## ANNUAL REPORT

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## Ptrhic Works Dbpartumbive



OF THE

CITY OF BOSTON
1920


## ANNUAL REPORT

(W) TIIF

## Public Worlis Departuent

FOR TIIE

YEAR 1920

COMPLIMENTS OF

## Thomas F. Sullivan,

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Commissioner of Public Works
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PLEASE EXCHANGE

> CITY OF BOSTON
> PRINTING DEPARTMENT
> 1921

## ANNUAL REPORT

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## Public Worlis Departivent

YEAR 1920


CITY OF BOSTON
PRINTING DEPARTMENT
1921

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## ANNUAL REPORT

OF THE

## PUBLIC WORKS DEPARTMENT

FOR THE

YEAR ENDING JANUARY 31, 1921.

Boston, February 1, 1921.
Hon. Andrew J. Peters, 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, 1921, 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 provision 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 of and removal of ashes, garbage, 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.

## Review.

A brief summary of the principal activities of the Public Works Department during the year ending January 31, 1921, follows:

Bridge Service.
Clarendon Street Bridge, from Stuart street to Columbus avenue. The building of this bridge was started during the year and the work will be completed early in the spring.

Ashland Street Bridge. - The rebuilding of the bridge over the New York, New Haven \& Hartford Railroad tracks has begun and will be finished in about six months more.

Warren Bridge. - The work started in 1919 is now practically completed. The rebuilding of this bridge will permit the operation of the heaviest type trolley
cars to and from Charlestown and Chelsea in the event of any delay on Charlestown Bridge.

Roxbury Canal Sea Wall.- The sea wall in front of the city yards on Albany street has been rebuilt and the dredging of the canal is now in progress. This will allow steamers of greater depth than formerly to dock at the City Hospital coal plant at a saving of about $\$ 1$ a ton in the price of coal.

## Ferry Service.

"John H. Sullivan."- The superstructure of this steel ferryboat was altered to provide four teaming roadways with an increased capacity of about 75 per cent.
"Noddle Island."- Contract has been made for rebuilding this ferryboat to provide four teaming roadways and the work will be completed early in the year.
"Governor Russell" and "General Sumner."- The main engines on both these ferryboats have been overhauled and repaired during the year.

New Boats.- Two new ferryboats, each with four teaming roadways, are being constructed under contract. These boats are to be equipped with special fire pumps so as to be available for use in an emergency to assist the fire boats.

Piers.- The south pier on the East Boston side North Ferry was rebuilt during the year.

## Paving Service.

Smooth pavements, artificial stone sidewalks and granite block pavement have been laid on a number of streets during the year in accordance with the policy adopted two years ago of laying permanent pavement in the heavy traffic streets and radial highways. About 125,000 square yards of sheet asphalt, 70,000 square yards of artificial stone, 100,000 square yards of granite block and 22,000 square yards of wood block were laid during the year.

## Sewer Service.

Stony Brook.- The extension of the covered channel of the brook, south of Forest Hills, for a distance of about 900 feet, is now in progress under contract.

Brookline Avenue.- Contract has been made for reinforced concrete conduit in this avenue, from Beacon street to Audubon road, a portion of the existing wooden conduit having collapsed during the year.

Farragut Road.- A reinforced concrete overflow sewer, 400 feet in length, is being built in that part of the road formerly under water, but which later is to be filled in.
$K$ and $N$ Streets.- Contract was made during the year and work is now in progress on the extension of these overflow sewers. This will remove cause of pollution of the beach at the Strandway.

Sanitary sewers to the length of about 20,000 feet and surface drains amounting to about 19,500 feet were constructed during the year.

## Street Cleaning Service.

An Elgin motor-driven sweeper, with gutter attachment, was bought during the year and is giving splendid service. There are now two of these machines in the department.

Four tractors to be used in the removal of snow have been bought during the year.

## Sanitary Service.

Payment for the collection and removal of ashes and garbage in the contract districts on a cubic yard basis has been continued with satisfactory results.

## Water Division.

Leases for space and agreements for power have been made with the Boston Elevated Railway Company and the Edison Electric Illuminating Company for the establishment of high pressure fire pumping stations on Commercial street, Atlantic avenue and Stuart street. Contract has been made for the furnishing and erection of the pumping plants at the Lincoln Power Station of the Elevated and the Atlantic Avenue Station of the Edison Company.

Waste water surveys have been made in the Charlestown, Brighton and South Boston districts with gratifying results.

Approximately seven miles of main pipes have been laid and relaid and about 36,000 feet of water pipe have been cleaned during the year.

## Work Contemplated for 1921.

The construction of a new bridge between Charlestown and Chelsea is planned for the coming year.

The bridge over the Boston \& Albany Railroad at Cambridge street, Allston, will be rebuilt during 1921.

Entrances and exits at the ferry piers to allow two lines of traffic to enter and leave the boats will be reconstructed during the year.

The laying of smooth and granite block pavements in the main thoroughfares of the city proper and suburban districts will be continued as in the past three years.

Extraordinary repairs are to be made to one of the main engines at the Calf Pasture pumping station.

A new turbine water wheel, controlling gates, generator and storage battery and electric light system at Moon Island is planned for the coming year.

An additional motor-driven sweeper will be bought during the year for the Strcet Cleaning Service.

It is proposed to continue the waste water survey which was begun last year and also the cleaning of water pipes in various sections.

## Appropriations.

The money assigned for the work of the Public Works Department during the year February 1, 1920, to January 31 , 1921, was made available from the following sources:

First. - Maintenance appropriation, derived from the income of the city raised by taxation. In December, 1919, the department estimates of the money necessary for the proper maintenance and conduct of affairs of the different services were submitted to the Mayor. The estimates were made in segregated form to the Mayor, who made such allowance for each item in the budget as he considered necessary and submitted them to the City Council. The total maintenance appropriations as passed by the City Council and approved by the Mayor are shown below. On another page will be found the total expenditures by each service for each item in the segregated budget:
Central Office . . . . . . . $\$ 90,65058$

Bridge Service . . . . . . . 473,699 74
Ferry Service . . . . . . . . 492,60743
Lighting Service . . . . . . . 723,623 98
Paving Service . . . . . . . 1,605,884 15
Sanitary Service . . . . . . 1,528,698 71
Street Cleaning and Oiling Service . . . 954,630 04
Sewer Service . . . . . . 534,814 74
Water Service . . . . . . . 1,253,166 33
Total
\$7,657,775 70

Boston and Cambridge Bridges.*
Second. - Loan inside the debt limit for building new strects assessable on abutting property authorized by chapter 393 of the Acts of 1906. (Paving Service.)

Amount expended during the year \$533,630 43

Third. - Loan inside the debt limit under the provisions of chapter 426 of the Acts of 1897, as amended by chapter 204 of the Acts of 1908, from which all sewerage works are now built. (Sewerage WorksSewer Service.)

| Balance February 1, 1920 | \$343,661 21 |
| :---: | :---: |
| Loan | 800,000 00 |
| Total | \$1,143,661 21 |
| Expended during the year | 848,045 50 |
| Balance January 31, 1921 | \$295,615 71 |

Fourth. - Separate systems of drainage.
Balance February 1, 1920 . . . . . $\$ 1422$
Expended during the year
Balance January 31, 1921
000

Fifth. - High Pressure Fire Service. (Water Service.)


## Special Appropriations.

Loan inside the debt limit under the provisions of chapter 661, Acts of 1912, for the widening and laying out of certain streets in Boston. (Paving Service.)

[^0]Expended during the year on:
Belgrade avenue extension and Beech street
widening
Hyde Park avenue, widening
Total
Bridges, Repairs, Etc.
Brookline Avenue Bridge. (Bridge Service.)
Balance February 1, 1920 ..... $\$ 92690$
Expended during the year ..... 21299
Balance January 31, 1921 ..... $\$ 71391$
Chelsea Bridge South. (Bridge Service.)
Balance February 1, 1920 ..... \$16,303 04
Expended during the year ..... 1,435 50
Balance January 31, 1921 ..... $\$ 14,867 \quad 54$
Granite Avenue Bridge, Appropriation Fron Taxes. (Bridge Service.)
Appropriation. ..... \$2,814 86
Expended during the year ..... 2,396 93
Balance January 31, 1921 ..... $\$ 41793$


[^1]| Reconstructing and Repairing Streets by Contract. |  |
| :---: | :---: |
| Balance February 1, 1920 | \$374,387 51 |
| Appropriation from taxes | 750,000 00 |
| Total | \$1,124,387 51 |
| Expended during the year | 942,637 65 |
| Balance January 31, 1921 | \$181,749 86 |
| Street Improvement | vice.) |
| Balance February 1, 1920 | \$27,225 99 |
| Appropriation from taxes | 250,000 00 |
| Transfer | 50,000 00 |
| Total | \$327,225 99 |
| Expended during the year | 327,225 99 |
| Balance January 31, 1921 | \$0 00 |
| Land and Buildings, Sanitary and Street Cleaning Division Dorchester. (Sanitary Service.) |  |
| Appropriation. | \$13,500 00 |
| Expended during the year | 13,500 00 |
| Old Harbor Improvement. (Sewer Service.) |  |
| Loan | * \$10,000 00 |
| Expended during the year | 9,966 17 |
| Balance January 31, 1921 | \$33 83 |

[^2]
## Expenditures Under the Maintenance Appropriation of the From February 1, 1920,



## Several Services by Items of the Segregated Budget. to January 31, 1921.



Expenditures Under the Maintenance Appropriation of

the Several Services by Items of the Segregated Budget.- Continued.


Expenditures Under the Maintenance Appropriation of

| Group and Item. | Central. | Bridge. | Ferry. |
| :---: | :---: | :---: | :---: |
| D. Supplies.-Cont'd. |  |  |  |
| 9. Educational and recreational. . . . . . . . . . . . |  |  |  |
| 10. Agricultural................................ . |  |  |  |
| 11. Motor vehicle. . . . . . . . . . . . . . . . . . . . . . . . . | \$490 96 | \$1,880 26 |  |
| 12. Military . . . . . . . . . . . . . . . . . . . . . . . . . . . . |  |  |  |
| 13. Chemicals and disinfectants............... |  |  | \$138 40 |
| 14. Marine. . . . . . . . . . . . . . . . . . . . . . . . . . . . |  |  |  |
| 15. Tobacco.. |  |  |  |
| 16. General plant. |  | 1,781 03 | 4,021 68 |
| E. Materials: |  |  |  |
| 1. Building. |  | 12092 | 5483 |
| 2. Highway... |  |  |  |
| 3. Bridges. |  | 39,600 74 |  |
| 4. Ferries.. |  |  | 16.472 73 |
| 5. Sewer. . |  |  |  |
| 6. Water. . |  |  |  |
| 7. Conduits...... . . . . . . . . . . . . . . . . . . . . . . . . |  |  |  |
| 8. Apparatus. . . . . . . . . . . . . . . . . . . . . . . . . |  |  |  |
| 9. Machinery. . . . . . . . . . . . . . . . . . . . . . . . . . |  | 40949 |  |
| 10. Electrical. |  | 52258 | 66430 |
| 11. Marine. |  |  |  |
| 12. Parks and recreational. |  |  |  |
| 13. General plant... . . . . . . . . . . . . . . . . . . . . . |  | 4394 |  |
| F. Special Items: |  |  |  |
| 1. Land.... |  |  |  |
| 2. Damages.................................... . |  |  |  |
| 3. Sinking funds.. . . . . . . . . . . . . . . . . . . . . . . . |  |  |  |
| 4. Serial loans. |  |  |  |
| 5. Interest.. |  |  |  |
| 6. Military . . . . . . . . . . . . . . . . . . . . . . . . . . . . |  |  |  |
| 7. Pensions and annuities. |  | 2,789 79 | 7,603 11 |
| 8. State and military aid, soldiers' relief and burials. |  |  |  |
| 9. Care of dependents.... |  |  |  |
| 10. Mothers' aid. |  |  |  |
| 11. Workingmen's compensation......... |  | 83771 |  |

the Several Services by Items of the Segregated Budget.- Continucd.


Expenditures Under the Maintenance Appropriation of the

| Group and Item. | Central. | Bridge. | Ferry. |
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|  |  |  |  |
| 13. Industries. |  |  |  |
| G. Incidental Expenditures to Cover Contingencies Other than Personal Service: <br> 1. Probation officers' expenses. |  |  |  |
|  |  |  |  |
| Totals. . . . . . . . . . . . . . . . . . . . . . . . . . . . | \$91,373 98 | \$436,999 95 | \$574,754 |

Several Services by Items of the Segregated Budget.- Concluded.


## Expenditures Under the Maintenance Appropriation of From February 1, 1920,

| Group and Item. | Central. | Bridge. | Ferry. |
| :---: | :---: | :---: | :---: |
| Sumbitle A. I'ersonal Service. |  |  |  |
| Commissioners | 89,00000 |  |  |
| Division engineers. |  | \$3,750 00 | \$1,250 00 |
| Engineers in charge. |  |  |  |
| Secretary and chief clerk. | 3,902 61 |  |  |
| Clerks and stenographers . | 53,868 37 | 3,272 28 | 1,070 85 |
| Messengers. |  |  |  |
| Chief engineer (civil). |  |  |  |
| Assistant engineers (civil). | 3,00000 | 11,512 65 |  |
| Draughtsmen |  | 6,290 75 |  |
| Instrumentmen. |  | 3,99414 |  |
| Rodmen. |  | 1,146 57 | . . . . . . . |
| Inspectors |  | 2,375 12 |  |
| Foremen. |  |  |  |
| Subforemen. |  | $4,42 \mathrm{~S} 75$ |  |
| Investigator. |  |  |  |
| Address printer. |  |  |  |
| Blue printers. | 3,885 24 |  |  |
| Boys. | 87033 |  |  |
| Chauffeurs. | 1,377 00 | 6,53400 | 35100 |
| Cement testers | 4,13848 |  |  |
| Chief inspeators |  |  |  |
| Chemist and assistant |  |  |  |
| Claim agent | 1,959 73 |  |  |
| Cashiers |  |  | 1,959 73 |
| Constable. |  |  |  |
| Coal passers |  |  |  |
| Captains . . . . . . . . . . . . . . |  |  | 26,078 55 |
| Drawtenders and assistants.. |  | 210,240 89 |  |
| Deekhands |  |  | 29,950 51 |
| Engineers (steam) |  |  | 26,737 50 |
| Electricians . |  | 1,720 20 | 1,720 20 |
| Emergencymen. |  |  |  |
| Feeders |  |  |  |
|  |  |  |  |
| General foreman.. |  |  | 2,740 65 |
| Janitresses. |  |  | 5,319 00 |
| Joiners and carpenters. |  |  | 3.68725 |

the Several Services by Items of the Segregated Budget. to January 31, 1921.


## Expenditures Under the Maintenance Appropriation of the



Several Services by Items of the Segregated Budget.- Concluded.


Financial Statement of the Public Works Department, Maintenance, February 1, 1920, to January 31, 1921.

| Divisions ind Services. | Appropriations. $1920-21$. | $\begin{aligned} & \text { Transfers } \\ & \text { to. } \end{aligned}$ | Transfers froml. | Total Credits. | $\begin{aligned} & \text { Expenditures, } \\ & 1920-21 . \end{aligned}$ | Balances, January 31, 1921. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Central Office | \$90,650 5s | \$723 40 |  | 891,373 98 | \$91,373 98 |  |
| Bridge Service | 473,699 74 |  | \$34,875 00 | 438,82474 | 436,999 95 | \$1,824 79 |
| Ferry Servic | 492,607 43 | 82,90197 |  | 575,509 40 | 574,754 54 | 75486 |
| Lighting Service | 723,623 98 |  | 1,489 70 | 722,134 28 | 722,134 24 | 04 |
| Paving Service | 1,605,884 15 | 6,783 92 | 23,026 97 | 1,589,641 10 | 1,589,641 10 |  |
| Sanitary Service | 1,528,698 71 | 11.00000 | 30,182 8S | 1,509,515 83 | 1,508,102 71 | 1,413 12 |
| Street Cleaning and Oiling Service. | 954,630 04 | 46,000 00 | 14,962 07 | 985,667 97 | 983,597 25 | 2,070 72 |
| Sewer Service | 534,814 74 | 86,182 88 | 4,055 55 | 616,942 07 | 616,461 55 | 48052 |
| Water Service. | 1,253 166 33 | 52,112 71 | 52,112 71 | 1,253 16633 | 1,253,166 33 |  |
| Totals | \$7,657,775 70 | 8285,704 88 | \$160,704 88 | \$7,7\$2,775 70 | \$7,776,231 65 | *\$6,544 05 |

* Balances transferred to City Treasury.

The expenditures under the several appropriations (for the different services) for the year 1920-21 were as follows:

| Divisions and Services. | Current Expenses. | Special. Appropriations. | Total. <br> Expenditures. | Balances, January 31, 1921. |
| :---: | :---: | :---: | :---: | :---: |
| Central Office. | \$91,373 98 |  | \$91,373 98 |  |
| Bridge Service. | 436,999 95 | 349,48138 | 786,481 33 | 8217,395 42 |
| Ferry Service | 574,754 54 | 84,22094 | 658,975 48 | 103,683 06 |
| Lighting Service | 722,134 24 |  | 722,134 24 |  |
| Paving Service. | 1,589,641 10 | 1,916,653 26 | 3,506,294 36 | 181,749 86 |
| Sanitary Service. | 1,505,102 71 | 13,500 00 | 1,521,602 71 |  |
| street Cleaning and Oiling service. | 983,597 25 |  | 983,59725 |  |
| Sewer Service. | 616,46155 | 858,025 89 | 1,474,487 44 | 295,615 71 |
| Water Service. | 1,253,166 33 | 99,502 68 | 1,352,669 01 | 279,019 38 |
| East Boston Ferry Improvements, etc......... |  | 156,600 71 | 156,600 71 | 343,399 29 |
| Totals | 87,776,231 65 | \$3,477,984, 86 | \$11,254,216 51 | \$1,420,862 72 |

Comparative Table Showing Cost of Maintenance of the * Street Department and Public Works Department Since 1911.

| Division and Service. | 1910-11. | 1911-12. | 1912-13. | 1913-14. | 1914-15. | 1915-16. | 1916-17. | 1917-18. | 1918-19. | 1919-20. | 1920-21. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Central Office | \$23,627 76 | \$72,943 26 | \$77,515 65 | \$80,159 50 | \$74,502 01 | \$70,618 59 | \$71,206 04 | \$73,965 70 | \$73,074 04 | \$79,909 15 | \$91,373 98 |
| Bridge Servi | 201,99500 | 271,876 76 | 268,959 44 | 271,423 04 | 283,066 41 | 269,28323 | 277,847 65 | 306,144 31 | 323,601 28 | 363,130 05 | 410,216 53 |
| Boston and Cambridge 13ridges.. | 22,006 57 | $21^{\prime} 05526$ | 17,183 87 | 17,744 48 | 18,645 52 | 17,765 44 | 18,945 39 | 21,163 98 | 23,942 63 | 26,390 52 | 26,783 42 |
| Ferry Serv | 235,920 63 | 247,628 07 | 269,016 52 | 277,727 39 | 293,671 43 | 277,048 47 | 303,917 18 | 355,450 17 | 393,783 69 | 436,687 75 | 574,754 54 |
| Lighting S | 710,294 84 | 726,967 18 | 768,779 08 | 795,880 53 | 753,811 73 | 739,599 62 | 772,769 97 | 773,541 76 | 540,350 56 | 714,821 55 | 722,134 24 |
| Paving Scrvice | 1,178,546 90 | 1,162,660 29 | 1,236,686 29 | 1,361,082 17 | 1,223,364 69 | 1,029,374 44 | 802,15073 | 949,503 41 | 1,006,62'S 46 | 1,063,059 16 | 1,023,332 58 |
| Removal of Snow | 112,623 21 | 124,961 68 | 106,691 07 | 64,00749 | 165,105 19 | 131,142 57 | $303,570 \quad 39$ | 203,210 15 | 138,659 39 | 78,80s 12 | 663,111 55 |
| Sanitary Scrvice... | 723,21964 | 730,292 62 | 790.80901 | 925,318 56 | 1,017,452 66 | 1,042,315 00 | 969,438 66 | 1,031,156 99 | 1,106,933 20 | 11,265,581 65 | 1,508,102 71 |
| Scwer Service | 312,511 05 | 325,508 86 | 378,573 18 | 387,120 67 | 362,672 07 | 339,44662 | 322.19903 | 379,453 30, | 452,310 71 | 472,713 49 | 616,461 ${ }^{\text {eb }}$ |
| Street Cleaning Service. | 370,602 81 | 408,571 72 | 454,623 71 | 492,32445 | 472,730 69 | 489,959 90 | 12s,899 28 | 516,475 67 | 5.56,830 98 | 607,992 26 | 700,031 01 |
| Strcet Watering and Oiling Service. | 160,513 93 | 163,036 26 | 198,993 93 |  | 17431200 | 39,744 97 | 1,4:0 68 | 10,488 14 | 137,150 39 | 118,014 |  |
| Water Service |  | 822,377 46 | \$35,072 00 | S99,338 91 | 894,170 14 | 904,13519 | 917,82361 | $1.015,54365$ | 1,05.5,842 87 | 1,010.634 32 | 1,253,166 33 |
| Totals | 81,051,952 31 | 8., $0.50,57942$ | 85,403,203 75 | 85,800 638 69 | 85,733,594 54 | \$5,450,434 30 | 85,313,218 84 | \$5.765, 45753 | 85 N09,108 20 | 86,237,742 02 | 37,776,231 65 |

Revenue.Collected by City Collector on Account of the Public WorksDepartment and Credited to General Revenue,as per City Auditor.
Bridge Service:
Labor and materials furnished ..... $\$ 6316$
Rents ..... 33000
Chelsea Bridge North ..... 8,358 63
Meridian Street Bridge ..... 9,681 55
$\$ 18,43334$
Ferry Service:
Tolls.890,085 57
Rents ..... 55327
Headhouse privileges ..... 40000
Sale of coal ..... 65158
Sale of old material ..... 28078
Commission on telephones ..... 11930
Cleaning telephone booths ..... 4800
Damages to ferry ..... 1200
Free ferries, July 4 ..... 100
Lighting Service:
Lighting Boston and Cambridge Bridges. ..... $\$ 2,48656$
Sale of gasolene ..... 8673
Paving Service:$\$ 29,05054$Permits
Sidewalk and edgestone assess-ments27,841 39
Sale of old material ..... 5,658 04
Labor and materials ..... 3,588 01
Inspectors' services ..... 2,804 50
Labor and materials (chapter 28,Revised Ordinances of 1914)1,187 75
Forfeiture on bid (Supply De- partment) ..... 50000
Use of pier ..... 3000
Damage to sidewalk ..... 2500
Sanitary Service:
Tickets for the removal of waste, ..... \$83,164 30
Sale of manure ..... 1,630 70
Sale of old material ..... 65800
Damage to vehicle ..... 4098
Removal of dead horses ..... 1900Carried forward

Brought forward
Repairs to sleigh . . . . 1005
Repayment of amount paid under
Workingmen's Compensation
Act, for injuries to employee
$407 \quad 34$
Street Cleaning and Oiling Service :
Rents $\$ 75000$
Oiling strcets 9486
Removing dirt . . . . 7990
Rent refunded . . . . 5000
Repairs to standpipe . . . 2913
Sale of automobile . . . 2500
Removal of dead horses . . 1000
Damage to buggy . . . . 500
Sewer Service:
Disposal of sewage . . . $\$ 5,86936$
Entrance fees
2,825 40
Labor and materials . . . 2,166 21
Use of drill
24000
Sale of materials . . . . 10489
Assessments . . . . . 1637
Inspectors' services . . . 1398
Rent . . . . . . 1000
Refund on automobile registration

800
Damage to truck . . . . 325
Water Service:
Water rates, 1921 . $\$ 72,34070$
Water rates, prioì . $3,292,59634$
$\begin{array}{lll} & \\ \text { Elevators, etc. . . . } \\ \text {. }\end{array}$
Service pipes . . . . . 18,931 85
Sale of materials . . . . 10,65568
Fees . . . . . . . 4,285 55
Labor and materials . . . 4,15492
Interest on bank deposits . . 94486
Board of horses . . . . 91375
Off and on . . . . . 85020
Damage to hydrants . . . 40432
Repairs to automobiles . . 35448
Relocating hydrants . . . 29540
Sale of merchandise . . . 29169
Damage to automobiles . . . 19085
Relocating pipes . . . . 17388
Rents . . . . . . 12000
Carried forward . . . $\$ 3,429,13083$ \$282,075 08

85,93037
$1,04 \dot{3} 89$

11,25746

| Brought forward |  | . | . | $\$ 3,429,130$ | 83 | $\$ 282,075$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Contracts Made by Public Works Department from February 1, 1920 , to January $31,1921$.

| 1) hatmiet. | Awarderl to | $\begin{aligned} & \text { Single } \\ & \text { ber } \\ & \text { Day. } \end{aligned}$ | $\begin{gathered} \text { Double } \\ \text { per } \\ \text { Day: } \end{gathered}$ | Auto $\begin{gathered}\text { Trucks } \\ \text { per }\end{gathered}$ Day. | Paving Service | Sanitary service. | $\begin{aligned} & \text { Sewcr } \\ & \text { Service. } \end{aligned}$ | Street ('latning and (tiling service. | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1No. 1, South Boston and Dorchester North, | Thomas F. Mccabe. | \$5 00 | 8600 | 83500 | 87,892 50 |  |  |  | \$7,892 50 |
| יNo. 2, East Boston and 13reed's Island | E. J. McIIugh, Jr | 400 | 800 | 2500 | 1,835 00 |  |  |  | 1,835 00 |
| ${ }^{1}$ No. 3, Charlestown | B. E. Grant Company | 600 | 650 | 3500 | 7,806 50 |  |  | \$1,966 50 | 9,773 00 |
| ${ }^{1}$ No. 4, Brighton | Bernard Malone | 400 | 800 | 2500 | 4,28050 |  |  |  | 4,280 50 |
| ${ }^{1}$ No. 5, West Roxbury | John J. Mloore | 400 | 700 | 3000 | (6,160 00 | 85,440 42 | 840500 | 5,899 50 | 20.90492 |
| ${ }^{1}$ No. 6-9, Dorchester and Ashmont | John D. Lyous | 425 | 785 | 3000 | 16,6733 92 |  | 4710 |  | 16,72102 |
| ${ }^{1}$ No. 7, Roxbury South and Jamaica Plain | John J. Moore | 400 | 695 | 3000 | 3.05445 | 33,339 99 |  | 1,534 8 | 34.57454 |
| ${ }^{1}$ No. 8, South End and Roxbury North | B. E. Grant Compan | 500 | 685 | 3500 | 11.58163 | 26,438 70 |  |  | 38,020 33 |
| 'No. 10, North and West Ends and Back Bay. | B. E. Grant Company | 550 | 600 | 3500 | 5,003 75 | 29,277 14 |  | 34,410 63 | 68,691 52 |
| 1No. 11, Hysle Park. | Thomas 1I. Corrigan.. | 475 | 750 | 2500 | 2,04000 |  |  |  | 2,040 00 |

Bridge and Feriry Division - Bridge Service.
Bridge Work.

| Contract. | Awarded to | Dated. | Progress of Work. | $\begin{aligned} & \text { Estimated } \\ & \text { Cost. } \end{aligned}$ | Amount <br> Expended in 1920 . |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ${ }^{1}$ Clarendon Street Bridge, removal of concrete and steel strueture. | Coleman Brothers. | Feb. 9, 1920. | Completed M1ay 4, 1920. | \$4,300 00 | \$4,300 00 |
| ${ }^{1}$ Repairing and strengthening Warren Bridge over Charles river. | V. Grande | Mar. 21, 1920. | Unfinished | 210,000 00 | 187,003 49 |
| 1 Repairing face of channelway, Dorchester Avenue Bridge, over Fort Point channel. | W. H. Ellis \& Sion Company | May 12, 1920. | Completed June 20, 1920. | 1,221 50 | 1,561 61 |
| ${ }^{1}$ Rebuilding flooring of Chelsea Bridge South | Lawler Brothers | Nay $24,1920$. | Completed luly 24, 1920 | 27,671 00 | 29,511 25 |
| 1 Building Clarendon Street Bridge over the Boston \& Albany and the New York, New Haven and Hartford Railroad. | John MeCourt Company | May $24,1920$. | Unfinished | 117,308 00 | 67,89844 |
| ${ }^{1}$ Furnishing and installing navigation lights and appliances for same on Summer street, Dorchester Avenue, Warren and Congress S'treet Bridges. | smith \& Lovett | June 4, 1920. | Completed sept. 1, 1920 | 2,400 00 | 2,432 00 |
| ${ }^{1}$ Furnishing and installing electric lanterns for natvigation lights on summer street and Dorchester Avenue Bridges | Stearns, Perry \& Smith Company. | June 25, 1920. | Completel Dee. 15, 1920. | 2,302 00 | 1,956 70 |
| ${ }^{1}$ Rebuilding Ashland Street Bridge over New York, New Haven \& Hartford Railroad, West Roxbury. | Boston Bridge Works, Inc | July 6, 1920 | ${ }^{\text {U }}$ - ${ }^{\text {finished }}$ | 51,000 00 |  |
| ${ }^{1}$ Furnishing labor and material to cover inner side of gearpit, Northern Avenue Bridge. | W. Kilingberg \& Sons, Inc...... | July 15, 1920. | Completed July 23, 1920. | 98600 | 98600 |
| Repairing Brookline Street Bridge over Charles river, Boston to Cambridge. | W. S. Rendle | Sept. 10, 1920. | Complefed Nov. 10, 1920. | 2,250 00 | 93975 |

Public Works Department.

| - Repairing flooring, Brookline Street Bridge over Charles river, Boston to Cambridge. | J. B. Dolan.. . . . . . . . . . . . . . | Nov. 5, 1920. | Completed Dec. 16, 1920... | 7,339 00 | 2,955 52 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ${ }_{2}$ Agreement for part payment of work on Warren Bridge. | Boston Elevated Railway Company. | April 6, 1920. |  |  | $\dagger 27,42653$ |
| ${ }^{2,3}$ Leasing storehouses at the approach of and under the new Charlestown Bridge. | M. P. Coleman. . . . . . . . . . . . | July 1, 1918. | Unfinished............... | *2,69700 | *2,472 25 |

* Per Year. † Paid by Boston Elevated to eity for work done. ${ }^{1}$ Advertised and awarded to lowest birdder.
2 Advertised and awarded to highest bidder. $\quad 3$ Paid to eity. $\quad 4$ Equal amount paid by eity of Cambridge.
Bridge and Ferry Division - Ferry Service.

| Contract. | Awarded to | Dated. | Progress of Work. | $\begin{aligned} & \text { Estimated } \\ & \text { Cost. } \end{aligned}$ | $\begin{aligned} & \text { Amount } \\ & \text { Expended } \\ & \text { in } 1920 \text {. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ${ }^{1,3}$ Weighing and vending machines in ferry headhouses, | Autosales Corporation | Feb. 11, 1920. | Complcted Jan. 31, 1921. | 840000 | \$400 |
| o ferryboats. <br> 1 Teaming coal from coal pockets and delivering same to ferryboats. | E. J. MeHugh, J | Feb. 5, 1920. | Completed Jan. 31, 1921 | * 35 | 3,977 |
| ${ }^{2}$ Remove soft patches on steam chimney of boiler of ferryboat "General Hancock" and replace same with hard patches, ete. | Hodge Boiler Work | Feb. 12, 1920. | Completed Marel S ${ }^{\text {S }} 1920$. | 1,500 00 | 1,987 15 |
| ${ }^{1}$ Repairs to.. machinery, etc., ferryboat "John H. | Boston Marine Works | Mar. 18, 1920. | Completed Alay 25, 1920. | 5,350 00 | 5,350 00 |
| North Ferry. <br> ${ }^{1}$ Rebuilding part of south pier, East Boston landing, | W. S. Rendle | April 12, 1920. | Completed Oct. 27, 1920. | 14,048 95 | 12,558 87 |
| ${ }^{1}$ Repairing ferry piers, South Ferry, Boston side | W. II. Ellis \& Son Company | April 28, 1920. | Completed July 2, 1920 | 1,843 60 | 2,157 0 |
| ${ }^{1}$ Repairing main engines, auxiliaries, ete., ferryboat " Governor Russell.' | Simpson's Patent Dry Dock Company. | April 28, 1920. | Completel July 7, 1920 | 9,756 00 | 11,736 00 |
| ${ }^{1}$ Rebuilding roadways of three ferry drops and repaining one drop foundation. | W. S. Rendle | May 22, 1920. | Completed Jan. 5, 1921 | 10,732 00 | 9,917 22 |
| ${ }^{1}$ Furnish new stack and repair tanks on ferryboat "Governor Russell." | Simpson's Patent Dry Dock Company. | May 24, 1920. | Completed June 23, 1920. | 78500 | 7850 |
| ${ }^{2}$ Placing ferryboat "General Sumner" on marine railway, clean hull, strin off eopper, ealk seans of huil, place four propeller blades, ete. | Atlantic Works | June 3, 1920. | Completed June 8, 1920 | 3,000 00 | 4,460 89 |
| ${ }^{1}$ Repairing , main engines, ete., ferryboat "General | Simpson's Patent Dry Dock Company. | July 2, 1920. | Completed July 12, 1920. | 93000 | 93000 |

45306
$9,616 \quad 19$
$75,990 \quad 00$
$67,000 \quad 00$

$\begin{array}{rr}1,500 & 00 \\ 9,287 & 00 \\ 379,950 & 00 \\ 335,900 & 00 \\ 1,146 & 00 \\ 152,400 & 00 \\ 2,9 \times 0 & 00\end{array}$
Completed July 17, 1920
Completed Oct. 15, 1920
Unfinished.........

est bidder. ${ }^{2}$ Invitation bids. ${ }^{3}$ Paid to eity. ${ }^{4}$ Second lowest hidder.
Miscellaneous Work.

| * Per ton of 2,000 pounds. $\quad{ }^{2}$ Advertised and awarded to lowest bidder. |
| :--- |
| Contract. |

${ }^{1}$ Advertised and awarded to lowest bidder. Placing ferryboat "General Hancock" on marine
railway, clean bottom, place new planking, etc.
Repairing south drop, North Ferry, Last Boston
landing. W. H. Ellis \& Sion Company
Groton Iron Works.
Winnisimmet ship Yard, Inc...
$\underset{\substack{\text { Company }}}{\text { Simpon's Patent Dry Doek }}$
Ricluard T .
Riclaard T. Green Company.
‘Subduog תu!p!!nqd!̣s' uozsog
,
2 Placing ferryboat "General Hancock" on marine Atlantie Works. - New steel ferryboat. . . . . . . . . . . . . . . . . . . . . . . . . . . . .

- New steel ferryboat.
${ }^{1}$ New steel ferryboat.
${ }^{1}$ Repairs on eight bronze propeller blades.
${ }^{1}$ Repairs and renewals to double-serew ferryboat
"Noddle Istand.


## Dee. 10, 1920. Unfinished

## Highway Division - Lighting Service.

Contracts in Force Made in Previous Years.

| Contract. | A warded to | Dated. | Progress of Work. | Estimated Cost. | $\underset{\text { Expended }}{\text { Amount }}$ in 1919. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ${ }^{1,2,3,4, ~ F u r n i s h i n g ~ g a s ~ f o r ~ s t r e e t ~ i g h t i n g ~ p u r p o s e s ~ f o r ~}$ a period of te years from April 1, 1914, until March 31, 1924, iuclusive | Boston Consolidated Gas Conupany... | March 19, 1914. | Unfinished. |  | 8195,80-5 09 |
| ${ }^{1,2,3,4,5,} \begin{aligned} & \text { lighting the streets, parks and alleys (except } \\ & \text { strects in Charlestown and Hyde } \\ & \text { Park) }\end{aligned}$ streets in Charlestown and Hyde Parki, with mas for a period of ten years, from April 1, 1914, until March 31, 1924, inclusive. | Boston Consolidated Gas Company... | March 19, 1914. | Unfinished. |  |  |
| ${ }^{1}$, ${ }^{\text {, }}$, Lighting the strects, parks and alleys wath electricity (except streets in Charlestown and including Charlestown if said company shall puchase the electric a period of ten years, from December 7, 1914, until December 6, 1924, inclusive. | The Edison Electric Illuminating Co. . | Dec. 7, 1914. | Unfinished. |  | * 472,92131 |

[^3]| Deschiption of Lamp. | lixed Costs per lamp per Year. | $\begin{aligned} & \text { Running } \\ & \text { Costs per } \\ & \text { Iamp Hour. } \end{aligned}$ | Description of Lamp. | Fixed Costs per Lamp per Year. | $\begin{gathered} \text { Running } \\ \text { Costsper } \\ \text { Lamp Hour. } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 40 candle power Inc. lamp, scrics | \$10 s0 | 0.15 cent | 100 candle power Inc. lamp, multiple | \$1500 | 0.50 cent |
| 40 candle power Inc. lamp, multiple | 1200 | 0.25 cent | 200 candle power Inc. lamp, series | 2.500 | 1 cent |
| 60 candle power Ine. [amp, ser!es. | 1200 | 0.20 cent | 500 candle power Inc. lamp, multiple | 3600 | 1.50 cents |
| 60 candle power Inc. lamp, multiple. | 1200 | 0.20 cent | 425 watt A. C. arc lamp, multiple | 3600 | 1.60 cents |
| 100 candle power Inc. lamp sercis | 1800 | 0.40 cent | 800 candle power Magnetite 500 watt D. C. arc lamp series. | 3600 | 1.37 cent |

The above are new prices which became effective on February 26, 1918, by decision of the Gas and Electric Light Commissioners.
Rebates for the preceding years, to the amount of
$\$ 147,746.25$, were deducted from bills paid in 1918 to the Edison Electric Illuminating Company. Service for For further detail, see report of Lighting
1918 .
Highway Division - Paving Service.

| Contrictur. | Dated. | Contract Completed. | Price per Square Foot | Amount Expended in Rebate in 1920. |
| :---: | :---: | :---: | :---: | :---: |
| Simpson Brothers Corporation | April 9, 1920 | January 31, 19:2 | $80 \quad 12$ | \$125 76 |
| John Landis | April 9, 1920 | January 31, 1921 | 12 | 87108 |
| John Vitrnerin | April 9, 1920 | January 31, 1921 | 12 | 40452 |
| W. A. Murtfeldt Company | April 9, 1920 | January 31, 1921 | 12 | 1,880 58 |
| Thomas J. Hind Compuny | April 5, 1920 | January 31, 1921 | 12 | 33000 |
| Pignat Vicenzi Mosaic Company, lnc. | April 12, 1920 | January 31, 1921 | 12 | 14178 |
| Joseph Rngo | April 12, 1920 | January 31, 1921 | 12 | Nothing. |
| F. J. Van litten Company. | April 16, 1920 | January 31, 1921 | 12 | 10620 |
| George M. Crowell. | April 29, 1920 | January 31, 1921 | 12 | 393 St |
| B. F. Hanrahan | April 29, 1920. | January 31, $1921 \ldots \ldots .$. | 12 | Nothing. |
| Joseph A. Singarella. | May 6, 1920. | January 31, 1921 | 12 | 26656 |
| Joseph Lambiase. | May 6, 1920. | January 31, 1921 | 12 | 4440 |
| Alfred J. Clapp. | May 6, 1920 | January 31, 1921 | 12 | Nothing. |
| Martino DeMatteo. | April 29, 1920. | January 31, 1921....... . | 12 | 57648 |
| Adams l'ond Company . | May $12,1920$. | January 31, $1921 . . . . . . .$. | 12 | $50 ¢ 22$ |
| Kearus Construetion Company | May 12, 1920 | January 31, 1921 | 12 | Nothing, |
| Warren Brothers Company . | May 22, 1920 | January 31, 1921. Rebate.* | 12 | 177 84 |
| Wilson \& Tomlinson.... | May 20, 1920. | January $31,1921 \ldots \ldots .$. | 12 | 35748 |


| January 31, 1921. | 12 | 8240 |
| :---: | :---: | :---: |
| January 31, 1921. | 12 | 14820 |
| January 31, 1921. | 12 | Nothing |
| January 31, 1921 | 12 | 13182 |
| January 31, 1921. | 12 | 22860 |
| January 31, 1921 | 12 | Nothing |
| January 31, 1921. | 12 | 16656 |
| January 31, 1921. | 12 | Nothing |
| January 31, 1921. | 12 | Nothing |

[^4]| Contract. | A warded to | Dated. | Progress of Work. | $\begin{aligned} & \text { Estimated } \\ & \text { Cost. } \end{aligned}$ | Amount Expended in 1920 . |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cushman road (Dustin street to Gleneoe street) Baston street (North Harvard street to Manstield street) Gilenville arenue (Cireylock roal to Allston street) Willian Jackison avenue (Chestnat Hifl avenue to Academy 1 lill road). | John J. Lane.. | Sept. 7, 1920. | $\left\{\begin{array}{l}\text { Unfinished } \\ \text { Completed Nor. } 9,1920 \\ \text { Completed Nov. } 5,1920 \\ \text { Completed Oct. } 30,1920\end{array}\right.$ | 875,300 00 | 852,053 74 |
| Centrestreet (Allandale street to South street). South street (Centre street about 270 feet easterly). | \}The Bermudez Company | Sept. 7, 1920. | $\left\{\begin{array}{l} \text { Unfinished } \ldots . \\ \text { Unfinished... } \end{array}\right.$ | 83,30000 | 72,551 58 |

Wood Block Pavement.

| Contract. | Awarded to | Dated. | Progress of Work. | $\begin{gathered} \text { Estimated } \\ \text { Cost. } \end{gathered}$ | Amount <br> Expended in 1920. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Devonshire street (Water strect to Franklin street) Washington street (Beach street to kneeland strect).. | JJames Doherty............ | May 12, 1920. | $\left\{\begin{array}{l}\text { Completed July 10, 1920... } \\ \text { Unfinished................... }\end{array}\right.$ | $\$ 21,400 \quad 00$ | 817,928 05 |
| Charles street (Fruit street to Allen street) | John NeCourt Company ..... | July $\quad 2,1920$. | Completed Aug. 20, 1920... | 20,000 00 | 20,012 45 |
| Tremont street (westerly side), Park street to Boylston street. <br> Boylston street (northerly side), Tremont street to Charles street. | James Doherty | July 16, 1920. | Completed Oct. 16, 1920... | 34,20000 | 25,495 51 |
| Simasco Pavement. |  |  |  |  |  |
| Contract. | Awarded to | Dated. | Progress of Work. | $\begin{aligned} & \text { Estimated } \\ & \text { Cost. } \end{aligned}$ | Amount <br> Expended in 1920 . |
| Market street (Washington street, across Western avenue).. <br> Arlington strect (Market street, aeross Leicester street), | Simpson Brothers Corporation, | Nov. 2, 1920. | $\left\{\begin{array}{l}\text { Unfinished............... } \\ \text { Unfinished.............. }\end{array}\right.$ | \$133,000 00 | 82,765 56 |

Artificial Stone Sidewalks, Furnishing and Laying.

| Contract. | Awarded to | Dated. | Piogress of Work. | Cost <br> Estimated | Amount <br> Expended in 1920 . |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ${ }^{1}$ Ashmont street (north side), from 186 feet west of Neponset avenue to Train street; Neponset avenue (west side) at Nos. 3-15 and 29-35; Olney street (north side) at Nos. 7 and 9. | Joseph A. Singarella | May 24, 1920. | Completed July 10, 1920... | \$5,700 00 | \$4,946 48 |
| ${ }^{1}$ Aslifield street (Walter street to Fairview street); Congreve street (South street to Centre street); Hastings street (Centre street to Montview street); Walk Hill street (west side), Hyde Park avenue to Wenham street. | John Kelly Company . . . . . . . | July 2, 1920. | Completed Oct. 26, 1920.... | 33,500 00 | 21,283 13 |
| ${ }^{1}$ Brooks street (Hobart street to Faneuil street); Linden street (Brighton avenue to Commonwealth avenue). | Piazzuolo \& Ferrari.......... | July $\quad 2,1920$. | Completed Sept. 22, 1920.. | 15,300 00 | 8,950 65 |
| ${ }^{1}$ Union Park street (north side), Washington strect to Harrison avenue. | Joseph A, Singarella . ....... | Aug. 11, 1920. | Completed Aug. 21, 1920 . | 1,500 00 | 1,194 75 |
| ${ }^{1}$ Providence street (north side), Columbus avenue to Church street. | Joseph A. Singarella | Sept. 22, 1920. | Completed Sept. 29, 1920... | 2,500 00 | 1,257 00 |
| ${ }^{1}$ St. Albans road (Francis street to Huntington avenue), | Joseph A. Singarella | Oct. 18, 1920. | Completed Oct. 22, 1920... | 85000 | 99678 |
| ${ }^{1}$ La Grange street (north side), Centre street to Landseer street. | Joseph Todesca. . . . . . . . . . . | Nov. 26, 1920. | Unfinished................. | 7,400 00 | 1,192 25 |

[^5]Topeka Pavement.

| Contract. | Awarded to | Dated. | Progress of Work. | $\begin{aligned} & \text { Estimated } \\ & \text { Cost. } \end{aligned}$ | Amount Expended in 1920 . |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ${ }^{1}$ Havelock street (Blue Hill avenue to Morton strect); <br> Wileock street (Bline IIill avenue to Morton street); <br> Wollastonterrace (Woodrow aveuue to Jonesavenue). | Rowe Contracting Company. | May 12, 1920. | Completed July 29, 1920. | \$32,000 00 | \$30,041 70 |
| ${ }^{1}$ Batrcock street (Commonwealth avenue to Boston \& Albany Railroad); Cummington street (Commonwealth avenue to Boston (E Albany Raitroad). | Rowe Contracting Company:. | May 27, 1920. | Unfinished | 37,700 00 | 16,610 15 |
| 1 Beceh street (West Roxbury l'arkway to Belgrade avenue); Belgrade avenue (Anawan avenue to Centre street); Centre street (houth street to Spring street). | Rowe Contracting Company*. | July 6, 1920. | Cnfinished | 330,800 00 | 113,016 74 |
| ${ }^{1}$ Ekler street( Columbia road to Humphreys strect); Wilbur street (Cushing avenue to Tpham avenue). | Central Construction Company. | July 13, 1020. | Completed Oct. 25, 1920.. | 22,000 00 | 17,923 91 |
| ${ }^{1}$. Trehdale roal (Washington street to South street) Parquhar street (Selwy street to Centre strect); MeCraw street (Belgride avenue to West Roxbury Railroad). | 11. De Matteo. | July 16, 1920. | $\left\{\begin{array}{l}\text { Not st:arted.................. } \\ \text { Completed Nov. .11, 1920.... }\end{array}\right.$ | 35,700 00 | 15,002 24 |
| ${ }^{1}$ Falkland terrace (Hobart street to Brooksdate road), | 1. J. Lane | Aug. 11, 1920. | Completed Sept. 25, 1920... | 17,600 00 | 11,693 53 |
| ${ }^{1}$ Pleasant street (East Cottage street to Stoughton street). | Central Construction Company. | Aug. 16, 1920. | Completed Oct. 7, 1920 | 21,300 00 | 20,2S7 05 |
| ${ }^{1}$ Hamlin street (East Eighth street to Columbia road), | John 'T. Shea, Jr | Aug. 20, 1920. | Completed Sept. 29, 1920... | 6,300 00 | 5,689 82 |
| ${ }^{1}$ Arbutus street (Blue fill avenue to Irma street) | M. Dearatteo | Oct. 11, 1920. | Unfinished | 19,000 00 |  |
| 1 Pleasantstreet (Stoughton street to Savin Hill avenue), | F. J. Burke. | Oet. 15, 1920. | Completed Dec. 18, 1920... | 25,000 00 | 18,892 10 |
| ${ }^{1}$ River street (bridge over Providence Division Railroad across Everett square). | Central Construction Company. | Nov. 2, 19:2. | Not started | 33,700 00 |  |
| ${ }^{1}$ Centre street (Forbes street to Boylston street). Green street (Call street to Centre street)....... | Central Construction Company............................ | Nov. 3, 1920. | Unfinished. <br> Not started. | 43,000 00 | 9,369 21 |

## Concrete Retaining Wall.


Paving Between Tracks.

| Contract. | Awarded to | Dated. | Progress of Work. | $\begin{aligned} & \text { Vitimated } \\ & \text { Cost. } \end{aligned}$ | Amount <br> Expended in 1920. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ${ }^{3}$ Hyde Park Avenue (Metropolitan avenue to River street. | John McCount Company | Oct. 8, 1920. | Completed Nov. 19, 1920 | 827,38000 | S26,5ss 60 |
| Bitulithic Pavement. |  |  |  |  |  |
| Contract. | Awarded to | Dated. | Progress of Work. | $\begin{aligned} & \text { Bstimated } \\ & \text { Cost. } \end{aligned}$ | Amount <br> Expended in 1920 . |
| 1 Stuart street (Clarendon street to Trinity place) | Warren Brothers | Aug. 3, 19:0. | Completed Oct. 30, 1920. | \$11,000 00 | \$10,281 20 |
| ${ }^{2}$ Huntington avenue at Jamaicaway | Warren Rrothers | Sept. 22, 1920. | Completed Aug. 21, 1920. | 1,400 00 | 1,52393 |

${ }^{1}$ Advertised and awarded to lowest bidder.
${ }^{3}$ Not advertised, awarded to lowest bidder on invitation.
Granite Block Pavement.

| Contract. | Awarded to | Dated. | Progress of Work. | $\begin{aligned} & \text { Estimated } \\ & \text { Cost. } \end{aligned}$ | Amount <br> Expended in 1920 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ${ }^{1}$ Franklin street ( 60 feet west of Devonshire street to Broad street). | James Doherty | June 25, 1920. | Completed Sept. 3, 1920.. | \$22,000 00 | \$10,820 71 |
| ${ }^{1}$ Washington street (Archdale road to 75 feet south of Corinth street) | William J. Barry | June 25, 1920. | Unfinished | $140,5{ }^{\prime} 000$ | 103,955 21 |
| ${ }^{1}$ Grosvenor place (Cliff street southeaterly, southwesterly and southeasterly). | Joseph A. Singarella | July 20, 1920. | Completed Dee. 6, 1920. | 4,800 00 | 3,871 06 |
| ${ }^{1}$ Blackstone street (Clinton street to Haymarket square) | Coleman Brothers, In | Aug. 3, 1920. | Completed Sept. 21, 1920... | 24,500 00 | 28,528 89 |
| ${ }^{1}$ Dorchester avenue (Dorchester avenue bridge to West Second street). | John Kelly Company | Aug. 9, 1920. | Completed Dee. 24, 1920 | 21,500 00 | 15,170 18 |
| ${ }^{1}$ Public alley No. 710 (East Brookline street to East Newton street). | John Landis | Aug. 11, 1920. | Completed Nov. 23, 1920 | 19,600 00 | 10,204 81 |
| Publie alley No. 818 (St. Stephen street 69 feet westerly). | John Landis. |  |  |  |  |
| ${ }^{1}$ Dudley street (Alexa nder stiwet to Stoughton street). | DeStefano Brothers | Aug. 18, 1920. | Unfinished | 33,20000 | 30,925 19 |
| ${ }^{1}$ Albany street (Broadway to Troy street) | James Doherty | Sept. 29, 1920. | Unfinished | 55,50000 | 30,45810 |
| Friend street (Union street to Causeway street). Portland street (Hanover street to Causeway street) Richmond street (Hanover street to Atlantic avenue) | B. E. Grant Company | Oct. 11, 1920. | (Unfinished Not started. Not started | 117,000 00 | 9,285 97 |
| Public alley No. 909 (Massachusetts avenue to Hemenway street). | DeStefano Brorhers | Nov. 2, 1920. | Not started | 7,000 00 |  |
| ${ }^{1}$ Fargo street (B street to C street). | B. E. Grant Company | Nov. 15, 1920. | Unfinished. | 16,500 00 | 2,464 15 |

[^6]Public Works Department.
Brick Block Pavement.

Miscellaneous.

| Contract. | Awarded to | Dated. | Progress of Work. | Estimated Cost. | Amount <br> Expended in 1920. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ${ }^{1}$ Recutting and redressing old granite block <br> ${ }^{2}$ Taking down trees onWalk Mill street. . | Willian Toon. <br> John IIalloran. | Scpt. 29, 1920. <br> Nov. 13, 1920. | Unfinished. <br> Completed. | $\begin{array}{r} \$ 12,00000 \\ 49000 \end{array}$ | \$113 37 |

Removing Snow and Ice.

