executions.....				18,000 00		18,000 00
New manholes, entire city.....	9,899 47	1,606 86	4,554 18		12,666 15	28,726 66
New catch-basins, South Boston.....	1,896 46	253 30	817 46		3,690 72	6,657 94
New catch-basins, East Boston.....	1,192 20	198 25	904 37			2,294 82
New catch-basins, Charlestown.....	144 69	13 00	225 89		2,459 44	2,843 02
New catch-basins, Brighton.....	1,356 49	323 63	1,421 57			3,101 69
New catch-basins, West Roxbury.....	5,305 98	632 75	3,010 20			8,948 93
New catch-basins, Dorchester.....	8,034 15	648 75	4,759 94		4,235 44	17,678 28
New catch-basins, Hyde Park.....	859 25	108 00	645 87		2,045 29	3,658 41
New catch-basin, Roxbury.....	8,874 71	1,306 00	5,621 40		7,876 43	23,678 54
New catch-basins, city proper.....	4,584 54	788 87	1,438 38		6,365 89	13,177 68
Sewers built in entire city.....	47,161 94	266 50	14,260 18	2,579 45	527,334 93	591,603 00
Totals.....	\$200,398 35	\$6,950 91	\$37,959 83	\$31,567 30	\$576,907 82	\$853,784 21

Sewerage Works, Construction, February 1, 1924, to January 31, 1925, Inclusive.

Location.	Began.	Finished.	Built by.	Length (Feet.)	Character.	Amount Expended in 1924.
SOUTH BOSTON.						
Farragut road extension and outlet in private land.						\$1,934 47
East First street from P street to O street.	Aug. 18, 1924	Aug. 30, 1924	John Williams & Co.	241 17	12" pipe, sanitary. 2 manholes.	83 61
Wesley street from Hyde street to Preble street*	Sept. 18, 1924	Oct. 7, 1924	C. Iacozza.	140	10" pipe, sanitary. 1 manholes.	2,362 55
P street from Columbia road to East Sixth	Nov. 3, 1924		V. Barletta.	140	18" pipe, sanitary.	2,158 69
Binford street from A street to Necco street and Necco street from Binford street to Necco court*.						1,208 74
EAST BOSTON.						
Border street from Summer street to Central square.	April 8, 1924	April 18, 1924	C. A. Bassett.	196 00	12" pipe, sanitary. 1 manhole.	1,583 71
Border street at Central square.	April 30, 1924	July 16, 1924	Wm. Barret & Co.	136 68	5' 0" concrete overflow. 1 manhole.	1,052 71
Moore street overflow outlet from Coleridge street to Cowper street.	June 30, 1924		A. Baruffaldi Company.	570 75 191 03 63 40 179 28	1' 6" by 2' 0" concrete surface. 1' 6" by 1' 8" concrete surface. 15" pipe, surface. 12" pipe, surface. 7 manholes. 9 catch basins.	11,351 94
Ashley street from Breed street to Boardman street*.	July 10, 1924		A. Baruffaldi Company.	276 10	20" pipe sanitary. 2 manholes.	15,942 20
Paris street from Summer street to manhole 275 feet easterly*.	Nov. 3, 1924	Dec. 2, 1924	The Pierce Company.	149 90	12" pipe sanitary. 1 manhole.	2,467 45
Gladstone street from Tower street to 150 feet westerly.						1,207 05

* Cost not complete.

Sewerage Works, Construction, February 1, 1924, to January 31, 1925, Inclusive.—Continued.

LOCATION.	Begun.	Finished.	Built by.	Length. (Feet.)	Character.	Amount Expended in 1924.
CHARLESTOWN.						
Crescent street, from Roland street to Cambridge street.	July 14, 1924	July 22, 1924	George J. Regan.	149.10	10" pipe, sanitary. 1 manhole.	\$1,109 05
Hamblen street outlet, extension to Mystic river.	Oct. 21, 1924	Oct. 28, 1924	Bay State Dredging Company.	11	30" cast-iron pipe surface	986 25
BRIGHTON.						
Colonial road from Melton road to about 80 feet northerly, from Eustis road to about 130 feet northerly, from Melton road to about 165 feet northerly and northerly.						278 48
Village Brook, from Brookline line to Prendergast avenue.						1,294 17
Western avenue, from Telford street to Everett street and Everett street from Western avenue to Adams street.						150 75
Corinne road, from existing sewer to end of street.	May 6, 1924	May 26, 1924	John Guarino & Co.	242.85	10" pipe, sanitary. 2 manholes.	1,335 52
School street, from Waverly street to Fletcher street.	May 1, 1924	May 26, 1924	A. D. Daddario	239 13 236 81 8	10" pipe, sanitary. 24" D. S. pipe, surface. 16" cast-iron pipe, surface. 2 manholes.	3,097 54
Shepard Brook, easterly branch in Everett street private land, Hiebborn street, from Everett street to Arthur street.*	April 29, 1924	Aug. 9, 1924	V. (James) Grande.	925 906.70 6.50	5' 6" circular concrete surface. 12" pipe, sanitary. 18" D. S. pipe, surface. 9 manholes.	34,128 14
Nottingham road, from Melton road to Nottingham road.	April 28, 1924	July 5, 1924	C. Russo	175 10 633 30 1,139.80 174.	18" D. S. pipe, surface. 12" pipe, surface. 10" pipe, surface. catch-basin drain. 15 manholes. 10 catch-basins.	14,601 31
Price road, from Glenville avenue to Long avenue.	May 27, 1924	July 15, 1924	John Guarino & Co.	232 64	10" pipe, surface. 2 manholes.	1,520 84

Florence avenue, from Allston street to Commonwealth avenue.	July 15, 1924	Aug. 19, 1924	A. Grande.....	298.14	10" pipe, sanitary. 3 manholes.	2,049 26	
Bostonia avenue from Breck avenue to Regent road.*	Sept. 17, 1924	Oct. 15, 1924	Joseph Toddes.....	602 02	10" pipe, sanitary. 4 manholes.	2,579 87	
Elizabeth avenue, from Allston street to Commonwealth avenue and outlet in Allston street.*	Nov. 12, 1924	Dec. 30, 1924	A. Grande.....	345.25	10" pipe, sanitary. 2 manholes.	2,029 16	
Foster street, from Commonwealth avenue to 1,200 feet northerly and outlet in Jane park.*	Nov. 28, 1924		A. D. Daddario.....	742. 180.	10" pipe, sanitary. 10" pipe, surface. 1 manhole.	2,005 21	
WEST ROXBURY.							
Garnett road and Quinn way.....						117 09	
Cass street, from Powell street to Centre street...						2,612 95	
Cedarwood road, from Moss Hill road to about 1,030 feet southerly and Bowditch road, from Moss Hill road to about 350 feet northwesterly.						1,326 48	
Prospect street from Baker street to N. Y. N. H. & H. R.R. and Moloney street, from Montgomery street to 135 feet southeasterly.						274 00	
Grove street, from Washington street to Centre street.						32,506 51	
Grayfield avenue and outlet in Corey street, Vermont street and private land.						1,624 71	
Spring street brook, from Centre street to Landseer street.						340 47	
Fowle street and outlet, from Board of Survey street 2244 to Rowe street.	April 9, 1924	May 7, 1924	A. E. Daddario.....	380.37 374 08	10" pipe, sanitary. 10" pipe, surface. 5 manholes.	3,139 09	
La Grange street, from Vermont street to 500 feet southeasterly and outlet in Vermont street, from Alder street to La Grange street.	April 14, 1924	May 26, 1924	DeCristoforo Brothers Company.	535 16 299.59 249.56 14 252 35 198.85 42	10" pipe, sanitary. 12" pipe, surface. 10" pipe, surface. 12" cast-iron pipe, surface. 18" D. S. pipe, surface. 22" D. S. pipe, surface. 10" pipe, catch-basin drain. 8 manholes. 3 catch-basins.	7,890 93	

* Cost not complete.

Sewerage Works, Construction, February 1, 1924, to January 31, 1925, Inclusive.—Continued.

Location.	Begun.	Finished.	Built by.	Length, (Feet.)	Character.	Amount Expended in 1924.
WEST ROXBURY.—Continued.						
Pondview avenue, from Moraine street to about 300 feet southerly.	April 3, 1924	April 16, 1924	A. Cefalo.....	286.82 34	10" pipe, sanitary..... 10" pipe, catch-basin drain. 2 manholes.	1,302.07
Cataumet street, from Pond street to end of street 260 feet northerly.	May 9, 1924	May 23, 1924	DeCristoforo Brothers Com- pany.	274.70 249.75 14 36.75	10" pipe, sanitary..... 10" pipe, surface..... 10" cast-iron pipe, surface. 10" pipe, surface. 6 manholes.	1,957.02
Eliot place, from Eliot street to about 250 feet easterly.	May 16, 1924	May 26, 1924	S. J. Tomasello.....	257.07	10" pipe, sanitary..... 3 manholes.	2,123.65
Germantown district and outlet in East street, Dedham.*	May 13, 1924	.....	C. & R. Construction Com- pany.	1,482.04 1,561.50 750 468 224.50 1,178 418 243 14 23 214 197 382.01 450 275.02 44	29" concrete sanitary..... 24" pipe, sanitary..... 15" pipe, sanitary..... 12" pipe, sanitary..... 10" pipe, sanitary..... 2" 3" concrete sanitary. 18" by 20" concrete sanitary. 24" pipe, surface..... 15" pipe, surface..... 30" pipe, surface..... 24" by 28" concrete surface. 2' 3" concrete conduit. 2' 6" concrete conduit. 3' concrete conduit. 3' 3" concrete conduit. Catch-basin drains. 43 manholes. 2 catch-basins.	135,443.01
Ifley road, from Washington street to Walnut avenue.*	July 8, 1924	Aug. 16, 1924	M. D. Russo.....	126.05	10" pipe, catch-basin drain..... 6 manholes. 5 catch-basins.	2,511.15
Weld street outlet in Montclair avenue, private land and Board of Survey street 1778 and 1779, from Merlin street and Weld street.*	July 7, 1924	Oct. 15, 1924	Zoppo & Civitares.....	824.85 598.64	15" pipe, sanitary..... 12" pipe, sanitary..... 6 manholes.	12,959.59
Ethel street, from Augustus avenue to Malvern road.*	Aug. 13, 1924	Aug. 30, 1924	Joseph Todesca.....	449.96 23	10" pipe, surface..... Catch-basin drain. 2 manholes. 2 catch-basins.	1,949.74

Weld street, Parkvale road, Willowdean avenue and Repton road †	Aug. 1, 1924	Aug. 7, 1924	John Guarino.....	201.15	12" pipe, sanitary. 2 manholes.	1,985 71
Jamaicaway, from Pond street to 200 feet southerly.	July 16, 1924	July 25, 1924	John Guarino.....	142.15	10" pipe, sanitary.	998 69
West Roxbury Parkway, from Pelton street to about 135 feet southerly.						
Stony brook, section No. 10†.....						35 50
Vermont street, from Mt. Vernon street to 175 feet northeasterly.	Sept. 9, 1924	Oct. 23, 1924	Day labor.....	175.66	10" pipe, sanitary. 1 manhole.	2,182 07
Canterbury street, from existing sewer west of Angell street to 250 feet westerly.*	July 22, 1924	Aug. 14, 1924	John Williams & Co.....	250.10	10" pipe, sanitary.	1,513 34
Newfield street and Lasell street, from Board of Survey street No. 1706 to La Grange street.*	Oct. 21, 1924	Nov. 25, 1924	M. DeSisto & Co.....	800.55	10" pipe, sanitary. 4 manholes.	2,185 83
Maynard street, from Metropolitan avenue to 260 feet southwestly.*	Oct. 20, 1924	Oct. 28, 1924	C. Russo.....	274.55	10" pipe, sanitary. 1 manhole.	776 59
Stellman road, private land, Bradeen street and Washington street.*	Oct. 6, 1924	Jan. 15, 1925	John Williams & Co.....	2,221.34 30.50 804.77 261.24 302.55 10.54 336.13 155.40 401.06 475.93 334.65 113.19 129	18" pipe, sanitary. 15" cast-iron pipe, sanitary. 10" pipe, sanitary. 2' 9" concrete surface. 2' 3" concrete surface. 24" pipe, surface. 22" pipe, surface. 20" pipe, surface. 15" pipe, surface. 18" pipe, surface. 15" pipe, surface. 12" pipe, surface. 10" pipe, surface. 10" pipe, catch-basin drain. 37 manholes. 10 catch-basins.	30,599 67
Metropolitau avenue, from Washington street to dead end.	Oct. 15, 1924	Oct. 17, 1924	A. G. Tomasello & Son.....	20 10 10	12" pipe, sanitary. Catch-basin drains. 1 catch-basin.	340 49
Hillside avenue, from Crandall street to 225 feet southerly.*	Nov. 6, 1924	Nov. 22, 1924	James J. Conway.....	225.40	10" pipe, sanitary. 1 manhole.	1,022 20
Roberts avenue, from Dent street to La Grange street.*	Dec. 8, 1924	Jan. 2, 1925	A. Cefalo.....	498.15 343.75 6	10" pipe, sanitary. 10" pipe, surface. 10" cast-iron pipe, surface. 6 manholes.	1,993 56
Louder's lane, from existing sewer to about 50 feet westerly.	Oct. 27, 1924	Oct. 30, 1924	Joseph Todesca.....	48.90	10" pipe, sanitary.	336 75

* Cost not complete.

† Advertised, not awarded.

Sewerage Works, Construction, February 1, 1924, to January 31, 1925, Inclusive.—Continued.

LOCATION.	Begun.	Finished.	Built by.	Length, (Feet.)	Character.	Amount Expended in 1924.
DORCHESTER.						
Allendale avenue, from Marsh street to 200 feet southeasterly.						\$61 68
Bates road, from Beaumont street to Elm road.						96 86
Collins street, from existing sewer to about 250 feet northwesterly.						405 71
Standard street, from River street to about 1,250 feet southerly.						516 61
Fremont place and extension, from existing sewer to 150 feet southeasterly.						55 68
Dorchester Brook sewer, east fork in East Cottage street and Humphreys street, from Norfolk avenue to Holden street.						5,197 11
Allendale avenue, from Marsh street 200 feet southeasterly; Lenoxdale avenue, from Milton street 130 feet southeasterly.*	April 8, 1924	April 29, 1924	John Williams & Co.	394.28	10" pipe, sanitary. 4 manholes.	2,235 36
Columbia park, from Lawrence avenue to Hamilton terrace.	April 7, 1924	June 28, 1924	Joseph Todesca	191.50	10" pipe, sanitary. 2 manholes.	2,744 65
Dorchester Brook sewer, east fork in Humphreys street, from Holden street to Dudley street.*	April 28, 1924		V. Barletta	8 10 305.51 303.80 537.99 10 5.20 11 11.60 64	10" pipe, sanitary. 12" pipe, sanitary. 6' 8" by 6' 1" concrete sanitary. 1' 3" by 2' 6" concrete sanitary. 6' concrete sanitary. 1' 3" by 5' 2" concrete sanitary. 5' concrete sanitary. 3' 3" concrete sanitary. 4' concrete sanitary. 10" pipe, catch-basin drain. 7 manholes. 4 catch-basins.	58,284 24

Regina road, from Alpha road to about 275 feet westerly.	April 23, 1924	May 16, 1924	Samuel J. Tomasello.....	363.30	10" pipe, sanitary. 4 manholes.	2,224 86
Harmon street, from Oakland street to about 300 feet southwesterly.	April 9, 1924	May 15, 1924	George J. Regan.....	368.30	10" pipe, sanitary. 2 manholes.	3,677 81
Hallowell street, from Oakland street to Newcastle street and outlet in private land from Favre street to Hallowell street.*	June 6, 1924	Sept. 30, 1924	M. DeMatteo.....	261.07 395.46 270.80 31.53 249.50	10" pipe, sanitary. 12" pipe, sanitary. 18" D. S. pipe, sanitary. 12" pipe, surface. 4' 6" concrete conduit. 10 manholes.	11,326 39
Blue Hill avenue, from Harvard street 160 feet southerly to 380 feet southerly.	June 6, 1924	June 24, 1924	A. D. Daddario.....	231.35	12" pipe, sanitary. 1 manhole.	3,608 33
Colorado street, from Currier street to 315 feet northeasterly.*	July 28, 1924	Oct. 29, 1924	C. Russo.....	338.36 104.80 23.05	12" pipe, sanitary. 10" pipe, sanitary. 18" D. S. pipe, sanitary. 4 manholes.	5,966 22
Locust street, from Washington avenue to N. Y., N. H. & H. R. R.*	July 24, 1924	Sept. 16, 1924	M. H. Loomie.....	149.45 18 95.95	20" D. S. pipe, sanitary. 18" D. S. pipe, sanitary. 12" pipe, sanitary. 2 manholes.	5,167 24
Leston street, from Morton street to Woolson street.*	Aug. 13, 1924	Sept. 5, 1924	L. Balboni.....	183.30 401.40 54	12" pipe, surface. 10" pipe, surface. 10" pipe, catch-basin drain. 3 manholes. 5 catch-basins.	2,991 01
Mill street, from Victory road to Greenhill street.*	Aug. 25, 1924	Nov. 3, 1924	C. Iacozza.....	499.50	12" pipe, sanitary. 3 manholes.	3,591 09
New England avenue, from Talbot avenue to Massasoit avenue.*	Aug. 18, 1924	Sept. 24, 1924	James J. Conway.....	551.30 36	10" pipe, sanitary. 10" pipe, catch-basin drain. 6 manholes. 3 catch-basins.	4,593 41
Itasca street, from 56 feet southwest of Currier street to 450 feet southwesterly.*	Sept. 25, 1924	Nov. 3, 1924	James J. Conway.....	404	12" pipe, sanitary. 2 manholes.	3,440 61

* Cost not complete.

Sewerage Works, Construction, February 1, 1924, to January 31, 1925, Inclusive.—Continued.

LOCATIONS.	Begun.	Finished.	Built by.	Length. (Feet.)	Character.	Amount Expended in 1924.
<i>DORCHESTER.—Concluded.</i>						
Wilmington avenue, from Capen street 230 feet easterly and outlet in Capen street from Fairmount street to Wilmington avenue.*	Oct. 22, 1924	Dec. 3, 1924	C. Iacozza.....	431.10 152	12" pipe, sanitary. 10" pipe, sanitary. 5 manholes.	\$3,278 31
Fairview street, from 80 feet south of Anisley street to 100 feet southwest.	Sept. 29, 1924	Oct. 15, 1924	T. L. Pierce Company.....	125	10" pipe, sanitary.....	1,026 34
Myrtlebank avenue, from Milton street to 120 feet north.	Sept. 29, 1924	Oct. 8, 1924	D. F. O'Connell.....	150.60	10" pipe, sanitary. 1 manhole.	1,015 98
Adams street, from 110 feet southwest of Milton street to 150 feet southwest.	Oct. 11, 1924	Oct. 27, 1924	George J. Regan.....	149.50	10" pipe, sanitary.....	1,003 32
Lenoxdale avenue, from 270 feet south of Marsh street to 145 feet southeast.	Oct. 9, 1924	Oct. 16, 1924	D. F. O'Connell.....	145.10	12" pipe, sanitary. 1 manhole.	1,047 59
Bowman street, from Blackwell street to Chickatawbut street.	Sept. 22, 1924	Oct. 18, 1924	A. G. Tomasello & Son.....	104 67	12" pipe, surface..... 10" pipe, catch-basin drains. 2 manholes. 4 catch-basins.	2,848 18
Adams street, from 168 feet north of Ashmont street to about 80 feet westerly.	Nov. 1, 1924	Nov. 4, 1924	T. L. Pierce Company.....	94	12" pipe, sanitary. 1 manhole.	913 06
Blackwell street, from Neponset avenue to about 100 feet westerly.	Aug. 7, 1924	Aug. 16, 1924	D. F. O'Connell.....	50 24	18" pipe, surface..... 10" pipe, catch-basin drain. 2 catch-basins.	1,129 06
Woodward Park street, from 46 feet northwest of Folsom street to 50 feet northwest.	Oct. 4, 1924	Oct. 25, 1924	John Guarino.....	49	8" pipe, sanitary. 1 manhole.	887 80
Fuller street, from Milton avenue to about 200 feet easterly	Nov. 17, 1924	Dec. 8, 1924	William Barrett & Co.....	197.05	12" pipe, sanitary. 2 manholes.	- 1,182 38
Alabama street, from Currier street to Elene street, and outlet in private land, from Colorado street to Alabama street.*	Nov. 24, 1924	.....	James J. Conway.....	380	12" pipe, sanitary.....	2,647 80

HYDE PARK.

Warren avenue, from existing sewer northwest of Summit avenue to about 90 feet southeast; and Wilton street from 225 feet southeast of Hyde Park avenue to about 150 feet southeast.									159 68
Wood avenue, from Seminole street about 335 feet northwesterly to existing sewer.*	Sept. 15, 1924	Oct. 11, 1924	L. Balboni.....	250.45	1 1/2" pipe, sanitary 2 manholes.				2,029 24
Arnold street, from Vale street to River street; Vale street, from Linwood street to Arnold street; Linwood street, from Child street to Vale street; Child street, from Gordon avenue to Linwood street.*	Oct. 20, 1924	Dec. 4, 1924	Zeppo & Civitares.....	223 177 244.50 273.10 234.50	10" pipe, sanitary. 1 1/2" pipe, sanitary. 1 1/2" pipe, sanitary. 1 1/2" pipe, sanitary. 1 1/2" pipe, sanitary. 9 manholes.				5,761 23
Ralston road, rom Rustkin road to Rutledge road.*	Oct. 17, 1924	Nov. 15, 1924	A. D. Daaddario.....	198 23.50	12" pipe, sanitary. 10" pipe, sanitary. 3 manholes.				2,855 05
Cottage place, from Winslow street 142 feet southwest to 50 feet northwest.*	Nov. 20, 1924	Dec. 9, 1924	De-Christoforo & Brothers Company	206.20	8" pipe, sanitary 2 manholes.				755 85
Cottage street, from Water street to Washington street, and outlet in Water street, from Glenwood avenue to Cottage street.*	Nov. 15, 1924	Dec. 30, 1924	C. Iacozza.....	697 865.10	12" pipe, sanitary. 10" pipe, sanitary. 10 manholes.				5,040 59
Wood avenue, from Rutledge road about 90 feet northeast, and outlet in Rutledge road.*	Dec. 1, 1924	Dec. 20, 1924	George J. Regan.....	220.50	10" pipe, sanitary. 3 manholes.				1,851 97
Agnes avenue, from River street to about 225 feet southerly.	Dec. 9, 1924	Dec. 20, 1924	A. D. Daaddario.....	250.70	8" pipe, sanitary. 2 manholes.				1,141 90
ROXBURY.									58 42
Brookford street, from Dacia street to Randall street.									134 02
Fairland street, from Winthrop street to Moreland street.									
Elm Hill avenue, from Seaver street to Schuyler street.	April 7, 1924	May 31, 1924	A. Grande.....	722.03 718.21 26	12" pipe, sanitary 15" D. S. pipe, surface 10" pipe, catch-basin drain 7 manholes 3 catch-basins.				9,282 86

*Cost not complete.

Sewerage Works, Construction, February 1, 1924, to January 31, 1925, Inclusive.—Concluded.

LOCATION.	Begun.	Finished.	Built by.	Length (Feet.)	Character.	Amount Expended in 1924.
ROXBURY.—Continued.						
Harrishof street, from Warren street to Humboldt avenue.*	June 2, 1924	Aug. 16, 1924	John Williams & Co.....	1,021.64 383.37 683.86 50	12" pipe, sanitary..... 12" pipe, surface..... 15" pipe, surface..... 10" pipe, catch-basin drain..... 6 manholes..... 5 catch-basins.....	\$15,648 06
Mark street, from Day street to 203 feet easterly.*	July 21, 1924	Aug. 27, 1924	William Barrett & Co.....	203.80 203.80	10" pipe, sanitary..... 12" pipe, surface..... 3 manholes.....	2,648 92
Bolster street, from Mozart street to Wyman street.*	Aug. 12, 1924	Aug. 25, 1924	C. Iacozza.....	362 35	12" pipe, sanitary..... 10" pipe, catch-basin drain..... 3 manholes..... 2 catch-basins.....	2,409 20
Harold street at Howland street.....	Sept. 29, 1924	Oct. 2, 1924	J. J. McCarthy & Co.....	15.50	10" pipe, sanitary.....	192 00
CITY PROPER.						
Alley 711, from Waltham street to Hanson street.						151 63
Catch-basins, manholes and minor drains.						3,675 89
Post Office square, from Water street to Bath street; Bath street from Post Office square to about 91 feet southeasterly.	Jan. 18, 1924	Feb. 2, 1924	C. & R. Construction Company.	11.50 8.17 18.50 6 3	15" pipe, sanitary..... 12" cast-iron pipe, sanitary..... 10" pipe, sanitary..... 8" pipe, sanitary..... 10" pipe, catch-basin drain..... 1 manhole..... 1 catch-basin.....	3,358 28

Salem place, from Salem street to about 83 feet westerly, and outlet in Salem street, from Salem place to Cross street.									365 82
Florence street, from Harrison avenue to Washington street.									1,683 21
Public Alley 541, from Public Alley 542 to about 75 feet northwesterly.									189 71
Congress street, from Atlantic avenue to Purchase street.	April 4, 1924	June 7, 1924	M. H. Loomie.	167.20 95			24" D. S. pipe, sanitary. 10" pipe, catch-basin drain. 1 manhole. 5 catch-basins.		7,688 52
Shawmut avenue, from Warrenton street to Roxbury street.*	April 29, 1924	July 22, 1924	M. H. Gaddis.	1,657			10" pipe, catch-basin drain. 14 manholes. 64 catch-basins.		27,942 06
Public Alley 544, from Public Alley 543 to Carleton street.			Advertised, not awarded.						9 50
Boylston street at Ipswich street.	Sept. 3, 1924	Nov. 13, 1924	Day labor.	31.90 36.50			15" pipe, sanitary. 18" pipe, sanitary. 1 manhole.		3,717 27

* Cost not complete.

Recapitulation.

DISTRICT.	Linear Feet Sewers.	Linear Feet Catch-basin Drains.	Manholes.	Catch-basins.	Amount Expended.
South Boston.....	521 17	.....	3	.....	\$7,748 06
East Boston.....	1,763 14	.....	12	9	33,605 06
Charlestown.....	160 10	.....	1	.....	2,095 30
Brighton.....	6,913 14	174	40	10	65,070 25
West Roxbury.....	21,610 23	408 05	134	23	251,168 76
Dorchester.....	8,776 65	245	63	18	133,164 69
Hyde Park.....	3,863 55	.....	31	.....	19,595 51
Roxbury.....	4,314 21	111	19	10	30,373 48
City Proper.....	279 57	1,135	17	70	48,781 89

Sewerage Works Construction, February 1, 1924, to January 31, 1925, Inclusive.

New Catch-basins and Manholes built by Day Labor and Contract.

DISTRICT.	Catch-basins.	Manholes.	Total Cost.
South Boston.....	12	10	\$9,156 34
East Boston.....	6	1	2,640 69
Charlestown.....	4	5	4,052 55
Brighton.....	10	8	4,410 08
West Roxbury.....	25	7	10,839 94
Dorchester.....	63	10	19,822 09
Hyde Park.....	9	1	3,941 52
Roxbury.....	59	16	29,019 72
City Proper.....	24	34	26,883 04
Totals.....	212	92	\$110,765 97

SEWERAGE WORKS LOAN, 1924-25.

Engineers' salaries, general	\$106,013 05
Amount charged to construction of sewers	23,609 00
	\$129,622 05

ENGINEERING EXPENSE.

Labor	\$2,592 31
Teaming	805 00
Borings	1,414 04
Transportation	2,059 47
Supplies, etc.	4,937 48
	<u>\$11,808 30</u>

PUMPING STATION CONSTRUCTION.

Advertising	\$8 50
Labor	1,878 65
Contracts	10,233 53
Professional services	857 98
Materials, etc.	2,010 77
	<u>\$14,989 43</u>

SUNDRIES.

Labor	\$1,462 76
Paving service	126 30
Material	35,206 39
	<u>\$36,795 45</u>
Less material charged to jobs	36,190 99
	<u>\$604 46</u>

COURT EXECUTIONS AND AWARDS ON ACCOUNT OF LAND-TAKINGS, ETC.

J. J. Kelleher, Germantown district	\$500 00
Fred H. Plouff, River street, Hyde Park	500 00
C. & R. Construction Company, Muddy river conduit, contract dated June 25, 1920	17,000 00
	<u>\$18,000 00</u>

Sewerage Works, Charles River Basin.

Expenditures February 1, 1924, to January 31, 1925.

ACCOUNTS.	Labor.	Paid to Contractors.	Total.
Engineers' salaries	\$1,525 09		\$1,525 09
Sewers built in entire city	1,471 54	\$47,573 93	49,045 47
Totals	\$2,996 63	\$47,573 93	\$50,570 56

Sewerage Works, Charles River Basin, Construction, February 1, 1924, to January 31, 1925, Inclusive.

LOCATION.	Begun.	Finished.	Built by.	Length (Feet.)	Character.	Amount Expended in 1924.
BRIGHTON.						
Colonial road and outlet in Board of Survey street No. 2396, Union street and Shepard street.						\$815 21
North Harvard street, from Kinglsey street to a point about 100 feet northerly.						40 89
Scottfield road from Commonwealth avenue to Warren street.						391 55
Sorrento street, from Hopedale street to Eaton street.						237 57
Wirt street, from Henshaw street to Washington street.						91 84
WEST ROXBURY.						
La Grange street, from Vale street to Summit street about 1,060 feet northerly.						239 08
Plainfield street, from Brook street to about 220 feet northwesterly.						59 13
Jamaica place, from Arborway to end of Jamaica place.						96 28
Hyde Park avenue, from Wyvern street to about 150 feet southerly.						70 31
Curley street, from Paine street to about 185 feet northerly.						237 04
Midvale road, from Hodgdon terrace to Cory street.						247 36

New Haven street, from 500 feet south of North avenue to Upland street.	Dec. 1, 1923	Feb. 9, 1924	A. Grande.	15.35 8.13	10" pipe, sanitary 10" pipe, surface. 3" manholes.	1,092 24
Wright road, from Upland street to North avenue.						666 42
Union terrace, from Morton street to Forest Hills avenue.	Dec. 4, 1923	April 9, 1924				8,051 07
Weld street, from Board of Survey street No. 1799 to Parkvale road.	Feb. 11, 1924	Sept. 20, 1924	V. Barletta	934.50	12" pipe, sanitary 6 manholes.	24,730 42
Weld street, from Parkvale road to Church street; Parkvale road and Church street, from Weld street to 150 feet southeast of Parkvale road.*	Nov. 3, 1924		V. Barletta	1,302 247	10" pipe, sanitary 12" pipe, sanitary. 10 manholes.	5,781 82
DORCHESTER.						
Hosmer street, from Norfolk street to 167 feet northwesterly.						183 23
Floyd street, from 450 feet southwest of Lucerne street to Callender street.	Nov. 22, 1923	Feb. 14, 1924	George J. Regan.	83.10 102.40 7.00	10" pipe, sanitary 12" pipe, surface. 10" pipe, surface. 2 manholes.	3,611 30
ROXBURY.						
Public Alley No. 937, from Boylston street to about 133 feet southerly.						177 51
Public Alley No. 938, from Ipswich street to Ipswich street.						865 53
Silva place, from Muirce street to about 134 feet southerly.						274 54
CITY PROPER.						
Stuart street, from Washington street to Columbus avenue; Elliot street, from Stuart street to Broadway.						185 13

* Cost not complete.

Recapitulation.

DISTRICT.	Linear Feet Sewers.	Linear Feet Catch-basin Drains.	Manholes.	Catch-basins.	Amount Expended.
Brighton.....					\$1,577 06
West Roxbury.....	2,506.98		19		42,171 17
Dorchester.....	192.50		2		3,794 53
Roxbury.....					1,317 58
City Proper.....					185 13

Catch-basins in Charge of Sewer Service.

DISTRICT.	CATCH-BASIN DATA FOR YEAR ENDED JANUARY 31, 1925.			TOTAL FOR WHOLE CITY IN CHARGE OF SEWER SERVICE.	
	Number Built or Rebuilt.	Number Abandoned or Removed.	Net Increase.	Previous Report to February 1, 1924.	Grand Total to February 1, 1925.
City proper.....	68	55	13	3,295	3,308
Roxbury.....	95	57	38	2,895	2,933
South Boston.....	12	5	7	1,267	1,274
East Boston.....	15	2	13	901	914
Charlestown.....	4		4	768	772
Brighton.....	20		20	1,318	1,338
West Roxbury.....	48		48	2,252	2,300
Dorchester.....	81	37	44	3,563	3,607
Hyde Park.....	9		9	391	400
Totals.....	352	156	196	16,650	16,846

**Summary of Sewer Construction for Twelve Months Ending
January 31, 1925.**

DISTRICT.	Built by City by Contractor or Day Labor.	Built by Private Parties.	Total Length Built.	
	<i>Linear Feet.</i>	<i>Linear Feet.</i>	<i>Linear Feet.</i>	Miles.
City proper.....	205.57	287.50	493.07	0.093
Roxbury.....	4,382.41	.....	4,382.41	0.830
South Boston.....	521.17	.....	521.17	0.099
East Boston.....	1,929.14	2,036.77	3,965.91	0.751
Charlestown.....	160.10	.....	160.10	0.030
Brighton.....	6,912.64	506.91	7,419.55	1.405
West Roxbury.....	24,207.16	1,344.10	25,551.26	4.839
Dorchester.....	8,527.15	391.60	8,918.75	1.689
Hyde Park.....	3,863.55	.....	3,863.55	0.732
Totals.....	50,708.89	4,566.88	55,275.77	10.468

**Net Increase in Length of Sewers Between February 1, 1924, and
January 31, 1925.**

DISTRICT.	Length of Sewers Built During the Twelve Months ended January 31, 1925.	Length of Sewers Re- built or Abandoned During the Twelve Months ended January 31, 1925.	Net Increase for the Twelve Months Ended January 31, 1925.	
	<i>Linear Feet.</i>	<i>Linear Feet.</i>	<i>Linear Feet.</i>	<i>Miles.</i>
City proper.....	493.07	423.90	69.17	0.013
Roxbury.....	4,382.41	77.90	4,304.51	0.815
South Boston.....	521.17	.....	521.17	0.099
East Boston.....	3,965.91	424.10	3,541.81	0.671
Charlestown.....	160.10	.....	160.10	0.030
Brighton.....	7,419.55	.....	7,419.55	1.405
West Roxbury.....	25,551.26	426.00	25,125.26	4.758
Dorchester.....	8,918.75	1,120.65	7,798.10	1.477
Hyde Park.....	3,863.55	.....	3,863.55	0.732
Totals.....	55,275.77	2,472.55	52,803.22	10.000
<i>Total Length of Sewers.</i>				<i>Miles.</i>
Common sewers and surface drains previous to February 1, 1924.....				971.29
Net increase of common sewers and surface drains between February 1, 1924, and January 31, 1925.....				10.00
Total common sewers and surface drains to January 31, 1925.....				981.29
Intercepting sewers connecting with Metropolitan sewers to January 31, 1925.....				6.81 *
Boston main drainage intercepting sewers to January 31, 1925.....				24.12 *
Grand total of common and intercepting sewers to January 31, 1925..				1,012.22
Total mileage of streets containing sewerage works to February 1, 1925,				597.03

* No addition during 1924.