Sewer and Sanitary Division - Sewer Service.

| Contract. | Awarded to | Dated. | Progress of Work. | Estimated Cost as per Estimated Quantities, not Including Materials Furnished by City. | $\begin{gathered} \text { Amount } \\ \text { Expended } \\ \text { in } 1920 . \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 Kennebec street and outlet in privateland and Ruskin road, Dorchester and Hyde Park. | Frank Drinkwater | Feb. 7, 1920. | Completed Aug.s, 1920 | 88,677 00 | 87,250 02 |
| ${ }_{1}$ Stony brook conduit, section No. 10, West Roxbury. | West Roxbury Trap Rock | Mar. 12, 1920. | Unfinished | 109,052 00 | 52,627 75 |
| Wollaston terrace from Woodrow avenue to Jones avenue, Dorchester. | T. Coughlin | May 20, 1920. | Completed June 3, 1920 | 1,181 25 | 91530 |
| Unity court, from Unity street 151 feet westerly and northerly, city proper. | William Barrett \& Co. | May 20, 1920. | Completed June 24, 1920 | 2,884 50 | 2,185 69 |
| Berkeley street, from St. James avenue to Providence street, city proper | Coleman Brothers, Inc | May 24, 1920. | Completed Aug. 28, 1920 | 11,585 00 | 11,370 34 |
| ${ }_{1}$ Mechanic strect, from Madison court, 150 feet southerly, Roxbury | V. Grande | May 27, 1920. | Completed July 1, 1920 | 3,176 10 | 2,832 99 |
| Falkland terrace, from Hobart street and Brooksdale road, Brighton. | J. W. O'Connell. | June 16, 1920. | Completed July 13, 1920 | 4,199 50 | 3,909 33 |
| , Cummington street, from Commonwealth avenue to Boston \& Albany Railroad, Roxbury. | J. W. O'Connell. | June 16, 1920. | Completed Aug. 7, 1920 | 6,198 40 | 5,747 30 |
| ${ }_{1}$ Private land, outlet for Algonquin road, Newton, from Lake street to Newton line, Brighton. | John J. Lane. | June 3, 1920. | Completed Sept. 17, 1920 | 18,885 00 | 14,905 97 |
| ${ }_{1}$ Muddy river conduit in Brookline avenue, from Beacon street to Audubon road, Roxbury. | C. \& R. Construction Company. | June 25, 1920. | Unfinished | 280,118 00 | 48,851 60 |


| N \＃ $=$ | $\begin{aligned} & \text { N } \\ & \text { A } \\ & \underset{\sim}{3} \end{aligned}$ | $\begin{aligned} & i \\ & \text { in } \\ & \stackrel{9}{9} \end{aligned}$ |  | $\begin{aligned} & \text { 잉 } \\ & \text { ì } \\ & \frac{1}{4} \end{aligned}$ |  | ＇ 8 |  | $\cdots$ | $\begin{aligned} & \text { G } \\ & \text { H } \\ & \stackrel{y}{0} \end{aligned}$ | ® O 苟 | in － $\cdots$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 断 | 泉 | 8 | 永 | ？ | § | 6 | 8 | 8 | 8 | 8 | $\xi$ |
|  | 菝 | $\stackrel{\text { 을 }}{=}$ |  | 管 | $\frac{8}{9}$ | 会 | $\begin{aligned} & 0 \\ & 9 \\ & \hline 10 \end{aligned}$ | 苓 | \％ | $\stackrel{1}{2}$ | \％ |


| ＿Harvard street，from labyan street to Greenock street，Dorehester． | J．Guarino \＆Co． | June 25， 1920. | Completed July 20，1920．． |
| :---: | :---: | :---: | :---: |
| ${ }_{1}$ Lexington avenue，from Jefferson street about 156 feet Northerly，Hyde Park． | D．Vozzella Company ．．．．．．． | June 25， 1920. | Completed July 9， $1920 \ldots$ |
| ${ }_{1}$ Public alley No．909，from Hemenway street to Massachusetts avenue，Roxbury． | T．Coughlin | July 13， 1920. | Completed Sept．23， 1920. |
| ${ }_{1}$ Hastings street，from Centre street to Mont－ view st reet，West Roxbury． | D．Vozzella Company ．．．．．．． | July 13， 1920. | Completed Aug．23， 1920. |
| 1 Market street，from Lothrop street to Wash－ ington street，Brighton． | A．Cefalo． | July 13， 1920. | Completed Oct．30， 1920 |
| ，Bridge court and North Anderson street： Bridge eourt，from North Anderson street about 97 feet easterly，and outlet in North Anderson street，between Parkman and Cambridge streets，eity proper． | William Barrett \＆Co | July 13， 1920. | Completed Sept．21， 1920. |
| 1 Loring street，from Foster strect to Tyler street；outlet in Glenwood avenue，Hyde Park． | J．Guarino \＆Co． | July 15， 1920. | Completed Aug．23， 1920 ． |
| ${ }^{1}$ Grosvenor place，from Cliff street about 266 feet south and southwesterly，Roxbury， | J．Guarino \＆Co． | Aug．3， 1920. | Completed Oct． $28,1920 .$. |
| 2 Chestnut Hill avenue，from Cleveland circle to Commonwealth avenue：and Glenville avenue，from Aliston street and Greylock road．Brighton． | J．J．Conway | Aug．11， 1920. | Completed Nov．20， 1920. |
| 1 Private land and Paine street（near Brook street）．from Canterbury branch of Stony brook and brook from Forest Hill Ceme－ ter＇，West Roxhury． | Joseph Todesca | Aug．11， 1920. | Completed Sept．30， 1920. |
| ${ }^{1}$ Private land and Babcock street，from Salt creek outlet and Commonwealth avenue， Brighton． | A．Cefalo | Aug．29， 1920. | Completed Sept． $23,1920$. |
| ${ }_{1}$ River street，from llyde Park avenue and Central avenue，Hyrle Park． | D．Vitiello． | Aug．13， 1920. | Completed Oet．17， 1920 |

Sewerage Works.-Concluded.

| Contlacts. | Awarded to | Dated. | Progress of Work. | Fstimated Cost as per Estimated (Emantities, not Including Materials Furnished by (ity. | Amount <br> Expender in 1920. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ${ }^{1}$ Lareh street, from South Creseent eircuit to Lienriek street; Brayton road, from Kenrick street to ('reseent arenue; South Crescent circuit, from South Crescent avenue to Regent street: South Crescent eirenit and private land from Lareh street to Regent strect. Brighton. | L. Martiniello. | Aug. 16, 1920. | Completed Nov. 20, 1920.. | \$18,950 25 | \$18,469 57 |
| ${ }^{1}$ Saville and Wren streets, between Park and Oriole streets, and Board of Survey street No. $66 t$, between Wren street and Em- mons road, West Roxbury. | James 13:rletta. | Sept. 1, 1920. | Unfinished. | 40,961 50 | 14,397 72 |
| 1 Kouth street, Lesher street and private land, and Arehdale road, West Roxbury. | F. Drinkwater | Sept. 9, 1920. | Completed Nov. 24. 1920.. | 21,948 50 | 21,21036 |
| ${ }^{1}$ Murdock strect, between North Beacon strect and Cushman road; Cushman road, between (ilencoe strcet and Dustanstreets, Brighton. | J. J. Conway | Sept. 22, 1920. | Completed Dec. 30, 1920 | 12,766 00 | 12,317 98 |
| ${ }^{1}$ Fox Point road, from Savin ITillavenue about 134 feet southeasterly, Dorchester. | T. Coughlin | Sept. 22, 1920. | Completed Oct. 3, 1920 | 85960 | 51578 |
| ${ }^{1}$ Amory avenue, between Stony brook conduit and Amory street, Roxbury. | T. Coughlin. | Oet. 8, 1920. | Completed Dec. 4, 1920. | 5,768 00 | 3,669 31 |
| ${ }^{2}$ Faragut road extension, from East First street about 250 feet northwesterly, South Boston | A. Baruffaldi | Oct. 8, 1920. | Unfinished. | 37,39750 | 25,475 77 |
| , Cambridge street, between Hano and Wilkins street, Brighton. | J. Todesca. | Oct. 11, 1920. | Completed Nov. 6, 1920... | 3,128 75 | 2,421 48 |
| 1 Roanoke road, from liennebec street about 105 feet northwesterly, Hyde Park. | G. J. Regan. | Oct. 18, 1920. | Completed Nov. 29, 1920.... | 1,158 00 | 1,092 14 |


| , Itaska street, from oakland strect about 1,125 feet northeasterly, Dorchester. | J. Guarino \& Co.............. | Oct. 18, 1920. | Unfinished. | 10,103 00 | 8,115 55 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| - Alger street, from Dorehester avenue about $\bar{i} H$ feet westerly, South Boston. | S. J. Tomasello. | Oct. 20, 1920. | Completed Dec. 30, 1920 | 13,125 90 | 12,7s 36 |
| ${ }^{1} \mathrm{~N}$ and K street overflow extensions and dredgingin Old llarbor, South Boston | Bay State Dredging and Contracting Company. | Oct. 26, 1920. | Unfinished. | 51,393 00 | 7,730 75 |
| a Private land and Banfied avenue, between Delhi and West sholden streets, Dorchester. | Daddario \& Booth . | Oet. 2.), 1920. | Completed Dee. 16, 1920 | 7.96580 | 4.12859 |
| ${ }^{2}$ Lubec strect outlet in private land, between Cottage street and existing conduit, East Boston. | A. Cefalo. | Oct. 25, 1920. | Not started. | 2S,912 00 | $N$ Nthing. |
| 1 Castleton street, between Jamaicaway and south Huntinuton avenue and Zamora street, between Castleton and Perkins streets, West Roxhury. | A. Cefalo. | Oct. 25, 1920. | Completed Dee. 9, 1920. | 10,322 50 | 8,228 37 |
| ${ }^{1}$ Whalliams and Forest Hills streets. from atout 220 feet sontheast of Plainslield street to about 30 feet south of Williams street, West Rovbury. | . Todesca. | Nov. $2,1920$. | Unfinished | 9,4636 | 6,883 13 |
| ${ }^{1}$ l'rivate land, from Dellii strect about 176 feet easterly, Dorchester. | J. J. Conway | Dee. 3, 1920. | Completed Jan 15, 1921 | $5,31 \times 75$ | 4.81975 |
| ${ }^{1}$ Murray Court from Orleans street to end of Court, Bast Boston. | F. Williams. | Dec. 10, 1920. | Completed Jan. 6, 1921 | $2,320 \geq 0$ | 1,469 97 |
| ${ }^{1}$ Building fatch-basins, manholes and minor drains in Boston. | William Barrett \& Co. | May 20, 1920. | Completed Aug. 19, 1920 | 16,305 50 | 14.18945 |
| ${ }^{1}$ Building catch-bosins, manholes, minor drains and surface drains in koston. | V. Grande | Aug. 20, 1920. | Completed Oct. 19, 1920 | 7.6999 | 7,043 so |
| ${ }^{1}$ Building catch-basins and minor drains in Boston. | William Barrett \& Co. | Sept. 22, 1920. | Unfinished. | 13,363 50 | $13,965 \quad 10$ |

Miscellaneous.

| Contract. | Awarded to | Dated. | I'rogress of Work. | Estimated Cost. | Amount Expended in 1920. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ${ }^{1}$ Repairs to boiler No. 4 Calf Pasture Pumpingstation, | Daniel Russell Boiler Works, lne. | June 21, 1920. | Completed July 7, 19:0.... | \$700 00 | \$700 00 |
| ' Construeting new roof over coal poeket Calf lasture pumping station. | Coleman Brothers, Inc | July 15, 1920. | Completed Sept. 4, 1020... | 18,815 00 | 17,458 24 |
| 1 Repairs to boiler No. 5 Calf Pasture pumpingstation | $\underset{\text { Inc }}{\text { Daniel Russell Boiler Works, }}$ | Aug. 23, 1920. | Completed Sept. 1, 1920.... | 90000 | 90000 |
| ${ }^{1}$ Cleaning sewers Cambridge street, under Boston d Maine and Boston \& Albany Railroad, at East Somerville station, between Haverhill street and Somerville line, Charlestown. | Andrews Construction Company. | Oet. 25, 1920. | Completed Dec. 2, 1920.... | 2,190 00 | 2,712 00 |
| ${ }^{1}$ Repairs to Boiler No. 6 Calf Pasture P'umping station | Simpson Patent Dry Dock Company. | Nov. 2, 1920. | Completed Nov. 20, 1920... | 2,730 00 | 2,730 00 |
| ${ }^{1}$ Cleaning sewers in Roland stseet, between Crescent street and Crafts strect, ('harlestown, and P'ublic Alley number 817, off Gainsborough street, between St. Stephen street and Huntington avenue. | Andrews Construction Company. | Dee. 14, 1920. | Completed Dee. 30, 1920... | 1,500 00 | 1,536 73 |
| ${ }^{1}$ New deek for coal run at Calf Pasture pumping station. | Hub Contracting Company. | Jan. 4, 1921. | Not started............... | 3,243 10 | 69581 |
| ${ }^{2}$ Supervision of repairs to and overhauling of pumping engine No. 5 Calf Pasture pumping station. | A. B. Raymond | Jan. 25, 1921. | Notstarted............... | 3,922 65 | 1,307 55 |
| ${ }^{2}$ Repairs to and overhauling of pumping engine No. 5, | Simpson Patent Dry Dock Company. | Jan. 21, 1921. | Unfinished................. | 78453 |  |

Cleaning Catch=Easins.

| Dintricto. | Awarded to | Dated. | Progress of Work. | $\begin{gathered} \text { Price per } \\ \text { Cubic } \\ \text { liard. } \end{gathered}$ | Amount <br> Expended in 1920 . |
| :---: | :---: | :---: | :---: | :---: | :---: |
| No. 1, (ity l'roper. <br> No. 2, Back Bay, South End and Roxbury <br> No. 3, South Boston. | C. \& R. Construction Company. | March 1, 1920. | Completed Jan. 31, 1921. | \$190 | \$12,007 88 |
|  |  |  |  | 1 SO | 10,105 99 |
|  |  |  |  | 180 | 3,797 62 |
| ${ }^{1}$ No. 4, Charlestown and East Boston |  |  |  | 180 | 4,20533 |
| ${ }^{1}$ No. 7, Dorchester and llyde Pard... |  |  |  | 200 | 10,980 64 |
| ${ }^{1}$ No. 5, Brighton |  |  |  | 163 | 1,620 91 |
|  | $\}^{\text {James L L Pierce }}$ | March S, 1920. | Completed June 30, 1920. | 163 | 1,71S 5 S |
| ${ }^{1}$ No. 6, West Roxbury. | Dominick Vozzella | Oct. 3, 1920. | Completed Dec. 10, 1920.. | 330 | 3,192 81 |

${ }^{1}$ Advertised and awarded to lowest bidder.
Selver and Sanitary Division - Sanitary Service.

Collecting and Removing Ashes, Store Dirt, House Dirt and Refuse.

| District. |
| :--- |

[^7]${ }^{1}$ Advertised and awarded to highest bidder. ${ }^{*}$ Priee per horse per year paid to city.
Contracts In Force Made in Previous Years.

| Contrant. |
| :--- |

1 Advertised and awarded to lowest bidder.
Miscellaneous.

| Covtract. | Aw:arded to | Dated. | Progress of Work. | $\begin{aligned} & \text { Estimated } \\ & \text { Cost. } \end{aligned}$ | $\begin{aligned} & \text { Amount } \\ & \text { in } 1920 . \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ${ }_{1}$ Furnishing combination street sprinkling, flushing and oilspreading motor trucks. | B. E. Grant Company . | April 16, 1920. | Completed J: n . 31, 1921. | * 83200 | \$51,560 00 |
| ${ }^{?}$ Furnishing and operating electric sprinller rar for sprinkling and flushing streets. | American Car Sprinkler Company: | April 2? 1920. | Completed Jan. 31, 1921 | $\dagger 1,80000$ | 10,51100 |
| Repairing rouf on brick stable, 6.50 Allany strect | William Martin | June 24, 1920 . | Completed Aug. 16, 1920.. | 90000 | 90000 |

$\dagger$ Per month. $\quad 2$ Not advertised.

* Per day.
${ }^{1}$ Advertisel and awarded to lowest bidder.
high Pressure fire service.
Water Division - Water Service.
Laying and Relaying Water Pipes.

| Contract. | Awarded to | Dated. | Progress of Work. | Estimated Cost as per Estimated Quantities, not Including Materials Furnished by City. | $\begin{aligned} & \text { Amount } \\ & \text { Expended } \\ & \text { in } 1920 . \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 D and Claflin streets, unnamed street, $C$ and Eliot streets. | C. \& R. Construction Compiny. | April 12, 1920. | Completed July 5, 1920 . . | \$13,697 50 | \$13,045 39 |
| 1 Hastings, Walter and Centre strects, West Roxbury. | J. 13:arletta. | April 28, 1920. | Completed Aug. 28, 1920... | 4,65875 | 8,019 98 |
| 1 Blackstone, Chambers, Friend, Richmond, Berkeley, bast and South st reets. | C. \& R.Construction Company. | May 18, 1920. | Completed July 10, 1920 . . | 7,412 50 | 7,126 S2 |
| 1 Woot avenue, llyde Park; Athol, Raymond, Riverdale and Waverley strects, Brighton. . . | J. Barletta. | May $20,1920$. | Completed July 26, 1920. . | 5,04750 | $4,422 \quad 79$ |
| ${ }_{1}$ Landscer, Oriole and Centre streets, West Roxbury; Cushman road and Falkland terrace, Brighton. | L. DeSisto \& Co. | June 19, 1920. | Completed Sept. 3, 1920.... | 5,15500 | 5,29986 |
| 1 North, Commereial, Portland, Medford and Friend strcets, lixeter pince, Essex, Chauney, Milk and Berkeley streets; high pressure fire service. | C. \& R. Construction Company. | Juty $16,1920$. | Unfinished. | 111,85900 | 59,35700 |
| 1 Boylston and Burnett st reets, West Roxbury . . . | J. I3arletta. | Aug. 9, 1920. | Completed Scpt. 24, 1920... | 2,940 00 | 2,718 39 |
| ${ }_{1}$ Burt and Fuller streets, Thetford avenue, Doreliester. | F. Drinkwater | Aug. 16, 1920. | Completed Oct. 21, 1920... | 6,89.5 00 | 5,605 27 |
| 1 Condor strect, eity property abutting opposite Brooks strcet, East Boston. | J. Williams \& Co. | Sept. 1, 1920. | Completed Sept. 7, 1920... | 63000 | 43475 |


| $4,943 \quad 34$ |
| :--- |
| 3,13165 |
| $2,662 \quad 26$ |
| 1,52574 |
| 1,96183 |
| $1,988 \quad 22$ |
| 5,933 |
| 71 |
| 7,51063 |
| 68973 |


| 1 Summer, Kneetand and Norway strects, Public alley No. 44 , Pophar street, Kiennard avenue and M:arshtield street. | I. Williams \& Co. | Sept. 1, 1920. | Unfinished................. | 7,503 75 |
| :---: | :---: | :---: | :---: | :---: |
| Milton, Oak, Tileston, Tyler, Washington and West strects, llyde l'ark | 1'. DeCliristoforo | Sept. 16, 1920. | Completed Nov. 9, 1920 | 1,652 50 |
| 1 Arbutus streef, Dorchester: Nottingham road and Thorndike street, Brighton; West Roxhury Parkway and Willow street, West Roxbury. | J Barlcta. | Sept. 221920. | Completed Dee. 31, 1920. | 2,47000 |
| ${ }^{1}$. Dher street, Nouth l3oston, and Dilworth street, eity proper. | I. Willi:tus \& Co. | Oct. S, 1920. | Sompreted Oct. 14, 1920. . | 1,3.11 2.5 |
| 1 Was'ington, Groton, Laronia and Actonstreets, city proper. | J. Williams \& Co. | Oct. is, 1920 | Unfinished. | 5,12000 |
| ${ }^{2}$ Bullock street, Nouth Boston | J. T. Shea, Ir | Oct. 22, 1920. | Completed Oct. 30, 1920 | 1,926 75 |
| 1 Ashland, Florence, Poplar and Wachusett streets, West Roxhury. | , B. Barletta. | Oct. 2.5, 1920. | Unfinished. | 9,007 50 |
| ${ }^{1}$ Atlantic avenue, Edison Electric allev, off 511 Atlanticavenue, Battery street and adioining property of the Boston Elevated Railwas Company, high pressure fire service. | T. 1). liusso. | Nor. 12, 1920. | Unfinislied. |  |
| ${ }_{\text {a }}$ Bunker llillstreet, Charlestown. | D. Vozzella Company | Dec. 3, 1920. | Completel Dee. 13, 1920 | 7862.5 |

Miscellaneous.

| Covtracr. |
| :--- |


| ${ }^{1}$ Pearl street, city proper: Second, D and I streets, South boxton deaning water pipes. | National Water Main Cleaning Company. | Oct. 13, 1920. | Completed $0 \mathrm{ct} \cdot 21,192 \mathrm{t})$ | \$3,312 00. | 3,098 32 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Pitometer water waste surver of the South Boston distributionsystem aml a portion of the south End. | litometer Company | Oct. 1s, 1920. | Unfinished | \$10,000 00.......... | 2,833 33 |
| - Water tower, Grient leights, remove shingles from roof and put on at-phatt shinges. | J. Harrigan di sons. | Ott. 21, 1920. | C'ompleterl. | 880000. | 80000 |
| ${ }^{1}$ Columbus avenur, water pipe, brifge over Boston $\mathbb{E}$ Albany latiload, chaningand painting. | M. M. Devine. | Nov. 5, 1920. | Completed <br> Dec. 31, 1920. | \$77500. | 77500 |
| 2 Lease of space in the lincoln power station property, eorner Commercial and Battery strects, for high pressure fire service pumping station. | Boston Elevated Railway Company: | Nov. 17, 1920. |  | \$1 00 a year. |  |
| ${ }^{2}$ Purehtise of steam for high pressure pumping station $l_{0}-$ eated in the lineoln power station property, ('ommercial and Battery streets. | Boston Elevated Railway Cimpany. | Nov. 17, 1920. |  | \$200 00 per month. |  |
| ${ }^{1}$ Everett, Franklin, Cambridge and North LIarvard streets, Brighton, cleaning water pipes. | National Water Alain Cleaning Company. | Dec. 14, 1920. | Completed Dec. 31, 1920. | \$3,664 00. | 3,06796 |
| ${ }^{2}$ Lease of spate for ligh pressure pumping station at the third station property on Athantic avenue. | Edison Electric and Illuminating Company. | Jan. 12, 1921. |  | \$2,400 00 a year. |  |
| ${ }^{1}$ Lease of space for high pressure pumping station at the thirty-eight station property on sturt street. | Edison Electrice and Illuminating Company. | Jan. 12, 1921. |  | \$2,400 00 a year. |  |
| ${ }^{2}$ Agreement for purchase of electricity for high pressure pumping stations for the eity, located in the third station properts, dtantio avenue and thirty-e ight station preperety, stuart street. | Edison Electric and Illuminating Company. | Jan. 12, 1921. |  | Schedule rates. |  |
| Repairing pier and fember gnurds, Wiaren briden | Wr. i. Rentle. | Jin. 2x, 1921. | Unfinished | $85,76200$. |  |

The following table shows the snowfall and rainfall since 1914:

Snowfall (inches).

| Month. | 1914. | 1915. | 1916. | 1917. | 1918. | 1919. | 1920. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| January | 10.3 | 7.0 | 4.8 | 13.1 | 13.8 | 4.1 | 34.8 |
| February | 20.6 | 5.1 | 30.3 | 8.9 | 5.7 | 6.2 | 32.5 |
| March. | 5.2 | T. | 33.0 | 12.9 | 12.8 | 2.4 | 11.0 |
| April. | 2.0 | 6.1 | 4.2 | 9.1 | 4.2 |  | 2.0 |
| November. |  | 0.2 | 0.7 | 2.2 | T. | 0.2 | 1.8 |
| December. | 4.1 | 6.7 | 9.5 | 7.0 | 8.4 | 2.9 | 5.5 |
| Totals. | 42.2 | 25.1 | \$2.5 | 53.2 | 44.9 | 15.8 | 77.6 |

Rainfall (inches).

| Month. | 1914. | 1915. | 1916. | 1917. | 1918. | 1919. | 1920. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| January . | 3.26 | 6.33 | 1.23 | 2.82 | 3.11 | 3.62 | 2.72 |
| February | 3.07 | 3.47 | 5.18 | 2.67 | 2.30 | 2.66 | 5.88 |
| March | 4.16 | T. | 3.20 | 3.73 | 3.19 | 4.11 | 3.72 . |
| April. | 5.87 | 1. 86 | 4.51 | 2.72 | 3.08 | 2.33 | 5.6 S |
| May. | 2.75 | 1.64 | 2.83 | 4.45 | 1.99 | 4.25 | 5.26 |
| June. | 1.40 | 1.39 | 5.04 | 4.05 | 1.94 | 1.08 | 5.78 |
| July . | 2.64 | 8.85 | 5.67 | 1.10 | 2.64 | 4.63 | 1.56 |
| August. | 3.20 | 5.63 | 2.19 | 7.06 | 1.56 | 5.07 | 2.32 |
| Scptember | 0.21 | 0.69 | 1.90 | 1.91 | 9.19 | 5.83 | 1.90 |
| October. | 1.54 | 2. S 2 | 0.94 | 5.33 | 0.99 | 2.13 | 1.64 |
| November | 2.72 | 2.14 | 1.67 | 0.59 | 1.20 | 5.36 | 5.46 |
| December | 3.46 | 3.94 | 3.00 | 2.56 | 3.21 | 1.63 | 3.89 |
| Totals | 34.31 | 38.76 | 37.36 | 38.99 | 34.40 | 42.70 | 45.81 |

In this rainfall is included the precipitation during the winter months, which equals one tenth of an inch to one inch of snowfall.
Area of Pavements.
The Following Table Shows Areas in Square Yards and Character of Pavements on Aceepted Streets, February 1, 1921.

$60 \quad$ City Document No. 22.
Length of Pavements.
The Following Table shous: Lenyth in Wiles and Character of P'acments on Acepted Streets, February 1, 1921.

Note.-In above tabie the city is sublivided substantially on the bounlary linesbetween the districts as they existed when annexed to Boston. Territory annexed from Brookline included in City Proper.
Of this amount 0.02 mile ef fath asphat bocks; 17.32 miles e fuals bitulithic; 0.06 mile equals filbertine and 10.28 miles equals Topeka. $\$$ Of this amount 0.06 miles equals 131 ome Ciranitoid concrete blocked pavement, and 0.08 mile equals Roman road pavement
it Of this amount 121.21 miles equal bituminous macadam.
5.96 miles publie alleys included in this table. Receation Department ineluded in this table.
1.81 miles public streets in eharge of the Commonwealth of Massachusetts ineluded in this table.

## The following changes in pavement were made during the year:

0.00 mile or 31 square yards asphalt changed to granite block.
0.26 mile or 3,8 sit square yards asphalt changed to wood block.
0.00 mile or 41 square yards asphalt changed to bitulithic.
0.00 mile or 72 square yards asphalt changed to Topeka.
0.73 mile or 23,097 square yards granite block changed to asphalt.
0.09 mile or $2,62: 3$ square yards granite block changed to wood block.
0.01 mile or 132 sc 位re yards granite block changed to bitulithic.
0.00 mile or 782 square yards granite block changed to Topeka.
0.00 mile or 12 square yards brick changed to asphalt.
0.06 mile or 1,540 square yards brick changed to plank on bridges.
0.01 mile or 279 square yards bitulithic changed to asphalt.
0.00 mile or 43 square yards Topeka changed to asphalt.
1.58 miles or 23,422 square yards macadam changed to asphalt.
0.98 miles or 43,642 square yards macadam changed to granite block.
0.05 mile or 1,359 square yards macadam changed to wood block.
0.39 miles or 10,846 square yards macadam changed to bitulithic.
2.13 miles or 33,690 square yards macadam changed to Topeka.
0.00 mile or 3,725 square yards macadam changed to gravel.
0.55 mile or 7,544 square yards gravel changed to asphalt.
0.30 mile or 4,098 square yards gravel changed to granite block.
1.28 mile or 21,028 square yards gravel changed to Topeka.
0.48 mile or 7,404 square yards gravel changed to macadam.
0.00 mile or 2,297 square yards not graded changed to granite block.
0.05 mile or 1,200 square yards not graded changed to bitulithic.
0.00 mile or 10,073 square yards not graded changed to Topeka.
0.00 mile or 1,281 square yards not graded changed to macadam.
0.00 mile or 1,355 square yards not graded changed to wood 1 lock.
0.02 miles or $4 \overline{4} t$ square yards granite block changed to Unionite.

## Streets laid out or discontinued by the Street Commissioners during the year show:

Asphalt increase 0.00 mile or 568 square yards.
Granite block increased 0.09 mile or 1,929 square yards.
Macadam decreased 0.00 mile or 4.55 square yards.
Gravel increased 0.86 miles or 13,331 square yards.
Not graded increased 0.08 mile or 2,708 square yards.
Wood block increased 0.00 miles or 15 square yards.
Bitulithic increased 0.00 miles or 48 square yards.
Corrections on account of revision and other causes show:

[^8]Public streets laid out or discontinued by the Street Commissioners during the year show pavements increased 1.3 miles or 18,144 square yards.

Corrections to previous measurements on account of revision and other causes show pavements increased 0.06 mile or increased 943 square yards.

Total net merease 1.09 miles or 19,087 square yards.
The rate of increase from year to year is shown in the following table:

| 1859. | . 111.50 | 188S. | . 392.72 | 1906. | 502.80 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1571 | . 201.32 | 1889. | . 397.84 | 1907. | . 510.04 |
| 1872. | .207. 40 | 1890. | . 404.60 | 1908. | . 511.60 |
| 1873. | .209 .24 | 1891 | . 409.60 | 1909. | . 514.28 |
| 1874 | . 313.90 | 1892. | . 434.59 | 1910. | . 18.63 |
| 1875 | . 318.58 | 1893. | . 443.34 | 1911. | . 521.21 |
| 1876. | . 327.50 | 1894. | . 447.65 | 1912. | . 561.36 |
| 1877 | 333.20 | 1895. | . 452.12 | 1913. | . 567.51 |
| 1875. | 340.39 | 1896. | . 456.11 | 1914. | . 572.85 |
| 1579. | 345. 19 | 1897. | .459.12 | 1915. | . 584.55 |
| 1880 | 350.54 | 1898. | . 471.19 | 1916. | . 593.62 |
| 1851 | 355.50 | 1899. | 479.47 | 1917 | . 596.19 |
| 1882 . | 359.85 | 1900. | 489.55 | 1918. | 601. 12 |
| 1883. | 367.99 | 1901. | 491.85 | 1919. | . 601.07 |
| 1884. | 374.10 | 1902. | 496.90 | 1920. | 603.71 |
| 1885. | 379.60 | 1903. | 499.85 | 1921. | .604.80 |
| 1886. | 383.55 | 1904. | 500.39 |  |  |
| 1887. | 390.30 | 1905. | 502.20 |  |  |

List of Personal Property on Hand January 31, 1921, and Estimated Value of Same, Allowing for Depreclation.

Central Office.

| 1 automobile | . . . | \$2,000 00 |
| :---: | :---: | :---: |
| $\underset{ }{2}$ robes |  | 2000 |
|  | . . | 50000 |
|  |  | \$2,520 00 |

Bridge Service.


Ferry Service.
7 ferryboats
Supplies, tools, machinery $\quad . \quad . \quad \$ 163,17300$
24,000
00
\$187,173 00

## Lighting Service.

| 9,708 lamp-posts | \$97,080 00 |
| :---: | :---: |
| 300 lamp brackets | 30000 |
| 1 automobile | 20000 |
| 1 robe | 1000 |
| 1 typewriter | 5000 |
|  | \$97,640 00 |

## Paving Service.

1 large concrete mixer ..... $\$ 2,20000$
5 small concrete mixers ..... 1,500 00
3 bituminous mixers ..... 7,500 00
224 harnesses ..... 2,240 00
247 blankets ..... 24700
23 buggies ..... 34500
13 pungs ..... 26000
7 sleighs ..... 7000
13 jiggers ..... 52000
23 wagons ..... 92000
11 street watering carts ..... 1,375 00
4 road scrapers ..... 1,200 00
80 dump carts ..... 6,400 00
103 horses ..... 25,750 00
13 snow levelers ..... 39000
5 section rollers ..... 20000
11 steam rollers ..... 16,500 00
32 desks ..... 32000
956 picks ..... 47800
1,441 shovels ..... 72000
8 scarifiers ..... 2,080 00
7 automobiles ..... 2,800 00
1 truck ..... 30000
3 electric tractors ..... 4,800 00
Supplies, tools, machinery, surveying instru-ments, engineers' supplies, etc.49,000 00
$\$ 128,11500$
Sanitary Service.
3 automobiles ..... $\$ 2,00000$
5 auto trucks ..... 80000
315 horse blankets ..... 31500
17 buggies ..... 42500
210 carts ..... 21,000 00
239 shovels ..... 12000
244 harnesses ..... 4,880 00
Carried forward ..... $\$ 29,54000$


Water Service.

Real Property in Charge of the Bridge and Ferry Division.- (Bridge Service.)

Public Works Department.
$1,600 \quad 00$
1,52500

| 8 | 8 |
| :--- | :--- |
| 8 | 8 |
| 0 | 8 |

$2,600 \quad 00$
4,600 00

*Five leased to M. P. Coleman for $\$ 2,697$ per year, lease expires January 31, 1922.
Real Property in Charge of the Bridge and Ferry Division.- (Bridge Service.) - Concluded.

| Location. | Estimated Value of Buildings. | Total Value. |
| :---: | :---: | :---: |
| Summer Street Bridge over Fort Point Channel. |  |  |
| Draw house, controller house, two shelter houses and tool house | Draw house, 83,000 ; eontroller house, 8250 shelter houses, $\$ 500$; tool house, $\$ 100$. | 83,850 00 |
| Warren Bridge. |  |  |
| Stable, draw house, containing an engine room and boiler room and a tool house | \$3,500 | 3,500 00 |
| Warren avenue, between Water street and the railroad, used by Election Department for storage of election booths. |  |  |
| Western Avenue Bridge to Watertown. |  |  |
| Tool house | \$200. | 30000 |

Real Property in Charge of the Bridge and Ferry Division.- (Ferry Service.)

| Location. | Estimated Value of Land. |  | Estimated Value of Buildings. | $\begin{aligned} & \text { Total } \\ & \text { Value. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
|  | Per Foot. | Total. |  |  |
| South Ferry, East Boston side, located at the termination of Lewis street. On these premises are one headhouse with canopies, one workshop for carpenters, machinists and blacksmiths, one storehouse, one coal pocket, three piers which form the two slips, two drops and tanks, one wharf and duck. |  | \$96,300 00 | 843,000 00 | 8139,300 00 |
| South Ferry, Boston side, located at the termination of Eastern avenue. On these premises are one headhouse with canopies, one gate room, three piers which form the two slips and two drops and tanks. | 25,500 at 200 | 51,100 00 | 74,900 00 | 126,000 00 |
| North Ferry, East Boston side, located at the termination of Border street. On these premises are one headhouse with canopies, one boiter, one coal pocket, three piers which form the two slips and two drops and tanks. | $\begin{aligned} & \begin{array}{l} 18,876 \text { at } \\ { }_{4}^{42,262} \text { at } \end{array} 1000 \\ & \hline \end{aligned}$ | 111,800 00 | 58,000 00 | 169,800 00 |
| North Ferry, B oston side, located at the termination of Battery street. On these premises are one headhouse with eanopies, one gate room, three piers which form the two slips and two drops and tanks. |  | 106,000 00 | 69,000 00 | 175,000 00 |
| $\ddagger$ Eastern avenuc, No. 60, adjoining South Ferry Headhouse, Boston side. Upon this lot is a house and office building owned by Patrick J. Connolly. |  |  |  |  |

$\dagger$ Solid. $\pm$ Land rented to Patrick J. Connolly for $\$ 200$ per year.
Real Property in Charge of the Highway Division.- (Paving Service.)

| Location. | Estimated Value of Land. |  | Estimated Value of Buildings. | Total Talue. |
| :---: | :---: | :---: | :---: | :---: |
|  | Per Foot. | Total. |  |  |
| South Boston. |  |  |  |  |
| Columbia road, corner of H street, stable, carriage house, shed, tool house and office built by the city on land containing $12,017 \mathrm{square}$ feet, rented from Reuben Oenoff. | \$0 40 | 84,800 00 | \$900 00 | 85,700 00 |
| Columbia road, corner 11 amlin strect, lot of land used for storage purposes, containing 6,710 square feet, owned by Frank E. Briggs and rented from Charles P. Mooney, agent. | 25 | 1,800 00 |  | 1,800 00 |
| East Boston. |  |  |  |  |
| East Eagle strect, corner Condor street, sheds, stable and office building erected by the city on wharf property containing 61,636 square feet, owned by Alice 21 . Coleman and rented for the sum of $\$ 1,800$ a year. This property is used jointly with the Sewer, Sanitary, Street Cleaning and Oiling Services and Water Service.* |  | 24,700 00 | 6,800 00 | 31,500 00 |
| Charlestown. |  |  |  |  |
| Melford street, foot of Ehn strect, wharf property containing 44,700 square feet (Sur. Prog. 968), owned by the city. Lpon this lot are a shed, stable and office building. | 75 | 33,400 00 | 8,600 00 | 42,000 00 |
| Brighton. |  |  |  |  |
| Chestnut Hill avenue, ledge lot containing 569,776 square feet (L 1,630 ), purchased in 1882 by the city. Upon this lot are stone crusher, stable, shed and office building and oil plant. | 15 | 79,800 00 | 5,500 00 | 85,300 00 |
| West Roxbury. |  |  |  |  |
| Child street, lot of land oontaining 43,024 square feet, owned by the city. Upon this lot are sheds, stable and office building. (See Sewer Scrvice.) | 45 | 19,300 00 | 3,500 00 | 22,800 00 |
| Morton street, near Canterbury street, lot of land containing 14,484 square feet, owned by the oity and used for storage purposes. | 10 | 1,400 00 |  | 1,400 00 |
| Centre street, rear of 1932, lot of land used for storage purposes, hired for $\$ 180$ per year. |  |  |  |  |

Dorchester.


* This price to be increasell from Mareh 1, 1920, to $\$ 2,400$ a year. These estates are only partly oocupied by City of Boston.
Real Property in Charge of the Sewer and Sanitary Division.- (Sanitary Service.)

| Location. | Estimated Value of Land. |  | Estimated Value of Buildings. | $\begin{aligned} & \text { Total } \\ & \text { Value. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
|  | Per Foot. | Total. |  |  |
| Soutil Boaton. |  |  |  |  |
| $H$ and Seeond streets, stable and sheds, containing 8,500 square feet. Leased from E. M. \& M. J. Mahoney. | 30e. and 40e., land \$,590 feet . | 82,900 00 | \$2,500 00 | 85,400 00 |
| Charlestown. <br> 263 Rutherford avenue. (See Street Cleaning and Oiling Serviee). |  |  |  |  |
| Dorchester. |  |  |  |  |
| Vietory road (formerly South street), near Freeport street, lot of land taken in 1912 for refuse transfer station. Completed January 4, 1913. | 37,990 feet valued as part of 78,458 feet at $\$ 0.08$. | \$7,600 00 | 67,000 00 | 74,003 (6) |
| Roxbery. |  |  |  |  |
| Massachusetts avenue and Southampton street, weighing shed, eontaining about 2,300 square feet of land, leased from the Boston Consolidated (ias Company at $\$ 10$ per month. |  |  |  |  |
| Ward street, northerly side, near New York, New Haven \& Itartford Railroad, eontaining 12,500 square feet. (See letter of Street Commissioners, January 6, 1914.) | 35,553 square feet at \$0.30. | \$10,700 00 | 20,003 00 | 30,70000 |
| Highland street, formerly almshouse, eontaining 195,129 square feet. Upon this lot are stable, sheds, carriage house. A part of this stable and lot is used by the Paving Service and Street Cleaning and Oiling Serviee. |  | 78,100 00 | 51,000 00 | 129,100 00 |

Soutil End.

| 29,00000 | 143,00000 |
| :--- | :--- |
| 62,50000 | 164,10000 |
| 65,100000 | 248,90000 |
| 90,10000 | 108,50000 |


Real Property in Charge of the Sewer and Sanitary Division.- (Street Cleaning and Oiling Service.)

| location. | Estimated Value of Land. |  | Estimated V'aher of Buikłings. | $\begin{aligned} & \text { Total } \\ & \text { Villue. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
|  | Per Foot. | Total. |  |  |
| South Buston. |  |  |  |  |
| Creed at $\$ 75$ per month. <br> Yard and stable at 124 ohd Harbor street, corner of Columbia road, feased by the city from D. W. Creed at $\$ 75$ per month. |  |  |  |  |
| East Boston. |  |  |  |  |
| Part of stable on East Eagle strect. (See Paving Service.) |  |  |  |  |
| Chablestown. |  |  |  |  |
| Stable at 263 Rutherford avenue, and office building, used in common with Sanitary Service. Stable at 245-249 Rutherford avenuc, now oceupied under lease for $\$ 600$ per year by Timothy $\mathbf{F}$. Callahan. <br> Roxbury. | \$0 60 | \$22,100 00 | \$8,300 00 | \$30,400 00 |
| Stable on Highland strect. (Sce Sanitary Scrvice.) |  |  |  |  |
| South End. |  |  |  |  |
| Part of stable at 650 Albany strcet. (Sce Sanitary Service.) |  |  |  |  |
| West End. |  |  |  |  |
| Part of stable on North Girove street. (See Sanitary Service.) |  |  |  |  |
| Dorchester. |  |  |  |  |
| Gibson street, land and buildings containing stable and sheds, used by Sanitary and Sewer Scrvices, contains 21,250 square fect. (See Water Service.) | .............. | 7,400 00 | 5,000 00 | 12,400 00 |

Public Works Department.
75
Real Property in Charge of the Sewer and Sanitary Division.- (Sewer Service.)

| Location. | Estimated Value of Land. | Estimated Value of Buildings. | Total Value. |
| :---: | :---: | :---: | :---: |
| South Boston. |  |  |  |
| Summer street, underground pumping station. |  |  |  |
| East Boston. |  |  |  |
| East Eagle street, yard and buildings leased from Renton Whidden. (See Paving Nervice.) Brighton. |  |  |  |
| Western avenue. (See Water Service.) |  |  |  |
| $\mathrm{Westr}_{\text {ent }}$ Roxbury. |  |  |  |
| Child and South strects, yard and buildings occupied in common with Paving Service. (See Paving Service.) Dorchester. |  |  |  |
| (iibson street, land. (Siee Street Cleaning Service.) |  |  |  |
| Old Harbor Point, land and buildings, including pumping station, $22 \frac{1}{2}$ acres; 45,729 sfuare feet, more or less, on the westerly side of Mt. Vernon street, exchanged with the Boston Consolidated Gas Company for 51,000 square feet, more or less, on the easterly side of Mt. Vernon street. | \$196,000 00 | 8617,500 00 | \$813,500 00 |
| Socth End. |  |  |  |
| * Albany strect, No. 678, yard and buildings, 50,000 square feet | 66,400 00 | 4,00000 | 70.40000 |
| Inion Park street, corner Albauy street, pumping station, containing 4,167 square feet of land | 6,300 00 | 70,000 00 | 76,300 00 |
| Hyde Park. |  |  |  |
| Milton avenue, pumping station. |  |  |  |
| Back Bay Fens. |  |  |  |
| Gatehouse . |  | 12,000 00 | 12,000 00 |
| Moon Islind and Squantem. |  |  |  |
| Land, buildings and reservoirs. Upland in Squantum, 19.5 aeres; upland on Moon Island, 37.65 aeres; flats about Moon Island and Siquantum, 131 acres. |  |  |  |

Real Property in Charge of the Water Division.- (Water Service.)

| Location. | Estimated Value of Land. |  | Estimated Value of Buildings. | Total Value. |
| :---: | :---: | :---: | :---: | :---: |
|  | Per Foot. | Total. |  |  |
| East Boston. |  |  |  |  |
| Eagle Hill reservoir, with a capacity of 5,600,000 gallons. Area of property, 220,875 square feet. | \$0 30 | \$66,300 00 | \$400 00 | \$66,700 00 |
| High service tank, Orient Heights, eapacity 122,000 gallons. Area of property, 11,394 square feet. | 10 | 1,100 00 | 5,000 00 | 6,100 00 |
| Charlestown. |  |  |  |  |
| Medford strect, corner Tufts strect, containing 13,050 squarefeet. Upon this lot are a workshop and stable. | 50 | 6,500 00 | 4,000 00 | 10,500 00 |
| Brighton. |  |  |  |  |
| Western avenue, lot of land, containing 92,408 square feet. Upon this lot is an office building, workshop and stalle. Also used by the Sewer Service. |  | 9,200 00 | 5,500 00 | 14,700 00 |
| West Roxbury. |  |  |  |  |
| Williams street, Jamaica Plain, Nos. 110-112, land and buildings used as district headquarters, rented from Thomas Minton for \$1i00 per year. |  |  |  |  |
| Washington street and Metropolitan avenue, lot of land. Area of property, 12,895 square feet. | 14 | 1,800 00 | 7,000 00 | 8,500 00 |
| Dorchester. |  |  |  |  |
| Gibson street, in rear of lot occupied by Street Cleaning Service, land and buildings, 3,840 square feet. |  | 1,000 00 | 1,500 00 | 2,500 00 |
| Roxbury. |  |  |  |  |
| Heath and Lawn streets, strip of land containing 5,707 square feet (pipe route).............. | 25 | 1,425 00 |  | 1,425 00 |



South End.

* 206,020 square fect in Boston, balance in Milton.


## Employees.

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

Requisitions made on the Civil Service Commission . . 26
Requisitions canceled . . . . . . . . 3
Number of men called . . . . . . . . 154
Number of men certified . . . . . . . 315
Number of men appointed . . . . . . . 168
Provisional appointments made permanent . . . 1
Promotions allowed . . . . . . . . 11
Reinstatements allowed . . . . . . . ${ }^{2} 29$
Number of men discharged . . . . . . . 2
Number of men resigned . . . . . . . 67
Number of men died . . . . . . . . 58
Number of Civil War veterans retired . . . . 5
Number of laborers retired . . . . . . . 21
Number of transfers to other departments . . . . 13
Number of transfers from other departments . . . 7
Number of Civil War retired veterans died. . . . 14
Number of retired laborers died . . . . . . 43
The records of the department show that there are now 3,095 persons eligible for employment in the several divisions and of that number 2,993 were upon the January, 1921, pay rolls.

[^9]Grade and Number of Employees.


Grade and Number of Employees.- Continucd.


Grade and Number of Employees.- Concluded.


Comparative Table Showing the Number of Employees Actually Employed February 1, 1920, and February 1, 1921.

|  | Central office. | $\frac{8}{5}$ | - |  | - | $\stackrel{\tilde{n}}{\tilde{n}}$ | $\begin{gathered} \dot{t} \\ \stackrel{H}{E} \\ \mathscr{U} \end{gathered}$ |  | ¢ | ~ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| February 1, 1920. | 4.5 | 200 | 174 | 4 | 722 | 525 | 359 | 460 | 483 | 2,972 |
| February 1, 1921. | 43 | 196 | 179 | 3 | 707 | 597 | 330 | 460 | 478 | 2,993 |

Total Eligible Force.

| February 1, 1920. | 56 | 204 | 175 | 4 | 746 | 556 | 368 | 478 | 496 | 3,083 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| February 1, 1921. | 54 | 199 | 17.4 | 3 | 730 | 627 | 345 | 472 | 491 | 3,095 |

Toble of Employecs Showing Appointments, Transfers, Resignations, Retirements, Deaths, Etc., During the Year.

| $\dot{\Xi}$ | $\text { s.io.ıqur } 1 \text { pon! }$ | Rectired Veterans. |  |  | ت |  |  | $\begin{gathered} \text { SERVICES. } \\ 1920-21 \end{gathered}$ |  |  |  | - |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 |  |  | 1 | 2 |  |  | $56^{1}$ | Central Office. | *54 |  | 1 |  | 1 |
| 3 |  | 2 |  | 1 | 3 |  | 204 | Bridse. | 199 | 2 |  |  | 2 |
| 4 |  | 1 | 1 | 6 | 3 |  | 1.5 | Ferry | 174 | 7 | 1 |  | 6 |
|  |  |  |  | 2 |  |  | 4 | Lighting | 3 |  | 1 |  |  |
| 20 | 11 |  | 1 | 5 | 14 |  | 746 | Paving. | 730 | 14 |  |  | 21 |
| 4 | 2 |  | 2 | 29 | 22 | 1. | 5.56 | Sanitary | 627 | 17 | 1 |  | 113 |
| 10 | 2 |  | 5 | 1s | 3 |  | 4.8 | Street Cleaning | 472 | 16 | 2 | 3 | 11 |
| 8 | 1 | 1 | 3 | 7 | 10 | 1 | 368 | Sewer. | 345 | 7 | 1 |  |  |
| 8 | 5 | 1 |  | 2 | 12 |  | 496 | Water | 491 | 9 |  |  | 14 |
| 58 | 21 | 5 | 1.3 | 72 | 67 | 2 | 3,053 | Totals. | 3,095 | 72 | 7 | 3 | 168 |

*Inclules eight Central Ofice employees who are paid on Water Service pay roll.
Respectfully submitted,
T. F. Sullivan,

Commissioner of Public Works.

PART II.
APPENDICES.

## APPENDIX 1.

## Central Office.

Appropriation . . . . . . . .
Transfers . $\frac{\$ 90,65058}{72340}$

Expenditures from February 1, 1920, to January 31, 1921
\$91,373 98
Expenditures.
Salary, commissioner.
$\$ 9,00000$
Salaries of clerks, stenographers, cte. . . . 71,621 76
Automobile expense:
Wages of chauffeur . . . $\$ 1,38000$
Hudson phacton and winter top, $\quad 1,97500$ Gasolene 45973
Storage . . . . . . 12400
Repairs . . . $13+84$
Tires and tubes, new and repairs, 41402
Supplies . . . . . 15394
Oil, grease etc. . . . . 1812
Registration . . . . . 1200
Printing . . . . . . . . . 2,502 68
Stationery . . . . . . . . . 21642
Postage . . . . . . . . . 18119
Telephone tolls. . . . . . . 1140
Travel expenses, car fares, etc. . . . . 39978
Dalton adding machine . . . . . . 22050
Inspection and repairs to typewriters . . . 8400
Books, papers, office supplies, etc. . . . . 20780
Premium on surety bond . . . . . . 600
Expert service investigating contract for the dis-
posal of refuse; also preparing contract specifications2,250 80

## APPENDIX B.

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

Boston, February 1, 1921.
Mr. Thomas F. Sullivan, Commissioner of Public Works:
Dear $\mathrm{S}_{\text {Ir, }}$ - I respectfully submit the following report of the income, expenditures and operation of the Bridge and Ferry Division for the year ending January 31, 1921. The expenditures of the division in the regular maintenance appropriations of the department were $\$ 1,011,754.44$. Under a number of special appropriations $\$ 590,303.03$ was expended, making the total expenditure for the year $\$ 1,602,057.52$.

## Bridge Seryice.

Apportionment of Cost of Bridges between Boston and Chelsea. - The city of Chelsea paid $\$ 136,165.18$ as its share toward construction costs on Chelsea Bridge over the north channel of the Mystic river, Chelsea Bridge over the south channel of the Mystic river, and Meridian Street Bridge, but has to date paid nothing toward maintenance.

Prison Point Bridge. - The Boston \& Maine Railroad finished repairs to the corroded steelwork.

Winthrop Bridge. - The town of Winthrop paid in June, 1920, $\$ 21,823.03$ in final settlement with the City of Boston, toward the cost of the bridge.

> Recominendations for 1921.
> Bridge Service.

Allston Bridye, over the Boston \& Albany Railroad.This bridge should be rebuilt.

Beacon Street Bridge, over the Boston \& Albany Railroad. - This bridge should be rebuilt.

Hyde Park Avenue Bridge, over Mother Brook. - This bridge should be rebuilt.

Extensive repairs should be made to numerous other bridges over the lines of the Boston \& Albany Railroad and New York, New Haven \& Hartford Railroad where the steelwork is very badly corroded.

## BRIDGE SERVICE CONSTRUCTION WORK, 1920-21.

## Allston Bridge.

This bridge over the Boston \& Albany Railroad is a four truss span, 144 feet long, carrying three roadways, two sidewalks and gas and water mains. The floor system had been so badly deceriorated that after a thorough inspection it was decided to close the bridge to elevated car travel and limit the load on vehicles. One roadway was then closed to all travel and such repairs made as would enable street traffic to be continued until such time as a new structure could be planned. The water and gas pipes were temporarily relocated. The floor system of the middle roadway was entirely removed. Work on this bridge was done by the Transit Department and the Bridge Service day labor force.

## Ashland Street Bridge.

A contract for rebuilding Ashland Street Bridge was awarded to the Boston Bridge Works, Inc., and approved by the Mayor July 6, 1920. Owing to delays in the delivery of the steel the work has not been started in the field at the date of this report, but practically all the shop work has been done. The work will be completed in the spring.

## Beacon Street Bridge.

Repairs were made on the southerly roadway of this bridge during August and September. These consisted of strengthening the floor beams by adding new flange plates, replacing stringer seats and cutting out old and redriving several hundred new rivets. New yellow pine stringers were put in and the deck and sheathing entirely renewed. The steelwork was done by the Transit Department day labor force and the timber work by the Bridge Service crew.

## Berkeley Street Bridge.

This bridge which is a through girder span carrying two roadways, two sidewalks and water and gas pipes,
has been thoroughly overhauled and repaired. The girders were battened and strengthened where badly deteriorated. New floor beams were put in under the water and gas pipes. The Edison conduit under the sidewalk was removed and new floor beams put in. Flange plates on the outside girders were cut off and replaced by new ones. Many rivets which were badly corroded were cut out and redriven. The bottom part of the bridge was thoroughly painted. The yellow pine stringers were nearly all replaced by new ones and the deck and sheathing were relaid with new lumber. The steelwork was done by the Transit Department force and woodwork by the Bridge Service force, all day labor.

## Brookline Street Bridge (over Charles River at Cottage Farm).

A contract with W. S. Rendle was approved on September 10, 1920, for placing some piles in order to make the bridge safe temporarily. The work was completed November 10, 1920.

On this same bridge a contract was awarded to John B. Dolan, approved November 5, 1920, for repairs to the flooring of the bridge. Some yellow pine under plank was placed over the tracks of the Boston \& Albany Railroad in place of the rotted plank and a wood block flooring was laid on top. Patching was done on various other parts of the bridge in order to make the bridge safe for travel. This work was completed on December 16, 1920.

## Chelsea Bridge South.

The flooring of this bridge has been rebuilt under a contract with Lawler Brothers, approved May 24, 1920. Work was begun May 27 and was completed July 23, 1920, and was so conducted that only one half the roadway was closed to travel except at short lengths of the approaches at the draw span, where all car and vehicle traffic was taken off just after midnight until noon of three Sundays. The entire wearing surface of the roadways and sidewalks of both approaches to the draw and the lower planking of the roadway were removed; new 4 -inch yellow pine lower plank and new 4 -inch spruce upper plank laid on roadways and new 2 -inch spruce plank laid on the sidewalk.

New yellow pine stringers were laid under the car tracks; two 8 -inch by 12 -inch sticks under each rail, and such of the roadway stringers as were found to be poor were replaced with 6 -inch by 12 -inch timbers.

Some sidewalk stringers and wheelguard timbers were replaced with new yellow pine timber. The flooring of both ends of the draw span was rebuilt with new materials of the same dimensions as the old. The total amount paid under this contract was $\$ 29,511.25$.

## Clarendon Street Bridge.

The Massachusetts Public Utilities Commission, after a public hearing, required a clear headroom of 17 feet over the tracks of the New York, New Haven \& Hartford Railroad and the Boston \& Albany Railroad.

A contract was made with Coleman Brothers, approved on February 9, 1920, for the removal of the structure over the New York, New Haven \& Hartford Railroad, consisting of brick arches and concrete slabs resting on steel I-beams and girders which formed originally the foundation for the Back Bay Hotel, the hotel itself being removed by the railroad company prior to the contract. This contract was completed on May 4, 1920.

A contract was awarded to the John McCourt Company, approved May 24, 1920, for building a bridge over the two railroads and constructing a reinforced concrete abutment on the northerly end of the bridge. The bridge utilized the existing piers and abutments which formed the foundations of the Back Bay Hotel.

Owing to delay in the delivery of the steelwork the bridge has not been completed, but at the date of the report the northerly abutment has been constructed, the beams for the spans over the New York, New Haven \& Hartford Railroad put in place and encased in concrete and the steelwork of the plate girder span over the Boston \& Albany Railroad put in place. The work will be completed in the spring.

## Columbus Avenue Pipe Bridge.

The pipe bridge at Columbus arenue, over the Boston \& Albany Railroad, has during the year been repaired, cleaned and painted. The bottom flange plates on the girders were replaced by new ones and bracing and struts were replaced where found to be badly dete-
riorated. The steelwork was done by the Transit Department force, and the cleaning and painting by Maurice M. Devine, under contract, for the sum of $\$ 775$.

Commonwealth Avenue Bridge (over the Boston \& Albany Railroad at Cottage Farm).
As stated in the report of last year a contract was made with W. Klingberg \& Son, Inc., of New York, approved September 9, 1919, for covering the exposed surfaces of the arches and steelwork with gunite. Work was begun November 5, 1919; was suspended on account of weather conditions on January 6, 1920, and was resumed on June 2, 1920. Work was completed on July 27, 1920, the total amount paid under the contract being $\$ 10,252.61$.

All the surfaces of the I-beams, girders and arches exposed to fumes from the locomotives were thoroughly cleaned by the sand-blast method of all rust, unsound paint and other foreign materials.

Portions of the floor and outer surfaces of the girders on street lines were covered with a coating of gunite about $\frac{3}{4}$ inch thick, composed of one part Portland cement and three parts sand. Before the gunite was applied, reinforcing rods were placed on the bottom flanges of the I-beams and Clinton electrically welded wire cloth 3 -inch by 3 -inch mesh placed on the outside faces of the outer girders. The inside surfaces of the girders, not covered with gunite, and the railings on these girders were cleaned, patch painted with red lead and then painted with two coats of graphite paint.

## Dorchester Avenue Bridge (Over Fort Point Channel).

A contract was made with W. H. Ellis \& Son Company, approved May 12, 1920, for repairing the face of the channelway.

New 4-inch yellow pine vertical planking and new 8 -inch by 12 -inch yellow pine wheel timbers were put on where necessary. The amount paid under the contract was $\$ 1,561.61$ and the work was completed June 7, 1920.

Warren Bridge.
During the year the upstream half of Warren Bridge draw has been strengthened by the Boston Elevated Railway Company to carry 50 -ton electric cars. The
strengthening consisted of renewing and adding new flange plates to the floor beams and girder plates and stiffeners under the track stringers and placing larger stringers under the rails.

The deck plank which was in good condition was replaced. A new wearing surface was placed by the day labor force of the Bridge Service.

On this same bridge a contract with V . Grande was made, approved March 25, 1920, for repairing and strengthening. This contract provided for clriving additional piles under the street car tracks to enable the bridge to carry 50 -ton cars, and replacing and driving additional piles where old ones were found to be badly decayed.

An entire new layer of 6 -inch yellow pine under plank was provided and on top of this was placed granite block pavement consisting of blocks recut on the work, laid with an asphalt mastic filler.

Work was about three quarters completed when weather conditions compelled the shutting down of the job.

The cost of the work required to strengthen the bridge for 50 -ton cars is being paid back to the city by the Boston Elevated Railway Company.

Granolithic sidewalks are being built in place of the existing tar concrete walks.

The entire contract will probably be completed in the spring.

## Navigation Lights.

Navigation lights were installed on Warren Bridge, and on the bridges at Congress street, Summer street and Dorchester avenue, over Fort Point channel, under two contracts, one with Smith \& Lovett Company, approved June 4, 1920, for furnishing and installing mechanical equipment, and one with Stearns, Perry \& Smith, approved June 25, 1920, for furnishing and installing electrical equipment.

The contract with Smith \& Lovett Company was completed on September 1, 1920, and the one with Stearns, Perry \& Smith Company was completed on December 15, 1920.

On Congress Street and Warren Bridges where the draws are operated by steam, oil lanterns were installed. Those on Warren Bridge, which is a rectractile draw, are 15 feet above the roadway and are changed from
red to green through the movement of the draw by means of a mechanical device.

On Congress Street Bridge the change in lights is accomplished by the turning of the draw, which is a swing draw.

On Summer Street and Dorchester Avenue Bridges, where both have retractile draws and are electrically operated, electric lights were installed, those on the pier being connected by submarine cables and the draws being connected by means of cables and trolley wires. The lights which are 15 feet above the deck are changed by means of a double circuit and twin lights.

West Fourth Street Bridge.
The New York, New Haven \& Hartford Railroad employed the Boston Bridge Works, Inc., to repair the corroded steelwork on the bridge over its tracks.

The Bridge Service day labor force in conjunction with this work laid a new wooden flooring on the southerly half of the bridge.

## FERRY SERVICE.

## Ferryboat "John H. Sullivan."

A contract with the Boston Shipbuilding Company for rebuilding the superstructure of the boat and making four driveways for vehicular traffic, instead of two, was approved September 2, 1919.

Owing to a strike of ship carpenters work was considerably delayed and was finally completed April 10, 1920. This work increased the teaming capacity of the boat about 70 per cent.

A contract with the Boston Marine Works for repairing the machinery of the boat was approved on March 18, 1920. The engines were taken down, brasses planed, water courses cleaned, bearings, cylinders and valves cleaned.

The thrust bearings were rebabbitted and stern bearings rewooded. The dynamos, pumps and one of the steering engines were overhauled and the hull painted. The contract was completed May 25, 1920.

While this contract was being carried on the boat was placed on the railway of the Atlantic Works, where it was found that repairs were necessary to tail shaft, sleeves, rudder and pintle bearings and that defective rivets in the hull should be replaced. This work was done by the Atlantic Works.

On October 16, 1920, a propeller was lost from the Boston end of the boat and considerable damage was done to the tail shaft, rudder, etc. The boat was placed on the railway at the yard of the Richard T. Green Company, where repairs were made, including the putting in of a new tail shaft.

## Ferryboat " Noddle Island."

The ferryboat "Noddle Island" was put out of com- • mission on account of the rotten condition of the hull. A contract was approved October 5, 1920, with the Richard T. Green Company, for the reconstruction of the boat. Under this contract a new hull, longer and wider than the existing hull, is being built and a new superstructure is being built. The boat will have four
driveways instead of two, thereby greatly increasing the teaming capacity. The old engines are being overhauled and are to be placed in the new hull. Boilers are to be retubed. Work should be completed in the spring of 1921.
Ferryboat "Governor Russell."

A contract with the Simpson Patent Dry Dock Company was approved April 28, 1920, for repairing the main engines and auxiliaries.

Under this contract the boilers were retubed, cylinders of the engines rebored and main bearings babbitted. The stern bearings were rewooded and the shaft lined up.

A contract with the Simpson Patent Dry Dock Company was made for furnishing a new smoke stack and repairing the water tanks.

> Ferryboat "General Sumner."

A contract with the Simpson Patent Dry Dock Company was approved for repairing the main engines and steering engines of the "General Sumner." The most important part of this work was in raising the crank shaft which was down considerable and pounding the bottom of the boat.
Ferryboat"D. D. Kelly."

A contract was approved with the Boston Shipbuilding Company, under which extensive repairs were made to the paddle wheels, including work on the rims, arms and paddles.

A contract was approved on August 25, 1920, with the Winnisimet Ship Yard, Inc., for the construction of one new steel ferryboat and another contract was approved August 14, 1920, with the Groton Iron Works, for one new steel ferryboat.

These contracts are the first steps that have been taken for some years toward rehabilitating the Ferry Service and replacing old antiquated boats.

These boats will have four driveways and this will give them 75 per cent increase in teaming capacity over the existing type of boat of two driveways.

Up to the date of this report the keels of the boats have been laid, framing done, and considerable plate and deck work finished. It is expected that the vessels will be completed in the summer.

With the completion of these vessels and the "Noddle Island" there will be in service five boats with four driveways, whereas up to 1918 there was not a single boat so constructed.

A contract was made with W. H. Ellis \& Son Company for repairing the piers at the South Ferry, Boston side, approved April 28, 1920. Under this contract some new piles and girders were furnished and placed. Planking was refastened and where necessary new planking was placed. The amount paid under this contract was $\$ 2,157.02$.

A contract with W. S. Rendle for rebuilding part of the south pier, North Ferry, East Boston, was approved April 12, 1920. A stretch of pier about 160 feet long was entirely rebuilt.

A contract with W. S. Rendle was approved on May 22 , 1920, for rebuilding the roadways at the south drop, North Ferry, East Boston; the south drop, South Ferry, East Boston; the north drop, South Ferry, Boston, and for repairing the foundation of the south drop, South Ferry, East Boston. A large number of new floor beams were placed, new 4 -inch planks fastened on top of these timbers and slab pavements laid for wearing surface. The drop foundation was raised and moved into its proper position after building up the foundation and making repairs to the rocker irons and timbers.

A contract was made with W. H. Elis \& Son Company for repairs to the south drop, North Ferry, East Boston, which when stripped was found to be in a dangerous condition. Trusses were repaired and the bulkhead at the outer end of the drop rebuilt and the roadway supplementary drop repaired. The amount paid under this contract was $\$ 9,616.19$.

The Simpson Patent Dry Dock Company repaired, under a contract, nine bronze propeller blades.

Respectfully submitted,
John E. Carty, Division Engineer.

## BRIDGE SERVICE.

## Financial Statement 1920-21. <br> Expenditures from Maintenance A ppropriation.

| Boston luridges | \$410,216 53 |  |
| :---: | :---: | :---: |
| *Boston and Cambridge bridges | 26,783 42 |  |
|  |  | $\underline{\$ 436,99995}$ |
| Total Expenditures. |  |  |
| From maintenance appropriations | \$436,999 95 |  |
| From special appropriations. | 346,834 45 |  |
| From Strandway and Old Harbor appropriations | 25000 |  |
|  |  | $\underline{\$ 784,08440}$ |

## EXPENDITURES ON BOSTON BRIDGES.

(1.) Administration:

Salaries:
Division engimeer . . . . . $\$ 3,75000$

Supervisors . . . . . . 4,886 36
Engineers and draughtsmen . . . 22,944 11
Clerk . . . . . . . 1,76048

Inspectors . . . . . . 2,375 12
Medical inspector . . . . . 16667
Pensions:
Veterans . . . . $\$ 2,42979$
Laborers . . . . 36000
Holiday time
2,789 79
. . . . . .
Vacations . . . . . . . 2,211 40
Pay allowed to injured employees . . 83771
Printing, postage and stationery . . 1,216 97
Travel
19759
Telephones
Engineers supplies and instruments . 10113
Typewriter inspection
1800
Office supplies
19465
(2.) Yard and Stockroom:

Yard:
Employees: Clerk, janitor and watch-
men
\$3,999 80
Travel . . . . . . . 261 S3
Tools . . . . . . . 55103
Tool repairs . . . . . . 44662
Telephone . . . . . . 14399

Medical service . . . . . 5500
Furnishings . . . . . . 1380
Printing . . . . . . . 6165
Carried foruard . . . . . . $\$ 5,53372$

[^10]Brought forurard
(2) Yard and Stockroom:

Yard:
Supplies . . . . . . . 798

Expressing . . . . . . 90

$$
\$ 5,542 \quad 60
$$

\$7,669 49
Less decrease in stock for the ycar : 1,96432
tockroom:
Stock (lumber, nails and supplics for bridges).