**Summary of Sewer Construction for Five Years Previous to
February 1, 1925.**

	1920.	1921.	1922.	1923.	1924.
	<i>Linear Feet.</i>	<i>Linear Feet.</i>	<i>Linear Feet.</i>	<i>Linear Feet.</i>	<i>Linear Feet.</i>
Built by city by contract or day labor.....	42,541.12	37,115.48	63,156.54	41,076.39	50,708.89
Built by private parties.....	12.00	279.18	1,641.30	2,609.10	4,566.88
Totals.....	42,553.12	37,394.66	64,797.84	43,685.49	55,275.77

Sewage Statistics for Year Ended January 21, 1925.

MONTH.	Total Pumped Gallons.*	Average per Day Gallons.	Minimum per Day Gallons.	Maximum per Day Gallons.	Average Lift, Feet.	Average Duty Foot-pounds per Gallon of Oil.
1924.						
February.....	2,601,398,738	89,703,370	76,371,754	113,552,958	35.6	7,500,000
March.....	3,464,154,266	111,746,918	77,110,783	141,088,605	35.5	7,800,000
April.....	3,467,092,220	115,569,740	85,073,797	150,134,735	35.6	7,800,000
May.....	3,565,556,856	115,017,963	83,388,831	153,427,544	35.5	8,100,000
June.....	3,220,712,080	107,357,069	86,457,126	133,581,353	35.6	8,200,000
July.....	2,646,363,489	85,366,532	56,246,839	111,581,798	35.7	7,900,000
August.....	2,597,777,991	83,799,290	65,117,047	156,562,167	35.7	7,800,000
September.....	3,106,235,317	103,551,177	76,481,467	123,447,894	35.6	7,700,000
October.....	2,694,435,960	86,917,289	70,232,474	108,423,518	36.0	7,200,000
November.....	2,374,462,701	79,182,090	59,748,846	131,340,528	36.5	7,200,000
December.....	2,818,223,072	90,910,422	75,891,398	122,354,514	36.0	7,500,000
1925.						
January.....	2,959,900,679	95,480,667	67,160,836	146,051,605	36.0	7,700,000
Totals.....	35,517,312,572				429.3	
Averages.....	97,317,706				35.8	

* Gallons pumped based on displacement. Total gallons of oil burned from February 1, 1924, to January 31, 1925, inclusive — 1,322,170.

Cost of Pumping.

ITEMS.	Cost.	Cost per Million Foot Gallons.
Labor.....	\$72,482 80	\$0 05954
Gallons of fuel oil.....	58,175 48	04778
Oils and waste.....	2,886 90	00237
Rubber valves and packing.....	2,026 66	00166
Miscellaneous renewals and supplies.....	25,871 15	02125
Totals.....	\$161,442 99	\$0 13260
Labor and screens.....	\$7,510 00	\$0 00618

Sewage Statistics for Year Ending January 31, 1925.

MONTH.	Cheeses.	Weight. (Pounds.)
1924.		
February.....	331	75,271
March.....	182	43,862
April.....	253	60,973
May.....	159	38,319
June.....	148	25,669
July.....	234	56,394
August.....	231	55,671
September.....	179	33,139
October.....	242	58,332
November.....	237	57,117
December.....	232	55,912
1925.		
January.....	283	68,203
	2,711	628,862

314 $\frac{1}{2}$ $\frac{62}{100}$ tons. Averages 241 pounds to cheese.

Sludge Received and Removed in Deposit Sewers, Calf Pasture, 1924.

Sludge in sewers February 1, 1924	2,694	cubic yards
Received during year	1,966	" "
	4,660	" "
Removed during year	2,983	" "
	1,677	" "
Sludge in sewers February 1, 1925	1,677	" "

SANITARY SERVICE.

FINANCIAL STATEMENT.

Appropriation		\$2,898,443 36
Expended by Sanitary Service	\$1,931,188 36	
Expended by Street Cleaning and Oiling Service	921,185 33	
		<u>2,852,373 69</u>
Transferred to other departments and services,		<u>\$46,069 67</u>

INCOME.

Statement showing amount in cash and bills deposited with the City Collector from February 1, 1924 to January 31, 1925, and credited to general revenue.

Tickets and bills for the removal of ashes and waste		\$104,645 85
Sale of manure		3,507 00
Labor and materials		88 32
		<u>\$108,241 17</u>

AMOUNT PAID INTO THE CITY TREASURY DURING THE YEAR.

Removal of ashes and waste		\$104,656 74
Sale of manure		3,059 08
Labor and materials		1 00
		<u>\$107,716 82</u>

Total Cost of House Dirt, Waste, Rubbish and Offal, 1924.

Salaries, division engineer, supervisor, general foreman and medical inspector		\$16,196 11
Office supplies and expenses, printing, sta- tionery, etc.		3,553 97
Ashes, waste and rubbish account		1,215,877 62
House offal account		574,517 79
		<u>\$1,810,145 49</u>
<i>Carried forward</i>		\$1,810,145 49

<i>Brought forward</i>		\$1,810,145 49
Retired veterans' pensions	\$1,651 29	
Retired laborers' pensions	7,938 29	
		<u>9,589 58</u>
Total		\$1,819,735 07

CONSTRUCTION REPAIRS AND HORSESHOE-
ING ACCOUNT.

Expended for labor	\$84,523 36	
Expended for stock	35,813 17	
		<u>120,354 53</u>
		\$1,940,089 60

WORK DONE FOR OTHER SERVICES.

Paving Service	\$6,147 97	
Sewer Service	1,315 52	
Water Service	1,437 75	
		<u>8,901 24</u>
Total		<u>\$1,931,188 36</u>

Items of Expenditure for the Year 1924-25.

Salary, division engineer (in part).....	\$1,666 67
Salary, supervisor (in part).....	1,754 79
Salary, medical inspector (in part).....	1,029 14
Salary, chief veterinary (in part).....	1,125 00
Salary, foremen.....	20,307 71
Salaries, yard clerks.....	3,475 23
Labor, collecting and disposing of house dirt and ashes.....	603,272 69
Labor, collecting and disposing of waste and rubbish.....	38,533 03
Labor, collecting and disposing of house offal.....	340,763 69
Labor and stock at stables and yards.....	84,091 06
Hired teams on ashes.....	69,919 95
Contractor on ashes, East Boston, Brighton, West Roxbury, Dorchester and Hyde Park.....	244,684 00
Contractor on offal, East Boston, Brighton, West Roxbury, Dorchester and Hyde Park.....	123,500 00
Holidays, pay allowed.....	87,324 46
Vacations, pay allowed.....	27,555 25
Grain.....	21,899 58
Hay and straw.....	28,693 16
Medical attendance and pay allowed injured employees.....	13,387 26
Veterinary services and medicines.....	320 65
Outside wheelwright, blacksmith, horseshoeing, etc.....	31,157 75
Labor, stock and wheelwright, blacksmith, painting, etc.....	97,744 05
Repairs to stables and sheds.....	31,388 58
Fuel.....	3,869 33
Gas.....	357 73
Electric light and power.....	3,486 26
Printing, stationery, office supplies, etc.....	3,938 90
Automobile expense.....	34,152 18
Retired veterans' pensions.....	1,651 29
Retired laborers' pensions.....	7,938 29
Rent.....	1,500 00
Telephone tolls and rentals.....	700 68
Total.....	\$1,931,188 36

Amount Expended for the Collection and Disposal of Ashes, Garbage, Waste and Rubbish, by District, 1924-25.

Districts.	Popula- tion.	ASHES		GARBAGE.		WASTE AND RUBBISH.		Total Cost. per Capita.	
		Cost.	Per Capita.	Cost.	Per Capita.	Cost.	Per Capita.		
									Total Cost.
1. South Boston.....	72,878	\$73,766 43	\$1.0122	\$28,188 00	\$0.3868	\$667 50	\$0.0091	\$102,621 93	\$1.4081
2. East Boston.....	65,924	49,480 91	0.7505	12,696 92	0.1926			62,177 83	0.9431
3. Charlestown.....	35,833	45,703 40	1.2475	12,932 58	0.2361			58,635 98	1.4386
4. Brighton.....	44,620	50,170 89	1.1397	33,070 84	0.7502			83,241 73	1.8909
5. West Roxbury.....	60,928	43,699 39	0.7172	29,626 11	0.4862			73,325 50	1.2034
6. Dorchester.....	161,905	149,240 63	0.9217	83,450 92	0.5154			232,691 55	1.4371
7. Roxbury.....	128,771	192,587 01	1.4956	78,320 19	0.6082	11,104 04	0.0878	282,011 24	2.1916
8 and 9. South End and Back Bay..	117,755	246,494 90	2.0933	89,811 17	0.7627	45,554 32	0.3878	381,860 39	3.2438
10. North and West Ends.....	74,736	109,223 70	1.4615	26,216 46	0.3494	10,559 21	0.1414	145,999 37	1.9523
11. Hyde Park.....	19,340	7,938 79	0.4115	4,838 79	0.2512			12,817 58	0.6627
12. Disposal station.....		176,930 83		175,345 81				355,142 45	
Totals.....	782,090	\$1,145,276 88		\$574,517 79		\$70,730 88		\$1,700,525 55	

House Dirt and Ashes Removed.

YEARS.	Loads.	Cubic Yards.	Tons.
1920.....	288,646	891,042	363,097
1921.....	264,244	967,955	394,435
1922.....	272,245	1,025,555	417,915
1923.....	280,448	1,065,625	434,234
1924.....	276,818	1,099,636	448,094

House Offal Removed.

YEARS.	Loads.	Cubic Yards.	Tons.
1920.....	40,881	100,865	59,507
1921.....	47,711	118,237	69,182
1922.....	44,860	110,555	71,175
1923.....	50,115	127,052	74,962
1924.....	50,584	142,822	84,264

Waste and Rubbish Removed.

YEARS.	LOADS.		Cubic Yards.	Tons.
	Paper Carts.	Market Wagons.		
1920.....	3,794	2,717	47,949	5,641
1921.....	3,295	2,306	52,224	6,144
1922.....	2,850	4,055	54,071	6,455
1923.....	1,924	4,589	53,409	6,394
1924.....	1,901	4,601	53,443	6,390

Loads of Material Collected from February 1, 1920, to January 29, 1925.

YEARS.	Ashes.	Offal.	Rubbish.	Total Loads.	Tons.
1920.....	238,646	49,881	6,511	286,038	428,245
1921.....	264,244	47,711	6,786	318,741	469,961
1922.....	272,245	44,860	6,905	324,010	495,545
1923.....	280,448	50,115	6,513	337,076	515,590
1924.....	276,818	50,584	6,502	333,904	538,748

Collected by Contract.

DISTRICTS.	ASHES.				OFFAL.				
	Double Loads.	Auto Loads.	Cubic Yards.	Tons.	Single Loads.	Double Loads.	Auto Loads.	Cubic Yards.	Tons.
East Boston.....	13,315	796	74,535	30,373	.....	1,083	.....	3,791	2,237
Brighton.....	.....	6,729	67,290	27,420	.....	3,132	.....	10,962	6,468
West Roxbury.....	8,025	1,145	51,575	21,016	.....	369	789	9,182	5,417
Dorchester.....	35,335	8,581	262,485	106,962	669	7,408	.....	30,322	17,800
Hyde Park.....	3,001	21	15,215	6,200	.....	624	.....	2,496	1,472
Totals.....	59,676	17,272	471,100	191,971	669	12,616	789	56,753	33,484

Summary.

MATERIAL.	Cubic Yards.	Tons.
Ashes.....	471,100	191,971
Offal.....	56,753	33,484

Final Disposition of all Material in Loads and Tons (2,000 Pounds). Collected by the Sanitary Service, February 1, 1924, to January 29, 1925.

CLASS OF REFUSE.	COLEMAN DISPOSAL COMPANY.		COLLECTED AND DISPOSED OF BY CONTRACTORS.		TOTAL LOADS.	TOTAL TONS.
	Loads.	Tons.	Loads.	Tons		
House dirt and ashes.....	243,786	363,085	33,032	85,009	276,808	448,094
Offal.....	44,587	68,670	5,997	15,594	50,584	84,264
Waste and rubbish.....	6,502	6,390	.....	.....	6,502	6,390
Total.....	294,875	438,145	39,029	100,603	333,904	538,748

Cost of Collection and Disposal of Refuse by Contract in the City of Boston for the Year 1924-25.

Contract Districts and Population.	CHARACTER OF REFUSE.	Tons, (2,000 lbs.)	Total Tons.	Cost per Ton by Districts; Collection and Disposal.	COST PER DISTRICTS.			Where Disposed of.
					Cost.	Total Cost.	Total Cost per Capita.	
2..(65,924) ..	{Mixed refuse, principally ashes (no kitchen wastes).....	30,373		\$1 6291	\$49,480 91		Inland dumps.	
	{Garbage, principally kitchen wastes.....	2,237	32,610	5 6758	12,696 92	\$62,177 83	*	
4..(44,020) ..	{Mixed refuse, principally ashes (no kitchen wastes).....	27,420		\$1 8297	\$50,170 89		Inland dumps.	
	{Garbage, principally kitchen wastes.....	6,468	33,888	5 1129	33,070 84	\$3,241 73	*	
5..(33,906) ..	{Mixed refuse, principally ashes (no kitchen wastes).....	21,016		\$0 8649	\$18,177 44		Inland dumps.	
	{Garbage, principally kitchen wastes.....	5,417	26,433	2 7375	14,829 35	33,006 79	*	
6..(161,905) ..	{Mixed refuse, principally ashes (no kitchen wastes).....	106,962		\$1 5824	\$169,240 92			
	{Garbage, principally kitchen wastes.....	17,890	124,852	6 0627	108,450 63	277,691 55	Coleman Disposal Co. †	
11.Hyde Park (19,340)	{Mixed refuse, principally ashes (no kitchen wastes).....	6,200		\$1 2836	\$7,958 79		Inland dumps.	
	{Garbage, principally kitchen wastes.....	1,472	7,692	3 3008	4,858 79	12,817 58	*	
325,095	Totals.....	225,475		Av. \$1 6663		\$468,935 48		

* Removed beyond city limits and presumably fed to swine.
 † Contract for disposal.

Total as above..... \$468,935 48
 Add total of day labor table (between pages 168 and 169)..... 1,462,252 88
 Net amount of appropriation..... \$1,931,188 36

Cost of Collection and Disposal of Refuse by Day Labor Force in the City of Boston for the Year Ending January 31, 1925.

Districts and Population	CHARACTER OF REFUSE.	COST PER TON BY DISTRICTS.				COST OF DISTRICTS.					WHERE DISPOSED OF.		
		Tons (2,000 lbs.)	Total Tons	To Collect	For Disposal.	Total Collection and Disposal.	To Collect.	Total Cost to Collect.	For Disposal.	Total Cost of Disposal.		Total Cost of Collection and Disposal.	Total Cost per Capita, Collection, and Disposal.
1 (72,875)	Mixed refuse, principally ashes (no kitchen wastes).....	36,253		\$2 1451	\$0 0704	\$2 9928	\$75,215 61		\$2,550 82				Coleman Disposal Company.
	Garbage, principally kitchen wastes.....	5,451		5 4463		5 4468	29,688 00						Coleman Disposal Company.
	Store refuse, principally paper.....	114	41,818	5 8552		5 8552	667 50						Coleman Disposal Company.
				Av. \$2 5835	Av. \$0 0704	Av. \$2 6550		\$105,571 11		\$2,550 82	\$108,121 93	\$1 4850	
3 (35,832)	Mixed refuse, principally ashes (no kitchen wastes).....	22,591		\$2 1116	\$0 0427	\$2 1543	\$47,703 43		\$964 21				Coleman Disposal Company.
	Garbage, principally kitchen wastes.....	1,229	24,411	7 6998		7 6988	13,932 58						Coleman Disposal Company.
				Av. \$2 5219	Av. \$0 0427	Av. \$2 5676		60,671 77		964 21	61,635 98	1 4410	
5 (part) and 7 (155,793)	Mixed refuse, principally ashes (no kitchen wastes).....	65,693		\$3 7412	\$0 0450	\$3 8162	\$245,773 77		\$2,998 00				Coleman Disposal Company.
	Garbage, principally kitchen wastes.....	19,511		5 3353		5 3363	104,116 95						Coleman Disposal Company.
	Store refuse, principally paper.....	889	86,993	12 6029		12 6029	11,104 04						Coleman Disposal Company.
				Av. \$4 2279	Av. \$0 0450	Av. \$4 2729		360,994 76		2,998 00	363,992 76	2 3364	
8 and 9 (117,755)	Mixed refuse, principally ashes (no kitchen wastes).....	79,020		\$3 4819	\$0 0161	\$3 4582	\$275,155 45		\$1,339 45				Coleman Disposal Company.
	Garbage, principally kitchen wastes.....	16,405		5 9222	0 1538	6 0832	97,287 02		2,524 15				Coleman Disposal Company.
	Store refuse, principally paper.....	4,179	99,607	10 9088		10 9088	45,554 32						Coleman Disposal Company.
				Av. \$4 4963	Av. \$0 0465	Av. \$4 2368		417,996 79		3,863 60	421,860 39	3 5740	
10 (74,736)	Mixed refuse, principally ashes (no kitchen wastes).....	52,536		\$2 1551		\$2 1551	\$123,366 15						Coleman Disposal Company.
	Garbage, principally kitchen wastes.....	7,599		3 6571		3 1571	27,716 46						Coleman Disposal Company.
	Store refuse, principally paper.....	1,268	61,344	5 7411		5 7411	10,559 21						Coleman Disposal Company.
				Av. \$2 4557		Av. \$2 4537		161,641 82			161,641 82	2 0271	
	Coleman Disposal Company.....									345,000 00	345,000 00		
456,595	Totals	313,263		Av. \$3 5331	Av. \$1 1344	Av. \$4 6678		\$1,106,876 25		\$355,376 63	\$1,462,252 88	\$3 1778	

* The amount paid to Coleman Disposal Company is for disposal of all refuse collected by the city force and Dorchester contracts. District 6 on page 1-5

Total as above.....	\$1,462,252 88
Add total of contract table, page 16S.....	468,955 48
Net amount of appropriation.....	<u>\$1,931,188 36</u>

Coleman Disposal Company's contract calls for \$345,000 per year.