85,53372
…

$$
\frac{5,70517}{\$ 11,24777}
$$

(3.) Automobiles:

Division engineer:

| Wages of chauffeur | . | . | . | . | $\$ 1,026$ | 00 |  |
| :--- | :--- | :--- | :--- | :--- | :--- | ---: | :--- |
| Storage | . | . | . | . | . | . | . |
| Repairs | 180 | 00 |  |  |  |  |  |
| Supplies | . | . | . | . | . | . | 1,073 |
| Gasolene | . | . | . | . | . | . | 38 |
| New tires and tubes | . | . | . | . | 419 | 74 |  |
| Repairs to tires and tubes | . | . | . | 296 | 77 |  |  |
| Registration | . | . | . | . | . | 48 | 05 |
| R |  |  |  |  |  |  |  |

Supervisor of Bridges:
Wages of chauffeur:
Storage
Repairs
$\$ 1,32700$
18150
23972
Supplies
2022
Gasolene
28955
New tires and tubes
Repairs to tires and tubes
27103
Registration
3325
New Ford touring car . .
Auto Truck No. 1:
New tires and tubes
Storage
$\$ 27256$
Repairs
4000
2768
Gasolene 5146
Gasolene
37407
Registration . . . . . . 400
Auto Truck No. 2:
Wages of chauffeur
New tires and tubes
Repairs to tires and tubes . . . 1875
Repairs . . . . . . . 25015
Gasolene . . . . . . . 27077
Supplies
2979
Registration . . . . . . $\quad . \quad 200$
Auto Truck No. 3:
New tires and tubes . . . . $\$ 054$
Repairing tires and tubes . . . 500
Repairs . . . . . . . 27253
Gasolene . . . . . . 26195
Supplies . . . . . . . 1878
Registration . . . . . . 200

76977
2,847 93
$\$ 3,09308$

## (4.) Bridges.

Expenditures on Tide Water Bridges.

| Bridges. | Drawtenders Salaries. | Mechanics' Wages. | Material. | Repair Bills. | Supplies and <br> Misecllaneous Expenses. | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Broadway. | \$13,707 19 | 869498 | \$17576 | \$42 21 | \$19721 | \$14,817 35 |
| Charlestown | 18,708 02 | 1,614 83 | 2,847 27 | 1,491 50 | 85420 | 25,515 82 |
| Chelsea North. | 15,748 46 | 1,040 36 | 34296 | 4,205 45 | 74101 | 22,078 24 |
| Chelsea South | 13,786 05 | 2,671 12 | 1,052 50 | 30,026 17 | 51526 | 48,051 10 |
| Chelsea Street. | 14,190 85 | 1,786 46 | 1,041 20 | 1,028 79 | 42921 | 18,476 51 |
| Congress Street. | 14,244 32 | 1,997 01 | 1,060 66 | 86596 | 1,102 68 | 19,270 83 |
| Dorehester Avenu | 13,699 51 | 1,458 10 | 78098 | 4,459 35 | 36634 | 20,764 28 |
| Dover Street. | 13,786 08 | S29 95 | 74199 | 53657 | 20374 | 16,098 33 |
| L Street. | 13,686 38 | 411 S0 | 21588 | 32981 | 28445 | 14,928 32 |
| Malden. | 14,204 61 | 33351 | 3930 | S8 71 | 64584 | 15,311 97 |
| Meridian. | 14,285 40 | 1,868 78 | 40416 | 61590 | 30250 | 17,476 74 |
| Northern Avenue. | 15,738 24 | 3,001 04 | 3,248 75 | 1,825 12 | 6,336 99 | 30,150 14 |
| Summer Street | 14,165 63 | 1,230 62 | 1,059 91 | 2,572 74 | 47516 | 19,504 06 |
| Warren. | 14,022 11 | 1,808 27 | S00 57 | 1,444 16 | 1,297 54 | 19,372 65 |
| Western Avenue | 39884 | 19700 | 18258 |  |  | 77842 |
| Totals. | \$204,371 69 | \$20,943 S3 | \$13,994 67 | \$49,532 44 | \$13,752 13 | \$302,594 76 |

Repairs on Inland Bridges.

| Bridge. | $\begin{gathered} \text { Labor } \\ \text { and } \\ \text { Materials. } \end{gathered}$ |
| :---: | :---: |
| Albany street (over Boston \& Albany Railroad). | \$592 54 |
| Allston street. | 2,685 12 |
| Ashland street. | 16249 |
| Ashmont street. | 1841 |
| Austin street. | 39598 |
| Arlington street. | 3412 |
| Baker street. | 81718 |
| Byron street. | 30742 |
| Boylston street. | 91636 |
| Broadway (over Boston \& Albany Railroad). | 14362 |
| Broadway (over New York, New Haven \& Hartford Railroad) | 1480 |
| Beacon street (over Boston \& Albany Railroad). | 3,341 99 |
| Bennington street. | 3,205 21 |
| Berkeley street (over Boston \& Albany Railroad) | 3,941 43 |
| Boston street (Old Colony Division). | 26882 |
| Brookline avenue. | 18959 |
| Babson street. | 1,418 93 |
| Beacon street (over outlet) to Charles river | 4462 |
| Blue Hill avenue. | 28037 |
| B Street (footbridge) | 10390 |
| Columbus avenue. | 1,404 91 |
| Curtis street. | 32569 |
| Commercial Point. | 1975 |
| Central avenue. | 7748 |
| Dartmouth 'street. | 40096 |
| Dorehester avenue (over Old Colony Railroad) | 12630 |
| Dana avenue. | 2000 |
| Everett street. | 7100 |
| Fairmount avenue. | 4,066 95 |
| Glenwood Avenue East. | 3750 |
| Hyde Park avenue (over Stony brook). | 1000 |
| Harvard street. | 15903 |
| Ipswich street. | 7942 |
| Jones avenue (footbridge). | 3750 |
| Massaehusetts avenue (Providence Division) | 759 57 |
| Carried forward. | 826,479 26 |

Repairs on Inland Bridges.- Concluded.

| Bridge. | $\begin{gathered} \text { Labor } \\ \text { and } \\ \text { Materials } \end{gathered}$ |
| :---: | :---: |
| Brought forward. | \$26,479 26 |
| Mystic avenue (Boston \& Maine). | 23 88 |
| Milton street (Hyde Park) . | 2000 |
| Maverick street. | 11873 |
| Milton Lower Mills. | 4925 |
| Norfolk street. | 6062 |
| New Allen street. | 10631 |
| Oakland street. | 6350 |
| Porter street. | 337 |
| Prescott street. | 302 |
| Redfield street. | 41387 |
| Reservoir road. | 1000 |
| Summer street (over A street) . | 22083 |
| Summer street (over B street) . | 20979 |
| Summer street (over C street). | 19240 |
| Southampton street. | 40755 |
| Shawmut avenue. | 3775 |
| West Fourth street. | 9,921 60 |
| Winthrop. | 3000 |
| West Newton street. | 52027 |
| Lehigh street storehouse. | 113 |
| Webster street (footbridge). | 4803 |
| Miscellaneous: <br> Labor, removing snow and sweeping bridges. | 3,420 64 |
| Total.. | \$42,361 80 |

Summary of Expenditures.


## BRIDGES, REPAIRS.

## Warren Bridge.

| Engineering | . | . | . | . | . | . | . | $\$ 4,701$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | ---: |
| Inspection | 64 |  |  |  |  |  |  |  |
| Carried forward | . | . | . | . | . | . | $\$ 5,633$ | 68 |

## Brought forward

Supplies .
General repairs
Travel
Advertising -
Vincenzo Crande
Lumber
$\$ 5,633{ }_{6}^{7} 68$
3169
45765
6179
$15 \quad 84$ 183,32349

58350

Broadway Bridge.
Photographs . . . . . . . . . . . $\$ 800$


Sea Wall, Roxbury Canal.


## Malden Bridge.

Hugh Nawn Contracting Company, reconstructing bridge
$\$ 2,385 \quad 36$
Brookline Avenue Bridge.
Michael Meehan Contracting Company,
changing fence grades . . . . . $\$ 20499$
Supplies
$\$ 21299$
Ashland Street Bridge.

| Salaries of engineers | $\cdot$ | . | . | . | . | . | $\$ 1,223$ | 72 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | ---: | :--- |
| Printing | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ | 113 |

Strandway and Old Harbor Improvement.
James L. Pierce artificial stone sidewalks
Expenditures on Granite Avenue Bridge by ${ }_{\mathrm{i}}^{\dagger}$ County of Suffolk,
Salaries of drawtenders . . . . . . $\$ 2,277$ S6

Fuel
2163
Light
1644
Printing
1336
Lumber
1584
Motor repairs
5180

Public Works Department.
SUMMARY.
Expended from Special Appropriations in Charge of Bridge Service.

|  | Balances from 1919. | Total Credits, Including Balance Carried Over. | Expended During Year 1920 | $\begin{gathered} \text { Balance } \\ \text { Unexpended } \\ \text { January 31, } \\ 1921 . \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| Brilges, repairs. | \$155,255 22 | \$223,029 27 |  | 828,753 79 |
| Warren Bridge |  |  | \$190,245 64 |  |
| Broadway Bridge. |  |  | 800 |  |
| Brookline Street Bridge. |  |  | 4,021 ${ }^{4}$ |  |
| Totals | \$155,255 22 | \$223,029 27 | \$194,275 48 | \$28,753 79 |
| Aslland Street Bridge. |  | 65,000 00 | 1,432 51 | 63,56749 |
| Brookline Avenue Bridge | 92690 | 92690 | 21299 | 71391 |
| Chelsea Bridge South. | 16,303 04 | 16,303 04 | 1,435 50 | 14, $\times 6784$ |
| Malden Bridge |  | 2,385 36 | 2,385 36 |  |
| Seawall, Roxbury Canal | 6,585 30 | 256,585 30 | 147,092 61 | 109,493 69 |
| Strandway and Old Harbor Improvement. | 25000 | 25000 | 25000 |  |
| Totals | \$179,319 56 | 8561,479 87 | 8347,084 45 | \$217,395 42 |

## LIST OF BOSTON BRIDGES.

## I.- Bridges Wholly Maintained by Boston.

[In the list those marked with an asterisk (*) are over navigable waters, and are each providel with a draw.|

## In Charge of Bridge and Ferry Division.

Allston, over Boston \& Albany Railroad at Cambridge street, Brighton.
Arlington street, over Boston \& Albany Railroad.
Ashland street, over New York, New Haven \& Hartford Railroad, Providence Division, West Roxbury.
B street (footbridge), over Neponset river, Hyde Park.
Baker street, at Brook Farm, West Roxbury.
Beacon street, over outlet from Back Bay Fens.
Beacon'street, over Boston \& Albany Railroad.
Bennington street, over Boston, Revere Beach \& Lynn Railroad.
Berkeley street, over Boston \& Albany Railroad.
Blakemore street, over New York, New Haven \& Hartford Railroad, Providence Division.
Boylston street, over Boston \& Albany Railroad.
Braddock park, formerly Berwick park (footbridge), over New York, New Haven \& Hartford Railroad (Providence Division).
Broadway, over Boston \& Albany Railroad.

* Broadway, over Fort Point channel.

Brookline avenue, over Boston \& Albany Railroad.
Brooks street, Brighton.
Byron street, over Boston, Revere Beach \& Lynn Ralroad.
Charlesgate, in Fens, over Ipswich street.

* Charlestown. from Boston to Charlestown.
* Chelsea South (temporary), over south channel, Mystic river.
* Chelsea street, from East Boston to Chelsea.

Columbus avenue, over Boston \& Albany Railroad.
Commercial Point, or Tenean, Dorchester.

-     * Congress street, Fort Point channel.

Dana avenue, over Neponset river, Hyde Park.
Dartmouth street, over Boston \& Albany Railroad.

* Dorchester avenue (formerly Federal street), over Fort Point channel.
* Dover street, over Fort Point channel.

Fairmount avenue, over Neponset river, Hyde Park.
Florence street, over Stony brook, West Roxbury.
Gainsborough street (footbridge), over New York, New Haven \& Hartford Railroad, Providence Division.
Glenwood Avenue East (footbridge), over Neponset river, Hyde Park.

Glenwood Avenue West, over Mother brook, Hyde Park.
Gove street (footbridge), over Boston \& Albany Railroad, East Boston.
Huntington avenue, over Boston \& Albany Railroad.
Huntington avenue, over Stony brook, Hyde Park.
Hyde Park avenue, over Mother brook (at woolen mill), Hyde Park.
Hyde Park avenue, over Stony brook, West Roxbury.
Hyde Park avenue, over Stony brook (near Clarendon Hill Station), Hyde Park.
Ipswich street, in Fens, over waterway.
Irvington street (footbridge), over New York, New Haven \& Hartford Railroad, Providence Division.
Jones avenue (footbridge), over New York, New Haven \& Hartford Railroad, Midland Division.

* Malden, from Charlestown to Everett.

Massachusetts avenue, over Boston \& Albany Railroad.
Massachusetts avenue, over New York, New Haven \& Hartford Railroad, Providence Division.

* Meridian street, from East Boston to Chelsea.

Metropolitan avenue (near Clarendon Hills station), Hyde Park.
Neptune road, over Boston, Revere Beach \& Lynn Railroad.
Newburn street, over Stony brook, Hyde Park.

* Northern avenue, over Fort Point channcl.

Shawmut avenue, over Boston \& Albany Railroad and New York, New Haven \& Hartford Railroad, Providence Division.
Southampton street, over South Bay sluice.
Summer street, over A street.
Summer street, over B street.
Summer street, over C street.

* Summer street, over Fort Point channel.
* Summer street, over Reserved channel, South Boston.

Tollgate way (footbridge), over Providence Division, from Washington street to Hyde Park avenue, Forest Hills.

* Warren, from Boston to Charlestown.

West Newton street, over New York, New Haven \& Hartford Railroad, Providence Division.
West River street, over Mother brook, Hyde Park.
West Rutland square (footbridge), over New York, New Haven \& Hartford Railroad, Providence Division.
Wordsworth street (footbridge), over Boston, Revere Beach \& Lynn Railroad, East Boston.

## In Charge of Bridge and Ferry Division and Park and Recreation Department.

Columbia road, over New York, New Haven \& Hartford Railroad, Old Colony Division.
Columbia road, over Shoreham street.

## In Charge of Park and Recreation Department.

Agassiz road, in Fens.
Audubon road, in Riverway, over Boston \& Albany Railroad.
Berners street (footbridge), over Bridle path in Riverway.
Boylston street, in Fens, over waterway.
Bridle path, in Riverway, over Muddy river.

* Castle Island (footbridge), in Marine Park, South Boston, to Castle Island.
Charlesgate, in Fens, over Boston \& Albany Railroad.
Circuit drive, over Scarboro pond, in Franklin Park.
Commonwealth avenue, in Fens, over waterway.
Cottage Farm, over Boston \& Albany Railroad, at Commonwealth avenue.
Ellicott Arch, in Franklin Park.
Fens, in Fens.
Forest Hills entrance; in Franklin Park.
Leverett pond (footbridge), in Olmsted Park.
Norfolk Street Playground (footbridge), over Midland Division,
New York, New Haven \& Hartford Railroad.
Public Garden (footbridge).
Scarboro pond (footbridge), in Franklin Park.
Wood Island (footbridge), in Wood Island Park.


## II.-Bridges of Which Boston Maintains the Part Within its Limits.

In Charge of Bridge and Ferry Division.
Central avenue, from Dorchester to Milton.

* Chelsea North, from Charlestown to Chelsea.

Milton, from Dorchester to Milton.
Paul's Bridge, over Neponset river, Hyde Park.
Spring street, from West Roxbury to Dedham.

* Western avenue, from Brighton to Watertown.

Winthrop, from Breed's Island to Winthrop.

## In Charge of Park and Recreation Department.

Bellevue street, in the Riverway, over Muddy river.
Berners street (footbridge), over Muddy river.
Brookline avenue, in the Riverway, over Muddy river.
Huntington avenue, in the Riverway, over Muddy river.
Longwood avenue, in the Riverway, over Muddy river.

## III.-Bridges of Which Boston Pays a Part of the Cost of Maintance.

In Charge of Bridge and Ferry Division.
Albany street, over Boston \& Albany Railroad (over freight tracks).
Ashmont street and Dorchester avenue, over New York, New Haven \& Hartford Railroad, Old Colony Division.

Belgrade avenue, over New York, New Haven \& Hartford Railroad, Providence Divisıon.
Harvard street, over New York, New Haven \& Hartford Railroad, Midland Division.
Morton street, over New York, New Haven \& Hartford Railroad, Midland Division.
Norfolk street, over New York, New Haven \& Hartford Railroad, Midland Division, near Dorchester station.
Pleasant street, over the subway.
Walworth street, over New York, New Haven \& Hartford Railroad, Providence Division.

In Charge of Commissioners for Boston and Cambridge Bridges.
Anderson Bridge, from Brighton to Cambridge.
Brookline street, from Brighton to Cambridge.
Cambridge, from Boston to Cambridge.

* Cambridge street, from Brighton to Cambridge.
* Harvard, from Boston to Cambridge.
* Prison Point, from Charlestown to Cambridge.
* Western avenue, from Brighton to Cambridge.

In Charge of Commissioners for Granite Avenue Bridge.

* Granite avenue, from Dorcester to Milton.
IV.-Bridges of Which Boston Maintains the Whole or a Part of the Wearing Surface.


## In Charge of the Bridge and Ferry Division.

Austin street, over Boston \& Maine Railroad, Charlestown.
Babson street, over New York, New Haven \& Hartford Railroad, Midland Division, near Blue Hill Avenue Station.
Bennington street, over Boston \& Albany Railroad.
Blue Hill avenue, over New York, New Haven \& Hartford Railroad, Midland Division.
Boston street, over New York, New Haven \& Hartford Railroad, Old Colony Division.
Brookline street, Brighton, to Cambridge, portion over Boston \& Albany Railroad.
Cambridge street, Charlestown, over Boston \& Maine Railroad.
Chelsea, over Boston \& Maine Railroad.
Curtis street, East Boston, over Boston \& Albany Railroad.
Dana avenue, over New York, New Haven \& Hartford Railroad, Midland Division, Hyde Park.
Dorchester avenue, over New York, New Haven \& Hartford Railroad, Old Colony Division.
Everett street, over Boston \& Albany Railroad, Brighton.
Fairmount avenue, over New York, New Haven \& Hartford Railroad, Midland Division, and Station street, Hyde Park.

Glenwood Avenue, West, over passageway connecting land of the New York, New Haven \& Hartford Railroad, Hyde Park.
Hyde Park avenue, over proposed electric connection between Midland and Providence Division, New York, New Haven \& Hartford Railroad, Hyde Park.
Maverick street, East Boston, over Boston \& Albany Railroad.
Milton street, Hyde Park, over New York, New Haven \& Hartford Railroad.
Mystic avenue, over Boston \& Maine and Boston \& Albany Railroads.
New Allen street, Hyde Park, over New York, New Haven \& Hartford Railroad.
Oakland street, over New York, New Haven \& Hartford Railroad, Midland Division, Mattapan.
Perkins street (footbridge), Over Boston \& Maine Railroad.
Porter street, over Boston \& Albany Railroad.
Prescott street, oveı Boston \& Albany Railroad.
Redfield street, at Neponset, over New York, New Haven \& Hartford Railroad, Old Colony Division.
Reservoir road, Brighton, over Boston \& Albany Railroad, Newton Branch.
Saratoga street, over Boston \& Albany Railroad.
Saratoga street, over Boston, Revere Beach \& Lynn Railroad, East Boston.
Southampton street, over New York, New Haven \& Hartford Railroad, Old Colony Division.
Sprague street, over New York, New Haven \& Hartford Railroad, Midland Division, and branch of Providence Division, Hyde Park.
Summer street, over New York, New Haven \& Hartford Railroad, Midland Division.
Sumner street, East Boston, over Boston \& Albany Railroad.
Webster street (footbridge), East Boston, over Boston \& Albany Railroad.
West Fourth street, over New York, New Haven \& Hartford Railroad, Old Colony Division.

## V.-Bridges Maintained by Metropolitan District Commission, Park Division.

* Charles River Dam.

Mattapan, over Neponset river

* Neponset, from Dorchester to Quincy.

North Beacon street, from Brighton to Watertown.
VI.-Bridges Wholly Maintained by Railroad Corporations.
1st.-Boston \& Albany.

Albany street (over passenger tracks).
Harrison avenue.

Market street, Brighton.
Tremont street.
Washington street.
2d.-Boston \& Maine and Boston \& Albany Railroads. Main street.

Sd.-Boston \& Maine Railroad, Eastern Division. Wauwatosa avenue, East Boston.

> 4th.- Boston, Revere Beach \& Lynn Railroad.

Everett strect.
5th.-New York, New Haven \& Hartford Railroad, Midland Division.
Athens street.
Bolton street.
Dorchester avenue.
East River street, at River Street Station, Hyde Park.
Gold street.
Silver street.
Washington street, Dorchester.
West Broadway.
West Second street.
West Third street.
West Fourth street.
West Fifth street.
West Sixth street.
6th.- New York, New Haven \& Hartford Railroad, Old Colony Division.
Adams street.
Cedar Grove Cemetery.
Medway street.
Savin Hill avenue.
7th.- New York, New Haven \& Hartford Railroad, Providence Division.
Albany street.
Arlington square.
Baker street, West Roxbury.
Bellevue street, West Roxbury.
Berkeley street.
Broadway, South Boston. L
Canterbury street, West Roxbury.
Centre and Mt. Vernon streets, West Roxbury.
Columbus avenue.
Dartmouth street.
Gardner street, West Roxbury.
Harrison avenue.
Park street, West Roxbury.

Washington street.
West street, Hyde Park.
West River street, Hyde Park.
VII.-Bridges Maintained by the United States Governiment.
*Victory Bridge (over Neponset river), from Dorchester to Quincy.
Recapitulation of Bridges.
I. Number wholly maintained by Boston:
In charge of Bridge and Ferry Division. ..... 63
In charge of Bridge and Ferry Division and Park and Recreation Department ..... 2
In charge of Park and Recreation Depart- ment ..... 1883
II. Number of which Boston maintains the part within its limits:
In charge of Bridge and Ferry Division . ..... 7
In charge of Park and Recreation Depart- ment ..... 5
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 ..... 7
In charge of Commissioners for Granite Avenue Bridge ..... 1
16IV. Number of which Boston maintains the whole
or a part of the wearing surface. ..... 33
V. Number maintained by Metropolitan District Commission ..... 4
VI. Number maintained by railroad corporations:

1. Boston \& Albany Railroad ..... 5
2. Boston \& Maine and Boston \& Albany Pailroads ..... 1
3. Boston \& Maine Railroad, Eastern Division ..... 1
4. Boston, Revere Beach \& Lynn Railroad, ..... 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

# VII. Number maintained by the United States Government 

Total number . . . . . . . . 190

Table Showing the Widths of Channelways for Vessels in all Bridges Over Navigable Water in the City of Boston in January, 1920.

| Name of Bridge. | Location. |  | Width. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| * Anderson. | Brighton to Cambridge | 1 |  |  | 0 in | ches. |
| Boston Elevated Railway............ | Boston to East Cambridge. | 1 | 45 | " | 0 | " |
| Boston Elevated Railway............ | Charlestown to Everett. | 1 | 75 | " | 0 | " |
| Bóston \& Maine Railroad, Eastern Division. | Boston to Charlestown. | 1 | 39 | " 8 | 8 | " |
| Boston \& Maine Railroad, Eastern Division. | Over Miller's river. | 1 | 35 | * | 0 | " |
| Boston \& Maine Railroad, Fitchburg Division. | Boston to Charlestown. | 1 | 36 | " | 0 | " |
| Boston \& Maine Railroad, Fitchburg Division (for teaming freight). | " " | 1 | 36 | " 7 | 7 | " |
| Boston \& Maine Railroad, (freight), Southern Division. | Boston to East Cambridge | 1 | 40 | " 0 | 0 | " |
| Boston \& Maine Railroad (passenger), Southern Division. | " * | 1 | 39 | " | 8 | " |
| Boston \& Maine Railroad, Western Division. | Boston to Charlestown. | 1 | 39 | " 4 | 4 | " |
| Boston \& Maine Railroad, Western Division. | Over Miller's river. | 1 | 35 | " | 6 | " |
| Broadway | Over Fort Point channel. | 1 | 50 | * | 0 | * |
| $\dagger$ Brookline street | Brighton to Cambridge. | 1 | 40 | " 0 | 0 | " |
| * Cambridge | Boston to Cambridge | 1 | 50 | " 0 | 0 | " |
| Cambridge street | Brighton to Cambridge | 1 | 36 | " 6 | 6 | " |
| Charles River Dain (lock) | Boston to East Cambridge. | 1 | 45 | " 0 | 0 | " |
| Charlestown (main channel).. | Boston to Charlestown. |  | (50 | " 0 | 0 | " |
| Charlcstown (north channel). | " * | 2 | $\{49$ |  | 9 | * |
| Chelsea (north channel) | Charlestown to Chelsea. | 2 | 125 |  | 0 | " |
| Chelsea (south channel) | " " | 1 | 49 | " | 0 | " |
| Chelsea street. | East Boston to Chelsea. | 1 | 60 | " | 0 | " |
| Congress street. | Over Fort Point channe | 1 | 50 |  | 0 | " |
| Dorchester avenue. | " " | 1 | 41 | " | 3 | " |
| Dover street. | " " | 1 | 40 |  |  | " |

[^11]Table Showing Widths of Channelways, etc.-Concluded.

| Name of Bridge. | Location. |  | Width. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Grand Junction Railroad. | Brighton to Cambridge. | 1 |  | feet 3 | 3 i | ches. |
| Grand Junction Railroad. | East Boston to Chelsea. | 1 | 60 | " | 0 | " |
| Granite avenue. | Dorchester to Milton | 1 | 50 | " | 0 | " |
| Harvard (Boston side). | Boston to Cambridge. . . . . . . |  | (36 | " | 7 | " |
| Harvard (Cambridge side) | " " ........) | 2 |  | " |  | " |
| Malden. | Charlestown to Everett. | 1 | 75 |  | 0 | " |
| Meridian street. | East Boston to Chelsea. | 1 | 100 |  | 0 | " |
| Neponset (temporary). | Dorchester to Quincy | 1 | 38 |  | 5 | " |
| New York, New Haven \& Hartford Railroad. | Over Fort Point channel.. | 1 | 41 |  | 8 | " |
| New York, New Haven \& Hartford Railroad, Plymouth Division | Dorchester to Quiney. | 1 | 51 |  | 0 | " |
| * North Beacon street. | Brighton to Watertown | 1 | 45 | " | 0 | " |
| Northern avenue. | Over Fort Point channel. | 2 | 75 |  | 3 | " |
| Prison Point | Charlestown to Cambridge. | 1 | 37 |  | 4 | " |
| Summer street. | Over Fort Point channel. . | 1 | 50 |  | 0 | " |
| Summer street. | Over Rescrved channel, South Boston. | 1 | 39 |  | 3 | " |
| Victory. | Dorchester to Quincy . . . . . . . . | 1 | 50 |  | 0 | " |
| Warren. | Boston to Charlestown. | 1 | 36 |  | 0 | " |
| Western avenue. | Brighton to Cambridge........ | 1 | 36 |  | 0 | " |
| Western avenue | Brighton to Watertown | 1 | 36 | " | 0 | " |

[^12]Bridge Openings.


## ELEVATIONS AND DATUAI PLANES REFERRED TO BOSTON CITY BASE.

## Feet.

* 0.00 Boston city base. This base is used by the towns of Brookline and Watertown and the cities of Chelsea, Everett, Malden, Newton and Waltham.
-4.98 Cambridge city base.
+0.64 Somerville city base.
0.00 Metropolitan Park Commission base.
+0.64 State Department of Public Works, Division of Waterways and Public Lands.
0.00 Metropolitan Water Board base.
- 100.00 Metropolitan Sewerage Board base.
- 100.00 Boston Transit Commission base.
- 100.00 Charles River Commission base.
15.45 Old bench mark on coping of old dry dock at Charlestown Navy Yard.
15.11 New bench mark on coping of old dry dock at Charlestown Nary Yard, northwest end over crowfoot.
5.00 Piles to be cut off for building.
12.00 Minimum cellar bottom elevation when not waterproofed.
9.82 South Boston base. Formerly in use, now abandoned.
0.00 Nean low water about $1830 . \dagger$
+0.34 Mean low water, $1867 . \dagger$
+0.79 Mean low water, $1902 . \dagger$
+0.58 Nary Yard base, $1902 . \dagger$
10.63 Mean high water, 1902. $\dagger$
5.71 Mean sea level, $1902 . \dagger$
9.84 Mean rise and fall of tide, 1902. $\dagger$

[^13]
## Highest Recorded Tides.

Feet.
15.62 April 16, 1851, average of seven observations, North Market street and vicinity, leveled on in 1854 by Charles Harris, Surveying Division n. b. 22, p. 54 ( 15.10 above mean low water, United States Coast Survey Chart of Boston Harbor, 1857).
15.64 December 26, 1909, average of twenty-nine observations, on waterfront, Nut Island, to Deer Island, elevations determined in most cases by John H. Edmonds, before January 1, 1910, from points put in for that purpose, 1902 to 1905.
15.50 December 26, 1909, actual elevation at North Ferry, Boston proper, as observed on staff gauge, at high water.
From comparison of contemporary diary and newspaper accounts the only tide of this class prior to 1851, found by John H. Edmonds, was that of February 24, 1722-23, which was in all probability about 16.00 .
The following tidal records may be of interest:
High Tides.
Plane of Reference, Boston C'ity Base.

| Feet. | Date. | When Taken. | By Whom. |
| :---: | :---: | :---: | :---: |
| 6.00 | Feb. 24, 1722-23, | By comparison. | J. H. Edmonds. |
| 1.62 | April 16, 18.51. | Average of 7 observations | Charles Harris. |
| 115.74 | April 16, 1851. | Navy Yard, staff qauge . . . . . . . | Isaac Williams. |
| 145.15 |  | Charlestown Bridge and East Boston Ferries. Average of 1.5 observations. |  |
| 13.72 | Nov. $8,1900$. | Avalden Bridge............ | F. P. Spalding. |
| 14.19 | Nov. 25, 1:901 | Average of 10 observations. |  |
| 13.60 | Dec. 14, 1902. | Awrage of 11 observations. |  |
| 14.83 | Jan. 25.1905. | Average of 34 observations. |  |
| 14.70 | Jan. 2.5, 190. | Inner harbor, 10 observations. |  |
| 14.70 | Jan. 25, 1905. | North Ferry, Bioston proper. | J. H. Edmonds. |
| 11.90 | Dec. 26, 1909.. | North Ferry, Boston proper (p. m.) | J. H. Edmionds. |
| 13.50 13.90 | Dee. $26,1913$. Nov. $20,1914$. | North Ferry, loston proper Malden Bridge........... | F. P. Spalding. H. H. MeNerlin. |
| 14.30 | Jan. I3, 1915. | North Ferry, Boston proper | F. P. Splading. |
| 14.62 | Jan. 13, 1915. | Granite Avenue Bridge. | G. A. Clough. |
| 14.40 | Nov. 7, 1919. | North Ferry, East Boston side | F. P. Spalding. |

Low Tides.

| 5.60 | Nov. 27, 1898. | Deer Island, metropolitan sewer station. | Self-recording gauge. |
| :---: | :---: | :---: | :---: |
| -3.50 | Feb. 1, 1900. | Deer Island, metropolitan sewer station. | Self-recording gauge. |
| -2.94 | Feb. 3,1900. | South Boston station, Edison Electric | D. A. Harrington. |
| -3.00 -3.00 | Feb. 4, 1901. | Deer Island, metropolitan sewer station. | Self-recording gauge. |
| -3.00 | Mar. 23, 1905. | Deer Island, metropolitan sewer station. | Self-recording gauge. |

## FERRY SERVICE.

The following steam ferryboats are in commission:

| Name. | When Built. | Type. | Length. | Gress Tonnage. |
| :---: | :---: | :---: | :---: | :---: |
| D. D. Kelly. | 1879 | Side Wheel | $160 \mathrm{ft}$.3 in . | 550 |
| Hugh O'Brien | 1883 | " | 175 " 3 " | 645 |
| General Hancock | 1887 | " | 160 " 3 " | 577 |
| Governor Russell | 1898 | Propeller | 164"3" | 713 |
| Noddle Island. | 1899 | " | 164 " 3 " | 710 |
| General Sumner | 1900 | " | 164 " 3 " | 703 |
| . John H. Sulllvan. | 1912 | " | 172 " 3 " | 826 |

Financial Statement for the Year Ending January 31,

1. Receipts.

Total cash receipts during the year . . . $\$ 92,15150$
Cash in hands of tollmen at beginning of year 20000
$\$ 92,351 \quad 50$
Cash paid over to City Collector . $\$ 92,15150$
Cash in hands of tollmen January
31, 1921
20000
$\$ 92,351 \quad 50$

## 2. Appropriations and Expenditures.

Received from annual appropriation for Ferry Service
\$492,607 43
Received by transfer from Bridge Service . . 34,875 00
Received by transfer from Paving Service . . 23,026 97
Received by transfer from fuel supplies, etc . . 25,00000
Unexpended balance from special appropriation
for ferryboats, repairs, etc., February 1, 1921 . 27,904 00
Received from special appropriations:
East Boston Ferry, improvements, etc. . . *1,000,000 00
Ferryboat "Noddle Island" . . . . 160,000 00
Total appropriations and balance carried over . \$1,763,413 40
Total expenditures
815,576 19
\$947,837 21
Unexpended balance of special appropriations
January 31, 1921 . . \$947,082 35
Transferred to City Treasury $\quad 75486$

## 3. Result of Operations for the Year.

| Receipts for the year (net income). |  | \$92,151 50 |
| :---: | :---: | :---: |
| Ordinary expenses (maintenance appropriation) | \$574,75t 54 |  |
| Interest paid on ferry debt | 15,211 67 |  |
| Depreciation on ferryboats | 10,415 29 |  |
| Decrease in value of machinery and tools | 24754 |  |
|  | $\dagger$ \$600,629 04 |  |
| Less increase of stock <br> of supplies <br> L$\quad \$ 1,933 \quad 94$ |  |  |
| Less increase in stock <br> of fuel13,968 40 |  |  |
| Net outgo for the year |  | $\dagger 584,72670$ |
| Net loss for the year |  | $\dagger$ \$492,575 20 |

* Includes $\$ 500,000$ authorized but not issued.
$\dagger$ Does not include expenditures for special appropriations.

4. Balance Sheet.
End of Fiscal Ycar January 31, 1921.

| Ansets. |  | Lasbilitif. |  |
| :---: | :---: | :---: | :---: |
| Avallable Assets: <br> Cash in hands of tollmen at close of year <br> Inventory of supplies, viz.: <br> Fuel. <br> Supplies for maintenance. <br> $\$ 27,98400$ <br> 7,868 94 | \$200 00 | Current Liabilities: None. | ${ }^{4} \$ 947,08235$ |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  | $\begin{array}{r} 35,85294 \\ 14620 \end{array}$ |  |  |
| Total available assets. | \$36,199 14 |  |  |
| Contingent Assets: City Treasury | ${ }^{4} 947,08235$ | Contingent Liabilities: <br> Appropriations account. |  |
| Fined Assets: <br> Real estate, land and buildings ${ }^{1}$ <br> Ferryboats ${ }^{3}$. <br> Machinery, tools, atc. <br> Total tangible assets. <br> Deficiency or loss by operation and maintenance of the ferries for sixty-three years to date. |  | Fixed Liabilities: <br> Capital of the city invested in the ferries. viz, <br> Total expenditures of all kinds for sixtythree years, including interest on ferry debt. <br> Less total reccipts. <br> 7,668 45155 | :  <br>   <br>   <br> $7,739,363$ 41 |
|  |  |  |  |
|  | 379,450 27 |  |  |
|  | 2,227 90 |  |  |
|  | \$1,975,059 66 |  |  |
|  |  |  |  |
|  | \$8,686,445 76 |  | \$8,686,445 76 |
| ${ }^{1}$ Original purchase. <br> New buildings, drops, slips, cost to date. <br> Land, Lincoln's Wharf, cost, 1887. <br> Land, Battery Wharf, cost, 1893 | $\begin{array}{r} 876,3750004 \\ 607,52364 \\ 50,562 \\ 10,000 \\ 52 \end{array}$ | ${ }^{2}$ Assessors' figures. <br> ${ }^{3}$ Total cost to date, per ferry books Less boats sold, depreciation or destroyed. |  |
|  |  |  | \$959,347 91 |
|  |  |  | 579,897 64 |
|  | 46116 |  | \$379,450 27 |

Comparative Balance Sheets at the Close of each Year for Five Years,

|  | $\begin{gathered} \text { January } 31, \\ 1917 . \end{gathered}$ | $\begin{gathered} \text { January } 31, \\ 1918 . \end{gathered}$ | $\begin{gathered} \text { January } 31, \\ 1919 . \end{gathered}$ | $\begin{gathered} \text { January } 31, \\ 1920 . \end{gathered}$ | $\begin{gathered} \text { January } \\ 1921 . \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Assets. |  |  |  |  |  |
| Cash, balance on hand |  |  |  |  |  |
| Cash, tollmen's capital | \$200 00 | \$200 00 | \$200 00 | \$200 00 | \$200 00 |
| Rents receivable. | 3340 | 10052 | 11354 | $137 \quad 57$ | 14620 |
| Fuel and supplies in stock. . . . . . . | 12,28304 | $7,238: 4$ | 14,43634 | 19,950 60 | 35,852 94 |
| City Treasurer (balance of appropriation) | 1,775 00 |  | 27,280 67 | 27,904 00 | 947,082 35 |
| Ferryboats (less depreciation). . . . . | 208,995 39 | 196,455 67 | 184,668 33 | 173,588 23 | 379,450 27 |
| Machinery and tools . . . . . . . . . . . | 3,080 00 | 2,77200 | 2,60.5 72 | 2,47544 | 2,22790 |
| 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 | \$836,466 83 | \$816,866 43 | \$839,404 60 | \$834,356 14 | \$1,975,059 66 |
| Cost of avenues, etc., East Boston (previous to $18: 0)^{1}$. | 315,815 68 | 315,815 68 | 315,815 68 | 315,815 6S | 315,815 68 |
| Deficiency of assets (loss)........ . | $4,805,067 \quad 18$ | 5,094,074 27 | 5,477,858 89 | 5,578,459 23 | 6,395,570 42 |
| Totals. | \$5,957,349 69 | \$6,226,756 38 | \$6,633,079 17 | \$7,028,631 05 | \$8,686,445 76 |
| Liabiluties. |  |  |  |  |  |
| Capıtal invested by City of Boston to date. | \$5,955,574 69 | \$6,226,756 38 | \$6,60.5,798 50 | \$7,000,727 05 | \$7,739,363 41 |
| Appropriations account (credit balances) | 1,775 00 |  | 27,280 67 | 27,90400 | 347,082 35 |
| Total liabilities. | 85.957,349 69 | \$6,226,756 38 | \$6,633,079 17 | \$7,028,631 05 | \$8,686,445 76 |

Detarl of Capital Invested by the City of Boxton.

| Total expenditures to date per ferry books. | \$12,900,154 62 | \$13,331,024 31 | \$13,800,322 33 | 814,292,449 75 | \$15,113,454 44 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Interest of debt for the year (per City Auditor). | 14,987 91 | 7,995 00 | 6,063 00 | 5,428 50 | 15,211 67 |
| Interest previous years, etc. (net debits, per City Auditor) . . . . . | 279,14885 | 279,14885 | 279,148 85 | 279,148 85 | 279,14885 |
| Total expenditures. | \$13,194,291 3S | \$13,618,168 16 | \$14,085,534 18 | 814,577,027 10 | 815,407,814 96 |
| Deduct total receipts paid to City Collector. | 7,238,716 69 | 7,391,411 78 | 7,479,735 68 | 7,576,300 05 | 7,668,451 55 |
| Excess expenditures, capital. | \$5,955,574 69 | \$6,226,756 3s | \$6,605,79s 50 | 87,000,727 0,5 | 87,739,363 41 |

${ }^{1}$ Included in deficiency of assets in Table 4.
Comparison of Receipts, Appropriations and Expenditures for Five Years.

|  | 1916-17. | 191718. | 191819. | 191920. | 1920-21. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Receipts. |  |  |  |  |  |
| From foot patsengers (tollmen) | $\$ 44.04814$ | \$39,690 86 | \$37,548 30 | \$42,285 00 | \$37,926 79 |
| " foot passes (office sales) | 56670 | 51380 | 50930 | 40280 | 42380 |
| " extra passengers on teams (gatemen) | 1,721 3:3 | 1,710 71 | 1,514 59 | 1,586 24 | 1,546 34 |
| " teant tickets (office sales). | 2,661 50 | 2,977 50 | 3,625 50 | 3,107 50 | 2,519 50 |
| " strip team tiekets (tollmen) | 2:3,142 00 | 23,001 00 | 19,525 00 | 20,266 50 | 17,151 00 |
| " cash fares for teams (gatemen) | 21,202 55 | 23,30445 | $\begin{array}{r}24,22399 \\ \hline 100\end{array}$ | $\begin{array}{r}27,81319 \\ \hline 100\end{array}$ | 30,518 14 |
| " free ferries July 4............. | $100$ | 100 | 100 | 100 | 100 |
| Total from rates | \$93,343 20 | \$91,199 32 | \$86,947 68 | \$95,462 23 | \$90,086 57 |
| From rents.......... | 56400 | 51403 | 53383 | 53967 | 55327 |
| " old material sold | 59478 | 8435 | 29050 |  | 25078 |
| " other source | 62314 | 61883 | 55189 | 56247 | 1,230 88 |
| Total ordinary receipts | \$95,125 14 | \$92,416 53 | \$88,323 90 | \$96,56+ 37 | \$92,151 50 |
| Expenditures (Ordinary). |  |  |  |  |  |
| Division engincer's salary (part) * | \$1,250 00 | \$1,250 00 | \$1,250 00 | \$1,250 00 | \$1,250 00 |
| General foreman and cashier $\dagger$. | 4,341 44 | 4,253 88 | 4,288 44 | 4,370 91 | 4,700 38 |
| Clerks*. | 76500 | 90423 | 66334 | 93110 | 1,070 55 |
| Retired veterans' pensions | 4,739 45 | 4,645 58 | 5,373 07 | 5,612 79 | 5,257 47 |
| Retired employees' pensions. | 2,246 15 | 3,754 16 | 3,201 36 | 2,997 27 | 234564 |
| Medical inspector (part) | 8300 | 8333 | 8333 | 8334 | 8333 |
| Stationery. | 11759 | 13272 | 13812 | 15894 | 19899 |
| Printing. | 1,258 39 | 1,263 78 | 1,662 75 | 1,150 33 | 1,653 24 |
| Telephoncs. | 29954 | 21235 | 20575 | 23538 | $\checkmark 7932$ |
| Advertising | 3460 | 5650 | 3650 | 5090 | 6015 |
| Car fares. | 7500 | 5725 | 5745 | 7974 | 8715 |
| Postage. | 600 | 600 | 200 | 400 | 400 |
| Premiums, surety companies. | 9000 | 8084 | 8624 | 8652 | 8500 |
| Total, office expense | \$15,306 16 | \$16,700 62 | \$17,048 35 | \$17,011 22 | \$17,075 52 |



## Total Expenditures Upon Ferries Since 1858-59



Total Receipts from Ferries, 1858=59.
Receipts from rents, etc., previous to purchase of ferries
$\$ 29,58856$
Receipts from ferry tolls since purchase of ferries

7,362,385 27
Receipts from rents since purchase of ferries 68,432 69
Receipts from sale of ferryboats 149,06744
Receipts from all other sources, per ferry books.' 28,44274
Receipts from all other sources, additional, per City Auditor

30,73485
Total receipts from all sources . . . $\$ 7,668,65155$
Less amount with tollmen as capital . . . 20000
Total receipts, per auditor's figures
$\$ 7,668,45155$
Regular Annual (Ordinary) and Special Appropriations (Extraordinary) of the Ferry Service for the Year Ending January 31, 1921.
Appropriation (regular) for the year ending January 31, 1921
\$492,607 43
Received by transfer from Bridge Service
34,875 00
Received by transfer from the Paving Service 23,026 97
Received by transfer from fuel supplies, etc.
25,00000
$\$ 575,50940$


[^14]Brought forward. ..... $\$ 1,61071$
Amount paid James Swan, consulting engineer . ..... 25000Amount paid Fay, Spofford and Thorndike, forprofessional services for design and supervi-sion of new ferryboats11,75000
Amount paid to Winnisimmet Ship Yard, Inc., under contract (contract price $\$ 335,000$ ) for building steel ferryboat (work not completed) ..... 67,00000
Amount paid to Groton Iron works, under con-
tract (contract price $\$ 379,950$ ) for building steel ferryboat (work not completed) ..... 75,990 00
Total ..... $\$ 156,60071$
Ferryboats, Repairs, Etc.
Labor, engineering ..... $\$ 28314$
Printing specifications ..... 10055
Advertising ..... 1120Amount paid to Boston Shipbuilding Company.under contract for rebuilding superstructureof double screw ferryboat, John H. Sullivan:
Contract price$\$ 39,85000$Extra work, under contract, re-placing broken chafing irons,staving and covering boardson both ends of boat1,35680
$\$ 41,20680$
Less amount paid in 1919 ..... 18,62987
22,57693
Amount paid to Bertelsen \&Petersen Engineering Companyunder contract for retubing con-denser on ferryboat "John H.Sullivan"
Contract price ..... \$1,850 00Less amount paid in 1919 . . 2775027750
Total$\$ 24,54432$Ferry Boat "Noddle Island"
Labor, engineering$\$ 8822$
Amount paid to Richard T. Green Company,under contract (contract price $\$ 152,400$ ) forrepairs and renewals to double screw ferry-boat "Noddle Island" (work not completed).59,588 40
\$59,676 62

Statement Showing Recelpts at Each Ferry.
North Ferry.

| From Tolmen. | $\begin{gathered} \text { Foot } \\ \text { P'assengers. } \end{gathered}$ | $\begin{aligned} & \text { Frow } \\ & \text { Tickets. } \end{aligned}$ | Totals. |
| :---: | :---: | :---: | :---: |
| Boston side. | \$10,645 60 | \$3,727 00 | \$14,372 60 |
| East Boston side. | 9,709 20 | 634200 | 16,051 20 |
|  | \$20,354 80 | \$10,069 00 | \$30,42: 80 |

From tollmen
$\$ 30,42380$
From gatemen:
For 80,643 foot passengers at 1
cent
For cash fares for teams . . . 15,791 06
$\$ 80643$
16,597 49
Total at North Ferry
847,021 29

| South Ferry. |  |  |  |
| :---: | :---: | :---: | :---: |
| From Tolimen. | Foot Passengers. | $\begin{gathered} \text { From } \\ \text { Tickets. } \end{gathered}$ | Totals. |
| Boston side. | \$9,286 42 | \$3,986 50 | \$13,272 92 |
| East Boston side. | 8,285 57 | 3,095 50 | 11,381 07 |
|  | \$17,571 99 | \$7,082 00 | \$24,653 99 |


| From tollmen |  | \$24,653 99 |
| :---: | :---: | :---: |
| From gatemen: |  |  |
| For 73,991 foot passengers at 1 cent |  |  |
| For cash fares for tean | 14,727 08 |  |
|  |  | 15,466 99 |
| Total at South Ferry |  | \$40,120 98 |
| North and South Ferries as above |  | \$87,142 27 |
| Tickets paid for at ferry office |  | 2,943 30 |
| Received in lieu of free ferries July 4, 1920 |  | 100 |
| Total from rates |  | \$90,086 57 |
| Rents for the year |  | 55327 |
| Sale of old material |  | 28078 |
| Carried forward |  | \$90,920 62 |


| Brought forward. |  | \$90,920 62 |
| :---: | :---: | :---: |
| Headhouse privileges. |  | 40000 |
| Commissions on public telephones |  | 11930 |
| Care of public telephone booths |  | 4800 |
| Sale of coal |  | 65158 |
| Damages to ferry |  | 1200 |
| Total receipts for the year |  | \$92,151 50 |
| Statement of Travel on the Ferries from February 1, 1920, to January 31, 1921, Inclusive. |  |  |
| Foot passengers at 1 cent each | $\begin{aligned} & \text { North Ferry. } \\ & 2,116,123 \end{aligned}$ | $\begin{aligned} & \text { South Ferr } y \\ & 1,831,190 \end{aligned}$ |
| Foot passengers by ticket. | 34,280 | 6,192 |
| Foot passengers free | 125 | 3,180 |
| Total foot | 2,150,528 | 1,840,562 |
| One-horse teams, light motor trucks, pleasure carriages and runabouts. $230,860 \quad 206,394$ |  |  |
| Two-horse teams and motor trucks . 196,788 117,321 <br> Threc-horse teams and heavy motor |  |  |
|  |  |  |
| Four-horse teams $\quad 1,672 \quad 2,099$ |  |  |
| Two-horse pleasure carriages and hacks and touring cars | 131,898 | 94,844 |
| Handcarts, etc. | 2,823 | 2,401 |
| Drag wheels . . . . ...... 1 |  |  |
| Free teams, hacks and motor vehicles | 9,315 | 7,335 |
|  | 574,587 | 433,269 |

Motor Vehicle Traffic.
Febrnary 1, 1920, to January 31, 1921, included in above figures.

|  | North Ferry | South <br> Ferry. | Total. |
| :---: | :---: | :---: | :---: |
| Pinnabouts. | 34,502 | 31,547 | 66,049 |
| Tuuring cars. | 1135,535 | 298,790 | 234,325 |
| Trumks | ${ }^{3} 162.248$ | 413¢,551 | 300,509 |
| Total. | 332,285 | 268,888 | 601,183 |


| ${ }^{1}$ Includes | 4,326 free. |
| :---: | :---: |
| $2{ }^{2}$ " | 4.315 " |
| $\stackrel{3}{ }$ | 4.379 |
| 4 " | 2,321 |
| Total, | 15,341 free. |


| Total paying foot | 3,987,785 |
| :---: | :---: |
| Total free foot passengers. | 3,305 |
| Total foot passengers carried | 3,991,090 |
| Total paying teams | 991,209 |
| Total free teams. | 16,650 |
| Total teams carried | 1,007,859 |

Total Travel on Both Ferries from February 1, 1915, to January 31, 1921.

|  | 1915-16. | 1916-17. | 1917-18. | 1918-19. | 1919-20. | 1920-21 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| One-horse teams*. | 644,311 | 582,819 | 577,507 | 500,193 | 494,372 | 437,254 |
| Two-horse teamst | 276,550 | 291,795 | 308,564 | 306,672 | 330.023 | 314,109 |
| Three-horse teams | 5,410 | 4,723 | 3,538 | 3.471 | 4.372 | 4,105 |
| Four-horse teans | 4,507 | 6,640 | 7,089 | 7,598 | 4,540 | 3,744 |
| Two-horse earriages, hackst | S4,3s9 | 94.333 | 110,203 | 132.743 | 173,821 | 226,742 |
| Two-eent tolls, hand earts, ete. | 3,195 | 3,537 | 3,570 | 3,265 | 4.935 | 5,224 |
| Dragwheels, ete. | 4 | 1 |  | 8 | 6 | 1 |
| Paid teams at both ferries. | 1,018,660 | 983,848 | 1,010,471 | 953,950 | 1.012 .071 | 901,209 |
| Free teams at both ferries | 10,844 | 12,067 | 15,177 | 21,708 | 17.447 | 16,650 |
| Total teams at both ferries, | 1,029,510 | 905,915 | 1,025,648 | 975,65 | 1,029,51~ | 1,007,559 |
| Foot passengers paid. | 5,676,118 | 4,631,244 | 4,191,410 | 3,952,673 | 4.424 .773 | 3,987,785 |
| Foot passengers free. | 2,053 | 1,763 | 846 | 2.520 | 4.500 | 3,305 |
| Total foot passengers. | $5,678,171$ | 4,633,007 | 4,192,256 | 3,955,493 | 4,429,273 | 3,991,090 |

Note: The above team travel includes automobiles.
*Includes one-seat automobiles. $\dagger$ Includes motor trucks. $\ddagger$ Includes two-seat automoliles.

## APPENDIX C.

## REPORT OF THE DIVISION ENGINEER OF THE HIGHWAY DIVISION.

Boston, February 1, 1921.

Mr. Thomas F. Sullivan, Commissioner of Public Works:

Dear Sir,- I submit herewith a statement of the activities, operations and expenditures of the Paving and Lighting Services for the year ending January 31, 1921.

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

| Lighting Service | . | . | . | . | $\$ 722,134$ <br> Paving Service |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $1,589,641$ 10   <br> Total . . . . |  |  |  |  |  |

## Paving Service.

The department forces were employed in the maintenance of the streets, nine city steam road rollers and two hired rollers being employed in resurfacing and repairing the macadam streets throughout the city.

## General Plant.

Two asphalt mixing plants, one in Dorchester and one in Brighton, operated by the department forces have been producing both Topeka mixture and patching materials for the several districts. The nine steam road rollers received the usual overhauling and repairing during the winter months. All the boilers were inspected and passed by the state inspectors, but owing to the age of most of the machines it is expected that several will be rejected after this season. Tools and equipment have been kept in good condition by renewals and replacements, except some carts which are beyond repair.

There are 102 horses in fair condition. Many of these horses have grown old in the service and others that have been taken over from other divisions were old when transferred. It will be necessary to purchase some new stock to replace some of the present lame and halt.

The past year was probably the hardest, as regards road construction, ever known to this city. Abnormal construction conditions, due to transportation difficulties, high cost and scarcity of materials, delayed the proposed program and increased the cost of pavements so that the record of other years was not attained. The department was called upon to remove an umprecedented amount of snow and was engaged in this kind of work until late in March. Early in April construction was resumed on the thirteen (13) streets under contract and uncompleted from 1919. Contracts were awarded in 1920 to construct or repave sixty-seven (67) streets and forty-two (42) of them were completed, leaving twentyfour (24) to finish in 1921. About one hundred and fifty (150) streets were resurfaced by the department force with bituminous macadam or bituminous concrete.

About 76,000 square yards of granite block pavement was laid on the following streets: Albany street, from Broadway to Troy streets; Blackstone street, from Clinton street to Haymarket square; Dorchester avenue, from Dorchester Avenue Bridge to West second street; Dudley street, from Alexander street to Stoughton street; Federal street, from Franklin street to Dewey square; Friend street, from Union street to Merrimac street; Franklin street, from Devonshire street to Pearl street; Rutherford avenue, from Cambridge street to Chapman street; Grosvenor place, from Cliff street; Main street, from City square across Alford street; Public Alleys No. 710 and No. 818; Washington street, from Archdale road to beyond Corinth street. New granite blocks were laid on Albany street and Washington street and on the other streets the blocks were either relaid or recut.

About 56,000 square yards of sheet asphalt and binder was laid on the following streets, both on macadam base and on concrete base: Centre street, from Allandale street to South street; Cushman road, Brighton; Easton street, Brighton; Glenville avenue, Brighton; South street at Centre street; Tremont street, Dover street to Northampton street and William Jackson avenue, Brighton.

About 12,300 square yards of bitulithic pavement was laid in the following streets: Huntington avenue, at Jamaicaway; Stuart street, from Clarendon street to Trinity place, and Washington street, Brighton.

About 58,000 square yards of Topeka pavement was laid in the following streets on both macadam base and concrete base: Babcock street; Beech street, from Parkway to Belgrade avenue; Belgrade avenue, from Anawan avenue to Centre street; Centre street, from South street to Spring street; Centre street, from Forbes street to Boylston street; Elder street; Falkland terrace; Farquhar street; Hamlin street; Harvard street, from Fabyan street to beyond Brookview street; Havelock street; Hyde Park avenue, from Metropolitan avenue to River street; McCraw street; Pleasant street, from East Cottage street to Stoughton street; Pleasant street, from Stoughton street to Savin Hill avenue; Wilcock street; Wilbur street; Wollaston terrace and York street.

About 17,000 square yards of wood block pavement was laid on the following streets, all on a concrete base: Beacon street, from Massachusetts avenue to Raleigh street; Boylston street (northerly side), from Tremont street to Charles street; Charles street, from Fruit street to Allen street; Devonshire street, from Water street to Franklin street; East Fourth street, from K street to P street; Tremont street (westerly side), from Park street to Boylston street, and Washington street, from Beech street to Kneeland street.

About 4,300 square yards of macadam was laid on Mt. Vernon street, from Joy street to West Cedar street.

## Lighting Service.

There are in operation 5,354 arcs, 4,667 tungsten incandescents, 9,725 single mantle gas lamps and 143 fire alarm gas lamps, an increase of 71 over the preceding year. Part of this increase was the extension of the "white way" lighting in Tremont and Boylston streets to Park square, an installation of 23 new boulevard lamps. The Lighting Service is lighting 605 miles of public ways and about three hundred miles of private ways.

Yours respectfully,

> James H. Sullivan, Division Engineer.