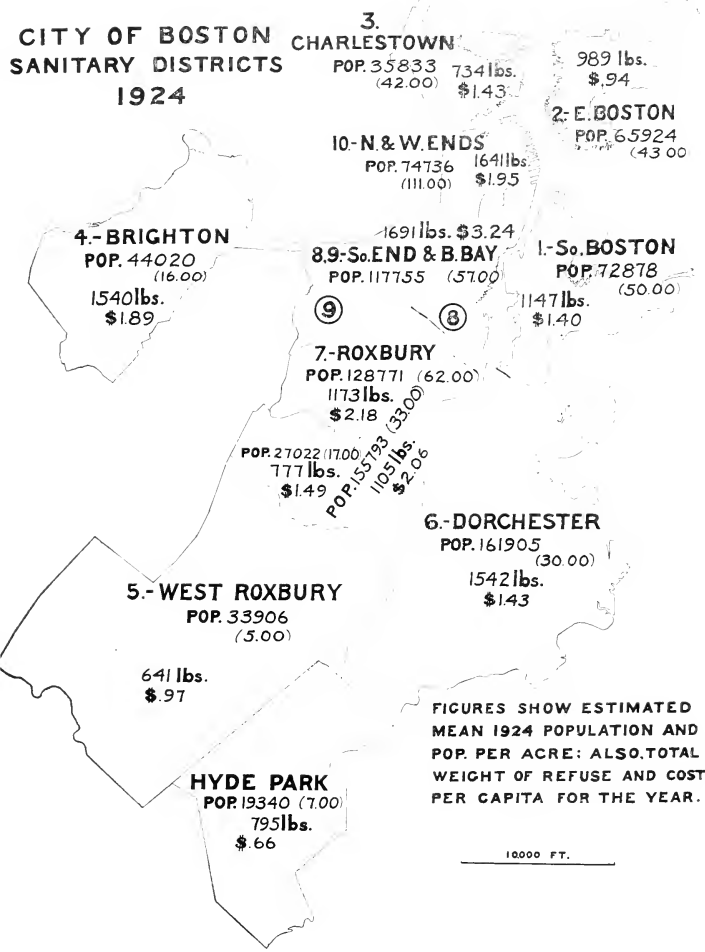


Details of Collected Refuse in Boston for the Year Ending January 20, 1925.

WARD	METS														GARDENS											WASTE AND RUBBISH										COMBINED TOTAL OF ASHES, GARBAGE, WASTE AND RUBBISH	
	METS														GARDENS											WASTE AND RUBBISH											
	METS														GARDENS											WASTE AND RUBBISH											
	METS														GARDENS											WASTE AND RUBBISH											
No.	No. of Trucks			No. of Haulers		No. of Men		No. of Horses		No. of Trucks		No. of Haulers		No. of Men		No. of Horses		No. of Trucks		No. of Haulers		No. of Men		No. of Horses		No. of Trucks		No. of Haulers		No. of Men		No. of Horses					
	Year	1924	1925	Year	1924	1925	Year	1924	1925	Year	1924	1925	Year	1924	1925	Year	1924	1925	Year	1924	1925	Year	1924	1925	Year	1924	1925	Year	1924	1925	Year	1924	1925				
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
6	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
7	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
8	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
9	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
10	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
TOTAL	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		

* Actual weight

**CITY OF BOSTON
SANITARY DISTRICTS
1924**



FIGURES SHOW ESTIMATED MEAN 1924 POPULATION AND POP. PER ACRE: ALSO, TOTAL WEIGHT OF REFUSE AND COST PER CAPITA FOR THE YEAR.

10000 FT.

SEWER AND SANITARY DIVISION — STREET
CLEANING AND OILING SERVICE.

General Administration:

Salary, supervisor (in part)	\$1,605 51
Salary, general foreman	3,008 22
Pensions, retired veterans	4,337 51
Pensions, retired laborers	7,142 70
Annuity, Acts of 1920 — chapter 132	600 00
Salary, medical inspector	800 00
Salary, chief veterinarian	1,000 00
Stationery	427 70
Telephone	681 78
Printing	940 60
Injured employees	5,322 59
Miscellaneous	289 30
Auto repairs and maintenance	2,093 60

\$28,249 51

General expenses other than general administration:

Wages, stablemen	\$48,086 66
Wages, yardmen	10,352 65
Wages, watchmen	5,796 94
Wages, foremen's driver	664 52
Wages, clerks and messengers	6,600 06
Hay and straw	26,808 48
Grain	19,393 83
Electric light	223 74
Veterinary service and medicines, Horseshoeing	443 31
Harnesses, etc.	3,611 85
Fuel	614 39
Fuel	561 72
Horses	7,000 00
Care of horses	9 00
Stable and yards, rent of	283 33
Stable and yards, supplies	1,701 95
Stable and yards, building repairs, Auto repairs and maintenance	2,059 84
	4,313 16

138,525 43

Operating expenses:

Salaries, district foremen	\$18,520 18
Salaries, inspectors	50,591 98
Wages, laborers	438,143 70
Hired autos	14,246 50
Holidays and pay allowed	58,748 29

Carried forward \$580,250 65 \$166,774 94

<i>Brought forward</i>	\$580,250 65	\$166,774 94
Vacations	20,018 13	
Dumps, use of	3,469 90	
Snow licenses	500 00	
Cart repairs	1,823 40	
Water cart repairs	130 00	
Tools and repairs	1,798 07	
Vehicle supplies	293 52	
Sweeping machine repairs	148 08	
Push carts and barrels	2,627 74	
Snow plows, repairs	583 22	
Push brooms, teamsters brooms, etc.	1,878 50	
Machine brooms	3,535 00	
Sand	834 44	
Water cart hose	325 37	
Flushing hose	537 80	
Refuse boxes	356 40	
Shovels, hoes and picks, etc	1,273 45	
Miscellaneous	1,793 30	
Autos, repairs and maintenance	52,756 52	
	<hr/>	674,933 49
		<hr/>
		<u>\$841,708 43</u>

STREET WATERING AND OILING BRANCH.

General administration:		
Salary, supervisor (in part)	\$139 61	
Stationery	37 19	
Advertising	10 00	
Printing	105 00	
Telephone	51 57	
Miscellaneous	137 22	
Auto repairs and maintenance	1,295 81	
	<hr/>	\$1,776 40
General expenses other than general administration:		
Horseshoeing	\$20 75	
Yard and stable supplies	159 45	
Auto repairs and maintenance	514 31	
	<hr/>	694 51
Operating expenses:		
Inspectors:		
Water	\$4,477 13	
Oil	5,033 13	
Sanding	807 94	
Vacation	533 12	
Holiday	809 35	
	<hr/>	
<i>Carried forward</i>	\$11,660 67	\$2,470 91

<i>Brought forward</i>	\$11,660 67	\$2,470 91
Calcide	84 09	
Stable repairs	30 69	
Labor:		
Water	4,290 54	
Oil	1,385 67	
Sanding	6,889 28	
Vacation	250 50	
Holiday	848 88	
Calcide	339 00	
Building repairs	1,047 04	
Allowed time	124 51	
Showers	40 50	
Hired autos	11,289 75	
Hired electric car sprinkler	4,864 00	
Tools	52 18	
Hose	45 00	
Hydrant repairs	112 66	
Sand	5,416 74	
Road oil	24,122 02	
Calcide	756 52	
Auto repairs and maintenance	3,355 75	
	<hr/>	77,005 99
		<hr/>
		<u>\$79,476 90</u>
Street Cleaning expenditures	\$841,708 43	
Street Watering and Oiling ex- penditures	79,476 90	
	<hr/>	
	<u>\$921,185 33</u>	

DISTRIBUTION OF EXPENDITURES.

Removing snow	\$83,583 32	
Snow work on crossings and gutters,	22,754 30	
	<hr/>	\$106,337 62
Flushing streets		25,013 61
Street patrolling by teams	\$36,119 60	
Street patrolling by push carts	174,829 05	
Collecting of refuse boxes	13,215 73	
	<hr/>	224,164 38
Cleaning of paved streets	\$235,292 57	
Cleaning of paved streets Elgin and Springfield sweepers	38,560 32	
Cleaning of macadam streets	63,669 70	
Cleaning of public alleys	1,360 58	
	<hr/>	338,883 17
Sanding of slippery streets		4,584 69
Work done for Sanitary Service		142,724 96
		<hr/>
Totals		\$841,708 43
Oiling public streets and ways		49,610 42
Watering public streets and ways		29,866 48
		<hr/>
Totals		<u>\$921,185 33</u>

Summary.

ITEMS.	STREET CLEANING BRANCH.			STREET WATERING AND OILING BRANCH.		
	1922-1923.	1923-1924.	1924-1925.	1922-1923.	1923-1924.	1924-1925.
Labor.....	\$614,050 85	\$630,918 18	\$685,772 62	\$38,869 45	\$23,510 89	\$27,454 38
Teaming.....	29,355 00	29,825 00	14,246 50	16,539 23	20,270 00	16,153 75
Supplies and repairs.....	97,478 06	159,290 50	141,689 31	79,315 18	65,061 44	35,868 77
Totals.....	\$740,883 91	\$820,033 98	\$841,708 43	\$126,723 86	\$108,842 33	\$79,476 90

Cost of Snow Work and Volume Removed.

DISTRICTS.	Crossings and Gutters.	Removal.	Total Cost.	Single Loads.	Cubic Yards.	Cost per Cubic Yard.
South Boston.....	\$3,565 56	\$2,880 66	\$6,446 22	823	2,058	\$1 39
East Boston.....	906 89	847 02	1,753 91	295	736	1 15
Charlestown.....	2,165 49	686 55	2,852 04	234	585	1 17
Dorchester.....	102 10		102 10			
Roxbury.....	444 43		444 43			
Uptown.....	591 87		591 87			
Downtown.....	3,405 15	20,434 03	23,839 18	14,919	37,297	0 547
Back Bay.....	431 02	3,606 27	4,037 29	1,232	3,080	1 17
North and West Ends.....	2,118 28	28,592 10	30,710 38	12,834	32,085	0 891
Patrol System.....	8,983 51	26,576 69	35,560 20	14,463	36,158	0 735
Totals.....	\$22,714 30	\$83,623 32	\$106,337 62	44,800	111,999	0 746

Snow Summary.

ITEMS.	Cost of Inspection, Labor and Teaming.	Cost of all Other Charges.	Total Cost.	AMOUNT OF SNOW REMOVED.		Cost per Load.	Cost per Cubic Yard.
				Loads.	Cubic Yards.		
Snow removal.....	\$55,515 43	\$28,067 89	\$83,583 32	44,800	111,999	\$1 86	\$0.746
Snow crossings and gutters.....	14,880 21	7,874 09	22,754 30				
Totals.....	\$70,395 64	\$35,941 98	\$106,337 62				

Cleaning of Paved Streets and Macadam Gutters.

District	PAVED STREETS		MACADAM GUTTERS		TOTAL PAVED STREETS AND MACADAM GUTTERS		PAVED STREETS					STREETS CLEANED AREA LOADS AND CUBIC YARDS					PAVED STREETS AND MACADAM GUTTERS				LOADS OF DIRT REMOVED						CUBIC YARDS OF DIRT REMOVED							
	Square Yards Cleaned (Sq.)	Equivalent Mileage 30-foot Roadway Cleaned (M.)	Square Yards Cleaned (Sq.)	Linear Miles Cleaned (M.)	Cleaned (Sq.)	Inspection, Labor and Tramping	All Other Charges	Total Cost	Cost per Mile 30-foot Roadway Cleaned	Cost per Thousand Square Yards Cleaned	Inspection, Labor and Tramping	All Other Charges	Total Cost	Cost per Mile Cleaned (M.)	Cost per Thousand Square Yards Cleaned (Sq.)	Inspection, Labor and Tramping	All Other Charges	Total Cost	Cost per Thousand Square Yards Cleaned (Sq.)	PAVED STREETS		MACADAM GUTTERS		PAVED STREETS AND MACADAM GUTTERS		PAVED STREETS			MACADAM GUTTERS			PAVED STREETS AND MACADAM GUTTERS		
																				Loads	Cost per Load	Loads	Cost per Load	Loads	Cost per Load	Total Cubic Yards	Per Thousand Square Yards	Cost per Cubic Yard Removed	Total Cubic Yards	Per Thousand Square Yards	Cost per Cubic Yard Removed	Total Cubic Yards	Per Thousand Square Yards	Cost per Cubic Yard Removed
	Loads	Cost per Load	Loads	Cost per Load	Loads	Cost per Load	Total Cubic Yards	Per Thousand Square Yards	Cost per Cubic Yard Removed	Total Cubic Yards	Per Thousand Square Yards	Cost per Cubic Yard Removed	Total Cubic Yards	Per Thousand Square Yards	Cost per Cubic Yard Removed																			
South Boston	13,068,925	776.64	3,018,447	771.97	16,087,372	\$10,097.14	\$7,969.58	\$16,686.96	\$21.46	\$1.219	\$8,766.55	\$3,299.87	\$12,066.42	\$21.089	\$3.994	\$19,461.68	\$9,259.49	\$28,721.08	\$1.721	3,054	\$5.457	1,699	\$7.096	4,753	\$6.043	6,108	446	\$2.728	3,398	1,125	\$3.548	9,596	569	\$3.021
East Boston	8,081,253	459.36	3,935,519	745.42	12,016,772	9,291.77	3,068.43	12,390.18	26.907	1.528	10,019.54	3,264.90	14,074.44	18.682	3.576	20,435.52	6,333.21	26,435.52	2.199	2,552	4.843	2,437	5.775	4,989	5.296	5,104	691	2.421	4,874	1,238	2.867	9,978	83	2.649
Charlestown	16,749,479	951.16	1,977,674	291.35	17,818,153	10,722.86	5,697.62	16,420.28	17.263	.98	8,157.13	1,235.94	4,392.16	21.514	4.074	13,879.79	6,932.05	20,812.44	1.168	1,221	13.448	362	12.133	1,583	13.147	2,442	145	6.728	724	671	6.066	3,166	183	6.573
Dorchester	6,028,945	342.55	2,037,151	583.82	8,066,096	8,188.94	4,936.48	12,125.52	35.886	2.027	7,166.01	2,963.99	10,130.00	26.255	4.972	15,354.05	7,000.47	22,354.52	2.771	3,307	3.696	3,128	6.435	3.473	6,614	1,096	1,848	6,256	3.07	1,619	12,870	1,590	1.736	
Roxbury	7,637,338	438.39	949,728	173.87	8,587,066	7,497.14	3,113.62	10,420.76	24.043	1.465	2,685.55	1,276.91	3,962.16	22.029	4.172	9,992.69	4,309.53	14,383.22	1.674	1,705	6.111	1,215	3.261	2,929	4.925	3,410	446	3.055	2,430	2,358	1,631	5,840	68	2.462
Uptown	24,362,923	1,384.25	3,109,692	734.49	27,472,615	13,479.26	5,558.35	17,099.61	11.561	.656	6,401.71	789.57	7,184.31	11.324	2.144	19,854.00	4,314.92	24,168.92	.872	2,144	7.931	829	8.666	2,973	8.136	4,288	176	3.966	1,658	494	4.333	5,946	214	4.068
Downtown	81,927,075	4,654.94			81,927,075	49,089.48	18,639.67	67,741.35	14.512	.826						49,089.68	18,639.67	67,741.35	.826	6,562	10.323			6,562	10.323	13,124	16	5.161			13,124	16	5.161	
Bark Bay	14,586,369	828.77	2,042,095	757.41	17,528,464	8,256.98	2,490.79	8,637.77	10.446	.595	9,181.01	2,688.00	11,869.01	21.296	4.938	15,437.99	5,988.79	20,526.78	1.114	718	11.361	923	12.839	1,641	12.508	1,436	998	5.681	1,846	627	6.43	3,282	187	6.254
North and West Ends	75,816,372	4,297.74			75,816,372	37,604.21	16,192.29	73,796.44	17.131	.973						37,604.24	16,192.29	73,796.44	.973	10,712	6.869			10,712	6.867	21,424	282	3.444			21,424	282	3.444	
Totals	248,849,668	14,139.18	17,111.11	1,278.63	266,169,988	\$17,408.99	\$6,268.67	\$23,292.57			48,179.53	\$15,499.17	\$63,669.79			\$280,779.43	\$78,182.84	\$298,962.27		31,975		10,593		42,568		63,950		21,186			85,136			
Average									\$16.645	\$9.945				\$19.425	\$3.677				\$1.123	\$7.338	\$6.01		\$7.023		256	\$3.679		1.233	\$3.005		319	\$3.511		

Macadam Streets Oiled.— Cost of Labor, Teaming, Oil, etc., Including Supervision.