## HIGHWAY DIVISION - LIGHTING SERVICE.

Financlal Statement.Expenditurts, February 1, 1920, to January 31, 1921.
Electric Lighting:
Arc.
Edison Electric Illuminating
Company ..... $\$ 393,65973$
Charlestown Gas and Electric
Company ..... 23,311 18
$\$ 416,97091$
Incandescent.
Edison Electric Illuminating Company . . . . . $\$ 82,39961$
Charlestown Gas and Electric Company . . . . . 211282,420 73
Gas Lighting:Boston Consolidated Gas Com-pany . . . . . . $\$ 195,53720$
Charlestown Gas and Electric
Company ..... 10,536 94
Charlestown Gas and Electric Company fire alarm lamps . 39997206,474 11
Salaries and Wages:
Division Engineer (part of). ..... $\$ 1,25000$
Clerk and supervisor ..... 1,859 89
Stenographer and clerk. ..... 1,311 72
Lighting inspectors ..... 96369
Pensions ..... 36000
Automobile Expenses: (2 automobiles):
Registration ..... $\$ 1000$
Gasolene, oil, etc. ..... 18585
Shoes and tubes, new and repairs ..... 15460
Supplies ..... 2243
Repairs ..... 4630
Construction:
Installing lamps and posts and removing and relocating lamps, posts etc., less rebates ..... 3,427 87
Carried forward ..... $\$ 715,45810$
Brought forward ..... $\$ 715,45810$
Office Expenses:
Printing ..... $\$ 11880$
Postage ..... 2900
Stationery and periodicals. ..... 4152
Miscellancous.
Telephone tolls ..... $\$ 400$
Travel expenses (car fares) ..... 2674
Typewriter repairs and inspection ..... 1350
Broken lamps ..... 60
Globes and shade frames ..... 9700 Installing bouleva
Boylston streets

Installing boulevard lamps on Tremont and

Installing boulevard lamps on Tremont and
6,344 981893214184
\$722,134 24
Revenue Credited to General Rertnue.
Lighting Boston and Cambridge bridges ..... \$2,573 29
The following is a statement of the work done during the year under the supervision of the Division Engineer, Highway Division:
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.
The "white way" on Tremont street was extended from Park street to Boylston, and Boylston, from Tremont to Park square, by the installation of 23 new boulevard lamps. Tenean beach, 4 new magnetite arc lamps were installed. In addition to these, throughout the city the lighting system was increased by the installation of 27 new magnetite ares and 57 incandescent and 22 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 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 ..... 603.71
Public footways ..... 1.31
Park roads, footways and private streets and alleys, approximately ..... 300.00
905.02
During the year the following defects were reported by the police: Arc lamps, 7,703; incandescent, 2,939, and gas lamps, 9,572 .
There are in operation 19,889 arc, incandescents and gas lamps, divided as follows: 5,354 arcs, 4,667 tungsten incandescents, 9,725 single mantle gas lamps and 143 fire alarm gas lamps.
Lamps Installed.
Magnetite arc lamps . . . . . 40
Tungsten lamps . . . . . . 57
Single mantle gas lamps . . . . . 22
Lamps Discontinued.
Magnetite arc lamps . . . . 4
Tungsten lamps . . . . . . 9
Single mantle gas lamps . . . . . 34
Fire alarm gas lamps . . . . . 1
Net increase . . . . . . . . 71

City Document No. 22.

| The following services, etc. | table | show | the | work o | setti | ng, rep | airing | nd a | tering | lamp | post | , bra | ckets, |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Lamps. <br> Set for | Set in Proken P'osts | Shifted to New Location. | Straight- | Reset to <br> Line and Grade. | $\begin{gathered} \text { Unused } \\ \text { Posts } \\ \text { Removed. } \end{gathered}$ | Repaired | Laid. | Relaid. | Recon- | Cleared. | Set in <br> Place of <br> Bracket | Shades. |
| Gas posts. | 28 | 59 | 23 | 1 | 51 | 49 | 17 |  |  | 5 |  | 2 | 10 |
| Arc posts. | 40 |  | 10 | 2 | 76 |  |  |  |  |  |  |  | 8 |
| Tungsten posts. | 23 | 5 | 2 | 1 | 38 | 4 |  |  |  |  |  | 6 | 2 |
| Gas brackets. |  |  |  |  |  | 3 | 2 |  |  |  |  |  |  |
| Arc fixtures. |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Tungsten fixtures. | 34 |  |  |  |  | 5 |  |  |  | 1 |  | 1 |  |
| Services. |  |  |  |  |  |  | 9 |  |  |  | 200 |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |

The following table shows the number of lamps of various types in use on January 1, 1921, as compared with the number in use on January 1, 1920:

|  | Jannary, 1921. | $\begin{aligned} & \text { J:inuary, } \\ & 1920 . \end{aligned}$ | Increase or Decrease. |
| :---: | :---: | :---: | :---: |
| Single mantle gas | 9,725 | 9,737 | -12 |
| Fire alarm gas. | 143 | 144 | -1 |
| Magnetite arc. | 5,354 | 5,318 | +36 |
| Tungsten incandescent. | 4,667 | 4,619 | +48 |
|  | 19,889 | 19,818 | +71 |

## 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. | Incandescent. | Gias. | Are. |
| :---: | :---: | :---: | :---: |
| February, 1920 | $\$ 666$ | \$.56 \$6 | \$253 66 |
| March. | 18 S4 | 37531 | 29961 |
| April. | 2210 | 39793 | 44163 |
| May. | 1508 | 22218 | 33398 |
| June. | 662 | 2776 | 14583 |
| July. | 1150 | \& 17 | 10789 |
| August. | 720 | 534 | 6917 |
| September | 1973 | 930 | 8626 |
| October | 1613 | 946 | 11855 |
| November. | 1507 | 1738 | 13587 |
| December. | S 96 | 3021 | 24134 |
| January, 1921 | 1197 | 3777 | 25936 |
|  | \$159 85 | \$1,197 67 | \$2,543 14 |

## Gas Lighting.

There are 9,725 single mantle gas lamps and 143 open flame fire alarm signal lamps.

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

The Lighting Service crovides 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.
Limpiva Contract.

Electric Lighting.
There are in use 5,354 magnetite are lamps, 3,323 40 candle power, 1,306 60 candle power, 17100 candle power, 10200 candle power and 11500 candle power tungsten lamps.

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

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

| Description of Lamp. | Fixer Costs per Lamp per IIour. | $\begin{aligned} & \text { Running } \\ & \text { Costsper } \\ & \text { Lamp) Ilour. } \end{aligned}$ |
| :---: | :---: | :---: |
| 40 candle power incandescent lamp, ser es | \$10 80 | \$0.18 cent |
| 40 candle power incandescent lamp, multiple |  | 25 cent |
| 60 candle power incandescent lamp, serics | 1200 | 2 cent |
| 60 candle power incandescent lamp, multiple. |  | . 3 cent |
| 100 candle power incandescent lamp, series | 1800 | . 4 cent |
| 100 candle power incandescent lamp, nultiple. |  | 5 cent |
| 200 candle powerincandescent lamp, series | 2500 | 1 cent |
| 500 candle power incandescent lamp, multiple. | 3600 | 1.5 cents |

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. | $\begin{aligned} & \text { Number } \\ & \text { of } \\ & \text { Lamps. } \end{aligned}$ | Connected. | Type of Lamp. | Type of (ircuit. | At Terminal. | lighting Hours. | $\begin{aligned} & \text { Cost per } \\ & \text { Lamp } \\ & \text { per Annum. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Edison Electric Illuminating Company <br> Charlestown Gas and Electric Company | $\left\{\begin{array}{r}1,694 \\ 3,336 \\ 26\end{array}\right.$$\left\{\begin{array}{r}222 \\ 76\end{array}\right.$ | Overhead. <br> Underground. <br> Underground. <br> Overhead. <br> Underground | Magnetite. Series 6.6 amp . D. C. <br> Magnetite. Series 6.6 amp D. C. <br> Magnetite. Multiple D. C. <br> Magnetite. Scries 6.6 amp. D. C. <br> Magnetite. Series 6.6 amp. D. C. |  | 528 | 3,42s | 87960 |
|  |  |  |  |  | 52 S | 3,82s | 7960 |
|  |  |  |  |  |  | 3,528 | 5752 |
|  |  |  |  |  | 528 | 3, ¢2S | 7960 |
|  |  |  |  |  | 529 | 3,828 | 7960 |
| Note. - In the above the candle power figures are the official designa are here eliminated. |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |

Incandescent Lamps.

| Compans. |
| :--- |

## PAVING SERVICE.

The following is a description of the most important work done during the year:

## Granite Block Pavement.

Albany street, from Broadway to about 75 feet south of Troy street. (See "Assessment Streets.")

Blackstone street, from Clinton street to Haymarket square, is about 1,115 feet in length. A contract for relaying the granite block pavement in this street was awarded to Coleman Brothers, Inc., on August 3, 1920. Considerable repaving was done outside the prescribed limits of the contract on Blackstone street, North street and Creek square. A new 6 -inch concrete base was laid between Clinton street and 7 feet west of the east tangent of Creek square. From this point to Hanover street, the old concrete base was practically cut to pieces; in some places the width of the old concrete base being only 13 feet of the original 40 feet. From Hanover street to Haymarket square the old concrete base was in fair condition. The granite blocks were laid upon the concrete base with a sand bed and grouted joints. The edgestone was reset and the old brick sidewalks were replaced with artificial stone sidewalks. The sidewalks and roadway were laid under a five-year maintenance guaranty.

Dorchester avenue, from Dorchester Avenue Bridge to West Second street, is about 749 feet in length. A contract for paving this street with second-hand granite blocks with grout joints on a concrete base was awarded to John Kelly Company August 29, 1920. The street is from 60 to 75 feet in width with a roadway of 40 to 55 feet in width and sidewalks 9 to 11 feet in width. The contractor reset the edgestone, barred out, cleaned, culled and piled the existing granite blocks and excavated the roadway. The roadway was paved with second-hand granite blocks with grout joints on a 6 -inch concrete base, under a five-year maintenance guaranty. The existing brick sidewalks were relaid. The straight edgestone, corners and circular edgestone were furnished by the city on the line of the work. Second-hand granite blocks for renewals were furnished by the city at the Dorchester avenue pile and hauled by the contractor. Second-hand sidewalk bricks were furnished by the city at the Chestnut Hill avenue paving yard and hauled by the contractor. All other materials were furnished by the contractor. The car tracks were set to grade by the Boston Elevated Railway Company and the area between the rails paved with recut granite blocks with grout joints on
a 6 -inch concrete base. The former surface of the street was granite block, gravel base and jointr, with brick sidewalks.

Dudley street, from Alexander street to Stoughton strect, is about 1,400 feet in length. A contract for repaving this street was awarded to De Stephano Brothers August 18, 1920. It is a 60 -foot street with 10 -foot artificial stone sidewalks, granite edgestone and a 40 -foot roadway with a double car track in the center. The roadway is paved with granite blocks, grout joints, on a 6 -inch cement concrete base. The best of the old blocks in the roadway were selected and used in the new work. The rejected granite blocks and other surplus paving materials were hauled to the city lot by the contractor. The new edgestone was furnished by the city on the line of work. The paving blocks required to complete the work were furnished by the city and hauled by the contractor. All other materials were furnished by the contractor. The artificial stone sidewalks and granite block pavement were laid under a five-year maintenance guaranty. The street car tracks were set to grade and paved by the Boston Elevated Railway Company: Only a small part of the work remained unfinished when the work was suspended on account of cold weather. Work will be resumed in the spring.
Fargo street, from B street to C street. (See "Assessment Streets.")

Federal street, from Milk street to Dewey square, is about 1,293 feet in length. A contract for paving this street with recut granite blocks and wood blocks was awarded to James Doherty October 19, 1919. Work was commenced October 23, 1919; suspended December 30, 1919; resumed April 1, 1920, and completed May 4, 1920. The roadway is 40 feet in width with sidewalks 10 feet in width. The contractor did the excavating and recut the edgestone where directed. The old concrete base was cleaned and brought up to grade with new concrete. From Milk street, across Franklin street, the roadway was paved with wood blocks on a cement mortar bed with sand joints, under a five-year maintenance guaranty. From Franklin street, to Dewey square, the roadway was paved with recut granite blocks on a sand bed with grout joints, under a five-year maintenance guaranty. All materials were furnished by the contractor. The car tracks were set to grade by the Boston Elevated Railway Company, and the area between the rails paved to conform with the work done by the contractor, except where granite blocks were laid, they were not recut. The former surface of the street was granite block with pitch joints on a concrete base. In connection with this contract, work was done in Purchase street and High street where the existing granite blocks were relaid with grout joints. Channing street, from Federal street to Congress street, was paved with second-hand granite blocks with grout joints on a gravel base. All the above work was done under a five-year maintenance guaranty.

Friend street, from Union street to Causeway street, is about 1,860 feet in length. A contract for paving this street with second-hand granite blocks with grout joints on a concrete base was awarded to B. E. Grant Company October 11, 1920. The street is about 35 feet in width with a roadway 25 feet in width and sidewalks 5 feet in width. Work was commenced October 22, 1920 and suspended November 15, 1920. The contractor reset the edgestone, barred out, culled and piled the old granite blocks and excavated the roadway. The roadway was paved with second-hand granite blocks with grout joints on a 6 -inch concrete base, under a five-year maintenance guaranty. The brick sidewalks were replaced with artificial stone on existing foundation under a five-year maintenance guaranty. The straight edgestone, circles and corners were furnished by the city on the line of work. Granite blocks, for renewals, were furnished by the city at the Massachusetts avenue lot and hauled by the contractor. All other materials were furnished by the contractor. Work will be resumed in the spring.

Franklin street, from Devonshire street to Broad street, is about 820 feet in length. A contract to repave this street was awarded to James Doherty June 25, 1920. The contractor removed the existing granite block, repaired the old concrete base and relaid the old granite blocks with grout joints. The work was done from 60 feet west of Devonshire street to Pearl street and was suspended on account of new building construction which was going on beyond this point. The city furnished all additional granite blocks that were required and all other materials were furnished by the contractor. The pavement was relaid under a five-year maintenance guaranty.

Grosvenor place, from Cliff street. (See "Assessment Streets.")

Main street, from City square across Alford street, is about 5,690 feet in length. A contract for repaving this street with recut granite blocks, with grout-joints, on a 6 -inch concrete base was awarded to William J. Barry June 10, 1919. Work was commenced July 14, 1919; suspended January 8, 1920; resumed April 5, 1920 and completed June 12, 1920. The roadway is from 33 to 65 feet in width with sidewalks 7 to 15 feet in width. The contractor excavated the roadway, set the edgestone and paved the roadway with recut granite blocks with grout joints on a 6 -inch Portland cement concrete base. The brick sidewalks were replaced with artificial stone on the existing foundation. The straight edgestone and corners were furnished by the city and hauled by the contractor. The circular edgestone was delivered at the line of work. The granite blocks used were recut by the contractor on the street and at the Massachusetts avenue lot, Dorchester avenue lot and East Fifth street lot. The recut granite block pavement and the artificial stone sidewalks were laid under a five-year
maintenance guaranty. The car tracks were set to grade by the Boston Elevated Railway Company, and the area between the rails paved with recut granite blocks with grout joints on a 6 -inch concrete base. The old granite blocks in the part of the street between Mead street and Alford street were bought by the contractor. The former surface of the street was granite block with gravel joints and gravel bed.

Public Alley No. 710, from East Brookline street to East Newton street. (See "Assessment Streets.")

Public Alley No. 909, from Massachusetts avenue to Hemenway street. (See "Assessment Streets.")

Public Alley No. 818, from St. Stephens street. (See "Assessment Streets.")

Portland street, from Hanover street to Causeway street. A contract to repave this street with granite block pavement was awarded to the B. E. Grant Company on October 11, 1920. Owing to the lateness of the season, the work was not started. The street will be completed in the spring.

Richmond street, from Hanover street to Atlantic avenue. A contract to repave this street with granite block pavement was awarded to B. E. Grant Company. Owing to the lateness of the season, work was not started. The contract was awarded October 11, 1920. The street will be completed in the spring.

Rutherford avenue, from Cambridge street to Chapman street, is about 3,800 feet in length. A contract to repave the surface of this street was awarded to Coleman Brothers, Inc., November 24, 1919. The contractor reset the edgestone, relaid the bricks sidewalks and repaved the roadway with recut granite blocks on a 6 -inch concrete base with cement grout joints. The existing granite blocks were barred up and recut by the contractor and additional granite blocks received were recut and hauled from the Medford street yard and from the Massachusetts avenue lot. The city furnished the new edgestone, the sidewalk bricks and paving blocks. All other materials were furnished by the contractor who also bought the old flagging and rejected paving blocks used in the old pavement. The new pavement was laid under a five-year maintenance guaranty.

Washington street, from Archdale road to 75 feet south of Corinth street, is about 3,387 feet in length. A contract for constructing the surface of this street was awarded to William J. Barry June 25, 1920. It is a 60 foot street with granite edgestone, 8 -foot sidewalks, principally of gravel and the roadway is paved with 5 -inch granite blocks on 6 -inch concrete base with grout joints, on each side of car tracks location. The parement was laid under a five-y ear maintenance guaranty. With the exception of a comparatively small amount of artificial stone sidewalks, the work was completed this year. The sidewalk will be laid in the spring, as soon as wgather conditions permit.

## Asplaalt Pavement.

Centre street, from Allandale strect to South street is about 6,502 feet in length. A contract to surface this street with a sheet asphalt pavement, laid upon the existing macadam, was a warded to The Bermudez Company September 7, 1920. A retaining wall 170 feet in length was constructed at the corner of South strect. Considerable pavement was laid outside original limits for approaches to business plants. With the exception of a small area, the roadway is practically completed.

Cushman road, from Dustin street to Glencoe street. (See "Assessment Streets.")

Easton street, from North Harvard street to Mansfield street. (See "Assessment Streets.")

Glenville avenue, from Greylock road to Allston street. (See "Assessment Streets.")
South street, from Centre street about 270 feet easterly. (See "Asscssment Streets.")

Tremont street, from Dover street to Northampton street is about 3,854 feet in length. A contract for paving this street with an asphalt pavement was awarded to B. E. Grant Company November 18, 1919. This street is about 100 feet in width with a readway 70 feet in width and sidewalks 15 feet in width. Work was commenced December 12, 1919; suspended December 31, 1919; resumed April 5, 1920 and completed September 20, 1920. The contractor reset the edgestone and excavated the roadway. The roadway was paved with $1 \frac{1}{2}$-inch asphalt wearing surface on $1 \frac{1}{2}$-inch bituminous concrete binder on a 6 -inch Portland cement concrete base. The brows, dummy, edgeings and driveways were paved with recut granite blocks with grout joints on a 6 -inch concrete base. The brick sidewalks were replaced with artificial stone on the existing foundation. The asphalt pavement, granite blocks and artificial stone sidewalks were laid under a five-year maintenance guaranty. The straight edgestone, circles and corners were furnished by the city on the line of work. All other materials were furnished by the contractor. The granite blocks were recut on the line of work and at the Massachusetts avenue lot. The car tracks were set to grade by the Boston Elevated Railway Company and the area between the rails paved with recut granite blocks with grout joints on a 6 -inch concrete base. In connection with this contract, Montgomery street, from Clarendon street to Dartmouth street, and Union Park street, from Tremont street to Montgomery street were paved with an asphalt pavement on a macadam foundation, under a fiveyear maintenance guaranty. The edgestone was reset and the brick sidewalks replaced with artificial stone where directed, under a five-year maintenance guaranty. The former surface of Tremont street was granite block, gravel base and joints with brick sidewalks and on Montgomery street and Union Park street the surfaces were macadam with brick sidewalks.

William Jackson avenue, from (hestnut Hill arenue to Audubon road. (See "Asiessment Streets.")

## Bitulithic Pavement.

Huntington avenue, at Jamaicaway, A contract for resurfacing the southerly roadway of Huntington arenue for about 150 feet, to conform with the pavenent then Jeing laid by the Park and Recreation Department on Janaicamas, was awarded to Warren Brothers Company September 22. 1920. About 485 square yards of 2 -inch bitulithic wearing sulace on the existing macadam base was laid under this contract. The contractor furnished all the new materials and guarmented the bitulithic parement for a period of five years. The former surface of the strect was bituminous macadam.

Stuart street, from Clarendon street to Trinity place. (See "Assessment Strects.")
Washington street, Brighton, from Market strcet to Tremont street, is about 4,120 feet in length. A contract to pave the surface of this street with bitulithic pavement was awarded to Warren Brothers Company October 8, 1919. The contractor hauled and set the new straight edgestone, set the circular edgestone and reset the old edgestone and fumished and laid artificial stone sidewalks. The old gutters were removed and the bitulithic pavement was laid on the old macadam as a foundation. The Boston Elevated Railway Company car tracks were set to grade and paved with recut granite blocks on a concrete base with grout joints. The south side of the street, from Oakland street to Lake street, was paved with recut granite blocks on a concrete base with grout joints, on account of the heavy teaming on the steep grade. The city furnished the paving blocks and edgestone. All other materials were furnished by the contractor. The pavement and sidewalks were laid under a five-year maintenance guaranty. Most of the work was done in 1919.

## Topera Pavement.

Arbutus street, from Blue Hill avenue to Irma street. (See "Assessment Streets.")

Archdale road, from Washington street to South street. (See "Assessment Streets.")
Babcock street, from Commonwealth avenue to Boston \& Albany Railroad. (Sce "Assessment Streets.")

Beech street, from West Roxbury Parkway to Belgrade ayenue. (See "Assessment Streets.")
Belgrade avenue, from Anawan avenue to Centre street. (See "Assessment Streets.")

Centre street, from South street to Spring street. (See "Assessment Streets.")

Centre street, Jamaica Plain, from Forbes street to Boylston street, is about 1,386 feet in length. A contract to pave the
surface of this street with Topeka pavement was awarded to the Central Construction Company November 23, 1920. The contractor set the new elgestone and reset the old stone, removed the old gutters and paved the roadway with Topeka on a macadam fomndation. The brows of car tracks were repaved with grout joints. Some of the brick sidewalk has been relaid and the balance of the brick sidewalk and some artificial stone are to be laid in the spring. The city furnished the edgestone, paving blocks and sidewalk materials. All other materials were furnished by the contractor. The Topeka pavement and artificial stone sidewalks were laid under a five-year maintenance guaranty.

Cummington street, from Commonwealth avenue to Boston \& Albany Railroad. (See "Assessment Streets.")

Elder street, from Columbia road to Humphreys street. (Sce "Assessment Streets.")
Falkland terrace, from Hobart street to Brooksdale road. (See "Assessment Streets.")
Farquhar street, from Selwyn street to Centre street. (See "Assessment Streets.")

Green street, Jamaica Plain, from Call street to Centre street, is about 1,992 feet in length. A contract to pave the surface of this street was awarded to the Central Construction Company November 23, 1920. Due to the lateness of the season, nothing was done on this street. The work to be done is to reset the edgestone, furnish and lay artificial stone sidewalks and pave the roadway with Topeka pavement on the old macadam as a foundation.

Green street, from Washington street across Call street, is about 888 fect in length. A contract for constructing this street was awarded to the Central Construction Company October 22, 1919. Work was begun October 20, 1919; suspended December 15, 1919; resumed September 16, 1920, and completed October 2, 1920. The sidewalks were completed and a Topeka pavement on a 6 -inch concrete base laid in driveways this year. The contractor furnished all materials. The artificial stone sidewalks and Topeka pavement were laid under a five-year maintenance guaranty.

Hamlin street, from East Eighth street to Columbia road. (See "Assessment Streets.")

Harvard street, from Fabyan strect to beyond Brookview street. (See "Assessment Streets.")

Havelock street, from Blue Hill avenue to Morton street. (Sce "Assessment Streets.")

Hyde Park avenue, from Metropolitan avenue to River street. (Sce "Assessment Streets.")

McCraw street, from Belgrade avenue to West Roxbury Branch Railroad. (See "Assessment Streets.")

Pleasant street, from East Cottage street to Stoughton street, is about 1,418 fect in length. A contract for repaving this strect was awrarled to the Central Construction Company

August 16, 1920. This street is from 70 to 73 feet in width with sidewalks from 10 to 18 fect in width, having a 10 -foot artificial stone walk and a loam space, granite edgestone and a 2 -inch Topeka roadway laid on the existing macadam base. The new circular edgestone was furnished by the city on the line of work. The contractor furnished all other new materials and hauled the surplus paving materials to the city lot on Massachusetts avenue. The artificial stone sidewalks and Topeka roadway were laid under a five-year maintenance guaranty. The former surface of this street was bituminous macadam.

Pleasant street, from Stoughton street to Savin Hill avenue, is about 830 feet in length. A contract for repaving the surface of this street was awarded to Francis J. Burke October 15, 1920. It is a 60 -foot street with 10 -foot artificial stone sidewalks, granite edgestone and a 40 -foot roadway, paved with a 2 -inch Topeka wearing surface on a 6 -inch cement concrete base. A double track runs through the center of the street which was regulated by the Boston Elevated Railway Company. The space between the tracks was paved by the contractor with granite blocks and grout joints on a 6 -inch cement concrete base. The new edgestone was furnished by the city on the line of work. All other materials were furnished by the contractor who hauled the surplus paving materials to the city yard. The artificial stone sidewalks and Topeka roadway were laid under a five-year maintenance guaranty. The former surface of the street was asphalt macadam.

River street, from bridge over the Providence Division Railroad across Everett square, is about 1,269 feet in length. A contract to pave this street with Topeka was awarded to the Central Construction Company on November 2, 1920. Owing to the lateness of the season, work was not started.

Wilcock street, from Blue Hill avenue to Morton street. (See "Assessment Streets.")

Wilbur street, from Cushing avenue to Upham avenue. (See "Assessment Streets.")

Wollaston terrace, from Woodrow avenue to Jones avenue. (See "Assessment Streets.")

York street, from Glenway street to Greenwood street. (See "Assessment Streets.")

## Wood Block Paiement.

Beacon street, from Massachusetts avenue to Raleigh street, is about 1,455 feet in length. A contract for paving this street with wood block with a sand joint on a concrete base was awarded to James Doherty October 22, 1919. This street is 60 fect in width with a roadway 40 feet in width and sidewalks 10 feet in width. The contractor did the exeavating and set the edgestone. The old concrete base was renoved where necessary and replaced with a new 6 -inch concrete base. The remainder was cleaned and brought up to grade with new
concrete. A wood block pavement was laid on the concrete base on a 1 -inch eement mortar bed with sand joints. The work was done under a five-year maintenance guaranty. In parts of the dummy, the existing wood block was relaid. The brick sidewalks were replaced with artificial stone on existing foundation and provided with tree pits under a five-year maintenance guaranty. The straight edgestone, circles and corners were furnished by the city on the line of work. All other materials were furnished by the contractor. Between Charlesgate East and Raleigh street, the car tracks were set to grade by the Boston Elerated Railway Company, and the area between the rails paved to conform to the work done by the contractor. The former surface of the street was wood block on a concrete base with brick sidewalks.

Boylston street (northerly side), from Tremont street to Charles street. (See "Assessment Streets.")

Charles street, from Fruit strcet to Allen street, is about 670 feet in length. A contract for paving this street with wood block with sand joints on a concrete base was awarded to John MeCourt Company July 2, 1920. This street is 60 feet in width with a roadway 40 feet in width and sidewalks from 11 to 14 feet wide. The contractor removed the old asphalt pavement, reset the edgestone, chipped and removed the old concrete base, where directed, and brought it up to the proper grade with new concrete. A wood block pavement was laid on the concrete base with cement mortar bed and sand joints, under a five-year maintenance guaranty. On the east sidewalk, the brick sidewalk was replaced with artificial stone, laid under a five-year maintenance guaranty. On the west side, the brick sidewalk was relaid under a five-year maintenance guaranty. The straight edgestone corners and circular edgestone were furmished by the city on the line of work. All other materials were furnished by the contractor. The car tracks were set to grade by the Boston Elevated Railway Company and the area between the rails paved to conform with the work done by the contractor. The former surface of the street was asphalt on a conerete base with brick sidewalks.

Devonshire street, from Franklin street to Water street, is about 730 feet in length. A contract to pave the surface of this street with wood block was awarded to James Doherty May 12, 1920. The contractor removed the existing asphalt pavement, repaired the old concrete base and furnished and laid the wood block pavement on a cement mortar bed with sand joints, under a five-year maintenance guaranty. Considerable granite block paving was relaid with grout joints at the Milk street intersection. All materials were furnished by the contractor.

East Fourth street, from K street across P street, is about 2.813 feet in length. A contract for constructing the surface for this street was awarded to John E. Quinn May 7, 1919. Work was begun May 28, 1919 and suspended January 8, 1920.

Work was resumed April 12, 1920 and compheted May 29, 1920. It is a 50 -foot street with artificial stome sidewalks about 8 feet in width, granite edgestone and a roadway about 34 feet in width, paved with 3'-inch wood block on a 6 -inch concrete base, except that the intersection of M street, N strect and P street and a part of the dummy between the car tracks are paved with granite blocks with grout joints on a concrete base. A single car track which rums through the center of the street from K street to L street and a double track from L street to P street was regulated by the Boston Elevated Railway Company. The granite block paving in the dummy, between the car tracks, from N street to P street and the wood block paving in the widening at the northeast corner of the strect were laid by the city forces. The former surface of the strect was granite block with gravel joints on a gravel bed.

Tremont street (northerly side), from Park street to Boylston street. (See "Assessment Streets.")

Washington street, city proper, Beach street across Kinceland street, is ahout 290 feet in length. A contract to pave the surface of this street was awarded to James Doherty May 12, 1920. The contractor reset the edgestone, repaired the old concrete base and furnished and laid a wood block pavement on a mortar bed with sand joints. Considerable granite block paving was relaid at the intersection of Beach street and Kneeland street. The work at Kneeland street is yet to be done and will be completed when the street car tracks are set to grade. The walks and pavement are laid under a five-year maintenance guaranty. The contractor furnished all materials necessary to do the work excepting a small amount of edgestone. Work will be resumed in the spring.

## Simasco Pavement.

Arlington street, Brighton, from Market street across Leicester street, is about 475 feet in length. A contract to pave the surface of this street with Simasco pavement was awarded to Simpson Brothers Corporation November 2, 1920. The contractor set the new edgestone, furnished and laid the artificial stone sidewalks on a cinder foundation. Owing to the lateness of the season the pavement has not been laid but will be completed in the spring. The block gutters are to be removed and the pavement laid on a macadam foundation.

Market street, from Washington street across Western avenue, is about 5,015 feet in length. A contract to pave the surface of this street with a Simasco pavement was a warded to Simpson Brothers Corporation November 2, 1920. Owing to the lateness of the season, little work has been done on this contract. It consisted of setting the edgestone and furnishing and laying the artificial stone sidewalks in front of the church near Arlington street. The work to be done is to set and reset
edgestone, furnished and lay artificial stone sidewalks and pave the roadway with Simasco pavement on the old macadam foundation and to pave the dummy and brows of car tracks with recut granite blocks with grout joints.

## Bituminous Macadam Pavement.

Mt. Vernon street, from Joy street to West Cedar street, is about 1,200 feet in length. A contract for paving this street with brick blocks with grout joints on a 6 -inch concrete base, was awarded to John W. O'Comnell October 3, 1920. A change was made in the contract and the brick block pavement was omitted and bituminous macadam substituted. This street has a roadway from 26 to 34 feet in width and sidewalks 8 to 12 feet in width. The contractor reset the edgestone, removed the cobble gutters and graded the roadway. On the foundation thus prepared the contractor spread and rolled the crushed stone. The straight edgestone, circles and corners were furnished by the city on the line of work. The crushed stone for the roadway was furnished by the city and spread by the contractor. The tar binder was furnished and applied by the city. All other materials were furnished by the contractor. The existing brick sidewalks were relaid. The former surface of this street was macadam with cobble gutters and brick sidewalks.

## Artificial Stone Sidewalks.

Ashmont street, from Neponset avenue to Train street, is about 1,035 feet in length. A contract for constructing the artificial stone sidewalks on the north side of this street was awarded to Joseph A. Singarella May 24, 1920. Work was begun June 2, 1920 and completed July 10, 1920. It is a 45 foot street with artificial stone sidewalks on the north side, from 8 to 10 feet in width, granite edgestone, granite block gutters and macadam roadway. The circular edgestone was furnished by the city and all other materials were furnished by the contractor. The sidewalk was laid under a five-year maintenance guaranty.

Ashfield street, from Walter street to Fairvicw street, is about 791 feet in length. A contract for constructing the artificial stone sidewalks was awarded to John Kelly Company July 2, 1920. Work was begun August 2, 1920 and completed September 29, 1920. The edgestone was set and reset, part of which was set on crushed stone and concrete foundation. Granite block gutters were laid and artificial stone sidewalks constructed 7 feet in width. The edgestone was furnished on the line of work by the city. The granite blocks were furnished by the city and hauled by the contractor. All other materials were furnished by the contractor. The artificial stone sidewalks were laid under a five-year maintenance guaranty.

Brooks street, Brighton, from Hobart street to Faneuil
street, is ahout 1,132 feet in length. A contract for constructing artificial stone sidewalles was awarded to Piazuolo and Alfieri, July 2, 1920. Work was begun Jume 29, 1920 and completed september 4, 1920. The contractor did the exeavating and hauled the surplus material to Cushman road, set the edgestone, furnished and placed the cinder foundation and laid the artificial stone sidewalks. The walks on the east side of the street are full width, 8 feet wide, while on the west side of the street, from Fancuil street to Bigelow street the walks are 11 feet wide with 5 -foot artificial stone sidewalks and a loam space. From Bigelow street to Gerrish street is full width of 9 feet, consisting of 5 -foot artificial stone sidewalks and a loam space. The city furnished all the new edgestone. The contractor furnished, graded and seeded the loam space. All other materials were furnished by the contractor. The walks were laid under a five-year maintenance guaranty.

Broadway (south side), from Washington street to Shawmut avenue, is about 408 fect in length. A contract to furnish and lay artificial stone sidewalks was awarded to the Pignat Vincenzi Mosaic Company, November 25, 1919. Work was started November 25, 1919; suspended December 2, 1919; resumed May 18, 1920 and completed May 26, 1920. The contractor furnished all the materials necessary to do the work.

Congreve street, from South street to Centre street, is about 1,422 feet in length. A contract for constructing artificial stone sidewalks was awarded to the John Kelly Company July 2, 1920. Work was begun July 8, 1920 and completed September 23, 1290. The edgestone was reset, part of which was set on the crushed stone and concrete foundation. Granite block gutters were relaid and artificial stone sidewalks. 7 feet in width, were constructed. Small corners were furnished by the city on the line of work. All other materials were furnished by the contractor. The artificial sidewalks were laid under a five-year maintenance guaranty.

Hastings street, from C'entre street to Montview street, is about 1,127 feet in length. A contract for constructing artificial stone sidewalks was awarded to the John Kelly Company July 2, 1920. Work was begun September 7, 1920 and completed Octoler 26, 1920. The edgestone was furnished by the city on the line of work and set by the contractor, a part of which was set on crushed stone and concrete foundation. Granite block gutters were laid and artificial stone sidewalks constructed, 7 feet in width. All other materials were furnished by the contractor. The artificial stone sidewalks were laid under a five-year maintenance garanty.

Linden street, Brighton, from Brighton avenue towards Commonwealth avenue, is about 491 feet in length. A contract to construct artificial stone sidewalks in this street was awarded to Piazuolo and Alfieri July 2, 1920. The contractors reset the edgestone, relaid the granite block gutters and fur-
nished and laid artificial stone sidewalks under a five-year maintenance guaranty. Work was begun August 20, 1920 and completed September 22, 1920. The city furnished the new edgestone and all the other materials were furnished by the contractor.
La Grange street, (north side), from Centre street to Landseer street, is about 1,005 feet in length. A contract for constructing the artificial stone sidewalks was awarded to Joseph Todesea November 26, 1920. Work was begun November 15, 1920 and suspended December 9, 1920. The edgestone was set, a 2 -foot granite block gutter laid and the foundation for artificial stone sidewalks laid this year. The work will be resumed in the spring as carly as weather conditions permit. The edgestone was furnished by the city on the line of work, and the granite blocks were furnished ly the city and hauled by the contractor. All other materials were furnished by the contractor.
Neponset avenue, from King square to Victory road, is about 651 feet in length. A contract for constructing an artificial stone sidewalk on the west side of the street was awarded to Joseph A. Singarella May 24, 1920. Work was begun May 24, 1920, and completed June 15, 1920. It is a 60 -foot street with a 10 -foot artificial stone sidewalk on the west side, granite edgestone and granite block gutters and Topeka roadway. All the new materials were furnished by the contractor. The sidewalks were laid under a five-year maintenance guaranty.

Olney street, at Nos. 7 and 9. A contract for constructing artificial stone sidewalks at this location was awarded to Joseph A. Singarella Miay 24, 1920. Work was begun July 7, 1920, and completed July 10, 1920. The artificial stone sidewalk is 8 feet in wilth with granite edgestone and granite block gutters. The new corners were furnished by the city on the line of work. All other materials were furnished by the contractor. The sidewalk was laid under a five-year maintenance guaranty.

Providence street, (north side), from Columbus avenue to Church street, is about 296 feet in length. A contract for constructing artificial stone sidewalks was awarded to Joseph A. Singarella September 22, 1920. The sidewalk on this street is 7 feet in width. The contractor reset the edgestone, removed the old artificial stone sidewalks and constructed a new artificial stone sidewalk on existing foundation. The contractor furnished all materials and hauled the surplus materials to the Massachusetts avenue lot. The sidewalks were laid under a five-year maintenance guaranty.

St Albans road, from Francis street to Huntington avenue, is about 681 feet in length. A contract for repairing the artificial stone sidewalk on this street was awarded to Joseph A. Singarella Uctuber 18, 1920. W ork was begun October 14,

1920, and completed October 22, 1920. It is a 40 -foot street with 7 -foot artificial stone sidewalks, granite edgestone, granite block gutters and a macadam roadway. All materials used were furnished by the contractor. The sidewatk was haid under a five-year maintenance guaranty.

Walk Hili street (easterly side), from Hyde Park avenue to Wenham strect, is about 244 feet in length. A contract for constructing artificial stone sidewalks in this strect was awarded to John Kelly Company July 2, 1920. Work was begun July 6, 1920 and completed September 1, 1920. The edgestone was reset, gutters relaid and artificial stome sidewalks constructed about 8 feet in wilth. All materials were furnished by the contractor. The artificial stone sidewalks were laid under a five-year maintenance guaranty.

Union Park street (north side), from Washington street to Harrison avenue, is about 446 feet in length. A contract to repair the artificial stone sidewalks on this street was a warded to Joseph A. Singarella August 11, 1920. Work was begun August 12, 1920 and completed August 21, 1920. The contractor furnished and laid the sidewalk under a five-year maintenance guaranty. He furnished all the materials necessary to do the work.

## Miscellaneous.

Ralston street (north side), from Boston street about 85 feet easterly. A contract to construct a concrete retaining wall and fence was awarded to the Andrews Construction Company November 5, 1920. This wall replaced an old wooden bulkhead. The contractor furnished all material and labor.

## Assessifent Streets.

Albany street, from Broadway to about 75 feet north of Troy street, is about 821 feet in length. A contract for paring this street with granite blocks and grout joints on a concrete base, was awarded to James Doherty September 29, 1920. Work was commenced September 15, 1920 and suspended December 17, 1920. This street is about 80 feet in width, with a roadway 54 feet in width and sidewalks 13 feet in width. The contractor did the excavating and filling and reset the edgestonc. The roadway was paved with granite blocks with grout joints on a 6 -inch Portland cement concrete base, under a five-year maintenance guaranty. Owing to the fact that the roadway was widened about 20 feet, the contractor furnished about 2,000 square yards of new granite blocks which were laid between Oncida street and (ienesee street. The straight edgestone, circles and corners were furnished by the city on the line of work. Second-hand sidewalk bricks were furnished by the city at the Massachusetts avenue lot and
hauled loy the contractor. All other materials were furnished by the contractor. The former surface of the strect was granite blocks with pitch joints on a concrete base. Work will be resumed in the spring.

Arbutus street, from Blue Hill avenue to Irma street, is about 727 feet in length. A contract for constructing the surface of this street with a Topeka pavement was awarded to Martino DeMatteo October 11, 1920. Work was begun November 24, 1920 and suspended December 20, 1920. A part of the edgestone had been set and some of the filling had been furnished by the contractor when the work was suspended on account of cold weather. Work will be resumed in the spring.

Archdale road, from Washington street to South street, is about 446 feet in length. A contract for constructing the street with a Topeka pavement was awarded to Martino DeMatteo July 16, 1920. On account of the paving going on in Washington street, it was impossible to construct this street this year. Work will be started in the spring.

Babcock street, from Commonwealth avenue to Boston \& Albany Railroad, is about 953 feet in length. A contract to construct this street was awarded to the Rowe Contracting Company May 27, 1920. Work was begun September 15, 1920 and suspended December 23, 1920. This is a 60 -foot street with 10 -foot artificial stone sidewalls and a 40 -foot roadway. The strect was subgraded, new edgestone was set and the roadway was paved with a Topeka pavement on a 4 -inch Portland cement concrete base. The artificial stone sidewalks and driveways will be laid in the spring. The pavement and sidewalks are to be laid under a five-year maintenance guaranty. The city furnished the granite blocks for paving the brows to the car tracks, and the edgestone. All other materials were furnished by the contractor.

Beech street, from West Roxbury parkway to Anawan avenue, is about 158 feet in length. A contract for constructing this strect was a warded to the Rowe Contracting Company July 6, 1920. Work was begun August 30, 1920 and suspended December 24 , 1920. It is a 60 -foot street with granite edgestone and a Topeka pavement, laid on a 6 -inch concrete base and is to have artificial stone sidewalks 10 feet in width. The work is completed with the exception of laying the artificial stone sidewalks. The edgestone was furnished by the city on the line of work and all other materials were furnished by the contractor. The Topeka pavement was laid under a five-year maintenance guaranty. The work will be completed as early in the suring as weather conditions permit.

Belgrade avenue, from Anawan avenue to Centre street, is about 1,303 fect in length. A contract for constructing this strect was awarded to the Rowe Contracting Company July 6, 1920. Work was begun July 6, 1920 and suspended December

24,1920 . It is a 70 -foot street with granite edgestone and sidewalks 10 feet in width and a Topeka pavement, laid on a 6 -inch concrete base with grout joints. The edgestone was set; about 90 per cent of the artificial stone sidewalks laid and Topeka pavement laid from railroad bridge to Anawan avenue. The concrete base for the Topeka was laid from the railroad bridge to Centre street this season. A part of the edgestone was reset. block gutters relaid and Topeka parement laid on a macadam foundation from about 100 feet etst of Bclgrade street to Anawan avenue, a distance of about 600 fect. The street car location was paved by the Boston Elevated Railway Company with recut granite blocks on a 6 -inch concrete base with grout joints, from about 100 feet east of Belgrade street to Centre street. The edgestone was furnished by the city on the line of work. All other materials were furnished by the contractor. The Topeka pavement and artificial stone sidewalks were laid under a five-year maintenance guaranty. The work will be completed as early in the spring as weather conditions permit.

Boylston street (north side), from Tremiont street to Charles street, is about 728 feet in length. A contract to widen this street was awarded to James Doherty June 16, 1920 Work was begun September 7, 1920 and completed October 16, 1920. The contractor excavated the old edgestone and reset it on the new line and where the bottom of the edgestone came close to the top of the subway, it was laid in a mortar bed. The widened portion of the roadway was subgraded and paved with wood blocks on a 6 -inch concrete base and matched to fit the old pavement. A considerable area of the old roadway had to be repaved to conform to the grade of the widened portion. The eity furnished all the new edgestone required and all other materials were furnished by the contractor. The wood blocks were laid under a five-year maintenance guaranty.

Centre street, from South street to Spring street, is about 6,331 feet in length. A contract for rough grading of this street was awarded to Antony Cefalo November 5, 1919. Work was begun November 7, 1919; suspended November 8, 1919; resumed April 8, 1920, and completed August 16, 1920. The work this year consisted in rough grading. A contract was awarded for constructing this street to the Rowe Contracting Company July 6, 1920. Work was begun July 9, 1920, and suspended December 24, 1920. It is an 80 -font street and is to have a granite edgestone and 10 -foot artificial stone sidewalks. A Topeka parement, laid on a 6 -inch concrete base is to be constructed for the entire width of the roadway from Church strect to Belgrade avenue and on each side of the street car location from Belgrade arenue to Spring street, with brows of granite blocks laid on a 6 -inch concrete base with grout joints at car rails. The work this year has consisted of completing the street from South street to Belgrade arenue. Edge-
stones were set, artificial stone sidewalks constructed and street car tracks rebuilt and the location paved with recut hocks on a 6 -inch conerete base with grout joints from Belgrade avenue to Willow street. The elgestones were set and artificial stone sidewalks constructed from Willow street to about 180 feet east of Corey street. The elgestones were set and the artificial stone sidewalk foundation placed on north side from 180 fect north of Corey street to Corey street. The elgestones were set and artificial stone sidewalks constructed from Corey street to 250 feet north of the railroad bridge. Filling has been placed and the street car tracks rebuilt and the location paved from railroad bridge to La Grange street. The edgestone was set and the artificial sidewalks placed on south side from entrance to Billings Field to Cottage avenue, and on the north side from La Grange street to Temple street. The straight edgestone was furnished by the city, a part on the line of work and a part hauled by the contractor. The circular edgestone was furnished by the city on the line of work. All other materials were furnished by the contractor. The Topeka pavement and the artificial stone sidewalks were laid under a five-year maintenance guaranty. The work will be resumed in the spring as early as weather conditions permit.

Centre street, at South street. (See "Asphalt Pavement.)
Cummington street, from Commonwealth avenue to Boston \& Albany Railroad, is about 268 feet in length. A contract to construct this street was awarded to the Rowe Contracting Company May 27, 1920. Work was begun tugust 19, 1920, and suspended Scptember 15, 1920. Practically no work has been done on this street but it will be built in the early spring. This street, when constructed, will vary in width from 40 feet to 45 feet with 7 -foot artificial stone sidewalks and a roadway 31 feet wide. A fence is to be built across the end of the street. The roadway is to be paved with Topeka pavement on a 6 -inch concrete base.

Cushman road, Brighton, from Dustin street to Glencoe street, is about 945 feet in length. A contract to construct this street was awarded to John J. Lane September 7, 1920. Work was begun August 19 1920, and suspended September 29,1920 , on account of sewer operations. This street as constructed is 40 feet wide with 7 -foot artificial stone sidewalks and a 26 -foot roadway. The contractor did the excavating, set the elgestone, furnished and laid the artificial stone sidewalks on a cinder fomdation, and paved the roadway with sheet asphalt on a t-inch concrete base. One block of the strect has not been finished but will be finished in the spring. The city furnished the edgestone and all the other materials were furnished by the contractor. The pavement and sidewalks were laid under a five-year maintenance guaranty.
Easton street, Brighton, from North Harvard street to Mansfield street, is about 974 feet in length. A contract to
construct this street was awarded to John J. Lane September 7, 1920. Work was begun reptember 22, 1920, and completed November 9, 1920. This street as constructed is 40 feet wide with 7 -foot artificial stone sidewalks and a 2 -foot roadway The contractor did the excavating, set the edgestone, furmished and laid the artificial stome sidewalks on a cinder foundation and paved the roadway with sheet asphalt on a 4 -inch conerete. hase. On the approaches to the street, asphalt was laid on the old macadam as a foundation. The city furnished the edgestone and all the other materials necessary to do the work were furnished by the contractor. The pasement and artificial stone sidewalks were laid under a five-year maintenanco guaranty.

Elder street, from Columbia road to Humphreys street, is about 8.47 feet in length. A contract for constructing this street was awarded to the Central Construction Company July 13, 1920. Work was begun July 22, 1920, and completed October 20, 1920. It is a 40 -foot street with 7 -foot artificial stone sidewalks, granite edgestone and a 2 -inch Topeka roadway on a 4 -inch cement concrete base. The edgestones were furnished by the city on the line of work. All other materials were furnished by the contractor. The artificial stone sidewalks and the Topeka roadway were laid under a five-year maintenance guaranty.

Falkland terrace, Brighton, from Hobart street to Brooksdale road, is about 662 feet in length. A contract to construct this street was awarded to John J. Lane August 11, 1920. Work was begun August 19, 1920, and completed September 25, 1920. This street as constructed was 40 feet wide with a 7 -foot sidewalk and 26 -foot roadway. The contractor did the excavating, set the edgestone, furnished and laid the artificial stone sidewalks on a cinder foundation and furnished and laid the Topeka pavement on a 4 -inch concrete base. The city furnished the edgestone and granite blocks for headers. All other materials were furnished by the contractor, who laid the pavement under a five-year maintenance guaranty.

Fargo street, South leoston from B street to C street, is about 533 feet in length. A contract to repave the surface of this street was awarded to the B. E. Grant Company November 15, 1920. The work to be done was to reset the old granite block and bar them out, relay them on a 6 -inch concrete base with grout joints, reset the edgestone and to lay brick sidewalks: also to relay the existing granite blocks in the C' street intersection on a gravel base. Owing to the lateness of the season little work was done.

Farquhar street, from Selwyn street to Centre street, is about 938 feet in length. A contract to construct the street was awarded Martino De Matteo July 16, 1920. Work commenced August 16, 1920 and completed November 11, 1920. It is a 40 -foot street with granite edgestone, artificial stone side-
walks 7 feet wide and has a Topeka pavement laid on a 4 -inch concrete base. Tree spaces were left in sidewalks and the intersection of Selwyn strect was laid with Topeka pavement on a macadam foundation. The straight edgestone and corners were fumished by the city and hauled by the contractor. The circular edgestone was fumished by the city on the line of work. All other materials were furnished by the contractor. The Topeka pavement and artificial stone sidewalks were laid under a five-year maintenance guaranty.

Glenville avenue, Brighton, from Greylock road to Allston street, is about 1,009 feet in length. A contract to construct this street was awarded to John J. Lane September 7, 1920. Work was begun September 8, 1920 and suspended November 5,1920 . This strect as constructed is 40 feet wide with 7 -foot artificial stone sidewalks and a 26 -foot roadway. The contractor did the excavating, set the edgestone, furnished and laid the artificial stone sidewalks on a cinder foundation and paved the roadway with sheet asphalt on a 4 -inch concrete base. The city furnished the edgestone and all other materials were furnished by the contractor. The pavement and artificial stone sidewalks were laid under a five-year maintenance guaranty.

Grosvenor place, from Cliff street southwesterly, southeasterly and southwesterly, is about 281 feet in length. A contract for constructing this street was awarded to Joseph A. Singarella July 20, 1920 and completed December 6, 1920. The street is from 10 to 20 feet in width with artificial stone sidewalks from 1 foot to 3 fect in width, granite edgestone and a roarlway paved with granite blocks, grout joints on a gravel base. A rubble retaining wall about $\varepsilon 2$ feet in length, with artificial stone cap and wooden fence was built on the southwesterly portion of the street. The edgestone and corners were furnished by the city on the line of work. The granite paving blocks were furnished by the city and hauled by the contractor. All other materials were furnished by the contractor. The artificial stone sidewalks were laid under a fiveyear maintenance guaranty.

Hamlin street, from East Eighth street to Columbia road, is about 266 feet in length. A contract for constructing the surface of this street was a warded to John T. Shea, Jr. August 20, 1920. Work was begun August 19, 1920 and completed September 29,1920 . It is a 40 -foot street with 7 -foot artificial stone sidewalks, granite edgestone and a 2 -inch Topeka roadway on a 4 -inch cement concrete base. The edgestone and corners were furnished by the city on the line of work. All other new materials were furnished by the contractor on the line of work. The artificial stone sidewalks and Topeka roadway were laid under a five-vear maintenance guaranty.

Havelock street, from Blue Hill avenue to Morton street is about 662 feet in length. A contract for constructing the
surface of this street was awarded to the Rowe Contracting Company May 12, 1920. Work was begun June 10, 1920, and completed July 28, 1920. It is a 40 -foot street with 7 -foot artificial stone sidewalks, granite elgestone and $2-$ inch Topeka roadway on a 4 -inch cement concrete base. The edgestone and corners were furnished by the eity on the line of work. All other materials were furnished loy contracter. The antificial stone sidewalks and the Topeka roadway were laid under a five-year maintenance guaranty.

Harvard street, from Fabyan street to beyond Brookview street, is about 652 feet in length. A contract for constructing this street was awarded to the Rowe Contracting Company Septen ber 29, 1919; suspended December 23, 1919; resumed April 13, 1920, and completed July 19, 1920. It is a 50 -foot street and has a granite edgestone, 8 -foot brick sidewalk on the west side and 8 -foot artificial stone sidewalk on the east side and Topeka pavement laid on a 4 -inch concrete base. The work this year consisted in completing the edgestone and constructing the sidewalks and roadway. The straight edgestone, corners and sidewalk bricks were furnished by the city and hauled by the contractor. All other materials were furnished by the contractor. The artificial stone sidewalks and Topeka pavement were laid under a five-year maintenance gualanty.

Hyde Park avenue, from Metropolitan avenue to River street, is about 5,454 feet in length. A contract for constructing this street was awarded to Martino De Matteo November 6, 1919. Work was begun November 10, 1919, and suspended January 8, 1920. Resumed March 29, 1920 and suspended December 20, 1920. It is a 70 -foot street with granite edgestone, 10 -foot artificial stone sidewalks, Topeka pavement on a 6 -inch concrete base cach side of street car location with recut granite block brows on a 6 -inch concrete base, grout joints at rails. The edgestone was set and reset, artificial stone sidewalks constructed and a Topeka pavement laid on a 6 -inch concrete base on west side from River street to West street. The 6 -inch concrete base was also laid on the west side from West street, across Metropolitan avenue and on the cast side from River street to beyond Thacher street. Work will he resumed as carly in the spring as weather conditions permit. The comers and recut granite blocks were furnished by the city and hauled by the contractor. The straight edgestone and circular edgestone were furnished by the city on the line of work. All other materials were furnished liy the contractor. The street car tracks were relocated and a double car track constructed by the Easten Massachusetts Street Railway Company. A contract for paving the street car location was awarded to John MeCourt Company October 8, 1920. Work was begun October 11, 1920, and completed Norember 19, 1920. This parement is recut granite blocks on a 6 -inch concrete
base with grout joints. The old granite blocks were furnished by the eity and recut hy the contractor. The contractor furnished all other materials. The Topela pavement and artificial stone sidewalls: were laid under a five-year maintenance guaranty.

MicCraw street, from Belgrade avemue to West Roxbury Branch Railroad, is about 1:31 fect in length. A contract for constructing this street was awardel to Martino De Matteo July 16, 1920. Work was begum July 28, 1920, and completed November 2, 1920 . It is a 40 -foot strect with granite edgestone, artificial stone sidewalks, 7 feet wide and has a Topeka pavement laid on a 4 -inch macadam foundation. The existing edgestone and artificial stone sidewalks on the easterly side were found in good condition and allowed to remain. The remainder of the street was constructed under this contract. The edgestone was furnished by the city on the line of work. All other materials were furnished by the contractor. The Topeka and artificial stone sidewalks were laid under a fiveyear maintenance guaranty.

Public alley No. 710, from East Brookline street to East Newton street, is about 372 feet in length. A contract to construct this alley was awarded to John Landis August 11, 1920. Work was begun August 5, 1920, and completed November 16,1920 . The contractor did the subgrading, set the edgestone and laid a 6 -inch concrete base, hauled and laid the recut granite blocks with grout joints and sand bed. He furnished and laid an artificial stone sidewalk. Concrete retaining walls were constructed where the sidewalks were above the grade of the house yards. The city furnished the edgestone and paving blocks. All other materials were furnished by the contractor. The roadway and sidewalks were laid under a five-year maintenance guaranty.

Public alley No. 818, from St. Stephen street about 690 feet westerly. A contract for constructing the completion of this alley was awarded to John Landis August 11, 1920. Work on this alley was suspended previously on account of sewer construction. The contractor did the subgrading, set the edgestone and laid a 6 -inch concrete base, hauled and laid the recut granite blocks with grout joints and sand bed and furnished and laid artificial stone sidewalks and where there was no sidewalk, backed the edgestone with concrete to the strcet line. The city furnished the edgestone and paving blocks. The contractor furnished all other materials required. The sidewalks and roadway were laid under a five-year mantenance guaranty.

South street, from Centre stret about 270 feet easterly. A contract to construct this street with a sheet asphalt pavement was awarded to the Bermudez Company September 7, 1920. Work was begun September 20, 1920, and suspended December 29, 1920. The pavement consists of a binder and wearing surface upon a broken stone base. Most of the old
macadam was found at too low a grade and was brought up to the proper subgrate with new material. The roadway is completed. The artificial stone sidewalks remain to be dene.

Stuart street, from Clarendon street to Trinity place, is about 268 feet in length. A contract to construct the surface of this street was awarded to Warren Brothers Company August 3, 1920. Work was begun July 30, 1920, and completed ()ctober 30, 1920. This street as built, is 80 feet wide with 20 -foot sidewalks and a 40 -foot roadway. The contractor did the excavating, set the edgestone, pared the roadway with bitulithie on a 6 -inch concrete base and constructed artificial stone sidewalks on the outside and 10 feet of gravel walk on the inside. The artificial stone sidewalks were laid on a cinder foundation and these and the bitulithic pavement were laid under a fiveyear maintenance guaranty. The city furnished the edgestone and the paving blocks for paving the Clarendon street approaches. Alf other materials were furnished by the contractor.

Tremont street (westerly side), from Park street to Boylston street, is about 1,671 feet in length. A contract for widening this street was awarded to James Doherty June 16, 1920. Work was begun August 19, 1920, and completed October 11, 1920. The contractor exeavated the old edgestone and reset it on the new line, making a roadway 43 feet wide. When the bottom of the edgestone came close to the top of the subway it was laid on a mortar bed. The widened portion of the roadway was paved with wood blocks on a 6 -inch concrete base and matched to the old paring. A considerable portion of the old paving had to be repaved to conform to the grade of the newly widened portion. The wood block pavement was laid under a five-year maintenance guaranty. The city furnished the edgestone and all other materials were furnished by the contractor.

Wilbur street, from Cushing avenue to Upham avenue, is about 335 feet in length. A contract for constructing the surface of this street was awarded to the Central Construction Company July 13, 1920. Work commenced August 4, 1920, and completed October 25,1920 . It is a 30 -foot strect with 6 -foot artificial stone sidewalks, granite edgestone and a 2 -inch Topeka roadway on a 4 -inch cement concrete base. The edgestone and corners were furnished by the city on the line of work. All other materials were furnished by the contractor. The artificial stone sidewalks and Topeka roadway were laid under five-vear maintenance guaranty.

Wilcock street, from Blue Hill avenue to Morton street, is about 779 feet in length. A contract for constructing this street was awarded to the Rowe Contracting Company May 12, 1920. Work commenced May 19, 1920 and completed July 7 , 1920. It is a 40 -foot street with 7 -foot artificial stone sidewalks, granite edgestone and a 2 -inch Topeka roadway on a 4 -inch cement concrete base. The edgestone and corners were furnished by the city on the line of work. All other materials were
furnished by the contractor. The artificial stone sidewalks and Topeka roadway were laid under a five-year maintenance guaranty.

Wollaston terrace, from Woodrow avenue to Jones avenue, is about 313 feet in length. A contract for constructing this street was awarded to the Rowe Contracting Company May 12, 1920. Work commenced July 1, 1920 and completed July 29, 1920. It is a 25 -foot street with 4 -foot artificial stone sidewalks, granite edgestone and 2 -inch Topeka roadway on a 4 -inch cement concrete base. The edgestone and corners were furnished by the city on the line of work. All other materials were furnished by the contractor. The artificial stone sidewalks were laid under a five-year maintenance guaranty.

William Jackson avenue, Brighton, from Chestnut Hill avenue to Acadamy Hill road, is about 500 feet in length. A contract to construct this street was awarded to John J. Lane September 7, 1920. This street as constructed is 25 feet wide with 4 -foot sidewalks and a 17 -foot roadway. Work started September 7, 1920, and was completed October 30, 1920. The contractor did the excavating, set the edgestone, furnished and laid the artificial stone sidewalks and paved the roadway with sheet asphalt on a 4 -inch concrete base. The city furnished the edgestone. All other materials were furnished by the contractor. The pavement and artificial stone sidewalks were laid under a five-year maintenance guaranty.

York street, from Glenway street to Greenwood street, is about 440 feet in length. A contract for constructing this street was awarded to the Rowe Contracting Company October 1, 1919. Work started October 31, 1919; suspended December 11, 1919, and resumed April 20, 1920, and completed April 24, 1920. It is a 40 -foot street with 7 -foot artificial stone sidewalks, granite edgestone and a 26 -foot roadway paved with Topeka, having a 2 -inch wearing surface on a 4 -inch concrete base. The Topeka roadway and part of the artificial stone sidewalks were built in 1919. The rest of the work was completed this year. The Topeka roadway and artificial stone sidewalks were laid under a five-year maintenance guaranty.
Work Done by Contract, 1920.