DISTRICTS.	Area Oiled Once, Square Yards.	Equivalent Mile- age, 30-foot Roadway.	DATES OF OILING.		Total Cost.	Cost per Square Yard Oiled Once.	Gallons Used.	Gallons per Square Yard.
			First.	Last.				
South Boston.....	342,455	19.457	June 25	July 21	\$5,037 28	\$0 147	35,242	.102
East Boston.....	161,091	9.152	June 3	July 14	2,431 22	015	19,892	.123
Charlestown.....	80,581	4.578	June 6	Aug. 6	2,454 95	304	11,809	.146
Brighton.....	140,686	7.993	July 11	Aug. 19	3,526 09	025	20,700	.147
West Roxbury.....	331,498	18.835	May 27	Aug. 9	6,100 05	184	42,187	.127
Dorchester.....	824,717	46.858	June 6	Sept. 11	13,491 73	163	99,175	.12
Roxbury.....	565,127	32.109	June 3	Sept. 5	9,043 25	016	72,504	.128
South End, Back Bay and part of Roxbury.....	214,614	12.193	June 8	June 29	4,815 52	224	32,338	.15
Hyde Park.....	83,198	4.727	July 20	Aug. 29	2,710 03	325	13,002	.156
Totals.....	2,743,967	155.907			49,610 42		346,849	
Average.....						018		.126

APPENDIX E.

REPORT OF THE DIVISION ENGINEER OF
THE WATER DIVISION.

BOSTON, February 1, 1925.

MR. J. A. ROURKE,
Commissioner of Public Works.

DEAR SIR,— I respectfully submit the following report of the operations, income and expenditures of the Water Division for the year ending January 31, 1925.

The development of unimproved property in the suburbs, especially in West Roxbury, Dorchester and Brighton, has continued without interruption throughout the entire year. The total length of 6-inch to 16-inch water pipe laid for extension was 7.3 miles, all occasioned by the construction of new buildings. Again, as in the past three years, the greatest volume of work was done in West Roxbury, and petitions for water service in this district called for the laying of 2.7 miles of pipe; in the Brighton district two miles of water pipe were laid to satisfy the demands for water.

In anticipation of the rebuilding of the Massachusetts Avenue Bridge over the New York, New Haven & Hartford Railroad, the existing 24-inch low service main carried on the bridge was relocated under the railroad tracks and, in addition, the two dead ends of the 24-inch high service main on either side of the bridge were connected by the laying of 30-inch steel pipes under the railroad tracks. The high service main serves as a cross connection between the 42-inch high service main in Huntington avenue and the 36-inch high service main in Tremont street. Both main pipes under the tracks and on either side of the bridge abutments are 30-inch steel riveted pipe, laid with cover of 7 feet below the tracks; the horizontal length of the pipes is 103 linear feet, with ninety-degree elbow pipes at either end; the vertical legs are 30-inch steel pipes terminating at the upper end of pipes, with ninety-degree

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elbow pipes on which are 24-inch manholes. The upper elbows have the normal cover of 4 feet and connect to the 24-inch cast-iron pipes by reducers. The vertical legs are 20 linear feet in length. The entire length of the steel pipes is encased in a concrete monolith 18 inches thick. Each manhole has a brick chamber to provide access to the steel pipes.

A start was made during the year to improve the supply of the high service area in Brighton dependent on a 16-inch main by laying 3,000 linear feet of 24-inch pipe in Cleveland circle, Sutherland road and Commonwealth avenue, the main connecting to and supplied from the 30-inch and 35-inch high service mains of the Metropolitan Water System. This main is laid practically through the center of the high service territory and will maintain a constant pressure under heavy drafts and end the dangerous situation formerly existing as regards adequate fire protection. The construction of the West Border road in West Roxbury Parkway by the Metropolitan District Commission called for the laying of 2,050 linear feet of 16-inch main connecting to the Bellevue tank and serving as a second supply to the extra high service area in West Roxbury.

The completion of the Neponset Bridge over the Neponset river under construction for the past three years permitted the city again to supply the various islands in Boston Harbor belonging to Boston. Nine hundred fifty linear feet of 12-inch pipe were laid in the westerly sidewalk of the bridge, crossing the channel by a siphon pipe under the channel. During the construction of this bridge the islands were supplied by water obtained through the courtesy of the city of Quincy.

For the improvement of fire protection and to furnish the quantity of water demanded by the modern fire engine, our policy of replacing lines of old and small sized pipes with larger sizes, 8-inch, 10-inch or 12-inch, has continued and during the year 2,170 linear feet of 4-inch and 6-inch pipe were relaid with 8-inch and 12-inch pipe in the city proper.

Two thousand two hundred eighty-five linear feet 4-inch and 6-inch pipe were replaced by 8-inch and 12-inch pipe in Roxbury.

Three thousand seven hundred ninety linear feet 4-inch and 6-inch pipe were replaced by 8-inch and 12-inch pipe in Dorchester.

Nine hundred thirty linear feet 4-inch and 6-inch pipe were replaced by 8-inch and 12-inch pipe in West Roxbury.

Three thousand three hundred fifty linear feet 4-inch and 6-inch pipe were replaced by 8-inch and 12-inch pipe in Hyde Park. The total length of pipe replaced was 2.5 miles.

Among the longer lengths replaced were:

CITY PROPER.

Province street, from School street to Bromfield street, 514 linear feet 6-inch by 12-inch pipe.

Leverett street, from Green street to Cotting street, 860 linear feet 12-inch by 12-inch pipe. (Original pipe laid in 1849.)

Oneida street, from Harrison avenue to Albany street, 507 linear feet 6-inch by 12-inch pipe.

ROXBURY.

Pilgrim road, from Brookline avenue to Longwood avenue, 1,830 linear feet 6-inch by 12-inch pipe.

SOUTH BOSTON.

Bowen street, from F street to Dorchester street, 450 linear feet 4-inch by 10-inch pipe.

DORCHESTER.

Humphrey street, from Dudley street to Groom street, 950 linear feet 6-inch by 12-inch pipe.

Humphrey place, from Humphrey street, 355 linear feet 4-inch by 8-inch pipe.

Blue Hill avenue, from Harvard street to Paxton street, 900 linear feet 6-inch by 12-inch pipe.

Wildwood street, from Morton street to Paxton street, 640 linear feet 6-inch by 12-inch pipe.

HYDE PARK.

Thatcher street, from River street to Metropolitan avenue, 760 linear feet 4-inch by 12-inch pipe.

Metropolitan avenue, from Thatcher street to Central avenue, 1,200 linear feet 6-inch by 12-inch pipe.

Greenwood avenue, from River street to Metropolitan avenue, 940 linear feet 4-inch by 8-inch pipe.

All work in connection with the extension of and relaying of water pipes was performed under twenty-four contracts awarded at various intervals during the working season from April to November, inclusive, and every applicant for water requiring a main pipe extension was cared for without delay.

During the year service pipes to the number of 1,532 were installed, varying in size from $\frac{3}{8}$ -inch to 12-inch, as compared with 1,382 services laid in 1923. This continued increase of service pipes is an indication of the building activities in the suburbs. One hundred ninety-eight of the total number of services installed were 4-inch pipes to furnish sprinkler protection. Cleaning of the older pipes laid previous to or in the early '70's was continued with a resultant improvement in the water system. Under a contract with the National Water Main Cleaning Company of New York, 28,900 linear feet of 6-inch, 8-inch and 12-inch pipe were cleaned in Roxbury and 36,300 linear feet of 12-inch and 16-inch pipe were cleaned in Brighton. The permanent paving of the longer thoroughfares such as Shawmut avenue, Blue Hill avenue, Congress street, Pearl street, South street, Charles street, Essex street, Centre street, Roxbury, Border street, East Boston, placed a severe demand on the resources of the maintenance force. In anticipation of the permanent pavement, the policy has been continued of gating all post hydrants, replacing the old decaying wooden gate and hydrant boxes with either cast-iron or concrete boxes, and the regulating and setting to grade all sidewalk cocks and tubes in order that every service may be controlled at the sidewalk and excavation in the roadway eliminated.

The regular work of the Distribution Branch repairing leaks, establishing fire and service pipes, freeing stoppages, shutting off and letting on water, etc., was handled to cause a minimum of delay or discomfort to applicants for water, to water takers and to the traveling public.

In compliance with the Acts of 1907, relative to metering water services, 3,814 meters were set on old services in existence prior to 1907 and 1,258 meters were set on new service pipes, a total setting of 5,072 meters. On January 31, 1925, the total number of meters in service was 85,636 and there remain to meter only Wards 25 and 26 of Brighton, having about 5,000 services unmetered. At the present rate of installa-

tion, the entire city will be on metered service by January 1, 1926. With 94 per cent of Boston metered, the work of the meter branch is increasing correspondingly and in addition to the meters installed as above, 7,485 meters have been changed and reset and 6,287 meters have been repaired during the year.

A new record has been made in the Income Branch by the collecting of \$3,930,893 for the year — exceeding the revenue for 1923–24 by \$20,000. Practically all money collectible for unpaid water bills of previous years has been collected and from now on the receipts will be only for the bills rendered each year. The statute making water bills a lien on real estate still continues to work to the benefit of the Water Division in prompt payments and prevents loss to the city when property changes owners.

The policy of advertising the main pipe and special castings contracts in the last months of the year for the next season's work has been followed and works to the utmost satisfaction. Without exception, all deliveries for the year 1924 were as specified in every contract awarded and at the beginning of the working season a sufficient quantity of every variety of stock was on hand and both pipe laying contracts and work by the Water Division employees were performed without any delay.

Under a contract awarded in April 8,000 linear feet of 12-inch high pressure fire pipe and 4,000 linear feet of 16-inch high pressure fire pipe were laid in various streets in the business district, supplying sixty hydrants. There are now 15.8 miles of pipe with 430 hydrants in the High Pressure Fire System.

Further detailed information regarding operations of the various branches of this division will be found in the tables published herewith.

Very respectfully,

C. J. CARVEN,
Division Engineer.

Receipts and Expenditures, 1915-25.

Receipts.

	1915-16.	1916-17.	1917-18.	1918-19.	1919-20.	1920-21.	1921-22.	1922-23.	1923-24.	1924-25.
Sales of water	\$2,859,707 92	\$3,037,974 66	\$2,872,867 89	\$2,698,922 73	\$3,244,542 37	\$3,364,937 04	\$3,407,579 24	\$3,694,448 30	\$3,813,371 42	\$3,748,375 28
Other receipts	84,977 77	71,374 55	79,223 75	50,529 81	54,111 33	64,598 71	65,479 69	97,499 70	97,164 36	182,317 83
	\$2,944,685 69	\$3,109,349 21	\$2,952,091 64	\$3,049,452 54	\$3,298,653 90	\$3,429,535 75	\$3,473,058 93	\$3,791,948 00	\$3,910,735 72	\$3,930,693 11
Transfer by City Auditor			* 4,826 39							
	\$2,944,685 69	\$3,109,349 21	\$2,956,918 03	\$3,049,452 54	\$3,298,653 90	\$3,429,535 75	\$3,473,058 93	\$3,791,948 00	\$3,910,735 72	\$3,930,693 11
Balance, beginning of year	\$154,470 21	\$135,014 40	\$87,146 19	\$25,987 31	† 3,487 83			† 843,733 95	† 200,000 00	\$24,141 18
Balance, end of year	† 135,014 40	† 87,146 19	† 25,987 31	† 3,487 83			\$43,733 95		24,141 18	26,737 35
Transferred to Collecting Department	24,500 00	25,774 09	27,264 14	26,165 88	30,317 74	\$33,570 54	34,596 76	46,425 42	50,522 49	58,653 86
Transferred to city loan account	239,946 70	407,823 86	16,000 00	124,263 90	390,095 22	209,958 26	161,000 00	250,233 01	113,570 40	16,000 00
Transferred to appropriation for service mains and relaying mains			35,000 00	30,000 00				200,000 00	208,180 00	217,638 84
Transferred to appropriation for High Pressure Fire Service								23,000 00		
Transferred to appropriation for High Pressure Fire system extension								100,000 00	410,000 00	175,000 00

Expenditures.

	1915-16.	1916-17.	1917-18.	1918-19.	1919-20.	1920-21.	1921-22.	1922-23.	1923-24.	1924-25.
Current expenses	\$964,135 19	\$917,823 64	\$1,045,543 65	\$1,055,842 87	\$1,010,634 32	\$1,253,166 33	\$1,232,418 76	\$1,396,212 50	\$1,229,573 73	\$1,608,320 10
Service and relaying mains	49,455 84	47,865 21	97,058 58	51,599 48	3,487 83				384,038 82	215,042 67
Metropolitan water assessment	1,665,006 29	1,609,132 79	1,752,004 76	1,741,098 84	1,865,104 67	1,885,924 91	1,958,528 33	1,784,257 21	1,872,413 17	1,829,073 63
Interest	91,259 22	87,866 59	80,494 28	71,268 00	61,162 73	45,874 33	41,852 66	34,449 49	25,534 00	24,680 00
Refunded water rates	738 38	628 33	611 26	962 99	1,330 82	1,041 38	928 47	1,104 32	941 93	626 68
	\$2,710,594 83	\$2,723,619 56	\$2,975,712 77	\$2,929,682 18	\$2,881,728 77	\$3,186,006 95	\$3,233,728 22	\$3,216,023 52	\$3,512,501 65	\$3,678,643 08

* Transfer from Reserve Fund.

† Balance of appropriation for service mains and relaying mains.

‡ Amount expended for current expenses and extensions, there being one appropriation only.

FINANCIAL STATEMENT.

RECEIPTS.

Sales of water	\$3,748,575 28
Service pipes and repairs	97,380 71
Fire, motor and elevator pipes, new and repairs	60,105 22
Labor and materials for miscellaneous work	8,021 94
Fees for Summonses	6,087 18
Sales of old materials	5,436 18
Sales of merchandise	1,784 91
Interest on bank deposits	1,273 25
Damages to hydrants	639 93
Shutting off and letting on water for non payment	558 00
Board of horses	567 50
Testing meters	225 00
Sales of gasolene	193 60
Drill returned	83 00
Workmen's Compensation	69 00
Sales of automobile accessories	52 72
Damage claim	25 39
Rebate on gasolene	8 00
Delivering water	5 50
Sale of lampwicks	80
Total income	\$3,930,893 11

Transferred to City Loan account to pay Hyde Park Water Debt.	\$16,000 00	
Transferred to credit of Collecting Department	58,653 86	
Transferred to appropriation for Service Mains and Re-laying Mains	217,638 84	
Transferred to appropriation for High Pressure Fire System Extension	175,000 00	
		<u>467,292 70</u>
		<u>\$3,463,600 41</u>

EXPENDITURES.

Current expenses and extensions	\$1,608,320 10
Interest on water loans	24,680 00
Refunded water rates	626 68
Metropolitan water assessment	1,829,973 63
	<u>\$3,463,600 41</u>

SERVICE MAINS AND RELAYING MAINS.

Balance unexpended February 1, 1924	\$24,141 18
Appropriation from water income May 20, 1924	\$200,000 00
Appropriation from water income January 31, 1925	17,638 84
Total appropriation 1924-25	\$241,780 02
Expended during fiscal year 1924-25	215,042 67
Balance unexpended	\$26,737 35

Details of expenditures under appropriation for current expenses and extensions for the fiscal year ending January 31, 1925. (From revenue.)