Work Done by Contract, 1920.-Concluded.

|  | Old. | New. | $\begin{aligned} & \text { Total, } \\ & \text { Old and New. } \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| Brick sidewalks laid. | 12,088 square yards. | 1,951 square yards. | 14,039 square yards. |
| ( iratel sidewalks 1 hicl. |  | 3.555 | $3.55 \%$ " |
| Earth excavation |  | $32,09 \mathrm{~s}$ culic yarrls. | 32,098 cubie yards. |
| Rork excavation. |  | 467 | 467 " " |
| Filling furnisheol. |  | 7,854 " | 7.854 " |
| Crushed stone furnislical. |  | 1,864 tons. | 1,564 tons. |
| Loam furnished. |  | 277 cubic y:urls. | 277 cubic yards. |
| Loam gradel and seedel |  | 647 square yards | 647 square yards. |
| OH1 conerete base removel. |  | 2,s81 " | 2,881 " |
| Covers, eatch-basin frames and Bradley-heads |  | 2,881 " | 761 * |
| Concrete backing for elyestone. |  |  | 378 linear feet. |
| Track basin drain built |  |  | 35 " |
| Concrete backing laid. |  |  | 129 cubic yarls. |
| Concrete walls built. |  |  | 213 linear fect. |
| Concrete walls built. |  |  | 71 cubie yards. |
| Concrete walls and fence built. |  |  | 406 linear feet. |
| Gravel shoulders placel. |  |  | 3,100 square yards. |
| Ground water drain built. |  |  | 450 linear feet. |

Explanations of Numerals on Preceding Pages.

| 2 Concrete base laid four (4) inches deep Conerete base laid six (6) inches deep. | 18.201 square yards. | ${ }_{133,941}^{28,698} \text { square yarts. }$ |
| :---: | :---: | :---: |
| Total concrete base laid. | 1s,201 stuare yards. | 162,639 square yarchs. |
| 2 Second-hand granite blocks, formerly gravel. secoml-hand granite blocks, formerly cobble gutters. Total granite block paving laid on gravel base witl gravel joints (new) | $30 \text { square yards. }$ | 1,425 square yarls. |
| - Formerly manadam <br> Formerly granite block paving gravel joints Fomerly gramite block paving piteh joints. Total new granite block paving laid with grout joints |  | 14.771 stmare yards. |
| 4 Formerly gravel. <br> Formerly macalam. <br> Formerly granite block paving gravel joints Formerly granite block paving grout joints. Formerly gramite block paving pitch joints. Total recut granite blocks, grout joints. | 3,486   <br> 700 square yards.  <br> 32,276 $"$ $"$ <br> 1,390 $"$ $"$ <br> 190 $"$ $"$ | 38,042 spuare yards. |
| - Formerly granite block paving gravel joints Formerly granite block paving pitch joints. Total second-hand granite block paving with grout joints (new) | $\begin{aligned} & 14,901 \text { square yarls. } \\ & 10,439 \end{aligned}$ | 25,340 squarce yards. |
| - Formerly gravel <br> Formerly macadam. <br> Formerly granite block paving gravel joints Total asphalt parement laid (new). | $\begin{aligned} & \text { s,972 square yards } \\ & 21,276{ }^{2} \text { " } \\ & 25,556 \text { " " } \end{aligned}$ | 55, 044 square yards. |
| 7 Formerly gravel <br> Formerly macadam <br> Total bitulithic pavement laid (new) | ${ }_{10,200}^{1,200} \text { scuare sards. }$ | 12,120 square yards. |

Explanations of Numerals on Preceding Pages.- Concluded.

| 8 Formerly kravel <br> Formerly macadam <br> Total Topeka pavement laid (new) | ${ }_{23,027}^{34,592}$ square yards. | 57,619 square yards. |
| :---: | :---: | :---: |
| - Formerly not graded. Formerly asphalt pavement. . Formerly granite block paving gravel joints Formerly gramte block paving pitch joints. Total wood block pavement laid (new) | $\begin{gathered} 1,544 \text { square yards. } \\ 4,675 \\ 199 \\ 196 \\ 964 \end{gathered}{ }^{\text {" }} \text { " } \quad \text { " }$ | 7,312 square yards. |
| ${ }^{10}$ Replacing asphalt Replacing bituminous concrete. <br> Total bituminous patching (full depth) | $\underset{4,595}{22,005} \text { square yards. }$ | 26,600 square yards. |
| ${ }^{1}$ Replacing asphalt. Replacing bituminous conerete. Total bitumiuous surface patching | $\underset{5,963}{2} \underset{4}{\text { square }} \underset{4}{\text { yards. }}$ | 5,965 square yards. |
| ${ }^{12}$ Formerly water-bound macadam. . . . . . . . . <br> Formerly cobble gutters.... <br> Total macadam tar penetration (new) | $\begin{aligned} & 3,076 \text { square yards. } \\ & 1,250 \end{aligned}$ | 4,326 square yards. |
| ${ }^{13}$ Laid with foundation. <br> Laid on existing foundation <br> Total artificial stone sidewalks laid | $\begin{aligned} & 51,101 \text { square yards. } \\ & 25,100 \end{aligned}$ | 76,201 square yards. |

Work Done by Paving Service Forces During 1920.


Financlal Statement, Paving Service.
Maintenance.

| Appropriation |  | \$1,605,884 15 |
| :---: | :---: | :---: |
| Transferred from Lighting Service, | \$766 30 |  |
| Transferred from Sewer Service | 4,055 55 |  |
| Transferred from Street Cleaning and Oiling Service | 1,962 07 | 6,783 |
| T |  | $\$ 1,612,66807$ |
|  |  | \$1,589,641 |
| Expended during the year |  | 1,589,641 |


| Special A ppropriation. |  |
| :---: | :---: |
| Granolithic sidewalks: |  |
| Balance February 1, 1920 | \$3,684 16 |
| Appropriation (from taxes) | 50,000 00 |
|  | \$53,684 16 |
| Expended during the year | 53,684 16 |
| Reconstructing and Repairing Streets by Contract. |  |
| Balance February 1, 1920 | \$374,387 51 |
| Appropriation from taxes | 750,000 00 |
|  | \$1,124,387 51 |
| Expended during the year | 942,637 65 |
| Balance January 31, 1921 | \$181,749 86 |
| Street Improvements. |  |
| Balance February 1, 1920 | \$27,225 99 |
| Appropriation from taxes | 250,000 00 |
| Appropriation from reserve fund | 50,000 00 |
| Expended during the year | \$327,225 99 |
| Summary of Expenditures. |  |
| Paving Service | \$1,589,641 10 |
| Highways, making of | 533,630 43 |
| Belgrade avenue extension and Beech stre widening | 9,963 06 |
| Carried forward | \$2,133,234 59 |

Brought forward ..... \$2,133,234 59
Hyde Park avenue widening ..... 49,511 97
Granolithic sidewalks ..... 53,684 16
Reconstructing and repairing street by con- tract ..... 942,637 65
Street improvements ..... 327,225 99
Total ..... 83,506,294 36
IncomeStatement showing the amount of bills and cashdeposited with the City Collector from February 1,1920, to January 31, 1921, and credited to generalrevenue:

| Edgestone and sidewalk assessments | \$42,739 64 |
| :---: | :---: |
| Permits | 28,139 41 |
| Services of inspectors | 3,309 00 |
| Labor, material furnshed, junk sold, rents, etc., | 8,170 98 |
|  | \$82,359 03 |

Amount paid into the city treasury during the year:

| Edgestone and sidewalk assessments | \$27,841 39 |
| :---: | :---: |
| Permits | 29,050 54 |
| Services of inspectors | 2,804 50 |
| Labor, material furnished, junk sold, rents, etc., | 10,988 80 |
|  | \$70,685 23 |

Objects of Expenditures from the Various Appropriations, Classified by Districts, from February 1, 1920, to January 31,

| Districts. | Macadam Repairs. | Paverl Street Repairs. | Removal of Snow. | Street Claning. | Edgestone and Silewalk Repairs. | Crosswalk Repairs. | Street Work. | Schacdute <br> A. Miscellancous. | Totals. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| South Boston and 1)orchester North | \$2,621 63 | 83,000 18 | \$13,757 72 | 86,282 61 | \$10,451 47 | \$192 12 | 8109,628 -2 |  | 8145,934 55 |
| East Boston and Breed's Island | 6,71594 | 2,055 17 | 3,099 67 | 2,329 11 | 9,217 17 | 37402 | 46,793 30 |  | 77,58.4 S8 |
| Charlestown | 4,101 17 | 3,634 60 | 17,345 37 | 2,148 47 | 9,507 88 | 914 | 199,588 36 |  | 237,240 04 |
| Brighton | 15,966 37 | 6880 | 10,631 76 | 15,109 40 | 2,165 17 | 21529 | 199,196 27 |  | 243,353 06 |
| West Roxbury | 24,558 89 | 233104 | 14,899 63 | 17,068 04 | 2,861 04 | 2314 | 451,5.50 01 |  | 511,191 79 |
| Dorchester | 12,737 61 | 1,711 85 | 15,782 76 | 13,276 97 | 7,779 29 | 1200 | 174,941 98 |  | 226,242 46 |
| Roxbury South and Jamaica Plain | 25,550 90 | $4,139 \quad 13$ | 29,294 62 | 44,582 98 | 17,608 80 | 603 \$2 | 120,26115 |  | 242,041 40 |
| South End and Roxbury North | 12,482 67 | $4,487 \quad 13$ | 191,278 71 | 5,932 45 | 24,941 04 | 1,74190 | $359,58.519$ |  | 600,4.52 09 |
| Ashmont | 24,329 22 | 608 92 | 7,763 93 | 8,090 67. | 3,129 54 | 9299 | 95,550 21 |  | 139,565 48 |
| North and West Ends and Back 1 | 5,703 41 | 20,375 91 | 252,538 85 | 3,642 8s | 13,273 91 | 2,753 36 | 146,380 29 |  | 444,668 61 |
| 1lyde Park | 14,194 35 | S2 52 | 4,915 49 | 6,693 85 | 4,6.11 49 |  | 120,937 70 |  | 151,465 40 |
| Miseellaneous. |  |  |  |  |  |  | *90,075 84 | 8396,478 76 | 486,554 60 |
| Totals | 8148,962 16 | \$40,395 25 | \$566,308 51 | 8125,157 43 | \$105,576 80 | 86,925 83 | \$2,116,489 62 | \$396,478 76 | \$3,506,294 36 |

* $\$ 7,362.50$, artificial stone sidewalks and rebates; $\$ 81,820.59$, asphalt and bitulithic road repairs; $\$ 892.75$, expert services, eharged to Reconstrueting and liepairing Streets by Contract.

Sciledule A.

| Salary of division engineer (part of) | \$3,750 |
| :---: | :---: |
| Salary of engineer in charge (part of) | 500 |
| Salaries of office clerks and stenographers | 5,785 |
| Salaries of assistant engineers (office work) | 5,654 |
| Salaries of permit office clerks | 10,592 |
| Salaries of permit office inspectors | 13,604 |
| Salaries of enginecring inspectors (office work) | 7,498 |
| Salaries of enginecring inspectors tallying traffic, | 461 |
| Salaries of district inspectors | 2,901 |
| Salaries of street numbering clerks | 1,560 |
| Salary of medical inspector (part of) |  |
| Medical attendance on injured employces (out- side) |  |
| Salary of chief veterinarian (part of) | 308 |
| Salary of veterinarian (part of) | 266 |
| Salary of inspector of horses | 1,378 |
| Salary of constable and inspector | 1,959 |
| Pensions paid to veterans of Civil War (retired) | 8.401 |
| Pensions paid to retired laborers | 26.897 |
| Compensation allowed injured employees | 1,958 |
| Allowance to employecs on military and naval service and state guard |  |
| Vacations allowed laborers, mechanics, etc. | 34,385 |
| Holidays, not including holidays charged to street accounts | , |

Automobile expense, division engineer ..... 3,505 42
Gasolene, oil, grease, etc. ..... $\$ 50830$
Repairs ..... 78382
New tires and tubes ..... 52386
Repairing tires and tubes ..... 150
Supplies, etc. ..... 6494
Miscellaneous ..... 1000
Winter top ..... 26000
Wages of chauffeur ..... 1,353 00
Automobile expense, engineer in charge
33261
33261
Gasolene, oil, grease, etc.
Gasolene, oil, grease, etc. ..... 33939
New tires and tubes ..... 13501
Repairing tires and tubes ..... 4195
Supplies, etc. ..... 6674
Miscellaneous ..... 1600
Wages of chauffeur ..... 1,249 00
Automobile expense, chief inspector
24179
24179
Gasolene, oil, grease, etc.
Gasolene, oil, grease, etc. ..... 19245
New tubes and tires ..... 14935

2,180 70

2,163 16

Carried forward
Brought forward ..... $\$ 201,281 \quad 00$
Storage ..... 18000
supplies, ete. ..... 1257
Miscellancous ..... 1000
Wages of chauffeur ..... 1,377 00
Automobile expense, foreman Brighton district ..... 2,24539
Gasolene, oil, grease, etc. ..... 38708
Repairs ..... 3968
New tires and tubes ..... 12251
Repairing tires and tubes ..... 525
Supplies, etc. ..... 7537
Miscellaneous ..... 1785
Wages of chauffeur ..... 1,29765
Ford rumabout, net cost ..... 30000
Automobile expense, foreman Dorchester clistrict,44277
Gasolene, oil, grease, etc. ..... 20277
Repairs ..... 5008
New tires and tubes ..... 5581
Repairing tires and tubes ..... 825
Supplies, etc. ..... 11586
Miscellancous ..... 1000
Automobile expense, foreman Roxbury district
Gasolene, oil, grease, etc. ..... 15648
Repairs ..... 1370
New tires and tubes ..... 16867
Repairing tires and tubes ..... 1600
Supplies, etc. ..... 12249
Miscellancous ..... 2000
Ford runabout ..... 55000
Automobile expense, emergency car ..... 78139
Gasolene, oil, grease, etc. ..... 33864
Repairs ..... 13103
New tires and tubes ..... 19160
Repairing tires and tubes ..... 350
Supplies ..... 10510
Miscellaneous ..... 1152
Automobile expense, truck, Brighton district ..... 770
Gasolene, oil, grease, etc.
200
Miscellaneous
Printing ..... 4,867 91Postage37424
Stationery ..... 1,081 99
Traveling expenses, car fares, etc. ..... 1,110 21
Advertising ..... 3200
Engineering supplies and incidentals ..... 2,140 50
Stationery ..... 80626
Printing ..... 81268
Postage ..... 5410
Transit repairs ..... 11275
Miscellaneous ..... 35471

Brought forward
$\$ 215,41444$
Supplies for laboratory . . . . . . 10792
Artificial stone sidewalks, new and repairs by
department force (see reconstructing and
$\begin{aligned} & \text { repairing streets } \\ & \text { improvements.) }\end{aligned} \quad . \quad . \quad$.
imptract and street
Asphalt and bitulithic pavement repairs. Temporary repairs, labor, teaming and materials (see, also, reconstructing and repairing streets by contract and street improvements),
Brick block repairs, labor, teaming and materials,
Wood block repairs, labor, teaming and materials,
New crosswalk, not included elsewhere
Fence repairs
Plankwalk repairs
Edgestones, sidewalks and gutters (new) not included elsewhere

1,800 30
6,366 44
10,127 29
$429 \quad 13$
5,489 50
1,461 36

Rent of land, wharves, etc., (net) . . . . 2,624 00
Horses . . . . . . . . . 37500
Expense of stables, including drivers, feeders, fodder, horseshoeing, repairs to harnesses, wagons, carts, etc. . . . \$186,192 14
Amount earned by department teams . . . . . . 157,543 01

28,649 13
Electric lighting at yards and stables
1,350 32
Gas lighting at yards and stables
19394
Fuel for heating yard buildings, offices and stables, $\quad 2,80578$
$\begin{array}{cccc}\text { Electrical appliances, labor and materials, yard } \\ \text { and stables . . . . . . . . } & 11119\end{array}$
Rent of towels . . . . . . . . 15180
Stoves, pipes, grates, etc. . . . . . 25131
Telephone service . . . . . . . 1,807 36
Derricks, repairing, etc. . . . . . . 14855
Oil for lighting around defects, etc. . . . 1,69580
Ice . . . . . . . . . . 14584
Signs, making and putting up . . . . 12,654 21
Tools, hardware, etc., new, cost of repairing, etc. . 24,92202
"Cletrac" tractors, three . . . . . 5,130 00
Expenses of yards, including salaries of foreman,
$\begin{gathered}\text { clerks, yardmen, watchmen, tool wagons, } \\ \text {.etc. }\end{gathered}$. . . . . . . . 38,54914
Repairs of yard buldings, stables, sheds, shanties,
etc.
Sanding icy and slippery streets . . . . 1,97848
Repairing culverts and building new culverts . 13354
Hoisting, engine, fuel and supplies . . . . 15512
Uniforms, boots, shoes, etc. . . . . . 22934
Carried forward .
Brought forward ..... $\$ 385,76921$
Chests for Central Office, making of, etc. ..... 8361
Repairing fences at snow dumps ..... 15355
Repairing MIt. Washington avenue snow dump ..... 64300
Premiums on surety bonds900
Marking eatch basins ..... 51210
Trimming and removing trees ..... 5850
Expert services, asphalt plant ..... 13500
Repairs to and inspection of typewriters ..... 5300
Expressage and freight ..... 18284
Miscellancous ..... 76780
Work done and materials furnished individuals, corporations, etc. ..... 1,697 12
Park Department, work done and materials fur- nished ..... 6000
Schoolhouse Department, work done and mate- rials furnished ..... 56000
Water Service, work done and materials furnished, ..... 53552
Street Cleaning and Oiling Service, work done and materials furnished ..... 8392
Sanitary Service, work done and materials fur- nished ..... 9,438 89
Sewer Service, work done and materials furnished, ..... 2,914 85
Lighting Service, work done and materials fur- nished ..... 1380Asphalt plant operating, Brightondistrict\$17,128 11
Less material used on streets ..... 11,133 25
Asphalt plant operating, Dorchester district ..... \$19,336 38
Less materials used on streets ..... 16,139 635,994 86
3,196 75
\$412,863 32Steam rollers, cost of operating,repairs, etc.\$22,861 01Steam rollers, amount earned . . 23,044 00\$182 99
Stock materials . . \$138,294 37
stock handling and teaming . . 43,911 82
\$182,206 19
Less stock delivered 198,407 76 on streets ..... 16,201 57Total$\$ 396,47876$

## SPECIAL APPROPRIATIONS.

Belgrade avenue extension and Beech street, widening. Continuation of work from 1919. (Work unfinished.) part of cost for year 1920 charged to the appropriation for Highways, making of. For details of cost of work done in the year 1920, see appropriation for Highways, making of.
Ifyde Park avenue, widening. Continuation of work from 1919. (Work unfinished.) Part of cost of work done in 1920, charged to the appropriation for Highways, making of. For details of coat of work done in the year 1920, see appropriation for Highways, making of.

## GRANOLITHIC SIDEWALK CONSTRUCTION.


*.Ashfield street, from W:alter street to Fairview street. Length, 791 linear feet. Area, 9,619 square feet. Edgestone set and reset, granite block gutters laid and artificial stone sidewalks constructed.

| Engineering | \$186 \$1 |
| :---: | :---: |
| Inspection | 14806 |

Inspection . . . . . . . . 14806
Engineering expense . . . . . . 220
Advertising . . . . . . . 175
Blocks, 20,200 old granite . . . 60400
Edgestone, 1,37S feet 7 inches straight, 9 feet
5 inches circular and 19 smedl corners
2,76731
Amount paid to John Kielly Company, under contract:

Removing trees, bushes, etc.
$\$ 300$
1,344 linear feet straight edgestone set (a.25c.

33600
64 linear feet circular edgestone set @ 25 c. 33 linear feet existing edgestone reset @ 25 c . . S 25.
385 linear feet crushed stone and concrete foundation furnished and placed @ 35 c .

13475
530 square vards granite block paving hauled and laid, gravel joints, © $\$ 1.30$. GS9 00
15 square yards existing granite block paring relaid, gravel joints, (a) 75 c .

1125
9,739 square fect artificial stone foundation furnished and placed @.Sc. .

77912
Carried forward
$\overline{\$ 1,977 \quad 37} \quad \overline{\$ 3,710 \quad 13}$

[^15]Brought forurerd
9,029 siuare feet artificial stone sidewalks, roncrete base and wearing surface furnished and laid (a) 29 c .
590 square feet artificial stone driveways, concrete hase and wearing surface furnished and laid (a) 45 c .

2 covers reset @ $\$ 3$
2 Bradley head catch basins reset (a) $\$ 5$
Extria work-Construct driveways not shown on plan.
1 day, paver (a $\$ 9$
1 day labor © $\$ 5.60$
Plus 15 per cent on $\$ 14.60$,

900
$\$ 1,977 \quad 37 \quad \$ 3,710 \quad 13$

2,61841
$26.5 \quad 30$
600
1000

560
219

* Ashmont street (north side), from 186 feet west of Neponset avenue to
Train street. Length, $\$ 44$ linear feet. Area, 6,438 square feet. Edgestone reset and artificial stone sidewalks constructed.


[^16]Brought forward
1 course of brickwork laid (a) 50 c.

Remove tree from sidewalk in front of 544 Ashmontstrect

| $\$ 2,4910$ | $\$ 2919 \Upsilon$ |
| ---: | :---: |
| 50 |  |
| 1500 | $\underline{2,89+60}$ |

Beech street, from West Roxbury parkway to Hobson street. (Work done in 1919.)
Enginecring . . . . . . . . $\$ 47$ tis
Cost of work done under contract with Frank
Drinkwater in 1919-20. . $\$ 4,43836$
Amount paid in 1919-20 . . 3,759 1s
67918
$\$ 72686$


Blue Hill avenue (east side), from Tremont street, 170 feet south. (Work done in 1919.)
Engineering . . . . . . . . \$49 00
Engineering expense . . . . . 2 so
$\$ 5180$
Bowdoin avenue, in front of Nos. 64 and 66. Edgestone reset and artificial stone sidewalks constructed.
Inspection . . . . . . . . $\$ 3068$
Amount paid to Joseph A. Singarella :
97 feet edrestone set and reset
(a) 50 c .
$\$ 4850$
32 square yards gutter paved (a) $\$ 1.50$

4800
728 square feet artificial stone sidewalks constructed @ 34c. . . . . . 247 52

Broadway (isouth side), from Washington street to Shawmut avenue. Length, 408 lincar feet. Area, 3,174 square feet. Artificial stone sidewalks repaired.
Enginecring . . . . . . . . $\$ 51100$
Inspection . . . . . . . . 6130
Engineering expense . . . . . . 40
Amount paid to Pignat Vicenzi Mosaic Company, Inc., under contract: 3,174 square feet artificial stone sidewalks furnished and and laid (a 24e.
$\$ 76176$
Less amount drawn but not collected . . . 11426

* Brooks street, from Hobart street to Fancuil street. Length, 1,132 linear feet. Area, 13,975 square feet. Edgestone set, granite block gutters relaid and artificial stone sidewalks constructed.

| Engineering |  | \$355 01 |
| :---: | :---: | :---: |
| Inspection |  | 24982 |
| Engincering expense |  | 1370 |
| Advertising . . . . . . . 3 |  |  |
| Edgestone, 1,917 | , 43 feet circular |  |
| 1 large and 4 small |  | 3,445 |

Amount paid to Piazuolo and Alfieri, under contract:
1,913 linear feet straight edgestone set (a) 35c. .
$\$ 66955$
100 linear feet circular edgestone set @ 35c. .

3500
67 linear feet existing edgestone reset (a) 35c.

2345
759 square yards existing gran te block paving relaid, gravel joints @ 9 `'.
13,975 square feet artificial stone foundation furnished and placed @ 0 5.c.

83850
13,317 square feet artificial stone sidewalks, concrete base and wearing surface furnished and laid (a) $25_{\frac{3}{3}} \mathrm{C}$.
658 square feet artificial stone driveways, concrete base and wearing surface furnished and laid @ 30c.

19740
5 covers reset @ $\$ 3$
1500
109 cubic yards loam fur nished @ \$3 .
513 square vards loam graded and seeded @. \$130
Extra work - Remove stumps and roots from sidewalks and break out joints edgestone where directed:
10 hours, stonecutter (a) $\$ 1.25$

1250
12 hours, labor @ 70c.. : $\quad 840$
Plus 15 per cent on $\$ 20.90$. . . . 314

6,969 79
$\$ 11,03732$


* Done in connection with Linden strect.
$\dagger$ Done in connection with Ashfield, Hastings and Walk Hill streets.


Euclid street, from Washington street to Wentworth street. (Work not started.)
Engineering . . . . . . . . $\$ 2300$
Enginecring expense . . . . . . 90
$\$ 2390$

[^17]Gray strect, from Berkeley street to Clarendon street. (Work done in
1919.)
Engineering expense . . . . . . . . . $\$ 030$

* Hastings street, from Centre street to Montview street. Length, 1,127
linear feet. Area, 14,164 square feet. Edgestone set and reset,
granite block gutters relaid and artificial stone sidewalks constructed.

Engineering
$\$ 12624$
Inspection 18408
Engineering expense . . . . . 245
Advertising
175
Blocks, 28,225 old granite
84675
Edgestone, 2,069 feet straight, 9 feet 5 inches circular and 28 small corners

4,08407
Teaming 42900
Amount paid to John Kelly Company, under contract:

Removing trees, bushes, etc. feet straioht edgestone set @ 25 c .

50650
2,026 linear feet straight edge-
105 linear feet circular edgestone and corners set (a) 25 c .

2625
7 linear feet existing edgestone reset @ 25c.
1,116 linear feet crushed stone and concrete foundation furnished and placed, © 35c. . . 39060
740 square yards granite block paving hauled and laid, gravel joints, (a) $\$ 1.30$

96200
4 square yards existing granite block paving relaid, gravel joints, @) 75 c.
14,164 square feet artificial stone foundation furnished and placed (a. Sc.
13,425 square feet artifieial stone sidewalks, concrete base and wearing surface furnished and laid (a. 29 c .

743 square feet artificial stone driverays, conerete base and wearing surface furnished and laid (a. 45 c .

$$
33435
$$

Carried forward . . . $\$ 7,253<2 \$ 5,67434$

* Done in connection with Ashfield, Congreve and Walk Hill streets.

| Brought forward <br> 3 covers reset (a) | $\begin{array}{r} \$ 7.253 \\ 900 \end{array}$ | \$5,67 3 34 |
| :---: | :---: | :---: |
|  |  |  |
| Extra work - Break out old concrete at Police |  |  |
| Station on Hastings |  |  |
| street to allow con- |  |  |
| struction to proper |  |  |
| 2 days' labor (a) \$5.60 | 1120 |  |
| Plus 15 per cent on \$11.20, | 168 |  |
|  |  | 7,275 70 |

$\dagger$ Linden street, from Brighton avenue to Commonwealth avenue. Length, 491 linear feet. Area, 5,355 square feet. Edgestone set, granite block gutters relaid and artificial stone sidewalks constructed.

Engineering

$\$ 16121$

Inspection
8766
Engineering expense . . . . . 160
Advertising
Edgestone, 741 feet 5 inches straight, 4 small corners

1,273 02
Amount paid to Piazuolo \& Alfieri, under contract:

1 cubic yard rock excavation @ $\$ 10$. . $\$ 1000$
550 linear feet straight edgestone set @ 35c

19250
233 linear feet circular edgestone set @ 35c
275 square yards existing granite block paving relaid, gravel joints, @ 98c. . . $\dot{\text {. }} \dot{\text {. }}$
4,947 square feet artificial stone sidewalks, concrete base and wearing surface furnished and laid @ 26c. 1,286 22
408 square feet artificial stone driveways, concrete base and wearing surface furnished and laid (a) 30c.

12240
Extra work - Remove stumps and roots from sidewalks and break out joints edgestone where directed:
13 hours, stonecutter.@\$1.25 1625
Plus 15 per cent on $\$ 16.25$
244
1,98086
$\$ 3,50772$
$\ddagger$ Judson street, from Brookford street to Julian street. (Work not started.)
Engineering . . . . . . . . . . . $\$ 500$
$\ddagger$ Neponset averue (west side), in front of Nos. 3 to 15 and 9 to 35 . Length, 651 linear feet. Area, 4,740 square feet. Edgestone reset and artificial stone sidewalks constructed.

[^18]```
    Engineering . . . . . . . . $52`75
    Inspection . . . . . . . . 61%36
    Engineering expense . . . . . . }2
    Amount paid to Joseph A. Singarella, under
    contract:
    568 linear feet existing edge-
        stone reset @ 44c.
        $249 92
    189 square yards existing
        granite block paving re-
        laid, gravel joints, @ $1
        18900
    1,833 square feet artificial stone
    foundation furnished
        and placed (a) 5c.
        9165
    4,462 square fcet artificial stone
        sidewalks, concrete base
        and wearing surface fur-
        nished and laid@ 2sc.
    278 square feet artificial stone
        driveways, concrete
        base and wearing sur-
        face furnished and laid
        (a) 28c.
        77 84
        1 cover reset @ $3
        30
    2 courses of brickwork laid
        (a) 50c.
        100
        1,861 77
        $1,976 08
```

* Olney street (north side), in front of Nos. 7 and 9. Length, 71 linear
feet. Area, 528 square feet. Edgestone reset and artificial stone
sidewalks constructed.
Engineering . . . . . . . . $\$ 476$
Inspection . . . . . . . . 657
Edgestone . . . . . . . . 600
Amount paid to Joseph A. Singarella, under
contract:
6 linear feet circular edgestone
set (a) 44 c .
stone reset @ 44c. . . 924
528 square feet artificial stone
foundation furnished and
placed @ 5c.
2640
462 square feet artificial stone
sidewalks, concrete base
and wearing surface fur-
nished and laid @ 28c. . 12936
56 square feet artificial stone
sidewalks, concrete base
and wearing surface fur-
nished and laid @ 28c. .1848
Extra work - Remove ex-
isting edgestone and put
in new driveway at Nos.
7 and 9:
4 hours' labor @ 65c. . . 260
Plus 15 per cent on $\$ 2.60$
39
1 hour, double team, @ $\$ 1$. 100
19011
$\$ 20744$
* Done in connection with Ashmont street and Neponset avenue.

| * Pearl street, from Dorehester avenue to Pleasant street. (Work done in 1919.) |  |  |  |
| :---: | :---: | :---: | :---: |
| Enginecring . . |  | $\$ 477$ |  |
| Cost of work done under contract with Frank Drinkwater in 1919 <br> $\$ 2,56446$ |  |  |  |
| Amount paid in 1919 . | 2,147 82 |  |  |
|  |  | 41664 | 421 |



* Rockuell street, from Washington street to Milton avenue. (Work done
in 1919.)
Cost of work done under contract with Frank
Drinkwater in 1919
Amount paid in 1919

| * Rosseter street, from No. 20 to Bullard street. |  |  |  |
| :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { Engineering . . . . . } \\ & \text { Teaming } \end{aligned}$ |  | $\begin{aligned} & \$ 249 \\ & 1350 \end{aligned}$ |  |
|  |  |  |  |
| Cost of work done under contract with Frank Drinkwater in 1919 |  |  |  |
| Amount paid in 1919 | 2,357 69 |  |  |
|  |  | 67406 | \$690 05 |

* Victoria street (north side), from Pleasant street 200 feet easterly. (Work done in 1919.)
Engineering of Cork done under contract with Frank Drinkwater in 1919 . . . . $\$ 43385$
Amount paid in 1919 . . . 36877
6508
$\$ 6785$
* Wales street, from Blue Hill avenue to Harvard street. (Work done in 1919.)

Engineering . . . . . $\$ 249$
Cost of work done under contract with Frank Drinkwater in 1919
$\$ 2,77745$
Amount paid in $1919 . \quad . \quad . \quad 2,20928$
56817

* Done in connection with Pearl, Pleasant, Rockwell, Rosseter, Wales, Abbot and Victoria streets.
* Walk IFill street (east side), from Hyde Park avenue to Wenham street. Length, 244 linear feet. Area, 1,829 square feet. Edgestone reset, granite block gutters relaid and artificial stone sidewalks constructed.
Engineering . . . . . . . . $\$ 2455$
Advertising
175
Amount paid to John Kelly Company, under contract:

Removing trees, bushes, etc.
$\$ 100$
3 linear feet straight edgestone set (a) 25 c .

75
128 linear feet existing edgestone reset @ 25c.

3200
46 square yards existing granite block paving relaid, gravel joints. @ 75c.

3450
1,829 square feet artificial stone foumdation fur n is hed and placed @. 8c.

14632
1,829 square feet artificial stone sidewalks, concrete base and wearing surface furnished and laid (a) 29 e .

53041
Extra work - Remove buried stumps on Walk Hill street:
1 day's labor @ $\$ 5.60$. 560
Plus 15 per cent on $\$ 5.60$, 84

## RECONSTRUCTING AND REPAIRING STREETS BY CONTRACT.


Amory street, from Green street to 140 feet north of Atherton street. (Work done in 1919.)
Engineering . . . . . . . . $\$ 21.50$
Teaming
Cost of work done under contract with the Central Construction Company in 1919 . . . . . $\$ 24,84902$
Amount paid in 1919 . . . 20,213 13

Arlington street, from Market street across Leicester street. Length, 475 linear feet. Area, 1.850 square yards. Edgestone set, artificial stone sidewalks constructed. Roadway not started. (Tnfinished.)

| Engineering | . | . | . | $\$ 46$ 71 <br> Inspection  <br> 71 59 |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Carried forward | . | . | . | . | $\$ 318 \quad 30$ |

* Done in connection with Ashfield, Congreve and Hastings streets.
$\dagger$ Eight-eight dollars of this amount paid out of street improvements.
Brought forward ..... $\$ 318 \quad 30$
Engineering expense ..... 190
Advertising ..... 770
Blocks ..... 2040
Bricks, 13,500 old ..... 20250Edgestone, 291 feet straight, 47 feet circularand 4 small corners7228.3
Lumber ..... 1500Amount paid to Simpson Brothers Corpora-tion, under contrict:295 linear feet straight edge-stone set (a) 35 c .$\$ 10325$33 linear feet circular edge-stone set @ 40c. . 1320110 line ir feet existing edge-stone reset @ 30c.3300412 linear feet crushed stoneand concrete founda-tion furnished andplaced @ 35c.6,363 square feet artificial stonefoundation furnishedand placed @ 6c.38178
6,011 square feet artificial stonesidewalks, concrete baseand wearing surfacefurnished and laid (a)26 c .1,562 86352 square feet artificial stonedriveways, concretebase and wearing sur-face, furnished and laid(a) 33c.
11616
Less 15 per cent retained,
$\$ 2,35445$
353172,001 28\$3,289 91Artificial stone sidewalks.
Rebates allowed ..... \$6,887 16
Repairs ..... 47534

Asphalt and bitulithic pavements repaired. Bituminous pavements upon which the maintenance has expired.
Engineering ..... $\$ 4,22863$Inspection3,634 82
Engineering expense ..... 17695
Advertising ..... 1280
Blocks ..... 7020
Bricks ..... 9000Final payment to Central Construction Com-pany under contract made in 1919 .8,960 60Amount paid to the Bermudez Company,under contract:
$26,469.93$ square yards bitumi-nous wearing surfaceand binder fur-nished and laid (a $\$ 2.20$
Carried forward . . . $\$ 58,23385 \quad \overline{\$ 17,17400}$

Brought forward
2,010.82 square yards bitumihous pavement resurfaced © $\$ 1.62$
210.82 cubic yards extra bituminous binder furnished and laid (a) $\$ 14$

1,493.37 square yards concrete base furnished and laid @ $\$ 3.50$
74 covers reset (a) $\$ 3$
Extra work - Double flush coat on Dartmouth, Marlborough and Berkeley streets:
3,954.14 square yards double flush coat © 20 c .
$\$ 58,233 \quad 85 \quad \$ 17,174 \quad 00$

3,25753

2,95148

5,226 80
22200

790 S3
\$70,682 49
Less 5 per cent retained . . . 3,53412
$\$ 67,14837$
2,501 78

64,64659
\$81,820 59
Atlantic avenue, from South Market to Commercial street. (Work done in 1918 and 1919.)
Engineering . . . . . . . . . . . $\$ 1200$
Beacon street, from Massachusetts avenue to Raleigh street. Length, 1,455 linear feet. Area, 7,467 square yards. Edgestone reset, wood block pavement laid and artificial stone sidewalks constructed.
Engineering
$\$ 55155$
Inspection
1,683 08
Engineering expense . . . . . . 4454
Analysis of oil . . . . . . . 5900
Templets
2250
Edgestone
1880
Lumber
1218
Teaming 350
Photographs
2000

Credit: Sidewalk bricks.
$\$ 2,41515$
78538
$\$ 1,62977$
Amount paid to James Doherty, under contract:
153 cubic yards earth excavation for tree pits @ $\$ 1.71$. . . $\$ 26163$
886 square yards existing concrete base excavated and removed @ 55 c .

48730
16 linear feet circular edge-
stone set @ 35c. . . 560
Carried forward
$\$ 75453$
$\$ 1,62977$

## Brought forward

2,613 linear feet existing edgestone reset © 21 c .
684 cubic yards concrete base furnished and laid (a) $\$ 10.00$
28 square yards existing granite block paving relaid, gravel joints @ 75 c .
15 square yards existing granite block paving relaid, grout joints @ \$1.39
7,276 square yards wood block pavement furnished and laid @ $\$ 4.17$
191 square yards existing wood block pavement taken up, cleaned, stored and piled and relaid in dummy of car track where directed (a) 95 c .

122 square yards existing brick sidewalks relaid (a) 40c.

23,434 square feet artificial stone sidewalks, concrete base and wearing surface furnished and laid © 21c.
10 covers reset @ \$3
10 Bradley-head catch-basins reset @ $\$ 5$
2 courses of brick work laid (a) 50 c .

147 cubic yards loam furnished and placed in tree pits @ $\$ 2$
Extrawork-Chip existing concrete base where directed:
49 hours, foreman, @ $87 \frac{1}{2} \mathrm{c}$., $538 \frac{1}{2}$ hours' labor (a) $62 \frac{1}{2} \mathrm{c}$.

Plus 15 per cent on $\$ 379.44$
$24 \frac{1}{2}$ hours, double team (a) $\$ 1.25$
Extra work -- Furnish and lay new wood block pavement in dummy of car tracks at intersection of Beacon street and Massachusetts avenue.
336 square yards wood block pavement furnished and laid in dummy of car tracks (a) 80c.

18145

4840

4288
33656
5692
$\$ 754$ 53 \$1,629177
54873

6,840 00

2100

2085

30,34092

4,921 14
3000
5000
100

29400

3063

26880

Beacon street and Chestnut Hill avenue, from Brookline line to Newton line (Cleveland circle). (Work not started.)
Enginecring
$\$ 41138$

Bennington street, from Central square to Day squarc. (Work done in 1919.)

Engincering . . . . . . . . $\$ 340$
Engineering expense . . . . . 3250
Photograplis . . . . . . . 2000
Cost of work done under contract with
McGuire \& MeGourty Inc., in 1919, 838,47449
Amount paid in 1919 . . . 32,66974 5,804 75
$\$ 5,86065$
Berkeley street, from Columbus avenue to Providence strect. (Work not started.)
Enginecring . . . . . . . . \$179 20
Engineering expense . . . . . . 180
$\$ 18100$
Blackstone street, from Clinton street to Haymarket square. Length, 1,115 linear feet. Area, 5,516 square yards. Edgestone set and reset, granite block pavement relaid and artificial stone sidewalks constructed.
Engineering . . . . . . . . $\$ 1,14203$
Inspection . . . . . . . . 40939
Engineering expense . . . . . . 170
Advertising . . . . . . . 675
Blocks, 72,728 old granite . . . . 2,149 84
Edgestone . . . . . . . SS 67
Amount paid to Coleman Brothers Inc., under contract:
35.7 square yards existing
concrete base excavated
and removed @ $\$ 2$$\quad \$ 7140$

10 square yards existing concrete base chipped and removed @ $\$ 2$
468 linear feet straight edge-
stone set @ 75c.
2000 stone reset © 60c.

69660
788.5 square yards concrete base furnished and laid (a) $\$ 16$

12,616 00
$2,442.4$ square yards granite block paving hauled and laid, including hauling away old blocks and flagging, sand bed and grout joints, @ $\$ 2.50$

6,10; 00
3,073.8 square yards existing granite block paving taken up, cleaned. piled and relaid, sand bed and grout joints, (a) $\$ 2.25$

6,916 05
Carried forward . . . $\$ 26,46115$ \$3,798 39

| Brought forward | \$26,161 15 | \$3,798 38 |  |
| :---: | :---: | :---: | :---: |
| 18 square yards existing brick sidewalks relaid (a) $\$ 1$ | 1800 |  |  |
| 9,513.3 square feet artificial |  |  |  |
| stone sidewalks, con- |  |  |  |
| crete base and wear- |  |  |  |
| ing surface furnished |  |  |  |
| and laid @ 20c. . | 1,902 66 |  |  |
| 18 covers reset @ \$3 | 5400 |  |  |
| 27 courses of brick work laid @ 50c. . | 1350 |  |  |
| Extra work - Cut sewer sheathing and dress granite flagging sidewalks, where directed. |  |  |  |
| 29 hours' labor (a) 65c. . | 1885 |  |  |
| 40 hours, stonecutter, © | 4600 |  |  |
| Plus 15 per cent on |  |  |  |
| \$64.85. | 973 |  |  |
| 4 bags cement (a) \$1.25 | 500 |  |  |
|  |  | 28,528 89 |  |

Border street, from North Ferry to Central square. (Work not started.)
Engineering .
$\$ 24510$
Bowdoin street, from Mt. Ida road to Topliff street. (Work not started.)
Engineering .
$\$ 1900$


Cambridge street, city proper, from North Russell street to Charles street. (Work done in 1919.)
Engineering
$\$ 900$
Cambridge street, Brighton, from Brighton avenue to Henshaw street. (Work done in 1919.)
Engineering . . . . . . . . \$12 43
Engineering expense . . . . . . 30
$\$ 1273$
Centre street, from Columbus avenue to Hyde square. (Work not started.)
Engineering . . . . . . . . $\$ 30767$
Engineering expense . . . . . . 1240
$\$ 32007$
Centre strect, from Eliot street across Allandale street. (Work done in 1919.)

Engincering . . . . . . . $\$ 18691$
Labor . . . . . . . . 400
$\$ 19091$

* Centre street, from Allandale street to South street. Length, 6,502 linear feet. Area, 17,084 square yards. Filling, edgestone reset, sheet asphalt pavement laid, retaining wall constructed and artificial stone sidewalks constructed. (Unfinished.)
Engineering . . . . . . . . \$1,629 73
Inspection . . . . . . . . 32053
Engineering expense . . . . . . 1695
Advertising . . . . . . . 725
Labor, employees, building culvert . . . 77640
$\$ 2,75086$
Credit: Blocks, old granite . . . . 1926
$\$ 2,73160$
Amount paid to Bermudez Company, under contract:
1,242 cubic yards gravel filling
furnished (a) $\$ 2.50$
$\$ 3,10500$
675 tons crushed stone furnished, placed, watered and rolled © $\$ 4$

2,700 00
377 linear feet straight edgestone set @ 45c.

16965
225 linear feet existing edgestone reset @ 40c.

9000
143 square yards existing granite block paving taken up, hauled and relaid in hips or bows, gravel joints, @ \$2.

28600
$2,35 t$ square yards shoulders graded, shaped, watered and rolled, @4 45c.,

1,059 30
16,836 square yards bituminous concrete binder and asphalt wearing surface furnished and laid on macadam foundation (a) $\$ 2.89$.
1.531 square feet artificial stone foundation furnished and laid @ 12c.

18372
Furnishing all materials and constructing wall and fence

7,700 00

$$
\text { Less } 5 \text { per cent retained, } \begin{array}{r}
\$ 63,94971 \\
3,197 \quad 49 \\
\hline 66,75222
\end{array}
$$

Less amount charged to Highways, Making of, $\quad$ T,150 46

Chambers street, from Green street to Cambridge. (Work not started.)
Engineering
$\$ 19572$

Charles street, from Fruit street to Allen street. Length, 670 linear feet. Area, 2,427 square yards. Edgestone reset, wood block pavement laid, brick sidewalks relaid and artifieial stone sidewalks constructed.
Engineering
Inspection
Engineering expense
Advertising .

| Servies of expert analyzing, etc. |
| :---: |
| Edgestone |
| Blocks |


| Credit: |
| :---: | Bricks, old sidewalk

Blocks, old granite
$\$ 24681$
Inspection . . . . . . . 33982
Engineering expense . . . . . . 230
Advering . . . . . $\quad 630$
Edgestone $\quad{ }_{40} 30$
Blocks . . . . . . . . . 2933
$\$ 90676$

43900
$\$ 46776$

Amount paid to John McCourt Company,
under contract:
301 square yards old concrete
base excavated and
removed @ $7 \% \mathrm{c}$.
391 square yards old concrete
base chipped and
removed, @ $\$ 1$. . 39100
$19 \begin{aligned} & \text { linear feet circular edge- } \\ & \text { stone set }(a) 50 \mathrm{c} .\end{aligned}$$\quad 950$
1,358 linear feet existing edge-

stone reset @ 40 c. | . |
| :--- |

188 cubic yards concrete base
furnished and laid (a)
$\$ 12 . \quad . \quad$ yards existing granite block paving relaid, grout joints, @ quare yards wood block pavement furnished and laid © 85.40

66495
6,367 square feet artificial stonc sidewalks, concrete base and wearing surface, furnished and laid (a) uare feet artificial stone ariveways, concrete fre and wearing surface, furnished and laid (a) 40 c .

31480
9 covers reset
8 courses of brickwork laid (16) 50 c .

Columbia road, from Hancock street to Blue Hill avenue. (Work not started.)
Engineering .
$\$ 3520$

Columbus arenue, from Roxbury street to Heath street. (Work not started.)
Engineering . . . . . . . . \$183 17
Engincering expense . . . . . . 570
$\$ 18887$
Commercial strect, from Fleet street to Hanover street. (Work done in 1918 and 1919.)
Engineering . . . . . . . . . . . $\$ 1200$
Commereial street, from Hanover street to Causeway street. (Work done
in 191S and 1919.)
Enginecring . . . . . . . . . . . $\$ 2400$
Conant strect, from Huntington avenue to Parker street. (Work done in 1919.)

Cost of work clone under contract with the Bermudez Company, in 1919
$\$ 8,12447$
Amount paid in 1919
6,502 97
$\$ 1,62150$

* Devonshire strect, from Water street to Franklin street. Length, 730 linear feet. Area, 2,248 square yards. Wood block pavement laid.
Engineering . . . . . . . . $\$ 34918$
Inspection . . . . . . . . 62821
Engineering expense . . . . . . 160
Advertising . . . . . . . . 325
Blocks granite . . . . . . . 4400
Edgestone . . . . . . . . 791
Expert services, analysis of blocks . . . 6435
Amount paid to James Doherty, under contract:
381 square yards existing concrete base excavated and removed @ 70c. . $\$ 26670$
296 square yards existing concrete base chipped and removed @ 70c. . .
3 linear feet circular edgestone set @ 39c.

20720

292 cubic yards concrete base
furnished and laid (a) $\$ 11$

3,21200
43 square vards existing granite block paving relaid, gravel joints, @ \$1

4300
513 square yards existing granite block paving relaid, grout joints, (a) $\$ 1.84$

94392
2,248 square yards wood block paving furnished and laid @ $\$ 5.19$. . 11,667 12
3 covers reset @ $\$ 3$ 900

Less 15 per cent retained, $\begin{array}{r}\$ 16,35011 \\ 2,452\end{array}$
13,897 59
$\$ 14,99609$

[^19]Dorchester avenue, from Park street to Peaborly square. (Work not started.)
Engineering . . . . . . . . 826279
Engineering expense . . . . . 10
$\$ 26289$
Dorchester aveuue, from Andrew square to Savin Hill avenue. (Work done in 1918 and 1919.)
Engineering . . . . . . . . . . . \$62 43
Dorchester avenue, from Summer street to Dorchester Avenue Bridge. (Work not started.)
Engincering expense . . . . . . . . . $\$ 560$
Dorchester avenuf, from Dorchester Avenue Bridge to West Second street. Length, 749 linear feet. Area, 4,236 square yards. Edgestone reset, second-hand granite block pavement laid with grout joints on concrete base and brick sidewalks relaid.
Engineering . . . . . . . . $\$ 61298$
Inspection . . . . . . . . 58297

Engineering expense . . . . . 140
Advertising . . . . . 1370
Blocks: 32,180 old granite . . . . 96540
Bricks: 24,200 old sidewalk . . . . 36300
Edgestone . . . . . . . . 2906
Teaming . . . 400

Amount paid to John Kelly Company, under contract:

Excavating and removing the paving materials, paving and filling, at and near abandoned approach to Atlantic Avenue Bridge . . $\$ 40000$
17 linear feet circular edgestone set (a) 30c.
1,449 linear feet existing edgestone reset @ 39c. .
1,087 square yards granite block paving hauled and laid, including hauling away old blocks and flagging, concrete base, sand bed and grout joints, @ \$4.15

4,51105
2,349 square yards existing granite block paving taken up, cleaned, piled and relaid, concrete base, sand bed and grout joints, © $\$ 4$
S00 square yards existing granite block paving taken up, cleaned, piled and relaid, concrete base, sand bed and grout joints (unfinished), (al $\$ 1.80$.

9,396 00

1,440 00
Carried forward

Brought forward
162 square yards existing granite block paving relaid, gravel base, sand bed and grout joints, @ \$2 20 . .
92 square yards brick sidewalks laid, (a) 60c.
1,092 square yards existing brick sidewalks relaid (a) 40 c .

14 covers reset @ $\$ 3$
7 courses of brick work laid (a 50c.
Extra work - Remove foundation of approach to abandoned Atlantic Avenue Bridge and remove existing concrete base where directed:
532 hours' labor @ 70c. . 37240
Plus 15 per cent on $\$ 372.40$
27 hours, double team, (a) $\$ 1.50$
16 hours, auto truck, @ \$4,
Extra work - Load and haul sidewalk brick from the Chestnut Hill paving yard instead of from the Massachusetts avenue lot:
19,500 brick loaded and hauled from the Chestnut Hill Avenue Paving Yard (a) $\$ 5.30$ per M.
Less 15 per cent retained, $\left.\begin{array}{r}\$ 17,847 \\ 2,677 \\ 2,\end{array}\right)$

5586
4050
$\$ 16,317 \quad 26 \quad \$ 2,572 \quad 45$

35640
5520
$436 \mathrm{S0}$
4200
350

10335

2,677 09

```
15,170 18

Dorchester street, from West Broadway to West Eighth street. (Work
not started.)
Engincering . . . . . . . . . . . \(\$ 9002\)

Dudley street, from Alexander street to Stoughton street. Length, 1,400 linear feet. Area, 5,941 square yards. Edgestone set, granite block paving laid and relaid, artificial stone sidewalks and driveways constructed.
Engineering . . . . . . . . \(\$ 85106\)
Inspection . . . . . . 87712
Engineering expense . . . . . . 4257
Advertising . . . . . . . . 630
Templets. . . . . . . . . 2190
Edgestone . . . . . . . . 1417
Teaming . . . . . . 400
Blocks, 14,163 old granite . . . . 41526
Carricd forward . . . . . . \(\$ 223238\)
\begin{tabular}{|c|c|c|}
\hline Brought forward
Credit: Bricks, old sidewalk & & \[
\begin{array}{r}
\$ 2,23238 \\
43320
\end{array}
\] \\
\hline & & \$1,799 18 \\
\hline \multicolumn{3}{|l|}{Amount paid to DeStefano Brothers, under contract:} \\
\hline \multicolumn{3}{|l|}{47 linear fect circular edgestone set (a) 60c. . \(\$ 2820\)} \\
\hline \multicolumn{3}{|l|}{\(1,610 \begin{aligned} & \text { linear fcet existing edge- } \\ & \text { stone reset (a) 35c. }\end{aligned} \quad 56350\)} \\
\hline \multicolumn{3}{|l|}{62 square yards existing granite block paving relaid, gravel joints, @} \\
\hline \$1.50 . & 9300 & \\
\hline \multicolumn{3}{|l|}{block paving hauled and laid, including} \\
\hline \multicolumn{3}{|l|}{hauling away old blocks} \\
\hline \multicolumn{3}{|l|}{and flagging, concrete base, sand bed and} \\
\hline grout joints, © \({ }^{\text {a }}\) \$4.50, & 3,847 50 & \\
\hline \multicolumn{3}{|l|}{granite block paving} \\
\hline \multicolumn{3}{|l|}{\multirow[t]{2}{*}{taken up, cleaned,}} \\
\hline & & \\
\hline \multicolumn{3}{|l|}{crete base, sand bed} \\
\hline \multicolumn{3}{|l|}{\[
\begin{aligned}
& \text { and grout joints, @ } \\
& \$ 4.40
\end{aligned}
\]} \\
\hline \multicolumn{3}{|l|}{\multirow[t]{2}{*}{30 square yards brick sidewalks relaid (a) 75 c.
\[
2250
\]}} \\
\hline & & \\
\hline \multicolumn{3}{|l|}{16,600 square feet artificial stone} \\
\hline \multicolumn{3}{|l|}{sidewalks, concrete base} \\
\hline \multicolumn{3}{|l|}{and wearing surface} \\
\hline \multicolumn{3}{|l|}{\multirow[t]{2}{*}{\begin{tabular}{l} 
33c. \\
126 scuare feet artificial stone
\end{tabular}\(\quad 5,47800\)}} \\
\hline & & \\
\hline \multicolumn{3}{|l|}{126 square feet artificial stone driveways, concrete} \\
\hline \multicolumn{3}{|l|}{base and wearing sur-} \\
\hline \multicolumn{3}{|l|}{face furnished and laid} \\
\hline \multicolumn{3}{|l|}{2 square feet covers reset \({ }^{\text {a }}\) - 60} \\
\hline \multicolumn{3}{|l|}{(a) \(\$ 3\). . . 600} \\
\hline \multicolumn{3}{|l|}{4 square feet courses of} \\
\hline brickwork laid (a30c. & 200 & \\
\hline \multicolumn{3}{|l|}{Extra work - Recut} \\
\hline \multicolumn{3}{|l|}{blocks to connect with} \\
\hline \multicolumn{3}{|l|}{4 -inch work of Colum-} \\
\hline \multicolumn{3}{|l|}{bia road and clean the} \\
\hline \multicolumn{3}{|l|}{\multirow[t]{2}{*}{pitch and pelthles from}} \\
\hline & & \\
\hline \multicolumn{3}{|l|}{city from Massichu-} \\
\hline \multicolumn{3}{|l|}{city from Massachusetts avenue lot:} \\
\hline 32 hours' labor (a.ic. & 2080 & \\
\hline Plus 15 per cent on \$20.s0, & 312 & \\
\hline Section 1, Article E. Overhaul: & & \\
\hline \multicolumn{3}{|l|}{77 tons blocks hauled from} \\
\hline \multicolumn{3}{|l|}{East Fifth street lot} \\
\hline \multicolumn{3}{|l|}{Last Fith street lot
(instead of Alassachu-} \\
\hline \multicolumn{3}{|l|}{\multirow[t]{2}{*}{setts avemue lot). \(1 \frac{1}{2}\)}} \\
\hline & & \\
\hline per ton per half mile. & 2541 & \\
\hline Carried foruard & \$32,539 63 & \$1,799 18 \\
\hline
\end{tabular}
Brought forward
12 tons blocks hauled from Centre street, near Montclair street (instead of Massachusetts avenue lot) 5 -mile overhaul at 11c. per ton per half mile
\[
\$ 32,539 \quad 63 \quad \$ 1,799 \quad 18
\]
1320
\begin{tabular}{ll} 
Less 5 per cent retained, & \(\begin{array}{r}\$ 32,552 \\
1,627 \\
54\end{array}\) \\
\hline
\end{tabular}
30,925 19
\(\$ 32,72437\)

\section*{Expert Services.}

Services of expert examining different kinds of smooth pavements and making report thereon
\(\$ 89275\)
East Broaduay, from Dorchester street to L street. (Work done in 1919.) Photographs
\(\$ 1200\)
East First street, from H street across Summer street. (Work done in 1919.)

Engineering . . . . . . . . \(\$ 1700\)
Engineering expense . . . . . . 30
\(\$ 1730\)
East and West Newton street. (Work done in 1919.)
Engineering expense
\(\$ 030\)
East Fourth street, from K street across P street. Length, 2,813 linear feet. Area, 12,082 square yards. Wood block pavement laid. Unfinished work from 1919. Roadway between the tracks paved with old granite blocks with grout joints by city forces. Work completed May 29, 1920.

Engineering . . . . . . . . \(\$ 40020\)
Inspection
01
Inspection . . . . . . . . 36501
Engineering expense : . . . . 1920
Expert services analyzing blocks, etc. . . 78025
Photographs.
1600
Labor, excavating roadway . . . . 34967
Labor, paving and grouting . . . . 65900
Blocks: 20.250 old granite . . . . . 60750
Sand: 77 cubic yards . . . . . 16931
Cement: 123 barrels . . . . . . 38734
Crushed stone . . . . . . . 1755
Teaming . . . . . . . . 33650
Telegrans . . . . . 695
Amount paid to Jolm E. Quinn, under contract:
318 linear feet circular edgestone set @ 3 j c.
\(\$ 11130\)
5,766 linear feet existing edgestone reset (a) 20c.

1,15320
47 square yards existing granite block paving relaid, gravel joints, (a) \(\$ 1.20\)

C'arriod foruard

5640
\(\$ 1,32090 \quad \$ 1,11448\)


Federal street, from Milk street to Dewey square. Length, 1,293 linear feet. Area, 4,524 square yards. Wood block and granite block pavement laid.
Engineering . . . . . . . \(\$ 13785\)
Inspection . . . . . . . . 32680
Engineering expense . . . . . 265
Expert services, analyzing blocks, etc. . . 14558
Edgestone . . . . . . . . 303
Blocks, recut granite . . . . . . 3840
Photographs . . . . . . . 1600
Amount paid to James Doherty, under contract:
100 cubic yards gravel filling
furnisht d © \(\$ 1\). . \(\$ 10000\)
92 linear feet existing edge-
stone reset @ 25c. . \(\$ 2300\)
733 cubic yards concrete base
furnished and laid @ \(\$ 9.75\) 7,146 75
418 square yards existing granite block paving relaid, gravel joints, @ 75 c .
31350
3,020 square yards existing granite block paving recut and relaid, sand bed and grout joints, @ \(\$ 1.83\) quards existing granite block paving relaid, sand bed and grout
joints, \(@ \$ 1.40\) sand bed and grout
1,504 square yards wood block
1,504 square yards wood block
pavement furnished and
laid @ \(\$ 4.41\) 5,526 60
1,244 square yards existing gran1,74160
laid @ \(\$ 4.41\).
15 covers reset @ \(\$ 3\)
Extra work - Load and haul to Massachusetts avenue lot, old paving blocks in Channing street, from Federal street to Congress street:
521 square yards old paving blocks loaded and hauled to Massachusetts avenue lot, @ 50c. 26050
Extra work - Relay brick sidewalks where directed in Channing street:
60 square yards brick side-
walks relaid © 40c.
6,632 64
4500
\(\qquad\)

Less amount paid in 1919, \(\begin{array}{r}\overline{\$ 21,813} 59 \\ 14,625 \\ \hline\end{array}\)

7,188 26
\(\$ 7,858 \quad 57\)

Exeter street, from Boylston street to Commonwealth avenue. (Work done in 1919.)
Engineering expense . . . . . . . . . \(\$ 030\)
Franklin sircet, from 60 feet west of Devonshire street to Broad street. Length, 820 linear feet. Area, 3,740 square yards. Granite block pavement relaid, grout joints.
Engincering . . . . . . . \(\$ 47983\)
Inspection . . . . . . . . 46322
Engineering expense . . . . . 205
Advertising . . . . . . . 680

Blocks, old granite, . . . . . . 31300
Amount paid to James Doherty, under contract:
232 square yards existing conconcrete base excavated and removed © 75 c .
203 cubic yards concrete base furnished and laid (a) \(\$ 11.50\). . . . 2,334 50
284 square yards existing granite block paving relaid, gravel joints, (a) \(\$ 1\)
\(28: 00\)
461 square yards granite block paving hauled and laid, sand bed, grout joints, (a) \(\$ 2.17\).