		EXTENSION.			
Construction of new mains		\$130,563	78		
Replacement of old mains		49,989	76		
New hydrants		9,756	30		
		<hr/>			
Total extensions				\$190,309	84
MAINTENANCE.					
Office and Engineering Branch:					
Salaries and wages	\$47,756	52			
Traveling expenses	1,505	35			
Printing, stationery and postage	2,706	70			
Miscellaneous	1,149	49			
		<hr/>		\$53,118	06
Income Branch:					
Salaries and wages	\$151,739	72			
Traveling expenses	2,321	45			
Printing, stationery and postage	5,964	06			
Miscellaneous	4,245	59			
		<hr/>		164,270	82
Distribution Branch:					
Salaries and wages	\$35,486	02			
Traveling expenses	965	48			
Printing, stationery and postage	876	35			
Miscellaneous	1,990	92			
		<hr/>		39,318	77
Meter Branch:					
Salaries and wages	\$16,377	53			
Traveling expenses	26	30			
New meters and setting	74,366	02			
Meters, repairing, resetting, testing, etc.	36,643	61			
Printing, stationery and postage	623	33			
Shops	17,382	99			
Laborers' vacations	1,313	15			
Holiday	5,189	30			
Miscellaneous	1,439	27			
		<hr/>		153,361	50
Inspection of castings		7,335	40		
Damages		35,399	52		
Yards		69,239	33		
Shops		39,727	41		
Stables		11,353	08		
Tools and repairs		28,965	85		
Main pipe relocation		15,403	75		
Main pipe repairs		93,309	69		
Service pipes, new		106,273	26		
Service pipes, changes		12,324	17		
Service pipes, repairs		114,781	56		
Hydrant, changes		34,456	70		
Hydrant, repairs		64,560	63		
		<hr/>			
Carried forward		\$786,491	85	\$190,309	84

<i>Brought forward</i>	\$786,491 85	\$190,309 84
Water post, changes	119 17	
Water post, repairs	767 13	
Fountain, changes	214 91	
Fountain, repairs	4,469 07	
Fountain, on account of ice	1,260 35	
Holiday	49,096 44	
Investigations	616 89	
Off and on water	22,101 11	
Accommodation work	1,685 32	
Work on account of Office and Engineering Branch	66 97	
Work on account of Income Branch	736 13	
Work on account of Meter Branch	724 15	
Work on account of waste detection	310 47	
Work on account of new meters	8,568 53	
Work on account of meter repairs	9,586 41	
Launch, repairs and supplies	410 13	
Veterans' pensions	7,849 58	
Laborers' pensions	11,692 58	
Laborers' vacations	14,505 32	
Workmen's compensations	3,251 81	
Emergency Service	55,390 54	
Garage	1,572 05	
Medical inspector	550 00	
Taxes	269 00	
High Pressure Fire System	5,092 79	
Harbor service	120 81	
Automobiles	40,759 66	
Total maintenance		1,284,986 82
Merchandise sold and stock consigned to junk		3,989 95
Stock purchased		487,597 65
		<hr/>
Less stock used and disposed of		\$1,966,884 26
		358,564 16
		<hr/>
Total expenditures from appropriation for current expenses		<u>\$1,608,320 10</u>

Details of expenditures under appropriation for "Service Mains and Relaying Mains." (From revenue.)

Construction of new mains	\$138,889 14
Replacement of old mains	26,236 61
New hydrants	4,738 80
Main pipe, relocation	17,879 41
Main pipe, repairs	2,716 85
Service pipes, new	16,909 38
Service pipes, changes	10 80
Service pipes, repairs	300 03
Hydrant, changes	5,169 54
Hydrant, repairs	73 04
Fountain repairs	10 80
New meters	2,092 07
Yards	16 20
	<hr/>
Total expenditures "Service Mains and Relaying Mains," 1924-25	<u>\$215,042 67</u>

COST OF CONSTRUCTION AND CONDITION OF WATER DEBT.

Cost of construction to February 1, 1925	\$19,546,435 08
Cost of construction to February 1, 1924	19,186,260 69
Increase during the year	<u>\$360,174 39</u>
Outstanding loans February 1, 1924	\$625,000 00
Outstanding loans February 1, 1925	250,000 00
Decrease during the year	<u>\$375,000 00</u>
Water Sinking Fund February 1, 1924	\$359,000 00
Water Sinking Fund February 1, 1925	000,000 00
Decrease during the year	<u>\$359,000 00</u>
Gross Water Debt February 1, 1924	\$625,000 00
Gross Water Debt February 1, 1925	250,000 00
Decrease during the year	<u>\$375,000 00</u>
Cochituate Water Sinking Fund receipts 1924-25:	
Interest on investments	\$9,925 00
Interest in bank deposits	1,491 14
	<u>\$11,416 14</u>
Cost of existing works January 31, 1925:	
Pipe yards and buildings	\$94,832 16
Engineering expenses	57,873 58
Distribution system (addition during the year, \$360,- 174.39)	18,925,729 34
Hyde Park water works	468,000 00
	<u>\$19,546,435 08</u>
High Pressure Fire System additions during the year (\$325,803.11)	<u>\$2,026,623 84</u>

INCOME BRANCH.

Table No. 1.—Statement of Each Year's Water Rates, 1906 to 1925, as of January 31, 1925.

ACCOUNT OF YEAR.	Amount Assessed.	Amount Abated.	Amount Collected.	Outstanding.
1906.....	\$2,524,205 25	\$37,599 28	\$2,486,605 97	
1907.....	2,619,031 00	34,959 33	2,584,071 67	
1908.....	2,645,962 55	36,939 32	2,609,023 23	
1909.....	2,694,408 57	49,407 44	2,645,001 13	
1910.....	2,845,900 66	117,818 49	2,728,182 17	
1911.....	2,863,501 75	65,439 47	2,798,062 28	
1912.....	3,001,771 87	49,937 87	2,943,402 48	\$8,431 52
1913.....	3,004,331 52	42,088 77	2,954,183 62	8,059 13
1914.....	3,034,885 83	41,544 93	2,970,232 82	23,108 08
1915.....	2,960,797 45	15,084 24	2,903,015 36	42,697 85
1916.....	3,130,590 53	16,390 64	3,062,749 14	51,450 75
1917.....	3,120,878 86	19,287 29	3,043,454 21	58,137 36
1918.....	3,359,691 95	98,624 99	3,197,142 01	63,924 95
1919.....	3,210,116 91	27,111 37	3,114,260 45	68,745 09
1920.....	3,503,644 58	61,968 25	3,379,770 19	61,906 14
1921.....	3,615,629 41	34,098 26	3,523,553 38	57,977 77
1922.....	3,612,681 41	31,357 21	3,520,318 43	61,005 77
1923.....	3,816,896 92	32,810 87	3,722,286 43	61,799 62
1924.....	3,831,504 44	25,834 56	3,485,828 89	319,840 99
1925.....	115,351 49	176 20	38,385 72	76,789 57
Total outstanding,				\$963,874 59

NOTE: Amount outstanding same date in 1924, \$981,950.44.

Table No. II.—Elevator, Motor and Fire Services.

Elevator services installed.....	—
Elevator services abandoned.....	2
Total number of elevator services in use January 31, 1925.....	508
Fire services installed.....	203
Fire services abandoned.....	2
Total number of fire services in use January 31, 1925.....	2,508
Total number of motor services in use January 31, 1925.....	96
Number of motor services metered.....	20

METER BRANCH.

Table No. 1.— Statement of Work During Fiscal Year 1924-25.

MAKE.	New Sets.	Discontinued.	CHANGED.		Tested.	Repaired in Shop.	Resets.	Repaired in Service.
			Out.	In.				
Hersey disc.....	247	389	3,213	2,845	3,687	2,559	138	512
Worthington disc.....	190	104	1,480	1,042	2,169	1,282	53	399
Crown.....	16	27	209	52	303	73	2	13
American.....		11	117	90	171	123	8	130
Hersey rotary.....	10	12	133	58	195	55	1	110
Nash.....	7	12	126	58	183	57		12
Lambert.....	5	4	44	17	66	44		5
Trident.....	1	4	24	15	33	18		5
Keystone.....	1	6	13	12	19	12	3	
Empire.....		1	11	5	15	16		
Hersey detector.....	7	1			7			32
King.....	841	111	1,444	698	2,121	1,277	117	159
Hersey compound.....								16
Watch dog.....	3,566	52	667	2,569	8,045	770	143	191
Federal.....	176		3	24	245		1	38
Protectus.....	5							1
Gem.....		1			1	1		
Standard.....			1		1			
Totals.....	5,072	735	7,485	7,485	17,261	6,287	469	1,623

Table No. II.

Meters in Service, January 31, 1925.

MAKE.	DIAMETER IN INCHES.										Totals.
	$\frac{1}{2}$	$\frac{3}{4}$	1	1 $\frac{1}{2}$	2	3	4	6	8	10	
Hersey disc.....	42,922	3,182	1,415	717	255	103	50	4	...	...	48,648
Hersey rotary.....	363	346	223	174	178	61	24	14	...	...	1,383
Crown.....	471	490	304	186	164	64	50	10	...	...	1,739
Nash.....	434	182	120	31	36	3	...	...	...	...	806
Lambert.....	312	104	72	18	17	...	3	...	...	...	526
Trident.....	202	5	3	4	5	16	9	3	...	...	247
Detector.....	...	...	...	...	...	4	15	26	13	6	64
Worthington.....	...	8	26	1	8	11	1	...	...	...	55
Worthington disc.....	10,003	28	8	16	57	51	15	...	...	...	10,178
Keystone.....	193	171	23	2	2	10	...	2	...	...	403
Metropolitan.....	...	12	1	...	...	...	...	...	...	...	13
American.....	227	447	...	...	...	...	...	...	...	...	674
Worthington turbine.....	...	...	...	...	...	...	1	...	...	...	1
Empire.....	137	3	3	4	...	...	...	...	...	...	147
Protectus.....	...	...	...	...	...	...	1	2	2	2	7
Gem.....	...	...	...	...	1	...	...	2	...	...	3
Standard.....	5	...	...	...	...	...	...	...	...	...	5
Watch Dog.....	7,155	353	186	106	81	28	...	...	...	...	7,909
Thomson.....	6	2	...	...	...	...	...	...	...	...	8
Union.....	2	1	...	...	...	...	...	...	...	...	3
King.....	11,909	321	222	76	65	...	...	...	...	...	12,593
Hersey compound.....	...	...	...	...	...	...	1	8	...	...	9
B. W. W.....	...	1	...	...	...	...	...	...	...	...	1
Gamon.....	1	...	...	...	...	...	...	...	...	...	1
Federal.....	213	...	...	...	...	...	...	...	...	...	213
Totals.....	74,555	5,656	2,606	1,335	869	351	170	71	15	8	85,636

Table No. 1.

Length of Water Pipes and Connections Owned and Operated by the Public Works Department, Water Division (Water Service) and Number of Valves in Same, January 31, 1925.

	DIAMETER OF PIPE IN INCHES.													Totals.			
	48	42	40	36	30	24	20	16	14	12	10	8	6		4	3	2
Length owned and operated January 31, 1924 (feet).....	10,533	15,980	16,081	43,535	93,331	76,532	86,520	279,838	5,041	1,528,212	436,437	872,495	1,117,609	92,244	9,738	6,591	4,720,737
Gate valves in same.....	9	4	8	20	59	68	72	633	19	3,920	1,451	2,974	3,649	376	15	16	13,493
Air valves in same.....	13	5	8	34	106	64	43	71	1	41	1	3	1	1	1	1	391
Blow-offs in same.....	1	4	3	11	34	23	46	65	.....	154	44	119	113	55	9	1	682
Length laid and re-laid during year 1924-25.....					376	3,431		3,276		23,417	4,833	19,397	953			175	55,861
Gate valves in same.....		1			4	4		7		114	17	60	11			.....	215
Air valves in same.....		1			4	3		2		3	3	9	1			.....	18
Blow-offs in same.....						3		2		3	1	9	1			.....	28
Length abandoned during year 1924-25.....						396		303		3,599	223	747	9,069	4,539	296	70	19,242
Gate valves in same.....					1			2		10		4	30	6		.....	52
Air valves in same.....										2						.....	4
Blow-offs in same.....										3		10			2	.....	15
Length owned and operated January 31, 1925 (feet).....	10,533	15,980	16,081	43,535	93,707	79,597	86,520	282,834	5,041	1,548,630	441,047	891,145	1,130,493	87,705	9,442	6,696	4,757,356
Gate valves in same.....	9	4	9	20	59	72	72	638	19	4,024	1,468	3,030	3,630	571	15	16	13,656
Air valves in same.....	13	5	9	34	109	70	43	74	.....	42	1	3	1	1	.....	1	405
Blow-offs in same.....	1	4	3	11	34	26	46	67	.....	154	45	118	122	56	7	1	695

* 901.01 miles.

Table No. II.

Total Number of Hydrants in System January 31, 1825.

	Lowry.	Boston Lowry.	Boston Post.	Ordinary Post.	Bachelor and Finerman Post.	Judlow Post.	Chapman Post.	Coffin Post.	Matthews Post.	Boston.	Totals.
City proper (public).....	482	40	523	291	125					58	1,519
“ (private).....	4		9	6						39	58
Roxbury (public).....	335	57	463	448	186					15	1,504
“ (private).....	2	1	3	4						10	20
West Roxbury (public).....	33	163	495	894	185					13	1,783
“ (private).....				15	1					1	17
Brighton (public).....	21	50	282	501	80					13	947
“ (private).....				8						2	10
Dorchester (public).....	215	147	700	1,163	124					21	2,370
“ (private).....		1	8		2					4	15
South Boston (public).....	111	22	260	221	29					16	659
“ (private).....	3			15						27	45
East Boston (public).....	32	15	217	215	36					6	521
“ (private).....	8	1		9						25	43
Charlestown (public).....	86	38	145	62	15					2	348
“ (private).....	13	1		37						5	56
Hyde Park (public).....			26	290	42	7	127	1			493
“ (private).....						13	55		4		72
Deer Island (private).....			1	19							20
Long Island (private).....				6							6
Thompson's Island (private).....				2							2
Gallop's Island (private).....				3						1	4
Rainsford Island (private).....				3							3
Quincy.....				9							9
Total number (public).....	1,315	532	3,111	4,085	822	7	127	1		144	10,144
Total number (private and suburban).....	30	4	21	136	3	13	55		4	114	380

Table No. III.

Service Pipes of Various Sizes Connected With the System, January 31, 1925.

SIZE.	Total Number.	Aggregate Length in Linear Feet.
½-inch	6,914	158,287
¾-inch	87,103	2,420,216
1-inch	3,673	124,792
1-inch	5,622	200,813
1¼-inch	589	17,434
1½-inch	1,695	51,170
2-inch	2,302	70,243
2½-inch	12	267
3-inch	996	28,307
4-inch	2,972	81,866
6-inch	204	23,900
8-inch	62	4,380
10-inch	15	1,771
12-inch	18	3,896
16-inch	5	448
Totals.....	* 112,182	3,187,790

* The completion of the metering of all services to within 5 per cent of the total number of live service pipes discloses the fact that the total number of service pipes will not exceed 90,000. The large discrepancy is found to be due to the fact that previous to 1880 no deductions were made for pipes abandoned, etc.

Table No. IV.
Hydrant Repairs.

CAUSE OF REPAIRS.	Number of Jobs.	Cost.
Boxes raised, lowered, reset, repaired and renewed.....!	421	\$6,935 33
Barrels changed, relocated, reset and repaired.....	715	5,637 99
Frost.....	50	475 36
Paint worn off.....	9,655	3,490 45
Contractors, corporations, other departments and divisions.....	16	490 98
Street construction and repairs.....	38	1,316 20
Repaving on account of repairs.....	145	2,076 89
Traffic.....	138	2,160 36
Hydrants inspected, oiled, cleaned, pumped, wasted and cleared of snow.....	91,392	22,647 93
Salt delivered to Fire Department, bags — 3,243.....		3,710 75
Changing threads on nozzles.....	42 2	355 87
Totals.....	102,992	\$49,298 11

Table No. V.

Maintenance of Main Pipe for Fiscal Year.— Ending January 31, 1925.

NATURE OF WORK.	Number of Jobs.	Total Cost.
Box tops renewed.....	40	\$476 86
Cleaning main pipes (by contractors).....	33	21,849 20
Dead ends blown off.....	44	147 41
Gates leaking at packing.....	92	1,039 52
Gates examined, salted, inspected, etc.....	5,996	3,476 47
Gate locations marked.....	7,892	2,488 96
Gates repaired.....	91	2,432 85
Gate boxes cleaned out.....	57	1,033 97
Gate box covers and frames repaired.....	106	1,436 09
Gate boxes renewed.....	333	14,480 10
Gate boxes raised and lowered.....	219	5,038 83
Leaking joints repaired.....	123	3,564 93
Leaks due to settlement and other causes.....	40	4,266 72
Repairs on bridges (on pipes, boxes, etc).....	41	3,419 81
Repaving (including contractor's miscellaneous jobs).....	246	7,656 60
Miscellaneous jobs.....	38	2,264 67
Totals.....	15,391	\$75,072 99

Cost of Extension of Main Pipe.

Street.	Location.	District.	Size (Inch)	Feet.	Cost of Department Materials, etc.	Cost of Labor.	Cost of Inspection.	Total Cost.	Remarks.
Orchard road.....	From Corey road.....	Brighton.	6	113	\$266 02	\$426 59	\$52 94	\$745 55	Public, rock, clay.
Walbridge street.....	From Beainerd road.....	Brighton.	6	110	245 28	113 00	11 50	369 78	Private, clay.
	Totals.....		6	223	\$511 30	\$539 59	\$64 44	\$1,115 33	
Florence avenue.....	Between Allston street and Commonwealth avenue.	Brighton.	8	400	\$1,039 86	\$515 85	\$76 02	\$1,631 73	Private, gravel, rock.
Lane park.....	From Foster street.....	Brighton.	8	261	502 93	330 00	32 58	865 51	Private, clay.
Pertshire road.....	From Dunboy street.....	Brighton.	8	411	776 16	488 33	43 13	1,307 62	Private, hard clay.
Perle street.....	From Washington street.....	Brighton.	8	182	437 38	206 00	8 63	652 01	Private, gravel and clay.
Claymoss road.....	Between Commonwealth avenue and Monastery road.	Brighton.	8	784	1,729 04	1,923 17	90 00	3,742 51	Private, sand and rock.
Ransom road.....	From Claymoss road.....	Brighton.	8	10					
Matchett street.....	From Perthshire road.....	Brighton.	8	60	99 43	293 24	20 13	412 80	Public, tar and macadam.
Goodenough street.....	From Faneuil street.....	Brighton.	8	250	698 76	344 94	9 50	1,053 20	Private, sand and gravel.
Elizabeth avenue.....	Between Allston street and Commonwealth avenue.	Brighton.	8	359	962 76	732 61	51 30	1,749 70	Private, clay and rock.
South street.....	Between Beach and Tufts streets.....	City Proper.	8	173	669 23	548 67	25 55	1,243 45	Public, granite block and concrete base.
South street.....	From Kincland street.....	City Proper.	8	95					
	Carried forward.....		8	2,985	\$6,915 55	\$5,383 14	\$359 84	\$12,658 53	

Cost of Extension of Main Pipe.—Continued.

STREET.	Location.	District.	Size (Incl.)	Feet.	Cost of Department Materials, etc.	Cost of Labor.	Cost of Inspection.	Total Cost.	Remarks.
	<i>Brought forward</i>		8	2,985	\$6,915 55	\$5,383 14	\$359 84	\$12,467 53	
Dalketh street.....	From Howard avenue.....	Dorchester.	8	56	265 72	325 32	25 00	616 04	Public, concrete.
Donald road.....	From Blue Hill avenue.....	Dorchester.	8	15	118 72	17 00	5 75	141 47	Private, clay.
Burgoyne street.....	From Beaumont street.....	Dorchester.	8	500	1,230 68	1,038 65	16 30	2,305 72	Private, gravel.
Helena road.....	From Burgoyne street.....	Dorchester.	8	74					
Becket street.....	Between Van Winkle and Codman streets.	Dorchester.	8	676	1,660 27	1,140 47	43 44	2,844 18	Private, gravel.
Wildwood street.....	Between Morton and Middleton streets.	Dorchester.	8	189	381 50	199 25	5 75	586 50	Public, clay.
Bertram street.....	At Old Colony Parkway.....	Dorchester.	8	131	313 06	162 88	5 39	481 33	Private, gravel.
Howe street.....	From Old Colony Parkway.....	Dorchester.	8	94	199 92	118 37	5 39	323 68	Private, gravel.
Fairview street.....	Between Adams and Gustine streets,	Dorchester.	8	208	621 54	399 67	21 72	1,042 93	Private, gravel.
Branch street.....	Between Butler and Medway streets,	Dorchester.	8	366	771 49	537 54	67 50	1,376 53	Private, clay.
Myrtlebank avenue.....	From Milton street.....	Dorchester.	8	171	385 37	162 45	11 50	559 32	Private, gravel.
Fessenden street.....	From Norfolk street.....	Dorchester.	8	32	57 94	195 85	18 00	271 79	Private, rock.
Mildred avenue.....	From Norfolk street.....	Dorchester.	8	152	257 93	291 89	13 50	563 32	Private, clay and rock.
Hallowell street.....	From Oakland street.....	Dorchester.	8	71	160 20	133 63	28 74	322 57	Private, loamy clay.
Fernald terrace.....	From Quincy street.....	Dorchester.	8	421	1,055 99	1,495 15	117 36	2,668 50	Private, rock.
Rockdale street.....	From Randolph road.....	Hyde Park.	8	84	145 47	110 02	17 25	272 74	Private, rock, hardpan.

Ruskin road.....	Between Ralston and Roseberry roads.	Hyde Park.	8	524	1,223 52	745 33	52 94	2,021 79	Private, clay.
Hollingsworth street.....	Between Oakland street and Randolph road.	Hyde Park.	8	549	1,120 28	637 36	73 31	1,850 95	Private, clay and rock.
Ruskin road.....	From Wood avenue.....	Hyde Park.	8	138	337 78	207 99	10 86	556 63	Private, clay.
Agnes avenue.....	From River street.....	Hyde Park.	8	72	121 87	224 65	9 58	356 10	Private, gravel and rock.
Friendship road.....	Between Osceola street and Belnel road.	Hyde Park.	8	438	970 52	546 30	43 44	1,560 26	Private, sand and gravel.
Burnham street.....	From Southampton street.....	Roxbury.	8	57	295 77	175 07	.....	470 84	Private.
Cunningham street.....	Between Howard avenue and Hartford street.	Roxbury.	8	191	330 83	846 50	47 90	1,225 23	Public, gravel.
Reed street.....	Between Hunneman and Thorndike streets.	Roxbury.	8	176	513 01	280 50	28 75	822 26	Public, macadam.
Harold street.....	Between Crawford and Howland streets.	Roxbury.	8	124	329 83	199 25	69 00	598 08	Public, sand and gravel.
Waldon road.....	From Washington street.....	West Roxbury.	8	425	1,095 99	483 51	23 00	1,602 50	Private, ash filled.
Pond View avenue.....	From Moraine street.....	West Roxbury.	8	326	815 94	388 33	29 87	1,234 14	Public, under construction
Atlantis street.....	From Lasell street.....	West Roxbury.	8	135	347 92	165 00	11 50	524 42	Private, sandy clay.
Rosindale avenue.....	From Beech street.....	West Roxbury.	8	206	638 03	278 44	29 87	946 34	Private, ash and clay.
Winton street.....	From Beech street.....	West Roxbury.	8	267	750 56	801 00	36 60	1,588 16	Public, clay and rock.
Moodly street.....	From Oakland street.....	West Roxbury.	8	430	1,054 19	609 32	51 75	1,715 26	Private, clay.
Granfield avenue.....	From Washington street.....	West Roxbury.	8	335	630 00	378 49	31 50	1,039 99	Private, ash filled.
Alliandra road.....	Between Maple and Willow streets.	West Roxbury.	8	427	1,017 27	554 00	23 00	1,594 27	Private, ash filled.
Marion street.....	From Centre street.....	West Roxbury.	8	287	650 05	308 39	19 01	977 45	Private, loam and clay.
Roberts avenue.....	From La Grange street.....	West Roxbury.	8	530	1,274 14	531 30	14 26	1,819 70	Private, gravel, clay.
	<i>Carried forward.</i>		8	11,862	\$28,078 85	\$20,092 01	\$1,368 66	\$49,539 52	

Cost of Extension of Main Pipe. — *Continued.*

STREET.	Location.	District.	Size (Inch)	Feet.	Cost of Department Materials, etc.	Cost of Labor.	Cost of Inspection.	Total Cost.	Remarks.
	<i>Brought forward</i>			8 11,882	\$28,078 85	\$20,092 01	\$1,368 66	\$49,539 52	
Goodway road.....	Between Bourne and Florence streets,	West Roxbury.	8	641	1,355 01	695 34	25 88	2,076 23	Private, gravel, clay and ash.
Hillside avenue.....	From Crandell street.....	West Roxbury.	8	224	524 96	327 58	16 29	868 83	Private, clay.
Hawthorne street.....	From Florence street.....	West Roxbury.	8	73	119 36	118 64	8 63	246 63	Private, loamy clay.
Grover street.....	From Neponset avenue.....	West Roxbury.	8	60	240 07	233 00	11 50	484 57	Private, sand.
Parkton road.....	Between Bonad and Russett roads.....	West Roxbury.	8	464	1,087 53	475 32	21 72	1,584 57	Private, rock and clay.
Bonad road.....	Between Weld street and Parkton road.	West Roxbury.	8	267	552 95	248 50	21 72	823 17	Private, clay.
Glenside avenue.....	From Glen road.....	West Roxbury.	8	121	205 78	443 00	29 49	678 27	Private, clay and gravel.
Metropolitan avenue.....	West of Washington street.....	West Roxbury.	8	60	146 38	60 30	5 43	212 11	Public, under construction.
Maynard street.....	Between Metropolitan avenue and Dale street.	West Roxbury.	8	373	1,444 93	947 12	45 00	2,437 05	Private, rock and clay.
Burley street.....	Between Metropolitan avenue and Dale street.	West Roxbury.	8	166	354 42	211 25	27 50	593 17	Private, gravel.
Littledale street.....	From Dale street.....	West Roxbury.	8	12	51 55	16 25	2 75	70 55	Private, gravel.
Billings lane.....	From Pond street.....	West Roxbury.	8	639	1,582 06	997 51	69 91	2,649 48	Private, loamy clay.
Maynard street.....	From Dale street.....	West Roxbury.	8	43	193 83	60 22	5 50	259 55	Private, clay and rock.
	Totals.....			15,205	\$35,937 68	\$24,326 04	\$1,659 98	\$62,523 70	
Penniman road.....	Between Hano and Braintree streets,	Brighton.	10	367	\$1,070 31	\$492 50	\$27 15	\$1,589 96	Private, sand and gravel.
Redford street.....	Between Brainerd road and Common wealth avenue.	Brighton.	10	410	1,179 44	524 62	25 88	1,729 94	Private, sand and clay.

Congress street.....	Between Franklin and High streets.....	City Proper.	10	391	1,457 27	946 44	69 43	2,473 14	Public, granite block and concrete base.
Congress street.....	Between Purchase street and Atlantic avenue.	City Proper.	10	204	1,296 75	613 28	21 72	1,931 75	Public, granite block and concrete base.
Randolph street.....	Between Harrison avenue and Albany street.	City Proper.	10	304	1,007 96	518 03	19 01	1,545 00	Public, granite block and concrete base.
Woodworth street.....	At Redfield street.....	Dorchester.	10	36	118 08	36 00	2 88	156 96	Public, macadam.
Redfield street.....	Between Walnut and Woodworth streets.	Dorchester.	10	510	1,302 27	540 65	19 41	1,862 33	Public, macadam.
Bayswater street.....	Between Lillian and Annavoy streets.	East Boston.	10	545					
Teragram street.....	At Bayswater street.....	East Boston.	10	5	1,865 22	1,071 39	57 70	2,994 31	Private, gravel.
Annavoy street.....	At Bayswater street.....	East Boston.	10	10					
Nancie street.....	At Bayswater street.....	East Boston.	8	5					
Waldemar avenue.....	From Walley street.....	East Boston.	10	281	782 18	654 67	28 74	1,465 59	Private, gravel.
Partridge street.....	Between Cowing and La Grange streets.	West Roxbury.	10	246	695 88	304 48	23 00	1,023 36	Private, rock hard pan.
Woodbrier road.....	Between Centre street and Welch road.	West Roxbury.	10	110	259 03	135 62	28 75	423 40	Public, sand and ashes.
Cornell street.....	At Washington and Kittredge streets.	West Roxbury.	10	631	1,729 20	871 09	22 28	2,622 57	Public, clay.
Schirmer road.....	Between Church street and Theodore Parlier road.	West Roxbury.	10	417	1,524 73	596 46	49 50	2,170 69	Private, rock and clay.
	Totals.....		10	4,457	\$14,288 32	\$7,305 23	\$395 45	\$21,980 00	
Arthur street.....	Between North Beacon and High-born streets.	Brighton.	12	467	\$1,719 38	\$805 48	\$31 63	\$2,556 49	Public, sand and gravel.
Larch street.....	From Kenrick street.....	Brighton.	12	778	2,623 61	1,088 60	63 25	3,775 46	Private, clay.
	<i>Carried forward</i>		12	1,245	\$4,342 99	\$1,894 08	\$94 88	\$6,331 95	

Cost of Extension of Main Pipe.—Continued.

STREET.	Location.	District.	Size (Inch.)	Feet.	Cost of Department Materials, etc.	Cost of Labor.	Cost of Inspection.	Total Cost.	Remarks.
.....	<i>Brought forward</i>.....	.....	12	1,245	\$4,342 99	\$1,894 08	\$98 88	\$6,331 95	
Easton road.....	Between Washington street and Colonial road.	Brighton.	12	732	2,516 05	2,558 83	199 50	5,274 38	Private, rock.
Kneeland street.....	Between Utica street and Atlantic avenue.	City Proper	12	368	2,970 83	788 98	25 55	3,785 36	Public, granite block, and concrete base.
Kneeland street.....	Between Whitmore and Washington streets.	City Proper.	12	69	334 39	339 62	43 13	717 14	Public, granite block, and concrete base.
Blue Hill avenue.....	New York, New Haven and Hartford Railroad Bridge.	Dorchester.	12	133	773 72	186 25	23 00	982 97	Public, loamy clay.
Old Colony Parkway.....	Between Tolman and Conley streets,	Dorchester.	12	592	2,167 21	793 80	29 34	2,990 35	Public, under construction.
Norwell street.....	Between Vassar and Carmen streets,	Dorchester.	12	349	1,189 42	668 32	27 15	1,884 89	Private.
Lorna road.....	From Morton street.....	Dorchester.	12	330	1,405 69	435 00	24 44	1,865 13	Private, ash filled.
Old Colony Parkway.....	At Tolman street.....	Dorchester.	12	14	96 19	135 28	6 59	238 06	Public, dirt.
Morton street.....	Between Evans and West Selden streets.	Dorchester.	12	575	1,759 42	955 48	58 80	2,773 70	Public, macadam and clay.
Allendale street.....	From Hill Top street.....	Dorchester.	12	124	409 12	136 40	4 31	549 83	Private, gravel, dirt.
Tchapitoulas street.....	From Poydras street.....	Hyde Park.	12	318	1,288 01	1,101 97	71 50	2,461 48	Private, rock, gravel and clay.
Poydras street.....	Between Tchaptoulas and River streets.	Hyde Park.	12	415	1,408 79	1,574 38	99 00	3,082 17	Public and private, brick and clay.
Moore street.....	Between Southampton street and South Bay avenue.	Roxbury.	12	916	.....	.....	.....	.....	Private, granite block and concrete base.
South Bay avenue.....	Between Moore and Burnham streets	Roxbury.	12	162	4,048 04	2,329 15	71 88	6,449 07	Private, granite block and concrete base.

Barnham street.....	From Southampton street.....	Roxbury.	12	513	1,993 53	939 90	10 90	2,944 33	Private, granite block and concrete base.
Harrishof street.....	Between Warren street and Humboldt avenue.	Roxbury.	12	1,029	4,050 34	5,177 71	92 00	9,330 05	Public, rock.
Riverway.....	Between Brookline and Longwood avenue.	Roxbury.	12	827	3,170 75	1,384 27	41 69	4,596 71	Parkway, gravel and loam.
Short street.....	Between Riverway and Pilgrum road.	Roxbury.	12	223	936 63	248 60	11 50	1,216 73	Private, gravel.
Barnham street.....	Between Southampton street and South Bay avenue.	Roxbury.	12	257	811 64	552 15	47 90	1,411 69	Private gravel.
Plymouth street.....	Between Riverway and Longwood avenue.	Roxbury.	12	252	806 69	260 70	14 38	1,081 77	Public, macadam.
West Roxbury Parkway.	South from Pelton street.....	West Roxbury.	12	212	777 25	311 41	22 68	1,111 34	Public, clay.
Washington street.....	East side, between Rockland street and Dedham line.	West Roxbury.	12	725	2,739 59	1,261 35	105 89	4,106 83	Public, rock and gravel.
Pierpont road.....	Between Theodore Parker road and Church street.	West Roxbury.	12	317	1,294 62	477 15	38 81	1,810 58	Private, clay.
Orange street.....	From Beech street.....	West Roxbury.	12	255	1,072 06	423 05	36 65	1,531 76	Private, clay.
La Grange street.....	Between Lasell street and Brook Farm road.	West Roxbury.	12	738	2,464 26	906 90	59 73	3,430 89	Public, gravel and macadam.
Lasell street.....	From La Grange street.....	West Roxbury.	12	231	883 46	362 90	15 61	1,261 97	Private, sand.
Germania street.....	Between Brookside avenue and Bismarck street.	West Roxbury.	12	251	1,201 16	551 90	43 44	1,796 50	Public, rock and sandy clay.
Bismarck street.....	Between Germania and Porter streets.	West Roxbury.	12	72	335 96	450 90	21 72	808 58	Public, rock and clay.
Stratford street.....	From Saville street.....	West Roxbury.	12	182	782 86	124 60	25 88	933 34	Private, clay.
Russett road.....	Between Wald street and Parkton road.	West Roxbury.	12	179	676 03	368 02	10 18	1,054 23	Private, clay.
	<i>Carried forward</i>		12	12,605	\$48,736 07	\$27,699 03	\$1,375 03	\$77,803 78	

Cost of Extension of Main Pipe.—Concluded.

STREET.	Location.	District.	Size (Inch.)	Feet.	Cost of Department Materials, etc.	Cost of Labor.	Cost of Inspection.	Total Cost.	Remarks.
	<i>Brought forward.</i>								
Stratford street.....	From West Border road.....	West Roxbury.	12	12,605	\$48,726 70	\$27,699 05	\$1,378 03	\$77,803 78	
Dale street.....	Between Eldridge and Burley streets.	West Roxbury.	12	30	133 39	49 50	1 44	184 33	Private, clay.
	Totals.....		12	374	1,355 95	637 65	22 00	2,035 60	Public, clay and gravel.
Charles River Reservation.	Between Western avenue and Cambridge street...	Brighton.	16	1,257	\$5,806 28	\$3,704 47	\$195 50	\$9,706 25	Public, land, mixed filling and macadam.
Cambridge street.....	At Charles River Reservation.....	Brighton.	12	56					
West Border road.....	Between West Roxbury Parkway and La Grange street.....	West Roxbury.	16	1,963	9,603 65	4,038 25	192 63	13,834 53	Public, state highway, clay.
Off West Border road.....	Connection to Mt. Bellevue tank.....	West Roxbury.	16	27					
	Totals.....		16	3,245	\$15,409 93	\$7,742 72	\$388 13	\$23,540 78	
Sutherland road.....	Between Commonwealth avenue and Beacon street.	Brighton.	24	2,296					
Commonwealth avenue.....	Between Sutherland road and Colonial road.	Brighton.	24	283	\$28,460 32	\$16,259 37	\$561 00	\$45,280 69	Public and private, bitulithic and macadam.
Colonial road.....	From Commonwealth avenue.....	Brighton.	24	192					
Colonial road.....	At Commonwealth avenue.....	Brighton	12	22					
	Totals.....		24	2,771	\$28,460 32	\$16,259 37	\$561 00	\$45,280 69	
			12	22					

Cost of Replacement of Main Pipe.