1,000 37
3,279 square yards existing granite block paving taken up, cleaned, piled and relaid, sand bed andgrout joints, (a) \(\$ 1.99\).
7 square yards existing flagging crosswalks relaid, grout joints, @ \(\$ 2.24\)

1568
13 covers reset @ \(\$ 3\). . 3900
Extra work - Omit the relaying of flagging crosswalks where shown on plan and haul granite block to replace same and haul granite block paving to replace abandoned south track of Boston Elevated Railway, between Devonshire strect and Federal street:
373 hours labor, @ 65c. . .
24245
Plus 15 per cent on \(\$ 242.45\), 3637
123 hours, double team, @ \(\$ 1.37 \frac{1}{2}\)

Friend street, from Union street to Causeway street. Length, 1,789 linear feet. Area, 5,240 square yards. Edgestone reset, granite block paving laid and relaid, artificial stone sidewalks laid.


Brought forward
Amount paid to B. E. Crant Company, under contract:
985 linear fect existing edgestome reset @ 30c.
332 cubic yards concrete base, furnished and laid @ \$14
SS squarc yards existing granite block paving relaid, gravel joints, (a) \(\$ 1.50\).
194 square yards granite block paving hauled and laid, including hauling away old blocks and flagging, sand bed and grout joints, @ \(\$ 2.65\)
1,783 square vards existing granite block paving taken up, cleaned, piled and relaid, sand bed and grout joints, @ \(\$ 2.25\). 4,011 75
4,569 square feet artificial stone sidewalks, concrete base and wearing surface furnished and laid @ 28c. .
11 covers reset © \(\$ 3\)
22 courses of brickwork laid (a) 50 c .
Less 15 per cent retained, \begin{tabular}{r}
\(\left.\begin{array}{r}\$ 10,92467 \\
1,63 S \\
70\end{array}\right)\)
\end{tabular}
\(\$ 29550\)

4,648 00
\(51+10\)
\(\$ 1,41741\)

13200

51
\[
\begin{array}{r}
1,27932 \\
3300 \\
1100
\end{array}
\]
Less 15 per cent retained, \(\quad 1,63 \mathrm{~S} 70\)
9,285 97
\(\$ 10,703 \quad 38\)

Green street, from Washington street across Call street. Length, 888 linear feet. Area, 2,725 square yards. Edgestone reset, Topeka pavement laid and artificial stone sidewalks laid. (Unfinished work from 1919.)
Engineering
\(\$ 12596\)
Inspection
Amount paid to Central Construction Company, under contract:
49 linear feet circular edgestone set (a) 35c.
\(\$ 1715\)
1,616 linear feet existing edgestone reset @ 23 c .

37168
122 linear feet existing granite block paving relaid, gravel joints, @ \$1

12200
39 square yards existing granite block paving relaid in driveways and edgings, concrete base, sand bed, grout joints, (a) \(\$ 3.25\)

12675
120 square yards existing granite block paving relaid, gravel base, sand bed and grout joints, (a \(\$ 1.30\)

15600
Carried forward
\(\$ 1,1935 \checkmark \quad \$ 18513\)

\(\$ 4,15144\)

Greenwich street, from Westminster street to Warwick street. (Work done in 1919.)
Engineering expense . . . . . . \(\$ 015\)
Guild row. (Work not started.)
Engineering . . . . . . . . \(\$ 800\)
Engineering expense . . . . . . S0
\(\$ 880\)
Humboldt avenue, from Walnut avenue to Seaver street. (Work not started.)
Engineering . . . . . . . . \(\$ 93385\)
Engineering expense . . . . . . 1700
\(\$ 95085\)
Huntington avenue, at Jamaicaway. Length, 150 linear feet. Area, 485 square yards. Bitulithic pavement furnished and laid.
Amount paid to Warren Brothers Company, under contract:
\(43 \frac{1}{4}\) tons crushed stone furnished and placed @ \(\$ 3.50\). . . . \(\$ 15138\)
485 square yards macadam foundation furnished and placed @ 46c. . 22310
485 square yards bitulithic pavement furnished and laid (a) \(\$ 2.37\). . 1,14945
\[
\$ 1,52393
\]
\(\$ 1,523 \quad 93\)



Market street, from Washington street across Western avenue. Length, 5,015 linear feet. Area, 17,780 square yards. Edgestone reset, artificial stone sidewalks constructed at church property. Roadway not started. (Unfinished.)
Engineering . . . . . . . . \$628 24
Inspection . . . . . . 4475
Carried forward
\(\$ 67299\)
\begin{tabular}{|c|c|c|}
\hline Brought forward & & \$672 99 \\
\hline Engineering expense & & 260 \\
\hline Advertising - & & 770 \\
\hline Amount paid to Simpson Broth tion, under contract: & Corpora- & \\
\hline 4 linear feet straight edgestone set (a 35c. & \$140 & \\
\hline 19 linear feet eircular edgestone set (a 40c. & 760 & \\
\hline 270 linear fect existing edgestone reset (11 30c. & 8100 & \\
\hline 2,458 square fect artifieial stone foumdation furnished and placed @ 6c. & 14748 & \\
\hline 2,321 square fect artificial stone sidewalks, concrete base and wearing surface furnished and laid (a26c. & 60346 & \\
\hline 137 square feet artificial stone driveways, concrete base and wearing surface furnished and laid (a) 33c. & 4521 & \\
\hline 1 cover reset @ \$3 & 300 & \\
\hline 2 Bradley head catch-basins reset © \(\$ 5\) & 1000 & \\
\hline Less 15 per cent retained, & \[
\begin{array}{r}
\$ 8915 \\
13487
\end{array}
\] & \\
\hline & & 76428 \\
\hline
\end{tabular}
\(\$ 1,437 \quad 27\)
Mt. Vernon street, from Joy street to West Cedar street. Length, 1,200 linear feet. Area, 4,511 square yards. Edgestone reset, bituminous macadam roadway laid and brick sidewalks relaid. (Work unfinished.)
Engineering . . . . . . . . \(\$ 73086\)
Inspection . . . . . . . . 28672
Engineering expense . . . . . . 215
Advertising . . . . . . . . 630
Templets
3000
Labor, handling stock. . . . . . 53016
Edgestone . . . . . 1,04515
Crushed stone: 912.2 tons . . . . 2,28050
Bricks . . . . . . . . . 4500
Road oil: 9,000 gallons binder . . . . 1,30500
Teaming 1,340 40
Amount paid to John W. O'Connell, under contract:
477 linear feet straight edgestone set @ 39c. . \(\$ 18603\)
52 linear feet circular edgestone set © 40c. . . 2080
1,558 linear feet existing edgestone reset @ 39c.

60762
150 square yards existing granite block or cobble paving relaid, gravel joints, @ \$1.45

21750
1,863 square yards existing brick sidewalks relaid (a) 70 c.

1,304 10
Carried forward . . . \(\overline{\$ 2,33605} \overline{\$ 7,60224}\)


Neubury street, from Arlington street to Fairfield street. (Work done in 1919.)
\begin{tabular}{lll} 
Engineering . . . . . . . . & \(\$ 2860\) \\
Engineering expense & 60
\end{tabular}

Engineering expense . . . . . . 30
\(\$ 2890\)

Northampton strect, from Washington street to Albany street. (Work not started.)
Engineering . . . . . . . . \(\$ 32589\)
Engineering expense . . . . . . 40
\(\$ 32629\)

Parker street, from Conant street to Tremont street. Length, 653 linear feet. Area, 2,633 square yards. Edgestone reset, asphalt pavement laid, brick sidewalks relaid. (Unfinished work from 1919.)
Amount paid to the Bermudez Company, under contract:
66 linear feet circular edgestone set (a) 35c.
\(\$ 2310\)
1,224 linear feet existing edgestone reset @ 30c. 36720
70 square yards existing granite block paving relaid, gravel joints, @ \$1, 7000
43 square existing granite paving relaid, gravel base, sand bed and grout joints, @ \(\$ 1.75\).
2,633 square yards bituminous concrete binder and asphalt wearing surface furnished and laid on macadam foundation ( 1 ) \(\$ 2.11\)

5,55563
140 square yards lrick sidewalks laid (a 60c.

Carried forward

S4 00
\(\$ 6,17518\)

```

    Brought forward
    1,537 square feet artificial
stone sidewalks, con-
crete base and wearing
surface furnished and
laid (a)30c.
\$19,522 20 \$472 0Slaid (a) 30c.$461 \quad 10$
139 square feet artificial stone
driveways, concrete
loase and wearing sur-
face furnished and laid
(a) 35c.
4 8 6 5
21 covers reset @ \$3 . . 6300
3 Bradley head catch-basins
reset @ \$5 . . .
45 courses of brickwork
laid @ 50c.
2250
21 cubic yards loam fur-
nished @ \$3.70
7770
134 square yards loam graded
and seeded @ 35c.
4690

Pleasant strect, from Stoughton street to Savin Hill avenue. Length, 830
linear feet. Area, 2,533 square yards. Edgestone set, granite blocks laid in dummy of car tracks. Topeka pavement laid and artificial stone sidewalks constructed.


Amount paid to Francis J. Burke, under contract:
9 cubic yards extra earth excavation (a) $\$ 3.50$
$\$ 31 \quad 50$
21 linear feet circular edgestone set ( $\omega$, 35 sc . .
1,300 linear feet existing edgestone reset (a) 40c.

52000
12 square yards existing granite block paving relaid, gravel joints, © $\$ 1.20$. . . 1440
4 square yards existing granite block paving relaid in roadway and edgings, concrete base, sand hed and grout joints, © $\$ 4.50$. . 1800

Carricd foruard
$\$ 591 \quad 25 \quad \$ 1,43218$

```
        Brought forwurd . . . $591 2.; $1,432 18
        217 square yards existing
        gramite block paving
        relaid in dummy of car
        tracks, concrete base,
        sand bod and grout
        joints, (a) $5 . . . 1,085 00
    149 square yards existing
        granite block paving
        relaid in brows of car
        tracks, concrete base,
        sand bed and grout
        joints, (a. $5.20
        77480
    2,734 square yards concrete base
        and Topeka wearing
        surface furnished and
        laid @ $5
        13,670 00
        130 square yards bituminous
        wearing surface fur-
        nished and laid on mac-
        adam foundation (a)
        $2.70 . . . .
        57 square yards existing brick
        sidewalks relaid (a 50c,
        35100
        2850
        3,182 square feet artificial stone
        foundation furnished
        and placed @ 5c.
    9,977 square feet artificial stone
        sidewalks, concrete base
        and wearing surface fur-
        nished and laid @ 31c.,
    305 square feet artificial stone
        driveways, concrete
        base and wearing sur-
        face furnished and laid
        (a)38c.
        11590
        6
            $19,886 42
            Less 5 per cent retained .
                                994 32
                            18,892 10
                                    $20,324 28
Portland street, from Hanover street to Causeway street. (Work not started)
Engineering . . . . . . . . \(\$ 13957\)
Advertising . . . . . . . . 233
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$14190
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$14190
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Ralston street (northerly side), from Boston street about 85 feet easterly.
Length, 85 linear feet. Concrete retaining wall and fence constructed.


Brought forward
859188
Amount paid to Andrews Construction Company, under contract:
Furnishing all materials and doing all the work necessary to build retaining wall and fence. . . . 3,93000
Less 15 per cent retained . . is9 jo

Richmond strect, from Hanover street to Allantic avenue. (Work not st:arted.)
Engineering . . . . . . . $\$ 14076$
Templets . . . . . . 2000
Advertising . . . . . . . . 23 3:
$\$ 16309$
River street, from bridge over Providence Railroad across Everett square. Length, 1,269 linear feet. Area, 6,020 square yards. (Work not started.)
Engineering . . . . . . . . $\$ 49714$
Engineering expense . . . . . . 1090
Advertising . . . . . . . . 740
$\$ 51544$
Roxbury street, from Kent street to John Eliot square.
$\underset{\text { Engineering expense . . . . . . . } \quad \$ 3200}{245}$
$\$ 3445$
Rutherford arenue, from Cambridge street to Chapman street. Length, 3,800 linear feet. Area, 19,565 square yards. Edgestone reset, recut granite block pavement laid and brick sidewalks relaid.
Engineering . . . . . . . . $\$ 1.113$ \$2
Inspection
1,25860
Engineering expense . . . . . . 4010
Blocks, 384,025 recut granite . . . . 23,041 50
Bricks, 91,700 old sidewalk . . . . 1,37i5 50
Edgestone
31711
Photographs . . . . . . . 2000
Amount paid to Coleman Brothers, under contract:
128 linear feet straight edgestone set (a30c.
$\$ 3840$
50 linear feet circular edgestone set @ 50c.

25 00
7,433 linear feet existing elgestone reset (a 30c.

2,229 90
1,710 square yards existing granite block paring relaid, gravel joints, (a \$1

1,71000
9,711 square yards granite block paving recut, hatuled and laid, concrete base, sand bed and grout joints, © 83.50 .
$33.988 \quad 50$
Carried forward . . . $\$ 37,991$ s0 $\$ 27,16663$

```
    Brought forward . . $37,991 $0 $27,166 63
    9,854 square yards existing
        granite block paving
        recut and relaid, con-
        crete base, sand bed
        and grout joints, @
        $3
    538 square yards existing
        granite block paving
        relaid, grout joints, (a)
        $1.50
    590 square yards brick side-
        walks laid @ 60c.
            35400
    5,S16 square yards existing
        brick sidewalks relaid
        (a)60c.
                            3,48960
    $4,500 sidewalk bricks loaded
        and hauled from
        Charlestown Paving
        Yard, Medford street,
        at $3 per MI.
        25350
        38 covers reset a $3
        11400
        40 Bradley head catch-bas-
        ins reset (a $5
        200 00
        14700
    294 courses of brickwork
        laid (a) 50c.
            Extra work - Remove ac-
                cumulation of rubbish,
                ashes, etc., from road-
                way. The roadway has
                to be cleaned of surplus
                material before the pav-
                ing blocks can be barred
                up:
    67 hours, foreman, (a. 80c.
            5360
    650 hours' labor (4.60c. . }3900
            Plus 1.5 per cent on\(\$ 443.60\)
                            6654
    90 hours, double team, (a)$1,
                                    90 00
                                    $73,519 04
6,577 square yards old granite
        blocks bought by con-
        tractor (a4 40c.
        2,750 S0
            70,768 24
                                    $97,934 87
```

Saratoga strect, from Chelsea street to Bennington street. (Work done in 1919.)

Engineering . . . . . . . . . . \$39 12
Shirley street, from Massachusetts avenue, 400 feet southerly. (Work done in 1919.)
Engineering expense . . . . . . . . . §0 30

[^20]| Brought forward | . . | \$64 36 |  |
| :---: | :---: | :---: | :---: |
| Cement . | . . | S8 32 |  |
| Crushed stone | . . | 2928 |  |
| Gravel | . | 709 |  |
| Labor, repairing roadway | . . | 13400 |  |
| Teaming | . | 4000 |  |
| Amount paid to the Bermudez under contract: | Company, |  |  |
| 27 linear fect circular edgestone set © 35c. | $\$ 945$ |  |  |
| 894 linear feet existing edgestone reset @ 30c. | 26520 |  |  |
| 16 square yards existing granite block paving relaid, gravel ;oints, @ $\$ 1$, | 1600 |  |  |
| 37 square yards existing granite block paving relaid, gravel hase, sand bed and grout joints, @ |  |  |  |
| \$1.75 | 6475 |  |  |
| 1,774 square yards bituminous concrete binder and asphalt wearing surface furnished and laid on macadam foundation @ |  |  |  |
| \$2.11 . . . . | 3,743 14 |  |  |
| 8 square yards brick sidewalks laid (a) 60c., | 480 |  |  |
| 691 square yards existing brick sidewalks relaid (a) 50 e . | 34550 |  |  |
| 14,400 bricks loaded and hauled from South End Paving Yard, Alhany street, © |  |  |  |
| $\$ 350$ per M. | 5040 |  |  |
| 2 covers reset (a) $\$ 3$ | 600 |  |  |
| 2 Bradley head catch-basins reset © $\$ 5$ | 1000 |  |  |
| 6 courses of hrickwork laid (a) 50 c . | 300 |  |  |
| Amount paid in 1919 | $\begin{array}{r} \$ 4,52124 \\ 3,71658 \end{array}$ |  |  |
|  |  | S04 66 | \$1,167 71 |

Smith street, from Phillips strcet to Parker street. Length, 609 linear feet. Area, 1,759 square yards. Edgestone reset, asphalt pavement laid and brick sidewalks relaid. (Final payment on work done in 1919.)
Amount paid the Bermudez Company, under contract:
41 linear feet circular edgestone set @ 35c. . .
1,148 linear feet existing edge-
$\$ 1 \div 35$

## stone reset (a 30 e .

3 square yards existing granitc block paving relaid, gravel joints. (a) $\$ 1$

Brought forward
18 square yards existing granite block paving relaid, gravel base, sand bed and grout joints, © $\$ 1.75$.
1,759 square yards bituminous concrete binder and asphalt wearing surface furnished and laid on macadam foundation @ \$2.11.
222 square yards brick sidewalks laid © 60c.
789 square yards existing brick sidewalks relaid (a) 50 c .

14,400 bricks loaded and hauled from South End Paving Yard, Albany street @ $\$ 3.50$ per M.

|  |  |
| :--- | :--- |
| Amount paid in $1919 \quad$ | $\$, 682$ <br> 3 <br> 3,850 <br> 03 |

39450
$\$ 36175$

3150

$$
3,71149
$$

13320

5040

3,850 03
$\$ 83281$
$\$ 83281$
Southampton strect, from Albany street to Massachusetts avenue. (Work not started.)
Engineering . . . . . . . . $\$ 10368$
Engineering expense . . . . . . 1 S0
Summer streel, from Fort Point channel to bridge over railroad. (Work done in 1919.)
Engineering expense . . . . . . . . . $\$ 045$
Sussex street, from Hammond street to Warwick street. (Work done in 1919.)
Enginecring expense . . . . . . . . . $\$ 015$
Tremont street, from Dover street to Northampton street. Length, 3,850 linear feet. Area, 27,340 square yards. Edgestone reset, granite block pavement laid and sbeet asphalt pavement laid and artificial stone sidewalks constructed.

| Engineering | \$1,451 72 |
| :---: | :---: |
| Inspection | 1,969 24 |
| Engineering expense | 10365 |
| Edgestone | 76156 |
| Blocks, 106,770 recut granite | 6,316 00 |
| Expert services analyzing blocks, etc | 8635 |
| Labor, stonecutter | 3000 |
| Photographs |  |
| Credit: Bricks, old sidewalk | $\begin{array}{r} \$ 10,738 \quad 52 \\ 3,371 \end{array}$ |
| Carried foruard | \$7,366 |

Brought forward
Amount paid to B. E. Grant Company, under contract:
1,979 cubic yards filling furnished (a \$1
$177 \frac{1}{2}$ tons crushed stone furnished and placed (a) $\$ 1$
10 linear feet straight edgestone hatuled and set (a 50c. . . . 517 linear feet circular edgestone set (a 35) e.
8,187 linear fect existing edgestone resct © 2sc.
154 square yards existing granite block paving relaid, gravel joints, (a) $\$ 1.50$

2,172 square vards granite block paving recut, hauled and laid in dummy, concrete base and grout joints. (a) $\$ 3.75$
43 square yards granite block paring recut, hanled and laid on driveways and edgiugs, concrete base and grout joints (a $\$ 4$.
324 square yards existing granite block paving recut and relaid in brows, concrete base and grout joints @ $\$ 4$,
651 square yards existing granite block paving recut and relaid in brows of car tracks, concrete base and grout joints. @ $\$ 4$,
25,556 square yards concrete base, bituminous concrete binder and asphalt wearing surface furnished and laid (a) $\$ 3.30$
3,028 square yards bituminous wearing surface furnished and laid on macadam foundation (a) $\$ 2.50$

605 square yards existing brick sidewalks relaid (a) 35c.

128,500 bricks 1 o a ded and hauled from Massachusetts avenue lot (a) $\$ 1$ per M .

Carried forward
$\$ 1,97900$

18095

8,14500

12850
$\$ 7,366 \quad 67$

71000

500

2,292 36

23100

17200

1,29600

2,604 00

84,334 80
$7,570 \quad 00$

21175
$\$ 109,260 \quad 36$

| Brought forward ${ }^{\text {c }}$ | \$109,260 36 | \$7,366 67 |
| :---: | :---: | :---: |
| 42 covers reset © \$3 | 12600 |  |
| 87 courses of brickwork laid (a) 50 c. . | 4350 |  |
| Extra work - Make roadway safe at brows on account of change in grade in tracks: |  |  |
| Making roadway safe | 50 |  |
| Extra work - Omit the relaying of brick sidewalks and substitute the furnishing and laying of artificial stone sidewalks: |  |  |
| 95,857 square feet artificial stone sidewalks, concrete base and wearing surface furnished and laid @ 27 c . | 25,881 39 |  |
| Extra work - Remove old concrete and backfill Water Department trench opposite Hanson street: |  |  |
| $6 \frac{1}{2}$ hours, ioreman, © $\$ 1.25$, | 813 |  |
| 39 hours' labor @ 65c. | $25 \times 35$ |  |
| Plus 15 per cent on $\$ 33.48$ | 502 |  |
| 3 hours, auto truck, @ $\$ 4.37 \frac{1}{2}$ | 1313 |  |
| Extra work - Move and joint circular edgestone at Canton street and Brookline street: |  |  |
| 4 hours, edgestone setter, (a) $\$ 1.25$ | 500 |  |
| 12 hours' labor @ 65c. | 780 |  |
| Plus $15 \%$ on \$12.80 | 1.92 |  |
| Extra work - Relay existing granite block paving with grout joints in Tremont street, from Northampton street about 50 feet westerly: |  |  |
| 342 square yards existing granite block paving relaid, grout joints, @ $\$ 1.75$ | 598 \% 5 |  |
| Extra work - Remove three (3) trees and stumps: |  |  |
| 3 trees and stumps removed @ \$100 | 30000 |  |
| Carried forward . . | \$136,276 60 | \$7,366 67 |

        Extra work - Make
                roadway safe at brows
                on account of change
                in grade in tracks:
            Making roadway safe
            Extra work - Omit the
                relaying of brick side-
                walks and substitute
                the furnishing and
                laying of artificial
                stone sidewalks:
    95,857 square feet artificial
stone sidewalks, con-
crete base and wear-
ing surface furnished
and laid @ 27c.
old concrete and
backfill Water De-
partment trench op-
posite Hanson street:
$6 \frac{1}{2}$ hours, ioreman, @ $\$ 1.25$,
$25 \times 35$
502
3 hours, auto truck, @
$\$ 4.37 \frac{1}{2}$
500
12 hours' labor @ 65 c .7 80
Plus $15 \%$ on $\$ 12.80$. 1.92
Extra work - Relay
existing granite block
paving with grout
joints in Tremont
street, from North-
ampton street about
50 feet westerly:
342 square yards existing
granite block paving
relaid, grout joints, @,
$\$ 1.75$
k - Remove
three (3) trees and
stumps:
trees and stumps re-
moved @ \$100
$\$ 136,27660$

Tremont street, from Castle strect to Dover street. (Work done in 1919.) Engineering expense ..... $\$ 030$
Tremont street, from Hammond street to William Pynchon square ..... (Workdone in 1919.)
Engineering ..... $\$ 6250$
Engineering expense ..... 510
Union Park street (north side), from Washington street to Harrison avenue. Length, 446 linear feet. Area, 4,425 square feet. Artificial stone sidewalks constructed.

| Engmeering | \$1600 |  |
| :---: | :---: | :---: |
| Inspection | 7013 |  |
| Advertising | 630 |  |
| Amount paid to Joseph A. Singarella, under contract: |  |  |
| 4,425 square feet artificial stone sidewalks furnished and laid @ 27c. | 1,194 75 |  |

Warwick street, from Hammond_street to Ruggles street. (Work done in 1919.)
Engineering . . . . . . . . $\$ 1000$
Engineering expense . . . . . . 15
$\$ 1015$
Washington street, from Forest Hills to Archdale road. (Work done in 1919.)
$\$ 300$

# Washington street, Brighton, from*Market street across Tremont street. Length, 4,120 linear feet. Area, 7,402 square yards. Edgestone set and reset, granite block brows and laid bitulithic pavement and artificial stone sidewalks and driveways constructed. 



Brought forruard
Amount paid to Warren Brothers Company, under contract:

12 cubic yards rock excavation @ $\$ 5$. . $\$ 6000$
114,310 tons crushed stone furnished and placed (a) $\$ 3.30$.

37719
2,472 linear feet straight edgestone hauled, and set (a) 40 c .

98880
161 linear feet circular edgestone set © 40c.

6440
3,929 linear feet existing edgestone reset @ 30c.

1,178 70
1,518 linear feet crushed stone and concrete foundation furnished and laid@24c..

36432
631 cubic yards concrete base furnished and laid@ $\$ 9$. .
333 square yards existing granite block paving relaid, gravel joints, (a) $\$ 1$

33300
2,413 square yards granite block paving recut, . hauled and laid in dummy, sand bed and grout joints, @ $\$ 2.30$
1,243 square yards existing granite block paving recut and relaid in dummy, sand bed and grout joints, @ \$2

2,486 00
596 square yards existing granite block paving recut and relaid in brows of car tracks, sand bed, grout joints, (a) $\$ 2$

1,19200

51496
14,731 square yards bitulithic wearing surface furnished and laid on macadam foundation (a) $\$ 2.23$

32,85013

6600
63,304 square fet tartificial stone foundation furnished and placed (a) Tc .

4,431 28
Carried foruard . . . $\$ 56,04568$

Brought forward
54,676 square fect artificial stone sidewalks, concrete bas and wearing surface furnished and placed (a24c.
1,451 square feet artificial stone driveways, concrete base and wearing surface furnished and laid, (a 30c.
50 covers rest ( 18 . 3 .
5 Bradley head catchbasins reset (17 $\$ 5$
82 courses of brickwork laid @, 50c.
4 dry wells constructed
Extra work - Remove stump in sidewalk where directed and haul paving blocks from Forest Hills:
101 hours' labor (a60c.
Plus 15 per cent on $\$ 60.60$. $\dot{\text { a }}$ \$1. . . . 8 hours, auto truck, (a) $\$ 3.75$

Less 1,569 linear feet straight edgestone delivered on street by city @ 10c.
$\$ 69,95391$

15690
$\$ 69,79701$
$27,318 \quad 80$
$\$ 56,04.568 \$ 4,58691$

13,12224

435 30
15000
25 00
4100
1000

6060
909
2500
30 C 0
$\xrightarrow{-2,318} \quad 42.47821$
$\$ 47,06512$

Washington strect, from Beach street across Kineeland strect. Length, 290 linear feet. Area, 640 square yards. Edgestone set and wood block pavement laid. (Unfinished.)
$\left.\begin{array}{lllr}\text { Engineering } \\ \text { Inspection } \\ \text { Engineering expense }\end{array}\right)$

| Brought forward <br> 76 linear feet existing edgestone reset © 30c. | $\$ 585$ 2280 | \$614 46 |  |
| :---: | :---: | :---: | :---: |
| 118 cubic yards concrete base furnished and laid @ \$11, | 1,29S 00 |  |  |
| 35 square yards existing granite block paving relaid, gravel joints, © $\$ 1$. | 3500 |  |  |
| 35 square yards existing granite block paving recut and relaid, sand bed and grout joints, @ \$2.23 | 7805 |  |  |
| 112 square yards existing granite block paring relaid, grout joints, @\$1.S4 | 20608 |  |  |
| 587 square yards wood block pavement furnished and laid @ $\$ 5.19$ | 3,046 53 |  |  |
| 68 square yards existing brick sidewalks relaid @ 55c. 4 covers reset @ \$3 | $\begin{aligned} & 3740 \\ & 1200 \end{aligned}$ |  |  |
| Less 15 per cent retained | $\begin{array}{r} \$ 4,74171 \\ 711 \quad 25 \end{array}$ |  |  |
|  |  | 4,030 46 | \$4,674 92 |

Washington street, West Roxbury, from Archdale road to 75 feet south of
Corinth street. Length, 3,387 linear feet. Area, 16,559 square
yards. Edgestone set and reset, gravel sidewalk graded, 5-inch
granite block pavement laid on 6-inch concrete base each side of
track and recut blocks on 6 -inch concrete base laid in track location.
(Untıuished.)
Enginecring . . . . . . . . \$1,082 23
Inspection . . . . . . . . 1,570 34
Engineering expense . . . . . . 2025
Adrertising . . . . . . . . 675
Templets . . . . . . . . 1740
Teaming . . . . . . . . 600

Edgestone, 4,413 feet straight, 309 feet cir-
cular, 4 small corners and 1 special stone,
Expert services, analyzing, etc.
8,757 91
4500
$\$ 11,50588$
Credit: Blocks, old granite
1,668 00
$\$ 9,83788$
Amount paid to William J. Barry, under contract:

Removing trees, bushes, etc.
$\$ 10000$
13 cubic yards rock excavation (a) $\$ 5$

6500
4,363 linear feet straight edgestone set @ 30c.

1,308 90
369 linear feet circular edgestone set @ 30c.

Carried forward

Brought forward
1,397 linear fect existing edgestone reset @30c.
560 linear feet crushed stone and concrete foundation furnished and placed (a. 10c.
12,826 square yards gr a n it e block paving furnished and laid, concrete base, sand bed, grout joints, (a) $\$ 7.75$

20 square yards gran ite block paving relaid, gravel base, sand bed and grout joints, (a) $\$ 2$, 73 square yards existing brick sidewalks relaid (a) 50c.

18 covers resct ( 83 . .
1 Bradley head catchbasin reset @ \$5
5 courses of brickwork laid@50c.
3,000 square yards gravel sidewalks placed, shaped, watered and rolled, @ 30c.
Extra work - Furnish and lay granite block paving, gravel base, grout joints on apapproaches as di rected.
116 square yards granite block paving furnished and laid, gravel base and grout joints, @ $\$ 5.75$
Extra work - grade approaches to Murray Hill road and place crushed stone to back up paving at side off Washington streets street:
1 day, foreman, @ $\$ 8$
$5 \frac{1}{2}$ days' labor@ $\$ 5.60$
Plus 15 per cent on $\$ 38.80$. . .
1 day, auto truck, @ $\$ 35$,
$14 \frac{1}{2}$ tons crushed stone @ $\$ 2.75$
Extra work - Haul exeavated material to Walter street at Centre street:
4 days, auto truck, @ $\$ 35$,
Carried forward
\$1,58.5 60
$\$ 9,83788$
41910

5600

99,401 50

4000

3650
5400
500

250

90000

66700

800
3080
582 3500

3988

14000
$\$ 103,28670$
Brought forward ..... $\$ 103,29670 \quad \$ 9,837 \quad \$ 8$ ..... 88Extra work - Haui sur-plus recut blocks ofBoston Elevated Rail-way Company to Bel-grade avenue:
1 day, foreman, (a) $\$ 8$ ..... S 00 .....
$12 \frac{1}{2}$ days' labor @ $\$ 5.60$ ..... 7000Plus 15 per cent on $\$ 78$,1170
$3 \frac{1}{2}$ days, auto truck, (a) $\$ 35$, ..... 12250
Extra work - Replaceconcrete base removedby Water Service:
$3 \frac{1}{3}$ square yards concrete re- ..... -placed (a. \$2.85buried stump in edge-stone trench:
1 day's labor @. $\$ 5.60$ ..... 560
Plus 15 per cent on $\$ 5.60$, ..... 84
Extra work-Lightdummy of track loca-tion during suspensionof work by Boston Ele-vated Railway Com-pany:
$18 \frac{3}{4}$ days' labor @. $\$ 5.60$ ..... 10500
Plus 15 per cent on $\$ 105$, ..... 1575
2,650 lights, breakage and oil(a) 10 c .26500
Less 5 per cent retained,
$\$ 104,03959$ ..... 5,201 98950
Extra work - Remove
$\qquad$
-
$\qquad$,0
.

Brought forward
Worcester street, Columbus avenue to Washington street.
Amount paid to Central Construction Company, under contract:
18 cubic yards extra earth excavation (a $\$ 1.80$ $\$ 3240$
172 lincar feet straight edgestone and corncrs hauled and set (a) 35c.,
82 linear feet circular edgestone set @ 30c.

2460
3,235 linear fect existing edgestonc reset (a) 30c.

97050
38 square yards existing granite block paving relaid, gravel joints, (a) 80 c .

3040
397 square yards existing granite block paving relaid, gravel base, sand bed and grout joints, © $\$ 1.20$ :
6,915 square yards bituminous
6,915 square yards bituminous asphalt wearng surface furnished and laid, etc., @ \$2.09

14,45235
214 square yards brick sidewalks laid @ 60c. 47640

2,273 square yards existing
2,273 square yards existing (a)50c.

12840

1,136 50
8 covers reset @ $\$ 3$.

Less amount paid in 1919,
$\$ 17,33575$ $14,249 \quad 10$

Worcester square, Washington street to Harrison avenue.
23 tons crushed stone furnished, placed, etc., (a) $\$ 3.20$
$\$ 7360$
48 linear feet circular edgestone set (a)30c.

1440
1,598 linear feet existing edgestone reset © 30 c .

47940
42 square yards existing granite block paving relaid, gravel joints, (a) 80c. yards existing granite block paving relaid, gravel base, sand bed and grout joints, (a) \$1.20 : .
3,807 square yards bituminous concrete binder and asphalt wearing surface furnished and laid on macadam foundat ion (a) $\$ 2.09$

7,95t 63
Carried forward . . . $\$ 8,73763$


## STREET IMPROVEMENTS.

* Centre strect, from Forbes street to Boylston street. Length, 1,386 linear feet. Area. 3,560 square yards. Edgestone set and reset, Topeka pavement laid on macadam foundation, brick sidewalks relaid. (Unfinished.)
Engineering . . . . . . . . $\$ 62180$
Inspection . . . . . . . . 17255
Advertising . . . . . . . 365
Edgestone, 720 feet straight, 6 small corners, $\quad 1,39200$
Bricks
1500
Amount paid to Central $\dot{\text { Construction }} \dot{\mathrm{C}} \dot{\mathrm{Com}}$ -
pany, under contract:
10 cubic yards rock excavation © $\$ 6$
$\$ 6000$
$40 \frac{1}{2}$ tons crushed stone furnished, placed, watered and rolled © $\$ 3$.
689 linear feet straight edge-
stone set @ 32c.
33 linear feet circular edge-
stone set @ 35jc.
12150
22048 stone reset @30c. .
265 lincar feet crushed stone and concrete foundation furnished and placed © 30c.
$79 \quad 50$
52 square yards existing granite block paving relaid, in driveways and edgings, gravel bases, and bed and grout joints, (1) $\$ 2$
7 square vards existing granite block paving relaid in brows of car tracks gravel base, sand bed and grout joints, (a) 82.50 .

3,560 square yards Topeka wearing surface furnished and laid on maradam foundation (a) §2.35 . . . . $\$, 36600$
Carried forward . . . $\$ 9.319 \$ 3 \quad \$ 2,20500$

[^21]

La Grange street (north side), from Centre street to Landseer street. Length, 1,005 linear feet. Area, 8,950 square feet. (Work unfinished.)

Engineering

$\$ 3043$

Inspection
15723
Engineering expense . . . . . . 55
Advertising . . . . . . . . 630
Edgestone, 872 feet straight, 29 feet circular and six corners

1,781 69
Amount paid to Joseph Torlesca:
870 linear feet edgestone set (a) 27e.
$\$ 23490$
50 linear feet circular edgestone and corners set @ 27e.

1350
25 linear feet existing edgestone reset @ 27c.

675
200 linear feet crushed stone and concrete foundation furnished and placed @ 30c.

6000
50 square yards granite block paving hauled and laid, gravel joints, © \$1.35

6750
150 square yards existing granite block paving relaid, gravel joints, (a) $\$ 1$

15000
8,700 square feet artificial stone foundation furnished and placed (a) 10c.

87000
Less 15 per cent retained, $\begin{array}{r}\$ 1,40265 \\ 21040 \\ \hline\end{array}$
$\$ 3,16845$
Rand strect, repairs.
Blocks . . . . . . . $\$ 1.500$
Teaming . . . . . . . . 500
Amount paid to John T. Shea, Jr.:
375 square vards granite block paving relaid, with grout joints, (11 s2.2.) . . \$843 75
Setting 4 bases © $\$ 3$. 1200
Amount paid to B. E. Grant Company:
6.8 square yards block paring repairedat $\$ 1.5 . \quad . \quad 10210$

[^22]Proridence strect, from Columbus avenue to Church street. Length, 296 linear feet. Area, 2,575 square yards. Edgestone reset and artificial stone sidewalks constructed.
Engineering . . . . . . . . $\$ 4363$
Inspection . . . . . . . . 4137
Advertising . . . . . . . 60
Edgestone . . . . . . . 1013
Blocks . 7520
Amount paid to Joseph A. Singarella, under contract:
292 linear feet existing edgestone reset © 50 c .
$\$ 14600$
$2 \frac{1}{2}$ cubic yards concrete base furnished and laid @ $\$ 15$. 3750
52 square yards existing granite block paving taken up, cleaned, piled and relaid, sand bed and grout joints, @ $\$ 2.75$
37 square yards existing wood block paving taken up, cleaned, piled and relaid, etc., @ $\$ 2.75$.
1,460 square feet artificial stone foundation furnished and laid (a) 5c.

7300
2,575 square feet artificial stone sidewalks, concrete base and wearing surface furnished and laid, @29c.,

74675
3 covers reset @ $\$ 3$
900
— $\quad 1,25700 \quad \$ 1,43403$
St. Albans road, from Francis street to Huntington avenue. Length, 681 linear feet. Area, 2,694 square feet. Repairing artificial stone sidewalks.
Engineering . . . . . . . $\$ 1730$
Inspection . . . . . . . . 3068
Advertising . . . 630
Amount paid to Joseph A. Singarella, under contract:
2,626 square feet artificial stone sidewalks, furnished and laid, @37c.
$\$ 97162$
68 square feet artficial stone driveways, furnished and laid, © 37 c . . . 2516

STREETS CONSTRUCTED OR IN THE PROCESS OF CONSTRUCTION UNDER CHAPTER 393 OF THE ACTS OF 1906, AND THE COST CHARGED TO THE APPROPRIATION FOR HIGHWAYS, MAKING OF.
Albeny stret from Broadway to 75 feet south of Troy street. Length, 821 linear feet. Area, 5,340 square yards. Edgestone reset, granite block paving laid on concrete base, grout joints. Widened. (Unfinished.)
$\left.\begin{array}{llrl}\text { Enginecring } \\ \text { Inspection } \\ \text { Engineering expense } \\ \text { Tenplets } \\ \text { Edgestone }\end{array}\right)$

Allenwood street, from Anawan avenue to Pelton street. (Work not started.)


Arbutus street, from Blue Hill avenue to Irma street. Contract made with Martino DeMatteo for construction, but payment not made on contract.
Enginecring . . . . . . . $\$ 15570$
Inspection . . . . . . . . 6302
Engineering expense . . . . . 250
Advertising . . . . . . . . 880
Edgestone 1.259 feet straight and 2 small corners . . . . . . . . 2.38443

| Archdale road, from Washington street to South street. (Work not started.) |  |  |  |
| :---: | :---: | :---: | :---: |
| Engineering |  | \$81 04 |  |
| Engincering expense |  | 100 |  |
| Advertising |  | 420 |  |
| Augustus avenue, from Metropolitan avenue to Ethel street. (Work done in 1917.) |  |  |  |
| Final payment on contract with Martino $\$ 3572$ |  |  |  |
|  |  |  |  |
| Babcock strect, from Commonwealth avenue to Boston \& Albany Railroad. Length, 953 linear feet. Area, 4,082 square yards. Edgestone set, Topeka pavement laid and artificial stone sidewalks constructed. (Unfinished.) |  |  |  |
| Engineering |  | $\$ 52041$ |  |
| Inspection |  | 61393 |  |
| Engineering expense |  | 2530 |  |
| Advertising |  | 545 |  |
| Templets $\dot{\text { Edgestone, }} 1,393$ feet 6 inches straight, $12 \times 3364$ |  |  |  |
| Edgestone, 1,393 feet 6 inches large corners and 42 feet circu | straight, 12 | 2,857 58 |  |
| Blocks, 2,400 recut granite |  | 14400 |  |
| Labor, stonecutter |  | 1000 |  |
| Teaming |  | 3850 |  |
| Labor on roadway . . . . . . 2300 |  |  |  |
| Amount paid to Wilson \& Tomlinson forartificial stone sidewalks 20508 |  |  |  |
| Amount paid to Rowe Contracting Company, under contract. |  |  |  |
| $\begin{gathered}2,328 \text { cubic yards earth excava- } \\ \text { tion @ } \$ 1.90\end{gathered} \$ 4,42320$ |  |  |  |
| 1,389 linear feet straight edge-stone set @ 40c. . $\quad 55560$ |  |  |  |
| 148 linear feet circular edgestone and corners set |  |  |  |
| 460 cubic yards concrete base furnished and laid (a) |  |  |  |
| \$12 . . . . 5,520 00 |  |  |  |
| 49 square yards granite block paving hauled and laid in brows and dummy of car tracks, sand bed, grout joints, (a) $\$ 2.25$ | 11025 |  |  |
| 10 square yards granite block paving hauled and laid in edgings, sand bed and grout joints, @ $\$ 2.75$. | 2750 |  |  |
| 4,082 square yards Topeka wearing surface furnished and laid @ $\$ 2.10$ | 8,572 20 |  |  |
| 13,000 squarefeet artificialstone foundation furnished and placed © 2c. | 26000 |  |  |
| Carried forward | \$19,535 35 | \$4,476 \$9 |  |


| Brought forward <br> 2 covers reset @ \$3 | $\begin{array}{r} \$ 19,53535 \\ 600 \end{array}$ | \$4,476 89 |  |
| :---: | :---: | :---: | :---: |
| Less 15 per cent retained, | $\begin{array}{r} \$ 19,54135 \\ 2,93120 \end{array}$ | $\stackrel{16,61015}{\square} \$ 21,08704$ |  |
|  |  |  |  |



* Beech street, from West Roxbury parkway to Belgrade avenue. Length, 158 linear feet. Area, 700 square yards. Edgestone set and reset, foundation placed for artificial stone sidewalks and Topeka pavement laid. (Unfinished.)
Amount paid to Rowe Contracting Company, under contract:
200 cubie yards earth excavation @ $\$ 1.90$. . $\$ 38000$
260 linear feet straight edgestone set @ 30c.

7800
15 linear feet circular edgestone set @ 30c.

450
26 linear feet existing edgestone reset © 30 c . 670 square yards concrete base face furnished and laid (a) $\$ 4.20$

2,81400
2,500 square feet artificial stone foundation furnished and placed © 8c. .

$$
20000
$$

$\$ 3,48430$
Less 15 per cent retained, 52265
$\dagger$ Belgrade avenue, from Anawan avenue to Centre street. Length, 1,303 linear feet. Area, 6.575 square yards. Edgestone set and reset, Topeka pavement laid on six (6) inch concrete base and on macadam base. granite block laid in track location and artificial stone sidewalks constructed. (Unfinished.)
Amount paid to Rowe Contracting Company, under contract:
1,000 cubic yards earth excavation @ $\$ 1.90$. . $\$ 1,90000$

Carried forward

$$
\overline{\$ 1,900 \quad 00} \quad \overline{\$ 10,219 \quad 97}
$$

[^23]```
    Brought forurard
1,645 linear feet straight edge-
    stone set (a 30c.
    354 linear feet circular edge-
                stone and corners set
                (a)30c.
    20 lincar feet existing edge-
        stone res t (a,30r
    140 square yards gramite
                block pavement, con-
                crete base, samd bed
                and grout joints, fur-
                nished and laid (a)
        $8.50
            ,190 00
    18 square yards existing
        granite block pave-
        ment relaid in drive-
        ways and edgings, con-
        crete base. sand bed,
        grout joints, (a) $4
        uare yards concrete
            base and topeka wear-
        ing surface furnished
        and laid (a $4.20
18,700 square feet artificial stone
        foundation furnished
        and placed (a Sc
16,750 square feet artificial stone
        sidewalks, conerete
        base and wearing sur-
        face furnished and laid
        (a 27}\textrm{c
    245 square feet artificial stone
        driveways, concrete
        base and wearing sur-
        face furnished and laid
        (a)30c.
        Extra work - Excavate
        track area where di-
        rected in Belgrade
        avenue, between Bel-
        grade street and Ana-
        wan avenue.
    200 cubic yards earth exea-
        vation (a $2.50 . .
        Extra work -- Reset
            edgestone and relay
            gutters where neces-
        sary, lay hrows to
        strect car tracks and
        lay topeka pavement
        on macadam base from
        100 feet east of Bel-
        grade strect across
        Anawan avenue.
    4 0 0 ~ l i n e a r ~ f e c t ~ e x i s t i n g ~ e d g e .
        stone reset (a 30c.
    350 square yards existing
        granite block paving re-
        laid, gravel joints, (a)
        81.2.)
        120 00
        137 50
\(\$ 1,900 \quad 00 \quad \$ 10,21997\)
49350

10620
600

1,19000

7200

15,33000

1,49600

4,522 50

7350

50000

12000
\(437 \quad 50\)
\(\begin{array}{llll}\$ 26,247 & 20 & \$ 10,219 & 97\end{array}\)
\begin{tabular}{|c|c|c|}
\hline Brought forwerd & \$26,247 20 & \$10,219 97 \\
\hline 100 square yards existing granite book paving relaid, gravel hase, sand hed, and grout joints, (a \(\$ 2\) & 20000 & \\
\hline \multicolumn{3}{|l|}{wearing surface furnished and laid on existing. macadam foundation (a) \(\$ 2.30\)} \\
\hline & & \\
\hline Less 15 per cent retained, & \[
\begin{array}{r}
\$ 30,357 \\
4,553 \\
\hline, 58
\end{array}
\] & \\
\hline \multicolumn{3}{|l|}{Amount paid to West Roxbury Trap Rock Company, under contract:} \\
\hline \multicolumn{3}{|l|}{\(\begin{aligned} & \text { Removing trees, bushes, } \\ & \text { ete. }\end{aligned} \$ 1,20000\)} \\
\hline \multicolumn{3}{|l|}{16,066 cubic yards filling furnished and placed (a)} \\
\hline Less amount paid in 1919 & \[
\begin{array}{r}
\$ 16,94468 \\
14,40298
\end{array}
\] & \\
\hline \multicolumn{3}{|l|}{Amount paid to West Roxbury Trap Rock Company, under contract:} \\
\hline \multicolumn{3}{|l|}{Building Belgrade avenue bridge.
Contract price} \\
\hline Less amount paid in 1919 & 36,605 25 & \\
\hline \multicolumn{3}{|l|}{Building two walls and laying drain pipe at bridge. Labor and materials} \\
\hline bridge. Labor and materials &  & 20668 * \({ }^{* 5,66672}\) \\
\hline \multicolumn{3}{|l|}{Bellista road, from Allston street to Brookline line. (Work done in 1919.)} \\
\hline \multicolumn{3}{|l|}{Engineering expense . . . . . . . . . \(\$ 030\)} \\
\hline \multicolumn{3}{|l|}{Boylston street (westerly side), from Tremont street to Charles street. Length, 728 linear feet. Area, 1,115 square yards. Edgestone reset, roadway widened and wood block pavement laid.} \\
\hline \multicolumn{3}{|l|}{Engineering . . . . . . . . \$29394} \\
\hline Inspection expense . . . . . 000 & & 600 \\
\hline Inspection & & 9423 \\
\hline \multicolumn{3}{|l|}{Advertising . . . . . . . . 510} \\
\hline Edgestone & & 1200 \\
\hline \multicolumn{3}{|l|}{\multirow[t]{2}{*}{Expert services, analyzing blocks, etc. . . 9860 Amount paid to James Doherty, under contract:}} \\
\hline & & \\
\hline \multicolumn{3}{|l|}{\(28 \frac{1}{2}\) square yards existing concrete base excavated and removed © 85c.} \\
\hline \multicolumn{3}{|l|}{\begin{tabular}{l}
35 square yards existing concrete base chipped and \\
removed © \$1
\end{tabular}} \\
\hline Carried foruard & 85923 & 8:09 87 \\
\hline
\end{tabular}

\footnotetext{
* \(\$ 9,963.06\) of this amount charged to special appropriation for Belgrade avenue extension and Beech street widening.
}


Breck avenue, from Washington street to Langley road. (Work done in in 1917.)
Final payment under contract with Martino DeMatteo, for work done in 1917
\(\$ 3572\)

Buckminster strect, from Commonwealth avenue to Allston Street Playground. Length, 500 linear feet. Area, 1,524 square yards. Edgestone set, Topeka pavement laid and artificial stone sidewalks constructed. (Work done in 1919.)
Enginecring . . . . . . . . \$12 50
Engineering expense 30
Final payment on contract with Dominick Vozzella Company, under contract, for work done in 1919

1,008 20
\(\$ 1,02100\)
Burlington avenue, from Brookline avenue 500 feet northwesterly. (Work done in 1919.)
Engineering expense
\(\$ 045\)

Brenton strett, from Glenway street to Greenwood street. (Work not started.)
\begin{tabular}{llllll} 
Engineering &. &. &. &. & 800 \\
Engineering expense \\
Advertising . &. &. &. &. &. \\
90 \\
\hline
\end{tabular}
\(\$ 6950\)
Broadway, at southeast corner of Washington street. Corner widened and driveway built of granite, blocks on concrete base with grout joints and edgestone set. Area, paved and repaved, 211 square yards.
\begin{tabular}{|c|c|}
\hline Labor, roadway excavating & \$303 68 \\
\hline Labor, roadway paving & 202 \\
\hline Labor, concrete base laid & 11912 \\
\hline Labor, grouting & 5823 \\
\hline Labor, concrete wall exeavating & \\
\hline Labor, edgestone excavating & 18512 \\
\hline Labor, edgestone setting & \\
\hline Crushed stone, 37.875 tons & \\
\hline Granite blocks, reeut, 3.750 & 22500 \\
\hline Granite blocks, old, 1,875 & 5625 \\
\hline Sand, 38 cubie yards & \\
\hline Cement, 126 bags & 12285 \\
\hline Granite flagging, 8 feet & 320 \\
\hline Edgestone, eircular, 52 feet \(11 \frac{1}{2}\) inches & 14087 \\
\hline Edgestone, straight, 6 feet & \\
\hline Edgestone corners, 2 special, 13 feet \(2 \frac{1}{2}\) inches, & 3200 \\
\hline Teaming & 17810 \\
\hline
\end{tabular}

Canterbury street, at the intersection of Walk Hill street. Edgestone set, roadway excavated, asphalt macadam roadway to be built. (Work unfinished.)
Engineering . . . . . . . . \(\$ 5888\)
Advertising . . . . . . . . 160
Labor, edgestone excavating . . . . 16546
Labor, edgestone setting . . . . . 14797
Labor, roadway excavating . . . . 58229
Labor, roadway surfacing . . . . . 11636
Labor, roadway filling . . . . . \(22: 358\)
Labor, sidewalk surfaeing . . . . . 2700
Labor, on fence . . . . . . . 8000
Sand . . . . . . . . . 348
Gravel, 410 cubie yards . . . . . 61092
Edgestone, 336 feet eircular and 16 feet 90651
straight
Teaming . . . . . . . . 17900
Crossing blocks . . . . . . . 1000
\$3,113 05
Cameror street, from Hancock street to 538 feet westerly. Length, 538 linear feet. Area, 1,550 square yards. Edgestone set, asphalt pavement laid and artificial stone sidewalks constructed. (Work done in 1919.)

Cost of work done under contract with MeGuire \& MeGurty, Ine., in 1919
\(\$ 4,97720\)
Less amount paid in 1919 . . \(\$ 4,0 \mathrm{~S} 6 \mathrm{SS}\)
Less amount retained . . 10000

Caspian way, from Savin Hill avenue 520 fect easterly.
Final payment under contract with Martino DeMatteo for work done in 1917
\(\$ 3571\)

Castleton strect, from South Huntington avenue to Jamaicaway. (Work not started.)

* Centre strect, from South street to Spring street. Length, 6,331 linear feet. Area, 42,188 square yards. Grading, edgestone set and reset, Topeka pavement laid and artificial stone sidewalks constructed. (Unfinished.)
Engineering
Inspection . . 1,602 92
Engineering expense . . . . . . 6175
Advertising . . . . . . . 956
Templets . . . . . . . . 1000
Edgestone, 6,682 feet straight, 710 feet circular, 49 small and 2 large corners and 3 special st nes

14,671 42
Lumber and nails . . . . . . . 910
Expert services analysing materials, etc. . 1200
Teaming
30069
Labor, plank walks . . . . . 24468
Labor, temporary crosswalk . . . . 20601
Labor, handling stock . . . . 18846
Amount paid to Antony Cefalo, under contract:

Removing trees, bushes, etc. . . . . \(\$ 80000\)
\(3,16 \pm\) cubic yards earth and rock excavation (a) \(\$ 2.75\). . 8,701 00
Extra work - Make necessary excavation to lower house services of Water Service where cut is being made:
\(7 \frac{5}{8}\) days, foreman, (a' \(\$ 8\). 6100
\(7 \frac{5}{8}\) days, timekeeper, (a) 3660
\(7 \frac{5}{8}\) days, blacksmith, (a) \(\$ 5.60\). 4270
75 days' labor (a. \(\$ 5.60\). 42000
Plus 15 per cent on \(\$ 560.30\).
Extra work - Lay temporary drain to spring as directed:
18 hours' labor @ 70c. . 1260
Plus 15 per cent on \(\$ 12.60\). . . 189
22 linear feet 6 -inch drain pipe laid (a36c. . 792
Carried forward . . . \(\$ 10,167 \quad 76 \quad \$ 19,046 \quad 84\)

\footnotetext{
* Done in connection with Beech street and Belgrade avenue.
}
```

Brought forvard
\$10,167 7% \$19,046 84
Extra work-pjace
surphus material from
sewer excavation in
rellar holes as di-
rected:
5i) cubic vards material
placed in cellar holes
(a, %).
41 2.5
Extra Work-E x c:ו-
vatu tust pits at old
wall at railroad bridge:
4! hours, foreman, ( \$ \$1 . \& %0
22 hours' labor (" 70e. 1.540
Plus 15per cent on \$19.30
249
\$10,231 \&ऽ
6,409 00
Amomm paid in 1919
Work completed August 16, 1920.
Amount paid to West Roxbury Trap Com-
pany, under contract:
R Rembving trees, bushes, \$700 00
Removing trees, bushes, \$700 00
2,642 cubic yards earth exca-
ration (a \$1.35 . . 3,566 70
\$4,266 70
Amount paid in 1919
3,626 69
3,822 90
-W4001
Amount paid Rowe Contracting Company,
under contract:
Removing tree, bushes,
etc.
\$12,020 00
5,500 cubic yards earth exca-
vation (a \$1.90 . .
10.450 00
300 tons crushed stone fur-
nished. placed, watered
and rolled (a \$3
900 00
5,450 linear feet straight edge-
stone set (a 30c.
1,63500
500 linear feet circular edge-
stone and corners set
(a 30c.
15000
1,900 linear feet existing edge-
stone reset (a 30c.
570 00
2,500 linear feet crushed stone
and concrete founda-tion furnished andplaced (at 30c.75000
30 square yards existing granite block paving relaid. gravel joints, (a 81.2 )3750
25 scuare yards existing granite block paving relaid. gravel hase, sand bed, gront joints, (a) $\$ 2$
5000
Carried forurard
$\$ 26,562 \quad 00 \quad \$ 23,50975$

```

\(\dagger\) 1最100,105 63
Centre street, from Allandale street to South street. For details see under streets charged to reconstructing and repairing streets by contract.
Engineering . . . . . . . . \$416 41
Inspection . . . . . . . . 15340
Engineering expense . . . . . . 2360
Advertising . . . . . . . 206
Edgestone, 384 feet straight and 6 feet circular, \(\quad 74169\)
Amount paid to Bermudez Company, under contract
\(\ddagger 8,05337\)
\(\ddagger \$ 9,390 \quad 53\)
Charles street, from Beacon street to Cambridge street. To be widened. (Construction not started.)
Engineering . . . . . . . . \(\$ 28238\)
Engineering expense . . . . . . 100
Advertising . . . . . . . . 170
Teaming . . . . . . . . 6000
Edgestone . . . . . . . . 8707

\footnotetext{
* Done in connection with Beech strect and Belgrade avenue.
\(\dagger \$ 25,000\) of this amount charged to appropriation for reconstructing and repairing streets by contract.
\(\ddagger\) All money retained under contract deducted from charge to reconstructing and repairing strects by contract.
}
\begin{tabular}{|c|c|c|}
\hline Chelsea street, from Foss street to Adams street unfinished. Continued from 1919.) 101 square yards block paving relaid, 126 sq sidewalks constructed. & Strect widen et edgestone e yards art & d. (Work reset, 183 icial stone \\
\hline Engineering & \$144 89 & \\
\hline Engineering expense & & \\
\hline Labor, edgestone excavation & 13795 & \\
\hline Labor, edgestone setting & 7756 & \\
\hline Labor, sidewalk excavating & 4511 & \\
\hline Labor, roadway excavating & 11234 & \\
\hline Labor, roadway paving & 11234 & \\
\hline Labor, constructing artificial stone sidewalk & 9522 & \\
\hline Teaming & 26200 & \\
\hline Lumber & 288 & \\
\hline Edgestone . & 50.7 & \\
\hline Blocks, recut granite, 3,92.5 & 23550 & \\
\hline Sand & 10320 & \\
\hline Cement & * 3312 & \\
\hline Crushed stone & 7202 & \\
\hline & \$1,48.5 50 & \\
\hline Cement bags returned & 6900 & \\
\hline
\end{tabular}

Chestrut Hill avenue, from Commonwealth avenue to Beacon Park side. (Work not started.)
Engineering . . . . . . . . \(\$ 6000\)

Clarendon street, from Stuart street to Columbus avenue. To be extended and bridge constructed over railroad tracks.


Amount paid to Coleman Brothers, under contract:
Removal of concrete and steel structure over New York, New Haven \& Hartford Railroad on Clarendon street. Contract price,

4,30000
\(\$ 54,68961\)

\footnotetext{
* Cement furnished not paid for until 1921.
}
```

Cornell street, from Orange street to Colberg avenue. (Work done in 1917.)
Final payment under contract with Martino DeMatteo for
work done in }191$\$ 3572$Cummington strec: from Commonwealth avenue to Boston \& AlbanyRailroad. Length. $26 \mathrm{~s}^{\mathrm{s}}$ linear feet. Area, 1,010 square yards.(Work started, but no payments made under contract.)