STREET.	Location.	District.	Size (Inch.)	Feet.	Cost of Department Material, etc.	Cost of Labor.	Cost of Inspection.	Total Cost.	Original Size (Inch.)	Remarks.
Harrison place.....	Off Russell street.....	Charlestown.	2	105	\$135 37	\$75 06	.....	\$210 43	3, 3 Lead	Private, grave.
Townsend place.....	From Carver street.....	City Proper.	6	169	257 70	374 63	\$20 13	652 46	4	Private, granite block and gravel base.
Salem Hill court.....	From Holden row.....	Charlestown.	6	72	173 28	157 50	.....	330 78	4	Public, dirt.
Holden row.....	From Wesley street.....	Charlestown.	6	130	151 49	122 48	.....	273 97	4	Public, dirt.
Province court.....	Totals.....	.....	6	371	\$382 47	\$654 61	\$20 13	\$1,257 21	.....	.....
.....	From Province street.....	City Proper.	8	74	\$221 15	\$197 27	\$5 43	\$423 85	6	Public, granite block and gravel base.
Oneida street.....	Between Harrison avenue and Albany street.	City Proper.	8	504	1,395 59	751 85	69 00	2,216 41	6	Public, granite block and concrete base.
Branch street.....	Between Butler and Midway streets.	Dorchester.	8	120	214 04	159 47	6 75	380 26	6	Private, clay.
Standard street.....	Between Manchester and Freedom streets.	Dorchester.	8	50	389 35	593 37	.....	982 72	6	.....
Freeland street.....	At Standard street.....	Dorchester.	12	6	.....	.....	.....	.....	12	Public, under construction.
Humphreys place.....	From Humphreys street.....	Dorchester.	8	358	\$10 38	555 94	19 69	1,386 01	4	Private, macadam.
Greenwood avenue.....	Between Thatcher street and Metropolitan avenue.	Hyde Park.	8	935	2,020 01	1,427 04	56 50	3,503 55	4	Public, gravel.
.....	Carried forward.....	.....	8	2,041	\$5,050 52	\$3,684 94	\$157 37	\$8,892 83	.....	.....

Cost of Replacement of Main Pipe.—Concluded.

STREET.	Location.	District.	Size (Inch.)	Feet	Cost of Department Material, etc.	Cost of Labor.	Cost of Inspection.	Total Cost.	Original Size (Inch.)	Remarks.
	<i>Brought forward</i>		8	2,011	\$5,050 52	\$3,684 94	\$157 37	\$8,892 83		
Westminster street.....	At Metropolitan avenue.....	Hyde Park.	8	116	443 92	263 55	8 25	715 72	6	Public, gravel and macadam.
Short street.....	Between Riverway and Pilgrim road.	Hyde Park.	8	15	127 70	18 90	2 88	149 48	6	Public, macadam.
Bowen street.....	Between F and Dorchester streets.	South Boston.	8	449	1,134 99	970 49	38 01	2,143 49	4	Public, macadam.
Winton street.....	From Beech street.....	West Roxbury.	8	184	517 04	554 38	25 21	1,096 63	6	Public, clay and rock.
Metropolitan avenue.....	From Washington street.....	West Roxbury.	8	332	575 71	375 55	18 33	969 59	6	Public, clay.
	Totals.....		8	3,137	\$7,849 88	\$5,867 81	\$250 05	\$13,967 74		
Cornell street.....	Between Washington and Kirtledge streets.	West Roxbury.	10	132	\$353 10	\$192 58	\$28 75	\$574 43	8	Public, clay.
Province street.....	Between School and Bromfield streets.	City Proper.	12	426	1,267 62	1,083 18	43 44	2,394 24	6, 12	Public, granite block and gravel base.
Leverett street.....	Between Cotting and Green streets.	City Proper.	12	780					12	
Causeway street.....	At Leverett street.....	City Proper.	12	17	2,706 65	1,488 69	179 19	4,374 53	12	Public, granite block and gravel base.
Lyman street.....	At Leverett street.....	City Proper.	8	14					6	
Cotting street.....	At Leverett street.....	City Proper.	8	17					6	
Wildwood street.....	Between Morton and Woolson streets.	Dorchester.	12	635	2,577 51	1,118 38	66 13	3,762 02	6	Public, under construction.

Blue Hill avenue.....	Dorchester.	12	865							6
Between Harvard and Paxton streets.....	Dorchester.	12	12	2,983 41	1,634 37	106 68	4,724 49			6
At Blue Hill avenue.....	Dorchester.	12	12							6
At Blue Hill avenue.....	Dorchester.	8	4							6
Between Groom and Dudley streets.....	Dorchester.	12	870							2, 6
At Humphreys street.....	Dorchester.	10	10							6
At Humphreys street.....	Dorchester.	8	23	3,226 10	1,205 38	73 31	4,504 79			6
At Humphreys street.....	Dorchester.	8	13							8
At Humphreys street.....	Dorchester.	8	22							6
At Humphreys street.....	Dorchester.	6	11							6
Poydras street.....	Hyde Park.	12	174	619 25	286 50	33 00	938 75			6
Between Tehapoutlas and River streets.....	Hyde Park.	12	756	2,809 43	1,365 50	57 50	4,232 43			4, 6
Between Hyde Park and Metropolitan avenues.....	Hyde Park.	12	114	519 26	181 03	8 25	711 54			8
From Metropolitan avenue.....	Hyde Park.	12	1,169	4,722 67	2,156 50	93 50	6,972 67			6
Between Thatcher and River streets.....	Roxbury.	12	1,803	5,907 62	2,142 72	92 00	8,442 34			6
Between Brookline and Longwood avenues.....	Roxbury.	12	270	1,053 53	419 07	12 13	1,514 73			4
Between Riverway and Longwood avenue.....	West Roxbury.	12	94	362 26	111 00	8 25	511 51			6
Between Eldridge and Dudley streets.....	West Roxbury.	12	145	307 39	122 50	43 44	563 33			6
Between Germania and Porter streets.....	.....	12	8,130	\$29,152 73	\$13,647 82	\$846 82	\$43,647 37			
Totals.....	.....								

Cost of Relocation of Main Pipe.

STREET.	Location.	District.	(Inch) Size	Feet.	Cost of Department Material, etc.	Cost of Labor.	Cost of Inspection.	Total Cost.	(Inch) Size	Remarks.
Humphreys street.....	Between Harrow and Dudley streets.	Dorchester.	6	142	\$247 60	\$23 41	\$15 75	\$286 76	6	Public, sand and gravel.
Parley avenue.....	Between Rockview and Centre streets.	West Roxbury.	6	165	310 05	804 20	65 25	1,179 50	6	Private, rock.
	Totals.....		6	307	\$557 65	\$827 61	\$81 00	\$1,466 26		
Devonshire street.....	Between Milk and Franklin streets.	City Proper.	8	262	\$528 01	\$77 50		\$605 51	8	Public, granite block and concrete base.
Beryl street.....	Between Cornell and Brooks streets.	West Roxbury.	8	150	127 86	531 25	40 25	699 36	8	Public, under construction.
	Totals.....		8	412	\$655 87	\$608 75	\$40 25	\$1,304 87		
Leston street.....	From Morton street.....	Dorchester.	10	18	\$115 75	\$69 10		\$184 85	10	Public, gravel.
Sutherland road.....	Between Orkney road and Beacon streets.	Brighton.	12	192	350 63	495 00	55 00	900 63	12	Public, macadam.
Harrison avenue.....	At railroad bridge at Noanet street.	City Proper.	12	13	100 46			100 46	12	Public, granite block and concrete base.*
Broadway.....	At Harrison avenue.....	City Proper.	12	26	178 88			178 88	12	Public, granite block and concrete base.*
Federal street.....	Between Franklin and High streets.	City Proper.	12	117	372 98	235 20	23 00	631 18	12	Public, granite block and concrete base.
Neponset Bridge.....	At Neponset avenue, Quincy side.	Dorchester.	(12 594	(12 594	3,526 62	2,642 04	64 07	6,232 73	12	
Neponset Bridge.....	At Neponset avenue, Boston side.	Dorchester.	(12 112	(12 112					8, 12	
Neponset avenue.....	At Neponset Bridge, Boston side.	Dorchester.	12	230					12, 16	Public, granite block and concrete base.
	Totals.....		12	1,277	\$4,529 57	\$3,372 24	\$142 07	\$8,043 88		
Water street.....	Between Washington and Devonshire streets.	City Proper.	24	73	\$2,213 85	\$3,326 23		\$5,540 08	24	Public, granite block and concrete base.

* Labor paid by New England Telephone and Telegraph Company.

WATERWORKS STATISTICS — CITY OF BOSTON.

FOR THE FISCAL YEAR ENDING JANUARY 31, 1925.

DISTRIBUTION.

Mains.

Kind of pipe: Cast iron, wrought iron.
 Sizes: 2-inch to 48-inch.
 Extended, miles, 7.27.
 Sizes, enlarged, miles, 2.11.
 Total miles now in use, 901.01.
 Public hydrants added, 116.
 Public hydrants now in use, 10,144.
 Stop gates added, 163.
 Stop gates now in use, 13,656.
 Stop gates smaller than 4-inch, 31.
 Number of blow-offs, 695.
 Range of pressure on mains, 30 to 90 pounds.

Services.

Kind of pipe and size, lead and lead lined: $\frac{1}{2}$ -inch to 2-inch, cast iron.
 $2\frac{1}{2}$ -inch to 12-inch, wrought iron and cement lined: $\frac{3}{4}$ -inch to 2-inch.
 Extended, feet, 29,759.
 Total miles now in use, 603.74.
 Service taps added, 1,284.
 Total service taps now in use, 112,182.

High Pressure Fire System Extension.

Appropriations to January 31, 1925.....			\$2,128,000 00
Expenditures to January 31, 1924.....		\$1,764,293 32	
Expenditures during the year 1924-25:			
Extension:			
Engineering.....	\$8,080 91		
Automobiles.....	452 88		
Yard.....	1,499 90		
Inspection of pipe laying.....	2,638 12		
Inspection of castings.....	898 44		
Tools and repairs.....	60 09		
Vacations.....	305 73		
Atlantic avenue.....	17,754 67		
Berkeley street.....	30 95		
Bowker street.....	6,296 18		
Broad street.....	2,157 95		
Canal street.....	13,254 71		
Chardon street.....	9,003 62		
Carried forward.....	\$62,434 15	\$1,764,293 32	\$2,128,000 00

High Pressure Fire System Extension.—*Concluded.*

Brought forward.....	\$62,434 15	.....	\$1,764,293 32	\$2,128,000 00
Chatham street.....	7,899 58			
Commerce street.....	8,917 80			
Commercial street.....	515 32			
Custom House street.....	2,504 86			
Doane street.....	4,479 58			
Fleet street.....	9,050 68			
Hanover street.....	12,068 42			
Hawkins street.....	6,411 79			
India street.....	5,698 85			
Kilby street.....	6,964 94			
Kingston street.....	4,056 18			
Kneeland street.....	17,529 39			
Market street.....	1,979 72			
Milk street.....	5,681 03			
North street.....	4,147 21			
Portland street.....	271 20			
South street.....	5,094 21			
State street.....	4,069 66			
Sudbury street.....	2,714 11			
Union street.....	14,506 95			
Washington street.....	5,093 25			
Total extension 1924-25.....	\$192,088 88			
Maintenance:				
Main pipe repairs.....	\$167 18			
Hydrant repairs.....	2,078 72			
Sewer service.....	109 32			
Total maintenance.....	2,355 22			
Stock purchased.....	127,881 38			
Total expenditures, 1924-25.....			322,325 48	
Total expenditures to January 31, 1925.....				2,086,618 80
Unexpended balance January 31, 1925.....				<u>\$41,381 20</u>

APPENDIX F.

REPORT OF THE BOSTON AND CAMBRIDGE
BRIDGE COMMISSION.

BOSTON, February 1, 1925.

To the Honorable the Mayor:

SIR,—As commissioner for the City of Boston, I respectfully submit herewith the annual report of the Boston and Cambridge Bridge Commission for the year ending January 31, 1925.

This commission is composed of two members, one appointed by the Mayor of the City of Boston and the other by the Mayor of the City of Cambridge, under provisions of chapter 467, Acts of 1898.

The commission has charge of the maintenance of the following-named bridges between Boston and Cambridge: Anderson, Cambridge Street, River Street, Cambridge and Prison Point.

As there is no separate appropriation made for the City of Boston's portion of the expenses of this commission, the same is taken from the appropriation for the Bridge and Ferry Division, Bridge Service. The amount expended during the fiscal year ending January 31, 1925, was \$31,740.49.

BROOKLINE STREET BRIDGE (OVER CHARLES RIVER
AT COTTAGE FARM).

This bridge has been taken over by the Metropolitan District Commission for the purpose of making repairs, until such time as a new bridge is built at this location. Conferences have been held in regard to the new structure, since the plans must be approved by the mayors of Boston and Cambridge. It is hoped that the work of constructing the new bridge will be started during the coming year.

HARVARD BRIDGE.

The Metropolitan District Commission took over Harvard Bridge during the past year for the purpose of maintaining it and making it safe for the next ten or

fifteen years. The draw span was eliminated and the bridge at this point reconstructed to make it as wide as the rest of the structure.

The commission went to considerable expense in keeping this bridge open to travel both before and during the period of reconstruction. In the rebuilding of the bridge by the Metropolitan District Commission, under chapter 442, Acts of 1924, steel stringers were placed instead of the wooden stringers, 6-inch yellow pine plank floor laid on top of these stringers, and a granite block paving placed on the plank for a wearing surface. A new high concrete curb was placed on either side and granolithic sidewalks were built.

PRISON POINT BRIDGE.

This bridge was entirely resheathed and considerable patching and repairs were made to the pier.

RIVER STREET BRIDGE.

Two steel header beams, broken under the traffic, were replaced and some of the other steel work, which was in bad condition, was repaired. The bridge was sheathed once and a very large amount of under plank replaced.

It is expected that some time during 1925 this bridge will be rebuilt by the Metropolitan District Commission, as the plans for rebuilding have been approved by the mayors of Boston and Cambridge.

WESTERN AVENUE BRIDGE TO CAMBRIDGE.

This bridge has been rebuilt by the Metropolitan District Commission and will be turned back to this commission for the purpose of maintenance some time during the coming year.

The bridge now is a three-arched reinforced concrete structure, 60 feet wide, and traffic between Boston and Cambridge has been greatly improved by the addition of this structure.

Respectfully submitted,

JOSEPH A. ROURKE,
Commissioner for the City of Boston.

Monthly Summary of Draw Openings, Boston and Cambridge Bridges, February 1, 1924, to January 31, 1925.

	CAMBRIDGE STREET- RIVER STREET BRIDGE.			HARVARD BRIDGE.			PRISON POINT BRIDGE.			WESTERN AVENUE BRIDGE TO CAMBRIDGE.		
	Vessels.	Cargoes.	Openings.	Vessels.	Cargoes.	Openings.	Vessels.	Cargoes.	Openings.	Vessels.	Cargoes.	Openings.
1924.												
February.....	0	0	0	0	0	0	8	1	4	0	0	0
March.....	0	0	0	0	0	0	6	1	4	0	0	0
April.....	0	0	0	0	0	0	0	0	0	0	0	0
May.....	0	0	0	0	0	0	12	3	8	0	0	0
June.....	0	0	0	0	0	0	6	1	4	0	0	0
July.....	0	0	0	0	0	0	6	1	4	0	0	0
August.....	8	0	4	0	0	0	11	2	8	0	0	0
September.....	10	0	6	0	0	0	6	1	4	0	0	0
October.....	0	0	0	0	0	0	9	1	6	0	0	0
November.....	2	0	2	0	0	0	12	2	8	0	0	0
December.....	0	0	0	0	0	0	12	2	8	0	0	0
1925.												
January.....	0	0	0	0	0	0	0	0	0	0	0	0
Totals.....	20	0	12	0	0	0	88	15	58	0	0	0

NOTE.—Harvard Bridge was taken over by the Metropolitan District Commission July 28, 1924.
Western Avenue Bridge was taken over by the Metropolitan District Commission.

Annual Summary of Draw Openings, Boston and Cambridge Bridges, February 1, 1924, to January 31, 1925.

BRIDGE.	TUGS.			BARGES.			ALL OTHERS.			TOTAL VESSELS.			Carrocs.	(Openings.
	Day.	Night.	Total.	Day.	Night.	Total.	Day.	Night.	Total.	Day.	Night.	Total.		
Cambridge Street-River Street.....	6	0	6	0	0	0	14	0	14	20	0	20	0	12
Harvard.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Prison Point.....	60	0	60	28	0	28	0	0	0	88	0	88	15	58
Western Avenue to Cambridge.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals.....	66	0	66	28	0	28	14	0	14	108	0	108	15	70

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