```
Engineering ..... \(\$ 8807\)
Advertising ..... 375
```Eigestone, 155 feet straght, 19 feet eircular,7 small cornets39905
```

Templets ..... 15) 00
Cushman road, from Dustin street to Gleneo street. Length, 945 linear feet. Area, $2, \$ 20$ square yards. Subgraded, edgestone set, sheet asphalt pavement laid on four (4) inch concrete base and artificial stone sidewalks constructed. (Unfinished.)
Engineering . . . . . . $\$ 35307$
lnspection . . . . . . . . 10226
Engineering expense . . . . 330
Advertising . . . . . . 1113
Edgestone, 1,214 feet straight. 85 feet circular', 10 small corners
2,631 22
Templets
2000
A mount paid to John J. Lane, under contract: 120 cubie yards earth excavation @ $\$ \$ 2.25$
$\$ 2,72025$
4 cubie yards rock excavation (a. $\$ 12$
4S 00
1,202 linear feet straight edgestone set (a 30c. 36060
S0 linear feet cireular edgestone set © 35 F .2800
7 square yards existing granite block paving relaid, conerete base, sand bed and grout joints, (a) \$4.50
1,996 square yards concrete base, bituminous concrete binder and asphalt wearing surface furnished and laid (a. \$4.17. .
7,646 square feet artificial stone foundation furnished and placed (a Se.
61168
7,003 square feet artificial stone sidewalks, concrete base and wearing surface furnished and laid, (a)2sc.
252 square feet artificial stome driveways, conerete base and wearing surface furnished and laid (a) 35 c .
SS 20
8 covers reset © . $\$ 3.2400$
Less 15 per cent retained, $\begin{array}{r}\$ 14,19639 \\ 2,12946\end{array}$

Downer avenue, from DeWolf street to siwser avenuc. (Work done in 1917.)

Final payment on contract with Martino DeMafteo for work done in 1917
$\$ 3571$
East Fourth street, at northeast corner of K street. (Widened.) Circular edgestone set, wood block paving laid and granite block paving relaid.

| Engineering |  | \$22 67 |
| :---: | :---: | :---: |
| Labor, edgestone excavating |  | 3561 |
| Labor, edgestone setting . |  | 3775 |
| Labor, brick sidewalk relaid |  | 2150 |
| Labor, artificial stone sidewalk | constructed | 1250 |
| Labor, wood block paving |  | 1500 |
| Labor, roadway excavating | - . | 2906 |
| Labor, roadway paving | . . | 2064 |
| Labor, concrete base | . . . | 4480 |
| Teaming | . . | 11850 |
| Sand | . . | 2371 |
| Cement | . . | 195 |
| Lumber | . . | 372 |
| Bricks |  | 600 |
| Crushed stone |  | 3140 |
| Edgestone, circular | . . | 13566 |

Easton street, from North Harvard street to Mansfield strect. Length, 974 linear feet. Area, 2,924 square yards. Edgestone set, sheet asphalt pavement laid and artificial stone sidewalks constructed.

| Engineering |  | \$462 04 |
| :---: | :---: | :---: |
| Inspection |  | 12895 |
| Engineering expense |  | 1495 |
| Advertising |  | 364 |
| Templets |  | 2504 |
| Edgestone, 1,644 feet straight, corners and 29 feet circular | 18 small | 3,327 71 |
| Teaming |  | 00 |
| Amount paid to John J. Lane, under contract: |  |  |
| 1,673 cubic yards earth excava- tion (ac $\$ 2.25$ | \$3,764 25 |  |
| 3 cubic yards rock excaration @ $\$ 12$. | 3600 |  |
| 1,549 linear feet straight edgestone set (a30c. | 46470 |  |
| 89 linear feet circular edgestone set (a 35c. | 3115 |  |
| 114 linear feet existing edgestone reset (a 40c. | 4560 |  |
| 65 square yards existing granite block paving relaid, gravel joints, ( ${ }^{\text {a }}$ $\$ 1.25$ | S1 2.5 |  |
| 7 square yards existing granite block paving relaid, concrete base, sand bed and grout joints, ( $C$, $\$ 4.50$ | 3150 |  |
| Carried foruard | \$4,454 45 | \$3,966 33 |

```
    Brought forward . . . $4,454 45 $3,966 33
    2,687 square yards concrete
        base, bituminous con-
        crete binder and as-
        phalt wearing surface
        furnished and laid (a)
        $4.17 . . . .
    237 square yards bituminous
        wearing surface fur-
        nished and laid on
        macadam foundation
        (a)}$2.7
        65175
11,432 square feet artificial stone
        foundation furnished
        and placed @ 8c.
        91456
10,390 square feet artificial stone
        sidewalks, concrete
        hase and wearing sur-
        face furn'shed and laid
        (a) 28c.
            2,909 20
    543 square feet artificial stone
        driveways, concrete
        base and wearing sur-
        face furnished and laid
        (a) 35c.
        190 05
        9 covers reset @ $3
        2700
    1 \text { Bradley head catch-basin}
        reset @ $5 .
        500
        11 courses of brickwork laid
        (a) 50c.
        550
        $20,362 30
        3,054 34
        17,307 96
                            $21,274 29
```

Elder street, from Columbia road to Humphreys street. Length, 847 linear feet. Area, 2,484 square yards. Edgestone set, Topeka pavement laid and artificial stone sidewalks constructed.

| Engineering |  | \$290 21 |
| :---: | :---: | :---: |
| Inspection |  | 2392 |
| Engineering expense |  | 480 |
| Advertising |  | 60 |
| Templets |  | 2004 |
| Edgestone, 591 feet straight, 18 and 6 small corners | eet circular | 1,058 98 |
| Teaming |  | 400 |
| Amount paid to Central Const pany, under contract: 600 cubic yards earth excavation (a) \$1.50 | ction Com- $1,08000$ |  |
| 590 linear feet straight edgestone set (a 30c. | 17700 |  |
| 130 linear feet circular edge- stone set (a $3 \overline{5}$. | 4550 |  |
| 67 linear fcet existing edgestone reset (a) 35 c . | 2345 |  |
| Carried foruard | \$1,325 95 | \$1,620 91 |

```
    Brought forward . . . $1,325 95 $1,620 91
        4 square yards existing
            granite block paving
            relaid in edgngs, con-
            crete base, sand bed and
            grout joints,@@4
                            1 6 0 0
2,533 square yards concrete base
        and Topek:a wearing
        surface furnished and
        laid (a) $3.70 . . .
4,557 square feet artificial stone
        sidewalks, concrete base
        and wearing surface
        furnished and laid @
        24c.
            1,093 68
    470 square feet artificial stone
        driveways, concrete
        base and wearing sur-
        face furnished and laid
        (a) 30c.
    14100
        23 linear feet curb furnished
        and laid @ $1.70
        3910
        Less 15 per cent retained,}\begin{array}{r}{$11,987 1,798 17 % N}
        $11,810 57
```

Falkland terrace, from Hobart street to Brooksdale road. Length, 662
linear feet. Area, 1,949 square yards. Graded, edgestone set,
Topeka pavement laid and artificial stone sidewalks constructed.

Engineering
$\$ 23743$
Inspection
10427
Engineering expense
165
Templets
1504
Edgestone, 1,272 feet straight, 46 feet 7 inches circular, 79 special stones

2,727 56
Teaming
400
Blocks
1200
Amount paid to John J. Lane, under contract:
Removing trees, bushes, etc., . $\$ 1000$
1,251 cubic yards earth excavation @ $\$ 2.25$

2,814 75
13 cubic yards rock excavation (a) $\$ 10$

13000
1,198 linear feet straight edgestone set @ 30c.

35940
128 linear feet circular edgestone and corners set @ 35 c.

4480
667 linear feet erushed stone and concrete foundation furnished and placed @ 40 e.

266 s 0
$13 \frac{1}{2}$ square yards granite block paving hauled and laid, concrete base, sand bed and grout ioints @ \$4.50

Carricd forward . . . $\$ 3,68650 \quad \$ 3,10195$


Farquhar strect, from Selwyn strect to Centre street. Length, 938 linear fect. Area, 2,710 square yards. Edgestone set, Topeka pavement laid and artificial stone sidewalks constructed.
Engineering . . . . . . . . $\$ 51664$
Inspection . . . . . . . . 25312
Engineering expense . . . . . . S 60
Curried forward
$\$ 77836$

Brought foruard
$\$ 77836$
Advertising . . . . . . . . 420
Templets
1384
Edgestone, 1,684 feet straight, 25 feet circular. 18 small corners
3.339 33

Teaming
200
Amount paid to Martino DeMatteo, under contract:
Removing trees, bushes, etc. . 89500
1,000 cubie yards earth excavation ( 1 \$ $\$ 1.60$. . 1,60000
1,664 linear feet straight elgestone set (a 27 e.

44925
83 linear feet circular edgestone set (a)30c.

2490
2,620 square yards concrete base and Topeka wearing surface furnished and laid (a) $\$ 3.60$

9,432 00
100 square yards bituminous
wearing surface furnished and laid on macadam foundation (a) 82.10

21000
11,360 square feet artficial stone foundation furnished and placed © 10c.

1,136 00
10,500 square feet artificial stone sidewalks, concrete base and wearing surface furnished and laid, @22e.

2,31000
530 square feet artificial stone driveways, concrete base and wearing surface furnished and laid, (a) 50c.

265 C0
Extra work-Haul straight edgestone and corners from South End Yard, Albany street.
1,722 linear feet straight edgestone hauled from south End Yard, Albany strect, (a) 15 c .
Less 15 per cent retained,

| $\$ 15,78048$ |
| ---: |
| $2,367 \quad 07$ |

Glenville avenue, from Creylock road to Allston street. Length, 1,009 linear fect Area, 3,095 square yards. Edgestone set and reset, sheet asphalt pavement laid and artificial stone sidewalks constructed.
Engineering
Inspection
Engineering expense

## Advertising

194
Templets
Edgestone, 1,715 feet straight, 75 feet circular, 4 small corners.

3,462 95
Labor, handling stock 50
Teaming
Amount paid to John J. Lane, under contract:

1,228 cubic yards earth excavation (a) 82.25
7 cubic y:rrls rock excavation @ \$12
\$2,763 00
S4 00
1,277 linear feet straight edgestone set @ 30c.
504 linear feet circular edgestone set @ 35c.

38310
17640
2750
69 linear feet existing edgestone reset @ 40c.
2 square yards existing granite block pav.ng relaid, gravel joints, @ \$1.25.
$10 \frac{1}{2}$ square yards existing granite block paving relaid, granite base, sand bed, grout joints, @ $\$ 4.50$

4725
2,820 square yards concrete base, bituminous concrete binder and asphalt wearing surface furnish d and laid @ \$4.17,

11,75940
275 square yards bituminous wearing surface furnished and laid on macadam foundation (a) $\$ 2.75$
9,199 square feet artificial stone foundation furnished and placed @ Sc.

73592
8,875 square feet artificial stone sdewalks, concrete base and wearing surface furnished and laid, @ 2Sc.

2,485 00
80 square feet artificial stone driveways, conerete base and wearing surface furnished and laid, (a) 35c.

2800
 laid © 50c.

450

15 per cent retained . | $\$ 19,30692$ |
| ---: |
| 2,89604 |

Granada avenue, from Metropolitan avenue to Ethel street. (Work donein 1917.)
Final payment under contract with Martino De.Matteo forwork done in 1917$\$ 3572$

* Greenview avenue, from Centre street to 415 feet southerly. (Work donein 1919.)
Cost of work done in 1919 under contract with John KellyCompany . . . . . . . \$3,185 69Amount paid in 1919 . . . . . . 2,707 83$\$ 47786$
Grosvenor place, from Cliff street southwesterly, southerly and south-westerly. Length, 2S1 linear feet. Area, 399 square yards. Edge-stone set, granite block pavement laid, retaining wall and fence con-structed and artificial stone sidewalks constructed.

Engineering
$\$ 25329$
Inspection24034
Engineering expense ..... 1125
Advertising ..... 650
Edgestone, 275 feet, 4 inches straight, 25 feet circular and 4 special ..... 60139
Blocks, 15,810 old granite ..... 47850
Amount paid to Joscph A. Singarella undercontract:
Removing trees, bushes, etc. ..... $\$ 1000$
200 cubic yards earth excavation (a) $\$ 3$ ..... 60000
5 cubic yards rock excavation (a) $\$ 10$ ..... 5000
275 linear feet straight edge-stone set @ 45c.12375
52 linear feet circular edge- stone set @ 45c. ..... 2340
160 linear feet existing edgestone reset @ 40c. ..... 6400
49 linear feet concrete backing for edgestone furnished and placed @ 60c. ..... 2940
7 square yards existing granite block paving relaid, gravel joints, @ \$1 ..... 700
380 square yards granite blockpaving hauled and laid,gravel base, sand bed andgrout joints, @ $\$ 3$1,140 00
3 square yards existing bricksidewalks relaid (a) $\$ 1$300
820 square feet artificial stonefoundation furnished andplaced @. 5c.4100
820 square feet artificial stonesidewalks, concrete base,wearing surface furmishedand laid @ 30c.24600
4 covers reset (2. 8 ..... 1200
Building wall and fence ..... $1,200 \quad 00$ ..... $\$ 3,5495.5$Less 15 per cent retained,53243
Halifax street, from South Huntington avenue to Pond View avenue.

| (Work not started.) |
| :---: |


| Engincering |
| :---: |
| Advertising |

Hamlin strect, from East Eighth street to Columbia road. Length, 266 linear feet. Area, 772 square yards. Edgestone set, topeka pavement laid and artificial stone sidewalks constructed.
Engincering . . . . . . . . \$192 57
Inspection . . . . . . . . 19408
Engineering expense . . . . . . 160
Advertising . . . . . . . . 700
Templets . . . . . . 1384
Edgestone, 455 feet straight, 19 feet circular
and 3 small corners
Bricks . . . . . . . . . 375
Teaming . . . . . . . . 400
Amount paid to John T. Shea, Jr., under contract:

Removing trees, bushes, etc.
$\$ 1000$
213 cubic yards earth excavation @ $\$ 2.50$.

53250
6 cubic yards extra earth excavation @ \$3

1800
448 linear feet straight edgestone set (a) 40c.

17920
29 linear feet circular edgestone set @ 45c.

1305
65 linear fect existing edgestone reset @ 45c.

2925
65 square yards existing granite block paving relaid, gravel joints, @ \$1,
8 square yards existing granite block paving relaid, gravel base, grout joints (a) $\$ 3.75$

3000
772 square yards concrete base and topeka wearing surface furnished and laid (a) 4.35 .

51 square yards bituminous wearing surface furnished and laid on macadam foundation @ 82.75

14025
35 square yards existing brick

Carried forurerd
sidewalks relaid, (a. \$1
3,254 square feet artificial stone
foundation furnished
3,254 square feet artificial stone
foundation furnished and placed (a, Sc. . 3,019 square feet artificial stone
sidewalks, concrete base and wearing surface furnished and laid © 30c.

3500

90570

Brought forward
235 square feet artificial stone driveways, concrete base and wearing surface furnished and laid (a) 35 e .

5 covers reset @ $\$ 3$
Extra work - Haul sidewalk bricks and corners for new driveways from South Boston Paving Yard.
20 hours' labor (ai 70 c .
Plus 15 per cent on $\$ 14$
$\$ 5,57647 \quad \$ 1,34669$

8225
1500

1400
210

$$
5,689 \quad 82
$$

$\$ 7,036 \quad 51$
Hampstead road, from Arborway to 992 feet northwesterly. (Work done in 1919.)
Cost of work done under contract with John
Kelly Company in 1919 . $\$ 14,55482$
Amount paid in 1919 . . . . . . 12,371 60
\$2,183 22
Harrard street, from Fabyan street to beyond Brookview street. Length 6.52 linear feet. Area, 2,452 square yards. Edgestone set, Topeka pavement laid, brick sidewalks laid on west side and artificial stone sidewalks constructed on west side. (Unfinished work from 1919.)
Engineering . . . . . . . . \$147 05
Inspection . . . . . . . . 45733
Engineering expense . . . . . . 350
Templets . . . . . . 1682
Bricks, 41,286 old, sidewalk . . . . 60389
Edgestone, 821 feet straight, 4 large and 4 small corners

1,323 38
Gravel
410
Teaming . . . . . . . $\quad 350$
Amount paid to Rowe Contracting Company, under contract:

Removing trees, bushes, etc. .
$\$ 13200$
1,405 cubic yards earth excavation @ $\$ 1.30$

1,826 50
1,220 linear feet straight edgestone and corners hauled and set @ 35c., 42700
St linear feet existing edgestone reset (a) 25c.

2100
16 square yards existing granite block paving relaid, gravel joints, @ $\$ 1$. 1600
17 square yards existing granite block paving relaid, concrete base, sand bed and grout joints, @ $\$ 1.50$

25 50
2,499 square yards concrete base and Topeka wearing surface furnished and laid @ $\$ 2.75$.

6,872 25
Carried fortuard . . . $\$ 9,320 \quad 25 \quad \$ 2,559 \quad 57$

| Brought forward | \$9,320 25 | \$2,559 57 |
| :---: | :---: | :---: |
| 15 square yards bituminous wearing surface fur- |  |  |
| nished and laid on mac- |  |  |
| \$1.85 . | 2775 |  |
| 531 square yards brick sidewalks hauled and laid |  |  |
| (a) 85 c . | 45135 |  |
| 3,902 square feet artificial stone |  |  |
| foundation furnished |  | - |
| and placed @ 2c. | 7804 |  |
| 3,720 square feet artificial stone |  |  |
| sidewalks, concrete base |  |  |
| and wearing surface furnished and laid@220 | 81840 |  |
| square feet artificial stone |  |  |
| driveways, concrete |  |  |
| base and wearing sur- |  |  |
| face furnished and laid |  |  |
| (a) 25c. | 4550 |  |
| 14 covers reset @ \$3 | 4200 |  |
| 25 courses of brickwork laid (a) 50 c . | 1250 |  |
| $\begin{aligned} & \text { Extra work - Remove } \\ & \text { trees } \end{aligned}$ | 40000 |  |
| Extra work-Grade roadway between end of work and Hansborough street: |  |  |
| 144 hours labor @ 70c. . | 10080 |  |
| Plus 15 per cent on | 1512 |  |
| Extra work Cut long edgestone to lay around curves: |  |  |
| 4 days, stonecutter @ \$8 | 3200 |  |
| Plus 15 per cent on $\$ 32$ | 480 |  |
| Extra work-Rebuild 2 sewer manholes at 420 Harvard street: |  |  |
| 18 hours, subforeman, @ 80c, | 1440 |  |
| 9 hours, mason, @ \$1 | 900 |  |
| 9 hours, tender. © 70c. | 630 |  |
| 54 hours' labor @ 65c. | 3510 |  |
| Plus 15 per cent on \$64.80, | 972 |  |
|  | \$11,423 03 |  |
| Less 5 per cent retained, | 57115 |  |
|  | \$10,851 88 |  |
| Amount paid in 1919 | 1,267 35 |  |
|  |  | 9,584*53 |

```
$9,320 25 $2,559 57
```

2775
45135
7804
4550
1250
40000

3200
480

1440
900
630
3510
972

9,584․ 53

Havelock street, from Blue Hill avenue to Morton street. Length,' 662 linear feet. Area, 1,958 square yards. Edgestone set, Topeka pavement laid and artificial stone sidewalks constructed.


Brought forward . . . . . . $\$ 30786$
Engineering expense
850
Advertising 267
Edgestone, 1,125 feet straight

Amount paid to Rowe Contracting Company, under contract:
897 cubic yards earth excavation (a) $\$ 1.90$
$\$ 1,70430$
3.7 cubic yards rock excavation (a) $\$ 6$

2220
1,221 linear feet straight edgestone and corners set (a) 28c

34188
46 linear feet existing edgestone reset (a) 30c.

1380
11 square yards existing granite block paving relaid, gravel joints, © $\$ 1$

1100
1,958 square yards concrete base and Topeka we aring surface furnished and laid © $\$ 3.60$

7,048 80
136 square yards bituminous wearing surface furnished and laid on macadam foundation (a) $\$ 2.20$
8,269 square feet artificial stone foundation furnished and placed @ 6c. 49614
8,145 square feet artificial stone sidewalks, concrete base and wearing surface furnished and laid @ 25c.,
124 square feet artificial stone driveways concrete base and wearing surface furnished and laid (a) 27c.

3348
11 covers reset @ $\$ 3$
18 courses of brickwork laid (a) 50 c .

3300
900

12,049 05
———\$14,280 59

Hill Top street, from Granite avenue to Hallet street. (Work done in 1917.)

Final payment made on contract with Martino DeMatteo for work done in 1917
$\$ 3571$
Holton street, from Everett street to Antwerp street. (Work done in 1919.)
Engineering expense
$\$ 020$
Hyde Park avenue, from Metropolitan avenue to River street. Length, 5,454 linear feet. Area, 30,548 square yards. Edgestone set and reset, recut granite blocks laid on six-inch concrete base in car tracks, grout joints, Topeka pavement laid on six-inch concrete base. Unfinished.)

| Engineering |  | \$2,044 41 |
| :---: | :---: | :---: |
| Inspection |  | 2,598 73 |
| Engineering expense |  | 19025 |
| Templets |  | 3780 |
| Edgestone. 5,553 feet straight, 771 feet circular, |  |  |
| 93 small corners, 4 large corne | rs and |  |
| special stone |  | 10,336 17 |
| Blocks, 131,770 reeut granite |  | 7,906 00 |
| Removing tree limbs |  | 2670 |
| Labor, lowering manholes |  | 35102 |
|  |  |  |
| Amount paid to John McCourt Company, under contract. |  |  |
| 3,474 square yards existing granite |  |  |
| block paving recut and re- |  |  |
| laid (in car tracks) concrete base, sand bed and grout joints, © $\$ 4.48$ | \$15,563 | 52 |
| 2,317 square yards granite block |  |  |
| recut (at Massachusetts |  |  |
| avenue lot), hauled and |  |  |
| laid in ear tracks, eonerete |  |  |
| base, sand bed and grout <br> joints, (a) $\$ 4.73$ $10,959$ |  |  |
|  |  |  |
| Less 12 per ent retained, $\quad \begin{aligned} & \text { 26,522 } 93 \\ & 3,978\end{aligned}$ |  |  |
| Less 15 per cent retained, |  | 44 22,54449 |
| Amount paid to Martino De Matteo, under contract |  |  |
| $\begin{gathered}\text { Removing trees, bush- } \\ \text { rs ete. }\end{gathered} \$ 2,50000$ |  |  |
| 8,500 cubic yards earth excava- 10,62500tion ( $\$ 1,25$ |  |  |
| 298 linear feet eorners hauledand set (a 35e. .350430 |  |  |
| 350 linear feet circular edge- <br> stone set (a. 25 c . $21250$ |  |  |
|  |  |  |
| 3,253 linear feet existing edge- <br> stone reset (a 25 c . $81325^{\prime}$ |  |  |
| 600 square yards granite |  |  |
| block paving recut,hauled and laid, con- |  |  |
|  |  |  |
| hauled and laid, conerete base, sand bed |  |  |
| $\$ 3.75$. 2,25000 |  |  |
| 25 square yards existing |  |  |
| granite block paving |  |  |
| relaid in driveways |  |  |
|  |  |  |
|  |  |  |
| joints, (a. $\$ 2.75$. . | 6875 |  |
| 6,500 square yards concrete |  |  |
| base and Topeka wear- |  |  |
| ing surface furnished |  |  |
| and laid © \$2.95 | 19,175 00 |  |
| 11,8.50 square yards concrete |  |  |
| base and Topeka wear- |  |  |
|  |  |  |
| ing surface furnished |  |  |
| \$1.25 . | 14,812 50 |  |
| Carried forward | \$50,561 30 | \$46,060 52 |

Brought forward
92,084 square feet artificial stone foundation furnished and pliced (a, 2c.
84,322 square feet artificial stone sidewalks, concrete base and wearing surface furnished and laid (a) 20 c .

7,762 square fect artificial stone rrivew:ys, concrete base and wearing surface furnished and laid (a) 30c.

Extra work - Omit the hauling of straight edgestone from the South End yard, Albany street. A deduction of nine (9) cents per linear foot is to be made from the price bid for hauling and setting straight edgestone:
5,912 linear feet straight edgestone set but not hauled (a) 26 c .

| Less 15 per cent retained, <br>  <br> Less amoint paid in 1919, <br> 73,13310 <br> 10,96997 <br> $\$ 62,16313$ <br> 2,00812 |
| :--- | ---: |

## $\$ 50,561 \quad 30 \quad \$ 46,060 \quad 52$

1,84168

16,86440
2.328 60)
$1,537 \quad 12$

| $\$ 73,133$ | 10 |  |
| ---: | ---: | ---: |
| 10,969 | 97 |  |
| $\$ 62,163$ |  |  |
| 2,008 | 12 |  |

Imrie road, from Cambridge street to Allston street. (Work not started.)


Justin road, from Bigelow street to Atkins street. (Work not started.) Engineering expense
$\$ 020$
Kenton road, from Washington street 844 feet easterly. (Work done in 1919.)

Engineering . . . . . . . . \$40 00
Cost of work done under contract with Rowe Contracting Company in 1919

$$
\$ 9,296 \quad 63
$$

Amount paid in 1919 . $\$ 7,90214$
Less 5 per cent retained, 46483

$$
8,36697
$$

[^24]

# MeCraw street, from Belgrade avenue to West Roxbary Branch Railroad. 

 Length, 131 linear feet. Area, 350 square yards. Edgestone set, Topeka pavement laid and artificial stone sidewalks constructed.
## Engineering <br> $\$ 10921$

Inspection
6136
Engineering expense . . . . 90
Advertising . . . . . . . 420
Edgestone . . . . . . . 2800
Steam roller . . . . . . 450
Amount paid to Martino De Matteo, under contract:

Removing trees, bushes, etc. . . . . $\$ 500$
150 tons crushed stone furnished, placed, watered and rolled @ \$3.75.
130 square yards earth exca-
43500

$$
\text { vation @ } \$ 1.60 \text {. }
$$

98 linear feet straight edge-
20800

$$
\text { stone set @ } 27 \mathrm{c} \text {. }
$$

33 linear feet circular edgestone set @ 30c.

2646

21 linear feet existing edgestone reset © 30c.

990

356 square yards bituminous wearing surface furnished and laid on macadam foundation (a) $\$ 2.10$.

74760
1,128 square feet artificial stone foundation furnished and placed © 10c.

11280
S78 square fect artificial stone sidewalks, concrete base and wearing surface furnished and laid @ 22c

19316
Carried forward
$\$ 1,74436 \quad \$ 208 \quad 17$

Brought forward
250 square feet artificial stone driveways, concrete base and wearing surface furnished and laid (a) 50 c

|  |  |
| :--- | ---: |
|  |  |
| Less 15 | per cent retained, |
| $\$ 1,86922$ |  |
| 280 | 39 |

$\$ 1,74436 \quad \$ 208 \quad 17$

28039
Mascot street, from Ballou avenue to Norfolk street. Length, 194 linear feet. Area, 410 square yards. Edgestone set, asphalt pavement laid and artificial stone sidewalks constructed. (Unfinished work from 1919.)
Engineering
Amount paid to Martino DeMatteo, under contract:
Removing trees, etc.

183 cubic yards earth excavation (not including excavation for artificial stone walls. steps, etc.). © $\$ 1.35$

24705
256 linear feet straight edgestone and corners hauled and set (a) 30c., $\quad 7680$
19 linear feet circular edgestone set (a) 25c. . 475
54 linear feet existing edgestone reset @ 25 c .
421 square yards bituminous macadam surface furnished and placed (a) $\$ 1.20$.
2,137 square feet artificial stone sidewalks, concrete base and wearing surface, furnished and laid, (a) 22c.
$470 \quad 14$
192 square feet artificial stone driveways, concrete base and wearing surface, furnished and laid, @ 35c
2,329 square feet artificial stone foundation furnished and placed @ 5 c .

11645
4 covers reset @ $\$ 3$. 1200
2 courses of brick work laid @ 50c. . . . 100
Artificial stone walls, steps and platforms built work - Excavate
Extra work - Excavate rock to subgrade $n$ here directed:
13 cubic yards rock excavation @ 88

10400
Carrued forward . . . $\$ 4,52809$
$\$ 1086$


Brought forward
Extra work - Furnish and lay 1 -inch asphalt wearing surface $1 \frac{1}{2}$-inch bituminous concrete binder on existing macadam base in Mt. Ida road, from 254 feet south of Marie strect to Robinson strcet:
61 square yards bituminous binder and asphalt wearing surface furnished and taid on macadam base (a) $\$ 2.25$
Extra work - Trim the base of concrete wall on Mit. Ida road, around Ronan Park, to conform with the the grades of artificial stone sidewalks:
58 hours' labor (a) $57 \frac{1}{2} \mathrm{c}$.
Plus 15 per cent on $\$ 33.35$

| Less amount paid in 1919, | \$11,957 50 |
| :---: | :---: |
|  | 9,741 54 |
|  | \$2,215 96 |
| Less amount retained | 10000 |

13725
$\$ 11,781 \quad 90 \quad \$ 41 \quad 35$

$$
13620
$$

100

$$
2,11596
$$

Norfolk street, widening from Corbet street to Blue Hill avenue. (Work done in 1918 and 1919.)
Final payment for work done under contract with War-
ren Brothers Company, in 1919 . . . $\$ 26614$
Materials . . . . . . 3944
$\$ 30.58$
North Beacon street, from Cambridge street to Market street. (Work done in 1918 and 1919.
Engineering expense
$\$ 030$
Oriole street, from Bellevue street to Emmons road. (Work not started.)
Engineering . . . . . . . . $\$ 6800$
Engineering expense . . . . . . 80
Advertising . . . . . . . . 547
$\$ 7427$

Patten street, from Hyde Park avenue to Bourne strect.
Final payment on contract with Martino DeMattco for work done in 1917
$\$ 3572$
Perthshire road, from Bigelow strect to Matchett street. (Work done in 1919.)

Engincering expense
$\$ 020$


Brought forward<br>Less 15 per cent retained,

$\$ 4,71404 \quad \$ 2,93038$
70711
4,00693
$\$ 6,93731$
Public Alley No. S1S, from St. Stephen street about ti90 feet westerly. Length, 693 linear feet. Area, 616 square yards. Edgestone set, granite block pavement laid, artificial stone sidewalks and concrete retaining walls constructed.

Enginecring .
Inspection
Engineering
Advertising . . . . 350
Edgestone, 1,283 feet straight, 2 small corners $\quad 2,45145$
Blocks, 26,060 recut granite
Labor, bandling stock
Amount paid to John Landis, under contract:
Removing trees, bushes, etc.
$\$ 500$
S34 cubic yards earth excavation (a) $\$ 2$
1,359 linear feet straight edgestone set (a35c.
20 linear feet circular edge-
16 linear feet existirg edgestone reset © 35 c .
378 linear feet concrete backing for edgestone furnished and placed (a 55 c .
616 square yards granite block paving hauled and laid, concrete base, sand bed and grout joints, © $\$ 4.50$
5 square yards existing brick sidewalks relaid@ ${ }^{\text {a }}$ 75c.
3,059 square feet artificial stone foundation furnished and placed (a 7c.
3,338 square feet artificial stone sidewalks, concrete base and wearing surface furnished and laid, @ 30c.
12 cubic yards concrete wall furnished and placed (a $\$ 20$
30 enbic yards concrete wall furnished and placed @ $\$ 14$
Extra work - Excavate buried edgestone, make rlosures and cut sewer sheathing:
19 hours edgestone setter, (11 $\$ 1.10$
45 hours lahor (a 6 65c. .
hours, stonecutter, (a $\$ 1.10$

Carried forward

47565
$21+13$

24000

2090
2925
8 so
8 S4
1,668 00

700
560

20790

2,772 00
375

1,00140

42000
-
\$7,088 $22 \quad \$ 5,02283$

```
    Brought foruard
$7,088 22 $5,022 83
            3 hom's, double team, (a)}$
                Lxtra work - Rehandle
                    and place in position
            edgestone left on line of
            work:
1,336 linear feet edgestone re-
            hamudled and placed (a
                1:)c. .
                            300
                                    20040
            Less 15 per cent retained, }\begin{array}{r}{87,29164}\\{1,093}\\{74}
                                    6,197 S8
Amount paid to John McCourt Company,
    under contract:
            Removing trees, bushes,
                etc. . . . .
                            $125
    166 cubic yards earth excava-
                tion (a $1.70
                            282 20
    361 linear feet straight edge-
                stone and cornérs hauled
                and set (a 355.
                126 35
            4 \mp@code { l i n e a r ~ f e e t ~ c i r c u l a r ~ e d g e - }
                stone and special stone
                set (a 35%.140
    373 linear feet concrete back-
                ing for edgestone fur-
                nished and placed (a)
                35c.13055
    170 square yards granite block
                paving hauled and laid,
                concrete base, sand bed
                and grout joints, (a) $3,
                            510 00
            1 cover reset (a $3
                        30
            1 \text { course of brickwork laid}
                (a 50c.50
Extra work - Cut sewer sheathing and puddle trenches were directed:
    18 hours' labor (a 5je. . . 9 90
            Plus 15 per cent on $9.90
Less amount paid in 191990Plus 15 per cent on \(\$ 9.90 \quad 149\)Less amount paid in 1919
```

\$1,066 64
89590

Public Alley No. 819, from Westland avenue to Batavia street. (Work done in 1919.)
Cost of work done under contract with John Mc Court Company in 1919
\$1,341 78
Amount paid in 1919
1,065 59
$\$ 27619$
Engineering
355
Engineering expense

Public Alley No. Sz0, from Huntington avenue to St. Botolph street. (Work done in 1919.)

| Engineering |  | \$3 56 |  |
| :---: | :---: | :---: | :---: |
| Cost of work done under contract with John McCourt |  |  |  |
| Company in 1919 | \$1,759 50 |  |  |
| Amount paid in 1919 | 1,489 13 |  |  |
|  |  | 27037 |  |
|  |  |  | \$273 93 |

Public Alley No. S21, from Gainsborough strect to Public Alley No. 820. (Work done in 1919.)
Engineering . . . . . . . . $\$ 356$
Cost of work done under contract with John McCourt Company in 1919 . . . $\$ 3,114$ S9
Amount paid in 1919 . . 2,642 29 47260
$\$ 47616$

Public alley, from Massachusetts avenue to Hemenway strcet. (Work
not started.)
Engineering . . . . . . . . $\$ 9450$
Engineering expense . . . . . . 260
Advertising . . . . . . . 630
$\$ 10340$
Reservoir pond, at northeast corner of Beacon street. Street widened, graded, and tar macadam roadway constructed. Length, 200 feet. Area, 1,484 square yards. (Unfinished work from 1919.)

Engineering
$\$ 3850$
Labor, edgestone excavating
6612
Labor, edgestone setting
9261
Labor, roadway excavating
1,653 19
Labor, macadam spreading
21176
Labor, sidewalk excavating
5511
Labor, sidewalk resurfacing with crushed stone,
Teaming
800
Steam roller picking
85788
Steam roller rolling
4500
Tarbinder, 2,500 gallons
8100
Crusher, 2,500 gan
36250
Crushed stone, 288 tons
70707
Edgestone, circular, $12 \overline{5}$ feet 8 inches : 26892

Rockdale street, from Savin Hill avenue to Springdale strect. (Work not started.)
Engineering . . . . . . . . . . . $\$ 500$
Rowell street, from Hancock street to Cushing avenuc. (Work done in 1917.)

Final payment under contract with Martino DeMatteo for work done in 1917
$\$ 3571$
St. Rose street, from South street 416 feet westerly. (Work done in 1917.)
Final payment under contract with Martino DeMatteo for work done in 1917 .



Stuart street, from Clarendon street to Trinity place. Length, 268 linear feet. Area, 1,371 square yards. Subgraded, edgestone set, bitulithic pavement laid and artificial stone sidewalks constructed.
Engineering
\$296 41
Inspection . . . . . . . . 40693
Engineering expense . . . . . . 1865
Advertising . . . . . . . 730
Labor, handling stock . . . . . 1619
Bricks . . . . . . . 4500
Blocks, 4,300 old granite . . . . 12900
Edgestone, 40 fret straight, 50 feet circular, 86864
Amount paid to Warren Brothers Company, under contract:
276 cubic yards earth exca-
vation (a) $\$ 3$ ! . . $\$ \$ 2800$
Carried forward . . . $\$ 2 \$ 00 \quad \$ 1,78812$

119.5 culic yards gravel filling furnished © $\$ 2.50$. ad granite, brick and foundation excavated, removed, @ \$5. near feet straight edgenear feet circular edgenear feet existing edgestone reset (a) 45 c .

13200 33000
1,200 square yards concrete base and bitulithic wearing surface furnished and laid @ \$ 4.38 wearing surface furnished and laid in Trinity place @ $\$ 2.29$, brick sidewalks relaid (a) $\$ 1$
feet artificial stone foundation furnished and placed © 12c.

62292 sidewalks, concrete base and wearing surface furnished and laid (a) 29c.

39
6 covers reset @ $\$ 3$
100
$\$ 9,91260$
1,486 89

Stuart street, from Berkeley street to Columbus avenue. (Work not started.)
Engineering
$\$ 5283$
Tebroc street, from Bowdoin street to Levant street. (Work done in 1919.)
Cost of work done under contract with
McGuire \& McGourty, Inc., in 1919
$\$ 2,37305$
Amount paid in 1919 . $\$ 2,03071$
Amount retained
10000

Thorndike street, from Commonwealth avenue to Brookline line. (Work not started.)

| Enginecring |  |
| :--- | :--- |
| Engincering expense | . |
| . . . . | 8600 |
| 80 |  |

Advertising . . . . . . . 160
$\$ 6640$
Torar street, from Bowdoin street to Cameron street. (Work done in 1919.)
Cost of work done under contract with McGuire \& McGourty, lnc., for work done in 1919
$\$ 1,83460$
Amount paid in 1919 . . $\$ 1,492 \$ 7$
Amount retained
10000
1,592 87
$\$ 24173$
Tremont strect, (westerly side), from Park street to Boylston street.) Length, 1,671 linear feet. Area, 1,958 square yards. Edgestone reset, roadway widened and wood block pavement laid.

Engineering
Inspection
$\$ 53131$
Engineering expense S 40
Advertising
510
Expert serviees, analyzing blocks, etc. . 9859
Edgestone, 8,921 feet straight and 35 feet circular
Blocks, recut granite
1,596 81
Labor, handling stock
1050
Labor, Transit Department
2000
Amount paid to Janes Doherty, under contract:
54 square yards existing conerete base excavated and removed (a) 8.5 c .
$\$ 4590$
20 square $y$ ards existing concrete base chipped and removed (a) $\$ 1$

2000
30 linear feet straight edgestone set in gravel (a) 61c.

1830
S44 linear feet straight edgestone set in mortar (a, soc.

67520
39 linear feet circular edgestone set in gravel @ 65 c .

2535
36 linear feet eircular edgestone set in mortar @ 80 c .

2880
100 linear fect existing edgestone set in gravel (a) $4 \overline{\mathrm{c}} \mathrm{c}$.

4700
724 linear fect existing edgestone set in mortar © 65 c .

47060
874 lincar feet edgestone with new bed cut and pointed (a) 75 c .
65.550

Carried forward

| Brought foruard | \$1,986 65 | \$2,540 81 |
| :---: | :---: | :---: |
| 100 cubic yards concrete back- |  |  |
| ing for edgestone fur- |  |  |
| nished and placed (a) |  |  |
| \$15.75. | 1,57500 |  |

181 cubic yards concrete base furnished and laid @ $\$ 12.50$
2,262 50
7 square yards granite block paving hauled and laid, grout joints, etc., © $\$ 2.75$
1925
1,433 square yards wood block pavement furnished and laid, mortar bed, sand joint filler, etc., (a) $\$ 5.70$
525 square yards existing wood block pavement relaid, mortar bed, sand joint filler, etc., (a) $\$ 1.29$
3 covers reset © $\$ 3$.
Less 15 per cent retained,

67725
8,168 10

900
$\$ 14,69775$
2,204 66

Vista street, from Augustus avenue to Malvern road. (Work done in 1917.)
Final payment under contract for work done in 1917 by Martino DeMatteo
$\$ 3571$
Victory road, from Neponset avenue to Houghton street. (Unfinished work from 1919.) Strcet widened. Length, 416 feet. Area, 1,640 square yards. Edgestone set and reset, 4 -inch asphalt macadam roadway constructed and gutter paved with grout joints.
Labor, edgestone excavating . . . . $\$ 4250$
Labor, edgestone setting . . . . . 15300
Labor, gutter excavating . . . . . 2850
Labor, gutter paving . . . . . . 6700
Labor, roadway excavating . . . . 35803
Labor, roadway construction . . . . 40890
Labor, crosswalk excavating . . . . 4000
Labor, crosswalk relaying . . . . . 2350
Labor, cleaning . . . . . . . 1200
Teaming . . . . . . . 39797
Steam roller, rolling . . . . . . 16150
Steam roller, picking . . . . . . 5050
Flagging . . . . . . . . 440
Gravel . . . . . . . . . 1900
Sand . . . . . . . . 3038
Bermudez asphalt, 3,650 gallons . . . 90520
Crushed stone . . . . . . . 98285
Cement . . . . . . . . 365
Lumber . . . . 12075
Edgestone, 101 fect straight, 53 feet circular, 20115
Nails
789

```
Wachusett strect, from Walk Hill street to Eldridge road. (Work done in
        1919.)
    Fingineering . . . . . . . . \(\$ 1250\)
    Cost of work done under con-
        tract with John Kelly Company
        in 1919 . . . . . \(\$ 11,97376\)
    Amount paid in 1919 . . . 10,177 70
1,796 06
\(\$ 1,80856\)
```

Washington street (south side), from Tremont street to Nonantum street. Roadway widened. Edgestone reset and asphalt macadam roadway constructed. (Unfinished.)
Advertising . . . . . . . . $\$ 160$
Labor, edgestone excavating . . . . 2100
Labor, edgestone resetting. . . . . 5300
Labor, gutter exeavating . . . . . 700
Labor, gutter repaving . . . . . 2750
Labor, roadway excavating . . . . 25907
Labor, roadway eonstruction . . . . 8967
Labor, crosswalks . . . . . . 4962
Labor, erushed stone sidewalks . . . 10772
Cement . . . . . . . . 4 SS
Blocks . . . . . . . 330
Sand . . . . . . . . 17 s2
Edgestone, 105 feet 6 inches circular . . 28063
Steam roller, rolling . . . . . . $5+00$
Teaming . . . . . . . . 31700
\$1,293 81

Wellington Hill street, westerly from Blue Hill avenue. (Unfinished work from 1919.) Roadway widened. Edgestone set. Bermudez asphalt roadway constructed, 937 square yards, 6 inches deep.
Labor, roadway exeavating . . . . $\$ 5048$
Labor, roadway constructing . . . . 20409
Labor, crosswalk . . . . . . 2400
Teaming . . . . . . . 9421
Steam roller, rolling . . . . . . 2400
Steam roller, picking . . . . . . 800
Crushed stone, 239 tons $\quad 655 \quad 87$
Bermudez asphalt, 2,600 . . .. . . 62400
$\$ 1,68465$
Wensley strect, from Buekminster street to Bickford avenue. (Work done in 1917.)
Final payment under eontract with Martino DeMatteo for work done in 1917
$\$ 3571$

Wilbur street, from Cushing avenue to Upham avenue. Length, 335 linear feet. Area, 828 square yards. Edgestone set, Topeka pavement laid and artificial stone sidewalks constructed.


Brought forward
11 linear fect existing edgestone reset @ 30c.
19 square yards existing granite block paving relaid, gravel joints, @ $\$ 1$,
2,279 square yards concrete base and Topeka wearing surface furnished and laid @ $\$ 3.60$
137 square yards bituminous wearing surface furnished and laid on macadam foundation @ $\$ 2.20$
9,626 square feet artificial stone foundation furnished and placed @ 6c.
9,379 square feet artificial stone sidewalks, concrete base and wearing surface furnished and laid@ 25c.
247 square feet artificial stone driveways, concrete base and wearing surface furnished and laid (a) 27 c .

9 covers reset @ $\$ 3$

57756

6669
$\$ 2,723 \quad 27 \quad \$ 3,94450$
330

1900

8,204 40

30140

2,344 75

2700

William Jackson avemue, from Chestnut Hill avenue to Academy Hill road. Length, 500 linear feet. Area, 957 square yards. Subgraded, edgestone set, sheet asphalt pavement laid and artificial stone sidewalks constructed.
Engineering . . . . . . . $\$ 23031$
Inspection
6324
Engineering expense
550
Advertising . . . . . . 194
Templets . . . . . . . . 2004
Teaming 400
Edgestone, 904 feet straight, 3 special and 12 small corners

1,853 27
Amount paid to John J. Lane, under contract:
Removing trees, bushes, etc. .
$\$ 5000$
500 cubic yards carth excavation (a \$2.25

1,125 00
$51 \frac{1}{2}$ cubic yards rock excavation @ $\$ 12$ 61800
894 linear feet straight cdgestone set @ 30c.

26820
78 linear feet circular edgestone sct a 35c.

2730
1 linear foot existing edgestone reset (a, 40c.
5 square yards granite block paving relaid, concrete base, sand bed, grout joints, © \$4.50

2950
Carricd forward . . . $\$ 2,11140$ \$2,178 30

| Brought forward 957 square yards concrete base, | \$2,111 40 | \$2,17S 30 |  |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
| bituminous concrete |  |  |  |
| binder and asphalt |  |  |  |
| wearing surface, furnished and laid, @ $\$ 4.17$, | 3,990 69 |  |  |
| $\begin{aligned} & \text { 3,373 square feet artificial stone } \\ & \text { foundation furnished } \\ & \text { and placed (a \&c. } \end{aligned}$ | $2 \mathrm{ta} \mathrm{\%}$ St |  |  |
| 3,120 square feet artificialstone sidewalks, concrete base and wearing surface, furnished and laid, (a 35c., | 85.50 |  |  |
| 10 covers reset ( ${ }^{\text {a }}$ S 3 | 3000 |  |  |
| 20 courses of brick work laid (a) 50c. | 1) 00 |  |  |
| Less 15 per cent retained, | $\begin{array}{r} \$ 7,37408 \\ 1,10611 \end{array}$ |  |  |
|  |  | 6,267 97 | \$8,446 27 |

Wollaston terrace, from Woodrow avenue to Jones avenue. Length, 313 linear feet. Area, 595 square yards. Edgestone set, Topeka pavement laid and artificial stone sidewalks constructed.

| Engincering . . . . . . . . . |  |
| :--- | :--- | :--- | :--- |
| Inspection | $\$ 15686$ |
| 89 | 71 |

Engineering expense . . . . . . 600
Advertising . . . . . . . . 946
Templets . . . . . . . . 1384
Edgestone, 523 fect straight, 19 feet circular, 2 small corners and 2 special.

96922
Teaming . . . . . . : . 400
Amount paid to Rowe Contracting Company, under contract:

Removing trees, bushes, etc. .
$\$ 300$
320 cubic yards earth excavation @ $\$ 1.90$

60800
549 linear feet straight edgestone and corners set @ 28e

15372
31 linear feet circular edgestone set (a35c.

1085
72 linear feet existing edgestone reset (a, 30e.

2160
3 square yards existing granite block paving relaid, gravel joints, (a $\$ 1$
595 square yards concrete base and Topeka wearing surface furnished and laid (a $\$ 3.60$

2,14200
31 square yards bituminous wearing surface furnished and laid on macadam foundation (a) $\$ 2.20$

6820
Carried forward
$\$ 3,010 \quad 37$
$\$ 1,259 \quad 09$

Brought forward
2,187 scuure feet artificial stone foundation furnished and placed © 6c.
2,115 square feet artificial stone sidewalks, concrete base and wearing surface furnished and laid (a) 25 c .

72 square feet artificial stone
72 square feet artificia stone
driveways, concrete base and wearing surface furnished and laid (a) 27c.

7 covers reset @ \$3
25 courses of brickwork laid (a) 50 c . . . . . 1250
$\$ 3,01037 \quad \$ 1,25909$

13122

52875
-

1944
2100
1250
Wyoming street, from Waubeno street to Humboldt avenue. (Work done in 1917.)
Final payment and contract with Martino De Matteo for work done in 1917
$\$ 3571$
York street, from Glenway street to Greenwood street. (Work done in 1919.)
Engineering . . . . . . . $\$ 4352$
Inspection . . . . . . 2552
Cost of work under contract with Rowe Contracting Company done in 1919 . . $\$ 5,55593$
Amount paid in 1919 . . . 4,29357
1,262 36
$\$ 1,33140$
Zamora street, from Perkins street to Castleton street. (Work not started.)
Engineering
$\$ 2200$
Advertising . . . . . . $\quad 267$
$\$ 2467$

PIBIK WORKS OTFART MF\T


## RECAPITULATION OF STREET WORK.

Maintenance.


| Maintenance.- Continued. |  |  |
| :---: | :---: | :---: |
| Streets. | Limits. | Amounts. |
| Brought forward. |  | \$71,196 11 |
| Fairmount street. | Milton avenue to Morton street. | 2,607 70 |
| Flagg street | Washington street to IReed street. | 1.73568 |
| Franklin street. | Lincoln strect to North Harvard street | 79439 |
| G strcet | East Vighth street to Columbia road | 8531 |
| G street. | East Broadway to Thomas park. | 18919 |
| Goodale road. | Blue IIill avenue to end of street | 4785 |
| Gras street. | Chelsea street to Water street | 1,398 72 |
| Harvard street. | Glenway street to Esmond street | 1.73041 |
| Harvard street. | Morton street to Brookview street | 12485 |
| Harvard street. | Morton street to Blue Hill avenue | 1,673 52 |
| Havre street. | Sumner street to Meridian street | 3,352 92 |
| Hobart street. | Brooks street to Hobson street | 90067 |
| Hobart street. | Hobson street to Falkland termee | 10763 |
| Hobson street. | Faneuil street to Hobart street. | 35886 |
| Hunnewell street. | Champney street to Atkins street | 77542 |
| Hyde Park avenue. | Milton street to Glenwood avenue | 1,284 34 |
| Island street. | Gerard street to Hampden street | 2,079 76 |
| İneeland street. | Harrison avenue to Albany street | 1,054 68 |
| Lagrange street | Washington street to Newto | 10,33251 |
| Leeds street | Woodward street to Dorehester avenue | 6225 |
| Main street. | Railroad bridge to Somerville lin | 4200 |
| Massachusetts avenue. | Washington street to Harrison avenue | 4,740 07 |
| Mead street | Russell street to Main street | 3111 |
| Me lford street. | (See Corey street.) |  |
| Mercer street | Telegraph street to Dorchester street | 7813 |
| Montfern avenue. | Wrashington street to Faneuil street | 15484 |
| Moss Hill road. | Pond street to Woodland road | 2,796 31 |
| Neponset avenue...... | Minot street to Chickatawbut street | 26571 |
| Neweomb street. | Washington street to Harrison avenue | 1,038 18 |
| Newton street. | Brooks street to Charlesview street | 40994 |
| North Beacon street... | Market street to Parsons street | 90662 |
| Oak Square avenue... | Washington street to Faneuil street | 20302 |
| Orchard street | Eustis strect to Orehard Park street. . . . . . . . . . . . . . . . . | 41325 |
| Orehard Park street. . | Adams street to Ambrose street | 1,684 55 |
| Paris street., | Sunner street to Meridian street . . . . . . . . . . . . . . . . . . . | 2,305 37 |
| Pierce avenue. . . . . . . . | Adams street to Plain street. | 2,04585 |
| Carried forward. |  | \$119,007 72 |

Maintenance.- Concluded.


## Charged to Special Appropriations.

|  | Amounts. |
| :---: | :---: |
| * Belgrade avenue extension and Beech street widening. | \$9,963 Ot |
| * Hyde Park avenue, widening. | 49,511 97 |
| Total. | 859,475 03 |

[^25]Charged to Appropriation for Granolithic Sidewalks.

| Streets. | Limits. | Amounts. |
| :---: | :---: | :---: |
| Abbott street | Front of Nos. 2, 4, 6, and 26. | \$189 65 |
| Ashfield street. | Walter street to Fairview street | 8,604 20 |
| Ashmont street | North side, from 186 feet west of Neponset avenue to Train street. | 3,186 58 |
| Beeeh street | West Roxbury parkway to Hobson street | 72686 |
| Blakeville street. | Bowdoin street to Olney street | 5822 |
| Blue Hill avenue. | East side, Fremont street 170 feet south. | 5180 |
| Bowdoin avenue. | In front of Nos. 64 and 66 | 37470 |
| Broadway. | South side, Washington street to Shawmut avenue. | 71437 |
| Brooks street. | Hobart street to Faneuil street. | 11,037 32 |
| Congreve street. | South street to Centre street. | 8.69732 |
| Euelid street. | Washington street to Wentworth street | 2390 |
| Faulkner street. | At Boston Elevated Railway property | 13282 |
| Gray street | Berkeley street to Clarendon street | 30 |
| Hastings street | Centre street to Montview street | 12,950 04 |
| Judson street | Fnom Brookford street to Julian street | 500 |
| Linden street. | Brighton avenue to Commonwealth aven | 3,507 72 |
| Neponset avenue. | West side, in front of Nos. 3 to 15, and 29 to 35. | 1,976 08 |
| Olney street | North side, in front of Nos. 7 and | 20744 |
| Pearl street | Dorehester avenue to Pleasant street. | 42141 |
| Pleasant street. | East side from Vietoria street 100 feet northerly | 3726 |
| Rockwell street. | Washington street to Milton avenue | 51097 |
| Rosseter street | From No. 20 to Bullard street | 69005 |
| Vietoria street. | North side, from Pleasant street 200 feet easterly | 6785 |
| Wales street. | From Blue Hill avenue to Harvard stree | 57066 |
| Walk Hill street | East side, from Hy de Park avenue to Wenham street | 77772 |
|  |  | \$55,520 24 |
| Less amount due to Paving Serviee . . . . . . . . . . . . . . . . . . . . . . . . . . \$441 00 |  |  |
| Less amount due to Street Improvements. . . . . . . . . . . . . . . . . . . . . . . 1,39508 |  | 1,836 08 |
| Total |  | \$53,684 16 |

Charged to Appropriation for Reconstructing and Repairing Streets by Contract.

| Streets. | Limits. | Amounts, |
| :---: | :---: | :---: |
| Adamsstreet | King street to Minot street | $\$ 39437$ |
| Amory street. | Green street to 140 feet north of Atherton street. | 4,662 76 |
| Carried jorw |  | \$5,057 13 |

Cnarged to Appropriation for Reconstructing and Repairing Streets by Contract.- Continued.

| Streets. | Limits. | Amounts. |
| :---: | :---: | :---: |
| Brought forwird... |  | \$5,057 13 |
| Arlington strect. | Market street aeross Leicester street | 3,289 91 |
| Artificial stone sidewalk * | Repairs and rebates. | 7,362 50 |
| Asphalt and bitulithic pavementsrepaired.* |  | 81,8:0 59 |
| Atlantic avenue. | South Market street to Commereial street. | 1200 |
| Beacon street. | Massachusetts avenue to Raleigh street | 46,417 98 |
| Beacon street. | Chestnut Hill avenue (Cleveland Circle) | 41138 |
| Bennington street. | From Central square to Day square. | 5,860 65 |
| Berkeley street. | Columbus avenue to Providence street. | 18100 |
| Blackstone street. | Clinton street to Haymarket square | 32,327 27 |
| Border street, | North Ferry to Central square. | 24510 |
| Bowdoin street. | Mt. Ida road to Topliff street | 1900 |
| Boylston street. | Amory street to Centre street. | 51255 |
| Cambridge street. | North Russell street to Charles street. | 900 |
| Cambridge street. | Brighton avenue to Henshaw street. | 1273 |
| Centre street $\ddagger$. | Allandale street to South street | 56,333 36 |
| Contre street $\dagger$. | Forbes street to Boylston street | 1,516 55 |
| Centre street $\ddagger$. | South street to Spring street. | 25,000 00 |
| Centre street | Columbus avenue to Hyde square | 32007 |
| Centre street. | Eliot street, across Allandale street | 19091 |
| Chambers street. | Green street to Cambridge street | 19572 |
| Charles street. | Fruit street to Allen street. | 20,480 21 |
| Chestnut Hill avenue. . | See Beacon street. |  |
| Columbia road. | Hancoek street to Blue Hill avenue. | 3520 |
| Columbus avenue. | Roxbury street to Heath street. | 18887 |
| Commereial street. | Fleet street to Hanover street | 1200 |
| Commercial street | Hanover street to Causeway str | 2400 |
| Conant street. | Ifuntington avenue to Parker street | 1,621 50 |
| Devonshire street. | Water street to Franklin street | 14,906 09 |
| Dorchester avenue. | Park street to Peabody square | 26289 |
| Dorehester avenue. | Andrew square to Savin Hill avenue | 6243 |
| Dorchester avenue. | Summer street to Dorchester Avenue Bridg | 560 |
| Dorchester avenue. . | Dorchester Avenue Bridge to West Second street. | 17,742 69 |
| Dorehesterstreet. | West Broadway to West Eigth street | 9002 |
| Dudley street | Alexander street to Stoughton street | 32,724 37 |
| Carried forward |  | \$355,341 27 |

[^26]Charged to Appropriation for Reconstructing and Repairing Streets by Contract.- Continued.

| Streets. | Limits. | Aniounts. |
| :---: | :---: | :---: |
| Brought forward. |  | \$355,341 27 |
| Expertservices. |  | 89275 |
| East Broadway. | Dorehester street to L street | 1200 |
| East Firststreet. | H street, across Summer street. | 1730 |
| East Fourth street. | K street, across P street | 14,716 38 |
| East and West Newton streets. |  | 30 |
| Exeter street.......... | Boylston street to Commonwealth avenue. | 30 |
| Federal street. | Milk street to Dewey square | 7,858 57 |
| Franklin street. | 60 feet west of Devonshire street to Broad street. | 12,085 61 |
| Friend street. | Union street to Causeway street. | 10,703 38 |
| Green street. | Washington street, across Call street | 4,151 44 |
| Green street... | Call street to Centre street | 19741 |
| Greenwieh street. | Westminister street to Warwick street. | 15 |
| Guild row . | Dudley street to Roxbury street | 880 |
| Humboldt avenue. | Walnut avenue to Seaver street | 95085 |
| Huntington avenue... | Jamaicaway | 1,523 93 |
| John Eliot square |  | 34915 |
| Kilby street. | State street to Milk street | 1200 |
| LaGrange street. . | Washington street to Tremont street | 8780 |
| Main street. | City square across Alford street | 58,139 31 |
| Market street. | Washington street, aeross Western avenue | 1,447 57 |
| Mt. Vernon street | Joy street to West Cedar street | 14,913 98 |
| Newbury street. | Arlington street to Fairfield street | 2890 |
| Northampton street. . | Washington street to Albany street | 32629 |
| Parker street. | Conant street to Tremont street. | 1,294 15 |
| Pleasant street. | East Cottage street to Stoughton street | 20,759 13 |
| Pleasant street | Stoughton street to Savin Hill avenue | 20,324 28 |
| Portland street. | Hanover steet to Causeway street | 14190 |
| Ralston street. | Boston street, 85 feet easterly (north side) | 3,932 08 |
| Richmond street. | Hanover strreet to Atlantic avenue | 16309 |
| River street | Bridge over Providence Railroad across Everett square | 51544 |
| Roxbury street. | Kent street to John Eliot squar | 3445 |
| Rutherford avenue. | Cambridge street to Chapman street | 97,934 87 |
| Suratoga street. | Chelsea street to Bennington street | 3912 |
| Shirley street. | Massachusetts avenue, 400 feet southerly | 30 |
| Smith street. | Huntington avenue to St. Alphonsus street | 1,167 71 |
| Carried forward. . |  | \$630,071 96 |

## Charged to Appropriation for Reconstructing and Repairing Streets by Contract.- Concluded.

| Streets. | Limits. | Amounts. |
| :---: | :---: | :---: |
| Brought forward. |  | \$630,071 96 |
| Smith street. | Phillips street to Parker street. | 83281 |
| Southampton strcet. | Albany street to Massachusetts avenue | 10548 |
| Summerstreet | Fort Point channel to bridge over railroad | 45 |
| Sussex street | Hammond strect to Warwiek street | 15 |
| Tremont street | Dover street to Northampton street | 140,10t 23 |
| Tremont street. | Common street to Castle street. | 30 |
| Tremont street | Hammond street to William Pynehon square | 6760 |
| Union Park street. | North side, from Washington street to Harrison avenue . | 1,287 18 |
| Warwiek street. | Hammond street to Ruggles street. | 1015 |
| Washington street. | Market street aross Tremont street. | 47,065 12 |
| Washington street | Beach street across Kineeland street | 4,674 92 |
| Washington street. | Forest Hills to Arehdale road | 300 |
| Washington street. | Archdale road to 75 feet south of Corinth street | 108,675 49 |
| Westminster street. | Hammond street to Ruggles street | 15 |
| Weston street. | Warwiek street to Tremont street | 815 |
| Williams street. | Washington street to Westminster stre | 15 |
| Windsor street. | Shawmut avenue to Cabot street. | 15 |
| Worcester street and Woreester sq........ . Total $\square$ | Harrison avenue to Columbus avenue | 4,881 09 |
|  |  | \$937,790 53 |
| Amount due fromr Paving Serviee . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 4,828$ 52 |  |  |
| Amount due from Highways, Making of ........................... 725 |  |  |
| Amount due from Street Improvements.......................... 1135 |  | 4.84712 |
| Total. |  | \$942,637 65 |

Charged to Appropriation for Street Improvements.

| Streets. | Limits. | Amounts. |
| :---: | :---: | :---: |
| Adams street | Dudley street to Hampden street | \$1,861 26 |
| Algonquin street.. | Harvard street to Washington street | 2,056 18 |
| Allston street. | Bunker Hill street to Medford street. | 3,231 36 |
| Ambrose street | Albany street to Chadwiek strect. | 95321 |
| Astor street. | Hemenway street to Biekerstaff street. | 3,142 16 |
| Carried furuard |  | \$11,244 17 |

Charged to Appropriation for Street Improvements.- Continued.


* See Granolithic sidewalks.

Charged to Appropriation for Street Improvements.- Continued.

| Streets. | Limits. | Amounts. |
| :---: | :---: | :---: |
| Brought forward... |  | \$181,611 62 |
| Hyde Park avenue. . | River street to Glenwoorl avenue. | 72810 |
| Ivanhoe street. | West Dedham street to West Canton street. | 56511 |
| Jeffries street. | Marginal street to Maveriek street | 2,948 38 |
| Jerome street. | IIaneoek street to Everett street | 2,224 66 |
| Kneeland street. | Atlantic avenue to Lineoln strect. | 1,399 42 |
| La Grange street. | Centre street to Landseer street | 3,16845 |
| Lamartine street...... | Wyman street to Boylston street | 15,696 92 |
| Macadam road repairs, |  | 42,334 23 |
| Mall street | Eustis street to Albany street. | 81564 |
| Mill street | Rutherford avenue to Essex street | 2,118 04 |
| Oakland street. | Hobart street to Bennett street | 45431 |
| Paved street repairs. |  | 97785 |
| Pleasant street. | Warren street to Monument square | 1,380 75 |
| Princeton street. | Lexington street to Tufts street | 13125 |
| Providence street. | Columbus avenue to Church street | 1,434 03 |
| Putnam street. | Lexington street to Chelsea street. | 2,411 02 |
| River street | Glenwood avenue to Mill Pond | 6,458 08 |
| River street. | Glenwood avenue to railroad bridge. | 1,546 52 |
| Rosseter street. | Bullard street to beyond Olney street | 7,088 77 |
| St. Albans road. | Francis street to Huntington avenue | 1,051 06 |
| St. Germain street. | Massachusetts avenue to Dalton street | 1,999 51 |
| Sawyer avenue. | Pleasant street beyond Cushing avenu | 69361 |
| Sever street. | Haverhill street to Cambridge street | 1,652 82 |
| Stoughton street. | Columbia road to Pleasant street. | 13,718 19 |
| Stuart street | Dartmouth street to Trinity place. | 1,397 48 |
| Taber street. | Warren street to Winslow street | 65806 |
| Tetlow street. | Worthington street to Back Bay Fens | 83451 |
| Trenton street | Meridian street to East Eagle street | 10,996 84 |
| Union street | Main street to Rutherford avenue | 1,738 44 |
| Vermont street. | Corey street to Baker street | 3,748 70 |
| Walnut avenue. | Humbolit avenue to Scaver street | 26,983 41 |
| Walnut street | Medford street to Bunker Hill street | 1,559 84 |
| Warren street. | Townsend street to Blue Hill avenue. | 7,421 46 |
| Washinyton street... | Atherton street to Sc chool street | 1,053 01 |
| Water street. | Devonshire street to Congress street | 1,307 54 |
| West First street. | Dorchester avenue to A street. | 6.97812 |
| Carried forward |  | \$359,285 75 |

Charged to Appropriation for Street Improvements.- Concluded.

| Streets. | Limits. |  | Amounts. |
| :---: | :---: | :---: | :---: |
| Brought foruard... |  |  | \$359,285 75 |
| West Sixth street. | E street to F strert. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . |  | 2,193 76 |
| Winslow street... | Dudley strect to Eustis street. |  | 2,229 99 |
| Yeoman street. . | Albany strect to Hamplen street |  | 1,611 56 |
| Total. |  |  | \$365,321 06 |
| Amount due from Highways, Making of. . . . . . . . . . . . . . . . . . . . . . . . |  | \$114 27 |  |
| Amount due from granolithic sidewalks. |  | 1,395 08 | 1,509 35 |
| Total. |  |  | \$366,830 41 |
| Less amount due Reconstruction and Repairing Streets by Contract. . |  | \$11 35 |  |
| Less amount due Paving Service. |  | 39,593 07 | 39,604 42 |
| Total. |  |  | \$327,225 99 |

Charged o Appropriation for Highways, Making of.

| Streets. | Limits. | Amounts. |
| :---: | :---: | :---: |
| Albany street | Broadway to 75 feet south of Troy street. | \$13,569 77 |
| Allenwood street. | Anawan avenue to Pelton street | 7750 |
| Arbutus street | Blue Hill avenue to Irma street | 2,620 45 |
| Arehdale road. | Washington street to South street | 8624 |
| Augustus avenue. | Metropolitan avenue to Ethel street | 3572 |
| Babeoek street. | Commonwealth avenue to Boston \& Albany Railroad. | 21,087 04 |
| Belgrade avenue * | Extension and Beeeh street wideni | 35,703 66 |
| Bellvista road. | Allston street to Brookline line | 30 |
| Boylston street | Westerly side, from Tremont street to Charles street | 8,933 09 |
| Breck avenue | Washington stneet to Langley road | 3572 |
| Brenton street | Gilenway street to Greenwood | 6950 |
| Broadway. | At southeast corner of Washingto | 1,890 82 |
| Buekminster street | Commonwealth avenue to Allston Street Playground | 1,021 00 |
| Burlington avenue | Brookline avenue, 500 feet northerly | 45 |
| Cameron street. | Hancock street, 538 feet westerdy. | 79032 |
| Canterbury street. | At the intersection of Walk Hill stree | 3,113 05 |
| Caspian way.... | Savin Hill avenue, 520 feet easterly | 3571 |
| Castleton street. | South Huntington avenue to Jamaicaway. | 4427 |
| Carried forward |  | \$89,114 61 |

[^27]Charged to Appropriation for Highways, Making of.- Continued.

| Streets. | Limits. | Amounts. |
| :---: | :---: | :---: |
| Brought foru'ard... |  | \$89,114 61 |
| Centre street*. | South street to Spring street. | 75,105 63 |
| Centre street*. | Allandale street to South street. | 9,390 53 |
| Charles street. | Beacon street to Cambridge street. | 43215 |
| Chelsea street. | Foss street to Adams street. | 1,416 50 |
| Chestnut Hill avenue. | Commonwealth aveuue to Beacon Park ride. | 6000 |
| Clarendon street. | Stuart street to Columbus avenue | 54,689 61 |
| Cornell street. | Orange street to Colberg avenu | 3572 |
| Cummington street. | Commonwealth avenue to Boston \& Albany Railroad. | 50587 |
| Cushman road. | Glencoe street to Dustin street. | 15,187 91 |
| Downer avenue. | DeWolf street to Sawyer avenue | 3571 |
| East Fourth street. | At northeast corner of K street | 56047 |
| Easton street. | North Harvard street to Mansfield street. | 21,274 29 |
| Elder street. | Columbia road to Humphreys street | 11,810 57 |
| Falkland terrace. | Hobart street to Brooksdale road. | 17,795 48 |
| Faneuil street. | Bigelow street to Dunboy street. | 18261 |
| Fargo street. | B street to C street. | 32234 |
| Farquhar street. | Selwyn street to Centre street. | 17,551 14 |
| Faywood avenue. | Orient avenue to Tower street. | 1,686 47 |
| Glenville avenue. | Greylock road to Allston street. | 20,655 81 |
| Granada avenue. | Metropolitan avenue to Ethel street | 3572 |
| Greenview avenue. | Centre street, 415 feet southerly | 47786 |
| Grosvenor place. | Cliff street southwesterly | 4,608 39 |
| Grove street. | Centre street to Washington street | 4470 |
| Halifax street. | South Huntington avenue to Pond View avenue. | 4554 |
| Hamlin street. | East Eighth street to Columbia road | 7,036 51 |
| Hampstead road. | Arborway, 992 feet northwesterly | 2,183 22 |
| Harvard street. | Fabyan street to beyond Brookview street. | 12,144 10 |
| Havelock street. | Blue Hill avenue to Morton street | 14,280 59 |
| Hill Top street. | Granite avenue to Hallett street |  |
| Holton street. | Everett street to Antwerp street | 20 |
| Hyde Park avenue $\dagger$. | Metropolitan avenue to River street | 56,703 56 |
| Imrie road. | Cambridge street to Allston street | 4305 |
| Justin road. | Bigelow street to Atkins street. | 20 |
| Kenton road. | Washington street, 844 feet easterly | 96966 |
| Kilmarnock street. | Boylston street to Queensberry street | 8086 |
| Carried foruard. . |  | \$436,503 29 |

* See Recoustructing and Repairing Streets by Contract.
$\dagger$ See Special Appropriation for Hyde Pard Avenue Widening.


## Charged to Appropriation for Highways, Making of.-Continued.

| Streets. | Limits. | Amounts. |
| :---: | :---: | :---: |
| Brought forward... |  | \$436,503 29 |
| Langley road. | Breck avenue, 571 feet easterly | 3572 |
| Levant street. | Geneva avenue to Topliff street | 1,378 97 |
| MeCraw street. | Belgrade avenue to West Roxbury Branch Railroad | 1,797 00 |
| Mascot street. | Ballou avenue to Norfolk street | 1,378 01 |
| Melton road. | Wallingford road to Colonial road. | 5060 |
| Mt. Ida road. | 254 feet south of Marie street to Robinson street. | 2,157 31 |
| Norfolk street. | Corbet street to Blue Hill avenue | 30558 |
| North Beacon street. . | Cambridge street to Market street | 30 |
| Oriole street. | Bellevue street to Emmons road | 7427 |
| Patten street. | Hyde Park avenue to Bourne street | 3572 |
| Pertshire road. | Bigelow street to Matchett street | 20 |
| Pontiae street. | Hillside street to Tremont street | 76952 |
| Province street. | Province court, northeasterly | 160 |
| Publie Alley No. 710.. | East Brookline street to East Newton street | 6,937 31 |
| Public Alley No. 818.. | St. Stephen street, about 690 feet westerly | 11,391 45 |
| Public Alley No. 819.. | Westland avenue to Batavia street | 28004 |
| Public Alley No. 820. | Huntington avenue to St. Botolph street. | 27393 |
| Public Alley No. 821.. | Gainsborough street to Public Alley No. 820. | 47616 |
| Public Alley No. 909.. | Massachusetts avenue to Hemenway street | 10340 |
| Reservoir road. | At northeast corner of Beacon street | 4,447 66 |
| Rockdale street. | Savin Hill avenue to Springdale street | 500 |
| Rowell street. | Hancock street to Cushing avenue | 3571 |
| St. Rose street. | South street, 416 feet westerly | 3571 |
| South street | At Centre street | 8,051 48 |
| Stark street. | Cambridge street to Roland street | 4840 |
| Stuart street. | Clarendon street to Trinity place | 10,213 83 |
| Stuart street. | Berkeley street to Columbus avenu | 5283 |
| Tebroc street | Bowdoin street to Levant street | 24234 |
| Thorndike street. | Commonwealth avenue to Brookline line | 6640 |
| Tovar street. | Bowdoin street to Cameron street | 24173 |
| Tremont street, | Westerly side, from Park street to Boylston street | 15,033 90 |
| Victory road. | Neponset avenue to Stoughton street | 4,018 70 |
| Vista street. | Augustus avenue to Malvern road | 3571 |
| Wachusett street. | Walk Hill street to Eldridge road | 1,808 56 |
| Washington street. | Tremont street to Nonantum street (south side) | 1,293 81 |
| Wensley street. . | Buckminster street to Bickford avenue. | 3571 |
| Carried forward. |  | \$509,617 86 |

Charged to Appropriation for Highways, Making of.- Concluded.

| Streets. | Limits. | Ansounts. |
| :---: | :---: | :---: |
| Brought foruard... |  | 8:30,617 86 |
| Wellington Hill street.. | Blue Hill avenue westerl | 1,684 65 |
| Whitten street. | Dorchester a venue casterly | 13586 |
| Wilbur street. | Cushing avenue to L'pham avenue | 5,170 05 |
| Wilcock street. | Blue Hill avenue to Morton street. | 17,211 87 |
| William Jackson avenue | Chestnut Hill avenue to Academy Hill road. | 8,446 27 |
| Wollaston terrace. | Woodrow avenue to Jones avenue. | 4,984 37 |
| Wyoming street. | Wabeno street to Humboldt avenue | 3571 |
| York street. | Glenway street to Greenwood strect | 1,331 40 |
| Zamora street. . | Perkins street to Castleton street. | 2467 |
| Total |  | \$548,642 71 |
| Less amount due Paving Service................................... . . $\$ 14,890$. 76 |  |  |
| Less amount due Street Improvements. . . . . . . . . . . . . . . . . . . . . . . 11427 |  |  |
| Less amount due Reconstructing and Repairing Streets by Contract, |  | 15,012 28 |
| Total. |  | \$533,630 43 |


|  | 1916. | 1917. | 1918. | 1919. | 1920. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total length of macadam in mile | 392.91 | 390.04 | 386.97 | 379.90 | $\ddagger 375.28$ |
| Total area of macadam in square yards | 7,058,095 | 6,913,275 | 6,815,543 | 6,648,728 | $\ddagger 6,538,199$ |
| Total cost of resurfacing of macadam * | \$115,268 20 | \$138,452 49 | \$115,285 89 | \$283,983 33 | \$ \$289,635 97 |
| Total cost of patching of macadam $\dagger$ | \$114,113 82 | \$198,820 05 | \$181,286 71 | \$213,774 43 | - 8248,46881 |
| Cost of resurfacing per mile over entire mileage. | 829337 | \$354 96 | \$29792 | \$74752 | $\$ 77178$ |
| Cost of resurfacing per square yard over entire area. | 80016 | \$0 02 | \$0 017 | \$0 042 | \$0 044 |
| Length of maeadam resurfaced yearly in miles. | 11.5 | 10.74 | 12.6 | 19.9 | 16.2 |
| Cost per milc of macadam resurfaced yeardy | 810,023 32 | \$12,891 29 | \$9,149 59 | \$14,270 52 | 817,878 76 |
| Area of macadam resurfaced yearly in square yards. | 179,093 | 165,401 | 156,337 | 268,015 | 229,680 |
| Cost per square yard of macadam resurfaced yearly. | 806.44 | \$120 | S0 619 | 81059 | 8126 |
| Area of macadam patched yearly in square yards. | 445,637 | 788,981 | 230,159 | 397,362 | \|| 540,690 |
| Cost per square yard of macadam patched yearly. | \$0 256 | \$0 252 | 30788 | 80537 | : $\$ 0459$ |
| Binders used in resurfacing (per cent): |  |  |  |  |  |
| Water. | . 1980 | . 0695 | . 4259 | . 1569 | . 1200 |
| Tar preparation. | . 5496 | . 5831 | . 3695 | . 4534 | . 3569 |
| Asphalt preparations. | . 2524 | . 3474 | . 2046 | . 3597 | . 5231 |

[^28]New Edgestones. (Does not include work done on streets laid out and constructed under chapter 393 of the Acts of 1906.)

First Setting. Linear Fcet

| Year. |  |  |  | $\underbrace{E}_{n}$ |  |  |  | $\begin{aligned} & \dot{\omega} \\ & \stackrel{\rightharpoonup}{0} \\ & \text { H } \\ & \text { O } \end{aligned}$ | \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1911. | 1,718 | 465 |  | 2,098 | 11,12: | 14,627 | 5,806 | 352 | 36,693 |
| 1912 | 6,045 | 1,017 | 229 | 1,506 | $7,5!0$ | 9,669 | 3,168 | 407 | 30,231 |
| 1913. | 2,199 | 557 | 70 | 1,221 | 2,507 | 10.206 | 2,716 | 1,359 | 21,325 |
| 1914. | 4,773 | 959 |  | 1,970 | 1,520 | 1,637 | 901 | 672 | 12,432 |
| 1915. | 947 | 265 |  | 4,939 | 2,230 | 6,928 | 4,547 | 331 | 20,157 |
| 1916. | 221 | 1,996 |  | 1,987 | 2,393 | 3,378 | 1,968 | 638 | 12,581 |
| 1917 | 1,779 | 298 |  | 1,159 | 8,225 | 7,189 | 933 | 524 | 20,107 |
| 1918. |  | 2,498 |  | 162 | 4,751 | 684 | 662 |  | 8,757 |
| 1919. | 324 | 151 |  | 1,144 | 1,075 | 1,573 | 641 | 54 | 4,962 |
| 1920. | 87 | 244 | 336 | 37 |  |  | 1,837 | 999 | 3,540 |
| Totals. | 18,093 | 8,450 | 635 | 16,523 | 42,618 | .55,951 | 23,179 | 5,336 | 170,815 |

New Brick Sidewalks. (Does not include work done on streets laid out and constructed under chapter 393 of the Acts of 1906.)

First Laying. Square Yards.

\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline Year. \&  \&  \&  \& 号 \&  \&  \& 家 \&  \& m

0
0 <br>
\hline 1911. \& 520 \& 364 \& \& \& \& 160 \& 1,469 \& 314 \& 3,127 <br>
\hline 1912. \& 2,249 \& 623 \& \& \& \& 208 \& 716 \& \& 3,796 <br>
\hline 1913. \& 490 \& 465 \& \& \& 80 \& 103 \& 647 \& 86 \& 1,871 <br>
\hline 1914. \& 762 \& 379 \& \& \& \& 150 \& 382 \& 585 \& 2,258 <br>
\hline 1915. \& 287 \& 465 \& \& 150 \& \& \& 501 \& \& 1,403 <br>
\hline 1916. \& 125 \& 17.5 \& \& \& \& \& 366 \& \& 666 <br>
\hline 1917. \& 17 \& 20 \& \& \& \& 105 \& 599 \& 49 \& 790 <br>
\hline 1918. \& \& 9.5 \& \& \& \& \& 95 \& 40 \& 230 <br>
\hline 1919 \& 491 \& 1,351 \& \& \& \& \& 322 \& \& 2,164 <br>
\hline 1920. \& 19 \& 210 \& \& \& \& \& \& \& 229 <br>
\hline Totals. \& 4,960 \& 4,147 \& \& 150 \& S0 \& 1,026 \& 5,097 \& 760 \& 15,53* <br>
\hline
\end{tabular}

Recapitulation, 1920.

| Districts. | Edgestones. Linear Fret. | $\begin{aligned} & \text { Brick. } \\ & \text { Square Yards. } \end{aligned}$ |
| :---: | :---: | :---: |
| South Boston Paving District, No. 1 | 87 | 19 |
| East Boston Paving District, No. 2 | 244 | 210 |
| Charlestown Paving District, No. 3 | 336 |  |
| Brighton Paving District, No. 4. | 37 |  |
| West Roxbury Paving District, No. 5 |  |  |
| Dorchester and Hyde Park Paving Districts, Nos. 6, 9-11 |  |  |
| Roxbury Paving District, No. 7. | 1,827 |  |
| City Proper Paving Districts, Nos. 8 and 10. | 989 |  |
| Totals | 3,540 | 229 |

Loads of Dirt and Street Cleanings Removed from February 1, 1920, to January 31, 1921.

| Districts. | Single* | Double. $\dagger$ | Auto Trucks. $\ddagger$ | Cubic <br> Yards. |
| :---: | :---: | :---: | :---: | :---: |
| South Boston | 2,334 | 10 | 5 | 2,384 |
| East Boston. | 472 | 241 |  | 954 |
| Charlestown | 235 | 38 | 29 | 485 |
| Brighton | 1,509 | 1,765 |  | 5,039 |
| West Roxbury | 1,202 | 2,041 |  | 5,284 |
| Dorchester. | 838 | 409 |  | 1,656 |
| Roxbury. | 6,842 | 265 |  | 7,372 |
| South End | 252 |  | 320 | 2,172 |
| Ashmont. | 1,068 | 1,318 |  | 3,704 |
| North End | 559 |  |  | 559 |
| Hyde Park | 1,912 | 268 |  | 2,448 |
| Totals. | 17,223 | 6,355 | 354 | 32,057 |

[^29]The Number of Loads of Snow Removed from February 1, 1920, to January 31, 1921.

| Distmicts. | Single.* | Double. $\dagger$ | Auto <br> Trucks $\ddagger$ | Cubie <br> yards. | Cont. \% |
| :---: | :---: | :---: | :---: | :---: | :---: |
| South Boston. | 8,043 |  |  | 16,086 | \$13,757 72 |
| East Boston. | 7心3 | 116 |  | 1,914 | 7,83479 |
| Charlestown | 2,5;30 | 31 | S64 | 10,3:37 | 13,1心2 11 |
| Brighton. | 218 | 587 |  | 2,197 | 10,631 76 |
| West Roxbury | 1,232 | 3,0×2 |  | 11,710 | 14, 599 (63 |
| Dorchester. | 1,136 | 950 |  | 5,122 | 15,752 76 |
| Roxbury | 4, 820 | 764 |  | 11,9832 | 29,29.462 |
| South End | 2,350 | 39 |  | 4, S17 | 20,347 39 |
| Ashmont. | 1,09S | 2,981 |  | 11,1:39 | 7.76393 |
| North End | $3,5 \times 3$ |  |  | 7,146 | 15,809 66 |
| Hyde Park | 303 | 849 |  | 3,153 | 4,915 49 |
| Totals. | 26,096 | 9,399 | 864 | 85,573 | \$156,219 86 |

* Single load, 2 cubic yards. $\dagger$ Double load, 3 cubic yards.
$\ddagger$ Auto truck loads, 6 cubic yards.
8 Includes cost of plowing gutters, cleaning sidewalks and picking ice not carted away.

Snow and Ice Removed by Contract from February 1, 1920, to January 31, 1921.

| Snow Districts. | $\begin{aligned} & \text { Number } \\ & \text { of } \\ & \text { Loads.* } \end{aligned}$ | Cubic Yards. | Cost per Cubic Yard. | Total. |
| :---: | :---: | :---: | :---: | :---: |
| Miscellaneous $\dagger$ |  |  |  | \$13,850 64 |
| District No. 1 | 6,974 | 48,792 | \$0 57 | 27,811 41 |
| District No. 2 | 4,144 | 35,470 ${ }^{1}$ | 74 | 26,248 17 |
| District No. 3 | 10,437 | 58,686 | 74 | 43,427 64 |
| District No. 4 | 12,643 | 48,607 | 73 | 35,483 12 |
| District No. 5 | 6,962 | 3S,794 | 78 | 30,259 32 |
| District No. 6 | 10,632 | 86,718 | 65 | 56,366 70 |
| District No. 7. | 14,843 | 59,776 ${ }^{\frac{1}{2}}$ | 60 | 35,865 90 |
| District No. 8 | 7,879 | 42,543 ${ }^{\frac{1}{2}}$ | 65 | 27,65:3 28 |
| District No. 9 | 3,599 | $29,72+\frac{1}{2}$ | 65 | 19,320 93 |
| District No. 10 | 6,254 | 27,230 | 65 | 17,699 50 |
| District No. 11 | 5,950 | 29,033 | 60 | 17,419 80 |
| District No. 12 | 355 | 3,905 | 65 | 2,53S 25 |
| District No. 13 | 4,172 | 21,471 | 65 | 13,956 15 |
| District No. 14 | 1,583 | 14,7.51 | 65 | 9,58S 15 |
| District No. 15. | 6,030 | $23,580{ }_{2}^{1}$ | 75 | 17,655 38 |
| District No. 16. | 1,286 | 5,962 | 65 | 3,875 31 |
| District No. 17 | 1,487 | 15,202 ${ }^{\frac{1}{2}}$ | 6.5 | 9, S81 6.4 |
| District No. 18. | 146 | 930 | 65 | 60450 |
| District No. 19 | 64 | 443 | 65 | 28795 |
| District No. 20 | 60 | $107 \frac{1}{2}$ | 65 | 264 SS |
| Totals | 105,500 | 592,027 $\frac{1}{2}$ | $\$ 0665$ | \$410,088 65 |

[^30]Summary of Volume and Cost of Snow Removed, Year Ending January 31, 1921.


## Street Ofenings.

Under Classes 1 and 2 of the Schedule of Permit Fees, permits were issued for openings in public ways as follows:

| To Whom Issued. | Permits. | Length in Feet. |
| :---: | :---: | :---: |
| Sewer and Water Services. | 3,300 | 20,450 |
| Boston Consolidated Gas Company | 1,469 | 36,795 |
| Boston Elevated Railway Company | 135 | 79,570 |
| Dedham and Hyde Park Gas and Electris Company. | 52 | 5,015 |
| Edison Electric Illuminating Company . . . . . . . | 1,585 | 38,765 |
| New England Telephone and Telegraph Company, | 249 | 11,0 6 |
| Quincy Market Cold Storage and Warehouse Company. | 34 | 1,570 |
| Western Union Telegraph Company. | 29 | 1,750 |
| Miscellaneous. . | 1,703 | 335,443 |
| Emergency permits. | 845 |  |
| Emergency permits returned as used | 890 |  |
| Estimated length of above. |  | 22,250 |
| Totals. | 10,291 | 552,644 |

Making a total length of openings approximately 104.7 miles.

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

Advertising by man wearing lettered hat or coat . 248
Cleaning snow from roof . . . . . . . 4,467
Driving cattle through streets . . . . . 33
Erecting and repairing awnings . . . . . 930
Erecting and repairing buildings . . . . . 1,536
Painting or minor repairs on buildings . . . . 3,806
Feeding horses on streets . . . . . . 196
Moving buildings . . . . . . . . 6
Placing signs flat on buildings . . . . . 1,096
Projecting signs or lamps from buildings . . . 321
Raising or lowering safes or heavy machinery . . 184
Emergency permits for above class . . . . 480
Special permits for periods and rates other than those above429

The schedule of fees for permits was revised and put in effect April 1, as follows:

Class No. 1. Openings in streets or sidewalks, 50 cents each. Limited to 100 linear feet on one permit.
2. Emergency permits, Class A (for the above purpose), 50 cents each.
3. Advertising by man wearing hat and coat lettered, $\$ 1$ per month, $\$ 5$ per year.
4. Cleaning snow from roofs (occupation of sidewalk and street). Annual permit, $\$ 1$.
5. Driving cattle through the streets (annual permit to driver), $\$ 5$.
6. Erecting and repairing awnings (annual permit), $\$ 1$.
7. Moving buildings in streets, $\$ 5$ per day; minimum charge, $\$ 10$.
8. Erecting, altering or repairing buildings (occupation of street or sidewalk), 5 cents, 3 cents or 2 cents per square foot per month according to zone.
9. Painting or minor repairs, $\$ 1$ each.
10. Feeding horses on streets (annual permit), $\$ 1$ each.
11. Placing or removing signs flat on buildings, $\$ 1$ each.
12. Projecting signs or lamps from buildings, $\$ 1$ each.
13. Raising or lowering safes, machinery, etc., $\$ 1$ each
14. Emergency permits, Class B, for above purpose, $\$ 1$ each.
15. Special permits for periods and rates other than those in the preceding classes, when, in the opinion of the Commissioner, such permits are requisite.

The revenue from issuing permits amounted to $\$ 29,008.98$, divided as follows:


Twenty-five thousand two hundred and twenty-one dollars and eighty-eight cents in cash were deposited with the City Collector, Bills for the collection of the balance, three thousand seven hundred and eightyseven dollars and ten cents were committed to the City Collector.

## Poles.

Permits were issued for placing 291 poles in new locations, 957 for replacing in old locations and 61 for removal of poles.

## Bonds.

There are one thousand seven hundred and thirtyfive surety company bonds on file covering the City against claims for damages, etc., through the use of permits. They are in amounts of $\$ 20,000, \$ 4,000$, $\$ 3,000$ and $\$ 1,000$. In addition to these, there are two hundred and one personal bonds for the same purpose.

## Plans. <br> Four hundred and eighty-five plans were received as follows:

|  | Tracks. | Poles. | Mains. | Conduits. | Miscellaneous. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Edison Eleetrie Illuminating Company |  | 98 |  | 206 |  |
| New England Telephone and Telegraph Company: |  | 3.3 |  | 27 |  |
| Hyde Park Gas and Electric Company |  |  | 2 |  |  |
| Boston Poliee Department. . . . . . . . . |  |  |  | 7 |  |
| Boston Elevated Railway Company. . | 7 |  |  | 5 |  |
| Western Union Telegraph Company... |  |  |  | 7 |  |
| Postal Telagraph Cable Company..... |  |  |  | 2 |  |
| Boston Fire Department. . . . . . . . . . . |  |  |  | 34 |  |
| Boston Consolidated Gas Company. |  |  | 7 |  |  |
| Charlestown Gas Company. |  | 1 | 3 |  |  |
| Miscellancous. |  |  |  |  | 46 |
| Totals. | 7 | 132 | 12 | 288 | 46 |

Total of all plans on file 15,219.

Street Numbering.

|  | Whole streets renum bered. | Streets partly renum- bered. | Buildings num- bered | Buildings renum- bered. | Figures supplied. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| East Boston. |  |  | 11 |  | 35 |
| Charlestown. |  |  | 11 |  | 28 |
| Boston. | 1 |  | 63 | 23 | 211 |
| South Boston |  |  | 27 | $\ldots$ | 71 |
| Dorchester |  |  | 131 | 6 | 318 |
| Roxbury |  |  | 49 | 4 | 130 |
| West Roxbury | 1 | 6 | 106 | 19 | 311 |
| Hyde Park. |  |  | 20 | 1 | 65 |
| Brighton. |  |  | 63 | 8 | 186 |
| Totals. | 2 | 6 | 481 | 61 | 1,355 |

LIS'T OF STREETS HAVING A smooth pavenent.

* Park roads in charge of Park Department. †Public streets in charge of Park Department.

| Streets. | Limits. | Length in Feet. | Area, Square Yards. | Year Laid. | $\begin{aligned} & \text { Guaranty } \\ & \text { Expires } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| A street (South Boston) | 15 feet northeast of West Broadway to West Broadway. Acme asphalt. Laid by Warren Brothers Company Bessemer brick block gutters. Laid by Warren Brothess Company | $15\}$ | 47 8 | 1917 1917 | $\begin{array}{ll} \text { Oct. } & 18,1922 . \\ \text { Oct. } & 18,1922 . \end{array}$ |
| A street (South Boston) | West Broadway to 15 feet southwest of West Broadway. Acme asphalt. Laid by Warren Brothers Company Bessemer brick Llock gutters. Laid by Warren Brothers Company | 15 \{ | 8 | $\begin{aligned} & 1917 \\ & 1917 \end{aligned}$ | $\begin{array}{ll} \text { Oct. } & 18,1922 . \\ \text { Oct. } & 18,1922 . \end{array}$ |
| Academy Hill road (Brighton) | At Washnngton street. Bitulithic. Laid by Warren Brothers Company. | 3 | 17 | 1913 |  |
| Acton street (city proper) | 10 feet west of Washington street to 6 feet east of Bradford street. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 243 | 329 | 1896 |  |
| Acton street (city proper) | 6 feet east of Bradford street to Bradford street. Sicilian rock asphalt. Laid by Boston Asphalt C'ompany. | 6 | S | 1897 |  |
| Adams street (Dcrchester). | At Bowdoin street. Topeka. (Macadam base.) Laid by eity force | 13 | 159 | 1918 |  |
| Adams street (Roxbury) | Each side of Eustis street. Bitulithic. Laid by John F. Beatty | 2 | s | 1914 |  |
| Adams strcet (Roxbury) | At Dudley street. Mack brick block. Laid by James Doherty | 7 | 20 | 1910 |  |
| Addison street (East Bostou) | At Saratoga street. Standard asphalt. Laid ly Bermudez Company | 8 | 32 | 1918 | May $1,1924$. |
| Ainsworth street (West Roxbury) | At Centre street. Asphalt. (Maradam base.) Laid by the Bermudez Company. | 9 | 29 | 1920 | Unfinished. |
| Albany street (city proper) | 82 feet north of Broadway to 27 feet north of Broadway. Trindad asphalt. Laid by Barber Asphalt l'aving Company. | 55 | 204 | 1899 |  |
| Albany street (city proper) | 27 feet north of Broadway to 13 feet north of the south side of Way street. Pine wood block. Latd ly New York, New Haven \& Hartford Railroad Company. | 55 | 204 | 1913 |  |

List of Streets Having a Smooth Pavement - Continued.

| Streets. | Limits. | Length in Feet. | $\begin{aligned} & \text { Area, } \\ & \text { Square } \\ & \text { Yards. } \end{aligned}$ | Year Laid. | Guaranty <br> Expires. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Albany street (city proper) | 7 fect north of Stoughton strect to 10 feet north of Massachusetts avenue. Pine wood block. Laid by Hernard E. Grant. | 974 | 5,844 | 1917 | Jan. 19, 1923. |
| Albany street (city proper and Roxbury). | 9 fect south of Massachusetts avenue to 37 feet north of Southampton strect. Pine wood block. Laid by Bernard E. Grant. | 234 | 1,407 | 1917 | Jan. 19, 1923. |
| Albany street (Roxbury) | 44 feet south of Hampden street to 7 feet north of Eustis street. Mexican asphalt. Laid by Bermudez Company. | 1,606 | 4,S81 | 1918 |  |
| Alford atreet (Charlestown) | Malden Bridge draw. Jennison Wright slab block pavement. Laid by Boston Bridge Company. | 125 | 611 | 1918 |  |
| Algonquin street (Dorchester) | At Washington street. Pine wood block. Laid by William J. Barr | 3 | 11 | 1913 |  |
| Allen street (city proper) | Charles street to 1 foot east of Charles street. Pine wood block. Laid by John McCourt Company. | 1 | 3 | 1920 | Aug. 20, 1925. |
| Allen street (city proper) | 1 foot east of Charles street to 2 fect east of Charles street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 1 | 3 | 1916 |  |
| Allen street (city proper) | 2 feet east of Charles strect to 18 fect east of Blossom street. Mexican asphalt (macadam base). Laid by Central Construction Company. | 786 | 2,099 | 1917 |  |
| Allen street (city proper) | 18 feet east of Blossom strcet to Chambers street. Bitulithic on crushed stone base. Laid by Warren Brothers Conıpany. | 507 | 1,300 | 1905 |  |
| Allendale street (West Roxbury)...... | At Centre street. Topeka. Macadam base. Laid by Rowe Contracting Company. | 33 | 150 | 1919 | Aug. 12, 1924. |
| Allston street (Brighton)............. . | Brighton avenue to 10 feet south of Brighton avenue. Aztec asphalt (macadam base). Laid by the Bermudez Company. | 10 | 40 | 1917 | Dec. 7, 1922. |
| Allston street (Brighton). | North street line of Commonwealth avenue to the south street line of Commonwealth avenue. Mexican asphalt (macadam base). Laid by Central Construction Company. | 129 | 344 | 1917 |  |


| Allston street (Brighton) | At Bellvista road. Aeme asphalt (macadam base). Laid by John F. Lynch, |  | 35 | 1919 | June 24, 1924. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Ambrose street (Roxbury). | At Dearborn street. Mexican asphalt. Laid by Bermudez Comapany | 3 | 10 | 1918 |  |
| Amory street (Rosbury and West Roxbury'). | 80 feet south of West Walnut park to 7 feet north of Green street. Mexican asphalt (macadam base). Laid by Central Construction Company. | 3,397 | 10,206 | 1919 | Dee. 6, 1924. |
| Amory street (West Roxbury) | 7 feet north of (ircen street to Green strect. Topeka. Laid by the Central Construction Company. | 7 | 22 | 1919 | Dee. 6, 1924. |
| Anawan avenue (West Roxbury) | 12 feet east of Belgrade avenue to Belgrade avenue. Topeka (macadam base). Laid by Rowe Contracting Company. | 12 | 71 | 1920 | Unfinished. |
| Anawan avenue (West Roxbury) | Belgrale avenue to 105 feet west of Belgrade avenue. Topeka (macadam base). Laid by Rowe Contracting Company. | 105 | 354 | 1920 | Unfinished. |
| Andrews street (eity proper) | East Dedh:un street to East Canton street. Trinidad asplalt. I.aid by Barber Asphalt l'aving Company. | 201 | 290 | 1899 | - |
| Appleton street (eity proper) | 'Tremont street to 16 feet west of Tremont street. Topeka. Laid by Rowe Contrating Company. | 16 | 106 | 1919 | May 31, 1924. |
| Appleton street (eity proper | 4 feet east of Berkeley street to Berkeley street. Bitulithic. Laid by Warren Brothers Company. | 4 | 18 | 1906 |  |
| Appleton street (city proper | Berkeley strect to 4 feet west of Berkeley street. Bitulithie. Laid by War-1 ren Brothers Company. | 4 | 18 | 1906 |  |
| Appleton street (rity proper | 4 feet west of Berkeley street to 3 feet east of Clarendon street. Acme asphalt (matadan base). 1, aid by Warren Brothers Company Bessemer brick block gutters. Laid by Warren Brothers Company. | $564\{$ | 2,180 314 | 1916 1916 | $\begin{array}{ll}\text { Nov. } \\ \text { Nov. } & \overline{5}, 1921 . \\ 1921 .\end{array}$ |
| Appleton street (city proper) | 3 feet east of Charendon street to Clarendon street. Bitulithic. Laid by Warren Brothers Company. | 3 | 15 | 1914 |  |
| Appleton street (eity proper) | Clarendon street to 3 feet west of Clarendon street. Bitulithie. Laid by Warren Brothers Company. | 3 | 14 | 1914 |  |
| Appleton street (eity proper). | 3 feet west of Clarenclon strect to 8 feet east of Dartmouth street. Aeme asphalt (macadim base). Laid by Warren Brothers Company . . . . . . Bessemer brick block gutters. Laid by Warren Brothers Company........ | 557 | 2,151 310 | 1916 1916 | $\begin{array}{ll}\text { Nov. } & 5,1921 . \\ \text { Nov. } & 5,1921 .\end{array}$ |

List of Streets Having a Smooth Pavement - Continued.

| Streets. | Linuts. | Length in Fcet. | Area, Squar Yards | Year Laid. | Guaranty Expires. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Appleton street (city proper). | S fect west of Dartmouth street to 91 fect east of West Canton street. Acme asphalt (macadam base). Lail by Warren Prothers Company. bessemer lrick block gutters. Laid hy Warren Brothers Company . | 293 | 1,140 163 | 1916 1916 | $\begin{aligned} & \text { Nov. } 5,1921 . \\ & \text { Nov. } 5,1921 . \end{aligned}$ |
| Appleton street (city proper) | 91 fect east of West Canton street to 10 fect east of Columbus avenue. Bitulithic. Laid by Fred S. \& A. 1). Gore Corporation. | 177 | 1,163 | 1912 |  |
| Appleton street (city proper) | 10 feet east of Columbus avenue to Columbus avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 10 | 95 | 1906-07 |  |
| Arbutus street (Dorchester) | At Jrma street. Bitulithic. Laid by Warren Brothers Compa | 7 | 23 | 1919 | May 26, 1924. |
| Arbutus street (Dorchester). | Earlh side of Lucerne street. Aztee asphalt. Laid by the Bermudez Company. | 14 | 46 | 1919 | Oct. 20, 1924. |
| Arch street (city proper). | Milk street to Franklin strect. Residual asphalt. Laid by Central Construction Company. | 416 | 1,203 | 1915 |  |
| Arch street (eity proper) | 9 fect south of Franklin strect to 12 feet north of Summer street. Residual asphalt. Laid hy Central Construction Company. | 382 | 1,303 | 1915 |  |
| Arch street (city proper) | 12 feet north of Summer street to Summer strect. Pine wood block. Laid by Northern Construction Company. | 12 | 63 | 1915 |  |
| Arch street (eity proper) | Near Summer street. Trinidad asphalt. Laid by Northern Construction Company. |  | 150 | 1915 |  |
| Ardale street (West Roxbury) | At Centre street. Asphalt (macadam base). Laid by Bermudez Company, | 18 | 54 | 1920 | Unfinished. |
| Ardent street (West Roxbury). | Colbery avenue to Belgrade avenue. Aztec asphalt. Laid by Central Construction Ccmpany. | 290 | 840 | 1916 | Aug. 16,1921. |
| Arlington street (eity proper) | 16 feet north of Boston \& Albany Railroad Pridge to 50 feet noith of Isabella street. Pine wocd llock. Laid by Fieds. \& A. D. Gore Corporation. | 376 | 1,069 | 1911 |  |
| Arlington street (city proper) | 31 feet south of Providence street to 10 fect south of Boylston strect. Bessemer brick block. Laid by Coleman Brothers. | 198 | 856 | 1918 |  |


List of Streets Having a Smooth Pavement - Continued.

| Streets. | Limits. | Length in Feet. | Area, Square Yards. | Year Laid. | Guaranty Expires. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Astor street (Roxbury) | At Massachusetts avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 4 | 13 | 1901 |  |
| Athens street (South ]oston) | West Second street to A street. Sicihan rock asphalt; bitummous concrete base. Laid by Boston Asphalt Company. | 614 | 902 | 1895 |  |
| Athens street (South Boston). | Bridye over New Y'crk, New Haven \& Hartford Railroad. Pine wood block. Laid by Central Construction Company. | 64 | 92 | 1918 |  |
| Athens street (South Boston). | B street to C street. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 503 | 726 | 1892 |  |
| Athens strect (South Boston). | C street to D street. Sicılian rock aspbalt. Laid by Jcnes \& Meehan | 508 | 734 | 1901 |  |
| Atherton street (Roxbury) | Each side Amory street. Mexican asphalt (macadam oase). Lard by Central Construction Company. | 18 | 60 | 1919 | Dec, 6, 1924. |
| Atkins street (Brighton) | Washington street to 27 feet north of Justin road. Mexican asphalt. Laid by Central Construction Company. | 618 | 1,490 | 1917 | July 18, 1922. |
| Atwill road (West Roxbury) | Richwood street to 6 feet north of Richwood street. Topeka. Laid by Central Construction Company. | 6 | 15 | 1917 | June 19, 1923. |
| Atwill road (West Roxbury) | 6 fect north of Richwond street to Park street. Topeka. Latd by Rowe Contracting Company. | 207 | 599 | 1919 | Oct. 22, 1924. |
| Auburn street (city proper) | S feet south of Leverett street to Chambers street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 217 | 556 | 1911 |  |
| Auburn street (eity proper) | Chambers street to Poplar street. Trindad asphalt. Laid by Barber Asphalt Paving Company. | 367 | 764 | 1911 |  |
| Auburn street (Roxbury) | Ruggles street to 7 feet south of Ruggles street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 7 | 20 | 1907 |  |
| Auburn street (Roxbury) | 7 feet north of Vernon street to Vernon street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 7 | 20 | 1907 |  |


| Auckland street (Dorchester) | At LIallam street. Mexican asphalt (macadam base). Laid by Martino DeMatteo. |  | 16 | 1919 | June 30, 1924. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Austin street (Charlestown) | S feet west of Seminary place to 5 feet east of Lawrence street. Trinidad asphalt. Latid by Barber Asphalt Paving Company. | 143 | 413 | 1891 |  |
| Avenue Louis Fasteur (Roxtury) | 121 feet north of Longwood avenue to Longwood avenue. Mack brirk block. Laid by James Doherty. | 121 | 1,244 | 1910 |  |
| Avery strect (eity proper) | Washington street to 10 feet west of Washington strect. Pine wood block. Laid by Bernard E. (irant. | 10 | 30 | 1917 | Nov. 4, 1922. |
| Avery street (eity proper | 10 feet west of Washington street to Tremont street. Bitulithic. Laid by Coleman Brothers. | 415 | 1,200 | 1914 |  |
| Avon street (eity proper | Washington street to 9 feet east of Washington street. Pine wood block. Laid by Rernard E. Grant. | 9 | 20 | 1917 | Nov. 4, 1922 . |
| Avon street (city proper | 9 feet east of Washington street to Chauney street. Trinidad asphalt. Lad by Barber Asphalt Paving Company. | 428 | 1,061 | 1901 |  |
| B street (South Buston) | 14 feet northeast of West Bradway to West Broadway. Acme asphalt. Lad by Warren Brothers Company Bessmer brick block gatters. Lad by Warren brothers | $14\{$ | 45 | $\begin{aligned} & 1917 \\ & 1917 \end{aligned}$ | Oct. 18, 1922. <br> Oet. 18, 1922. |
| 13 strect (South Boston) | West broadway southwesterly. Acme aspbalt. Latd hy Warren Brethers Company Bessemer brick block gutters. Laid by Warien Brcthers Company |  | 10 3 | $\begin{aligned} & 1917 \\ & 1917 \end{aligned}$ | Ott. 18, 1922. <br> Oct. 18, 192: |
| Babeock street (13righton) | Commonwealth avenue to Boston \& Albany Ralroad. Topeka. Laid by kowe ('ontracting ('ompany. | 933 | 4,052 | 1920 | Der. 6, 1925. |
| Bahison street (Dorchester) | Blue Whll avenue to 25 feet north of Norfolk street. Bitulithic (macadam base). Laid by Wirren Brothers Company. | 201 | 653 | 1915 | Nov. 4, 1923. |
| Babson strect (I)orchester) | 25 feet north of Norfslk street to Norfolk street. Bitulithic. Laid by Warien Brothers Company. | 25 | 150 | 1918 | Nov. 4, 1923. |
| Babson street (Dorcheste | Norfolk street to $\$ 3$ feet south of Norfolk street. Bitulithic (macad:m base). Laid by W:arren Brothers Company. | 83 | 645 | 1918 | Nov. 4, 1923. |
| Baird street (Dorchestel). | Blue Inll avenue to Morton strect. Bitalithic. Laid by Warren Brothers Company. | 545 | 1,605 | 1919 | May 26, 1924. |

List of Streets Having a Smooth Pavement - Continued.

| Ntreets. | Limits. | Length in Feet. | $\begin{aligned} & \text { Area, } \\ & \text { Square } \\ & \text { lards. } \end{aligned}$ | Year Laid. | Guaranty <br> Lapires. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Bakersfield street (Dorcheste | It Stoughton strect. Topeka (macadam base). Laid ly department forces | 2 | 7 | 1920 |  |
| Ballard street (West Roxbury) | At ('entre. Topeka (macadam base). Laid by Rowe Contracting Company, | 11 | 22 | 1919 | Aug. 12, 1924. |
| Barbara street (West Roxbury) | At ('entre strect. Topeka (macadam base). Laid by Central ('onstruction Company. | 11 | 33 | 1920 | Dec. 22, 1925. |
| Bardwell street (West Roxbury) | Sonth street to Ballard strect. Mexiean asphalt. Laid by Central Construction Company. | 623 | 1,328 | 1917 | June 13, 1922. |
| 13:rrton court (eity proper) | Barton street to Brighton street. Trinidad asphalt. Laid by Barber Asphalt P'aving Company. | 134 | 182 | 1904 |  |
| Barton street (ejty proper) | Leverett street to Chambers street and Chambers street to 5 feet north of Nilton street. Sicilian rock asphalt. Laid by Boston Asplalt Company. | 380 | 645 | 1895 |  |
| Barton street (city proper) | 5 feet north of Milton street to Milton street. Seyssel rock asphalt. Laid by Jones \& Meehan. | 5 | S | 1599 |  |
| Batterymarch street (rity proper) | 93 feet west of Broad street to 7 feet east of Milk street. American rock asphalt (gramite block base). Lad by Jones \& Meehan. | 206 | 659 | 1909 |  |
| Batterymarch street (city proper) | 7 feet east of Milk street to Milk street. Pine wood block. Laid by James Doherty. | 7 | 21 | 1911 |  |
| Batterymarelı street (city proper) | Milk street to 7 feet west of Milk street. Pine wood bloek. Laid by James Doherty. | 7 | 21 | 1911 |  |
| Batterymarch street (eity proper) | 7 feet west of Mikk street to 57 feet west of Milk street. Trinidad asphalt, Laid by Barber Asphalt Paving Company. | 50 | 150 | 1896 |  |
| Batterymarch street (city proper) . | 57 feet west of Milk street to 16 feet east of Liberty square. Aztee asphalt. Laid by James Doherty. | 77 | 231 | 1919 |  |
| Batterymarch street (city proper) . | 16 feet east of Liberty square to Liberty square. Pine wood block. Laid by James Doherty. | 16 | 48 | 1919 | Oct. 10, 1924. |


List of Streets Having a Smooth Pavement. - Continued.

| Streets. | Limits. | Length in Feet. | Area, Square Yards. | Year Laid. | Guaranty <br> Expires. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Beacon street (13righton) | 1,011 feet west of east street line of Reservorr lane to Newton line. Concrete road. Laid by city force. | 2,308 | 6,411 | 1916 |  |
| Be:ech street (West Roxbury) | Belurade avenue at 15 fect north to north side of West Roxbury parkway. Topeka. Laid by Rowe Contracting Company. | 155 | 689 | 1920 | Unfinished. |
| Beaver street ("ity proper) | At Beacon street. American rock asphalt. Laid by Jones \& Meehan. | 1 | 3 | 1908 |  |
| Brlfort street (Dorchester) | It Dorchester avenue. Pine wood lock. Laid by William J. Barry | 10 | 31 | 1919 | Ang. 21, 1924. |
| Belisrade avenue (West Roxbury) | 287 feet west of Rexhame strect across Anawan avenue. Topeka (macadam base). Laid by Rowe Contracting Company. | 611 | 1,764 | 1920 | Unfinished. |
| Belgrade avenue (West Roxbury) | Anawan avente to bridge over New York, New Haven \& Hartford R:ailroad. Topeka. Laid by Rowe Contracting Company. | 949 | 3,663 | 1920 | Unfinished. |
| Belvidere street (city proper and Roxbury). | West Newton strect to 3 feet east of Massachusetts avenue. Bitulithic (erushed stone base). Laid by Warren Brothers Company. | 1,324 | 4,025 | 1902-03 |  |
| Belvidere street (Roxbury) | 3 feet east of DIassachusetts avenue to Massachusetts avenuc. Sicalian rock asphalt. Laid by Boston Asphalt Company. | 3 | 12 | 1901 |  |
| Belivista road (Brighton) | Ailston sticet to Brookline linc. Acme asphalt. Ladd by John F. Lyneh... | 890 | 2,473 | 1919 | June 24, 1924. |
| Bennet street (eity proper) | Ash street to 9 fect west cf Harrison avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 239 | 452 | 1905 |  |
| Rennington street (East Boston) | At Chelsea street. Aztec asphalt (macadam base). Leid by Bermudez Company. |  | 50 | 1919 | May 1, 1924. |
| Bennington street (East l 3 oston) | Bridge over Boston \& Albany Railroad. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 60 | 507 | 1906 |  |
| Bentham road (Dorchester) | Mt. Ida road to 7 feet west of Mt. Ida road. Aztec asphalt. Laid by MeGuire \& McGourty. | 7 | 21 | 1919 | Dec. 26, 1924. |


| Bentham road (Dorehester) | 7 feet west of Mt. Ida road to 30 feet west of Mt. Ida road. Aztee asphalt (macadam base). Lad by MeGure \& MeGourty. |  | 6 | 1919 | Dec. 26, 1924. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Benton street (Roxbury). | At Columbus avenue. Bermudez asphalt. Laid by Boston Asphalt Company. | 27 | 69 | 1906-07 |  |
| Berkeley street (eity proper). | Tremont street to 12 feet north of Tremont street. Asphalt. Laid by 13. 1. Grant Company. | 12 | 140 | 1920 | Sept. 15, 1925. |
| Berkeley street (eity proper) | 12 feet north of Tremont stıeet to Columbus avenue. Bitulithic (erushed stone base). Laid by Warren Brothers Company. | 1,183 | $4,5.55$ | 1900 |  |
| Berkeley street (eity proper) | 150 feet south of $130 y$ lston street to 38 feet south of Boylston street. (East side.) Trinidad asphalt. Laid by Barber Asphalt Paving Company, (West side.) Trindad asphalt. Laid by Barber Asphalt I'aving Company', | 118 | 24.8 200 | $\begin{aligned} & 1906 \\ & 1902 \end{aligned}$ |  |
| Berkeley street (city proper) ......... . | 38 feet gouth of Boylston strect to 15 feet south of Boylston street. Trinidad asphalt. Laid ly Coleman Brothers. | 23 | 75 | 1914 |  |
| Berkeley street (city proper) . . . . . . . . | 15 feet south of Boylston stıeet to Boylston street. J'ine wood block. Laid by Coleman Brothers. | 15 | 92 | 1911 |  |
| Berkeley street (city proper) | Boylston street to 15 feet north of Boylston street. Pine wond block. Laid by Coleman 13rothers. | 15 | 68 | 1914 |  |
| Berkeley street (eity proper) | 15 feet north of Boylston street to 119 feet north of Boylston street. Bitulithic (crushed stone base). Laid by Coleman Brothers in 1914; Warren Brothers in 1903. | 101 \{ | 430 32 | $\begin{aligned} & 1914 \\ & 19003 \end{aligned}$ |  |
| Berkeley stıeet (city proper).... . . . . . | 119 feet north of Boylston street to south street line of Newbury street. Bitulithie (erushed stone base). Lajd by Warren Brothers Company: | 136 | 1803 | 1903 |  |
| Berkeley street (sity proper) ......... . | South street line of Newbury street to 74 feet north of Newbury street. Bitulithic. Macadam base. Laid by Warren Brcthers Company. | 122 | 542 | 1919 | June $t, 1924$. |
| Berkeley street (city proper) | 74 feet north of Newbury street to south strcet line of Commonwealth avenue. Bitulithic (crushed stone base). Laid by Warren 13rothers Company. | 191 | 847 | 1903 |  |
| Berkeley street (city proper)........ . . | South street line of Commonwealth avenue to north street line of Commonwealth avenue. Bituhthic (macadam base). Laid by Warren lirothers Company. | 200 | 879 | 1916 | Nov. 22, 1921. |

List of Streets Having a Smooth Pavement. - Continued.

| Striets. | Limits. | $\begin{aligned} & \text { Lenytht } \\ & \text { in F Fent. } \end{aligned}$ | $\begin{aligned} & \text { Area, } \\ & \text { Square } \\ & \text { Yards. } \end{aligned}$ | $\begin{aligned} & \text { Year } \\ & \text { Laid. } \end{aligned}$ | Guaranty |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Berkeley street (eity proper) | North strect line of Commonwealth avenue to 3 feet south of Marlborough street. Bitulithic (crushed stone base). Laid by Warren Brothers Company. | 262 | 1,16. | 1903 |  |
| Berkeley street (eity proper) | 3 feet south of Marlborough street to Marlbouorgh strect. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 3 | 15 | 1901 |  |
| Berkeley street (eity proper) | Marlborough strect to 2 feet north of Marlborough street. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 2 | 10 | 1901 |  |
| Berkeley strect (city proper) | 2 feet north of Marlborough street to Beacon strect. Bitulithic (erushed stone base). Laid by Warren Brothers Company. | 262 | 1,164 | 1903 |  |
| Bernard street (Dorchester) | At Talbot avenue (erosswalks). Mack brick block. Laid by James Doherty, | 23 | 155 | 1911 |  |
| Besley road (West Roxbury) | Washington strect to Florence street. Texro asphalt. Laid by McGuire \& MeGiourty. | 746 | 2,160 | 1919 | Aug. 2, 1924. |
| Bickford street(Roxbury).. | At Ifeath street. Mack brick block. Laid by Field, Barker \& Underwood, Ine. | 8 | 23 | 1910 |  |
| Bigelow street (3righton) | At Washington street. Bitulithic (macadam base). Laid by Warren Brothers Company. | 9 | 85 | 1920 | July 8, 1925. |
| Binney strect (Roxbury). | At Longwood avenue. Mack brick block. Laid by Field, Barker \& Underwood, Inc. | 8 | 32 | 1910 |  |
| Birch street (West Roxbury). | Penfield street to 6 feet east of Albano street. Bitulithic. Laid by A. H. Archer. | 346 | 898 | 1915 |  |
| Birch street (West Roxbury). | 6 feet west of Albano street to 416 feet west of Albano street. Bitulithic. Laid by A. H. Archer. | 410 | 1,048 | 1915 |  |
| Bird street (Dorchester) | At Hancock street. Mack brick block. Laid by Central Construction Company. | 10 | 29 | 1910-11 |  |


List of Streets Having a Smooth Pavement.- Continued.

| Streets. | Limits. | Length in Feet. | $\begin{aligned} & \text { Area, } \\ & \text { Syuare } \\ & \text { Yards. } \end{aligned}$ | Year Laid. | Guaranty Expires. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Blue Hill avenue (Dorchester) | At Walk llill street. Mexican asphalt (macadam base). Laid by Martino Dellatteo. |  | 981 | 1910 | June 18, 1924 |
| Blue Hill avenue (Dorchester) | Bidge over Neponset river. Pine wood block. Laid by Massachusetts Public Works Department (P'ark). | 20 | 133 | 1903 |  |
| Boardman street (East loston) | At Saratoga street. Standard asphalt. Lad by Bermudez Con | $\delta$ | 51 | 1918 | May 1, 1924 |
| Bolton street (South Boston) | Bridge over New York, New Haven \& Hartford Railroad. Pine wood block. Laid by Central Construction Company. | 64 | 92 | 1918 |  |
| Bolton street (South Boston) | C strect to D strcet. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 501 | 724 | 1905 |  |
| Bond street (eity proper) | Hanson street to Milford street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 182 | 401 | 1595 |  |
| Bosworth street (eity proper) | At Tremont street. Pme wood block. Laid by Coleman Brothers. | 13 | 28 | 1915 |  |
| Bowdoin street (city proper) | Beacon street to south side of Ashburton place. Canton block. Brick block, | 380 | 1,013 | 1902 |  |
| Bowdoin street (city pioper) | North side of Ashburton place to 17 feet south of Cambridge strcet. Bitulithic (crushed stone base). Lald by Warren Brothers Company. | 837 | 2,205 | 1902 |  |
| Bowdoin street (Dorchester) | 8 feet west of east side of Geneva avenue to 24 feet west of Topliff street Topeka. Each side of tracks macadam base. Laid by city force. | S65 | 2,418 | 1919 |  |
| Bowdoin street (Dcreheater) | 24 feet west of Topliff street to 77 feet west of Mt. Ida road. Aztec asphalt (macadam base). Laid by Bernudez Company. <br> Topeka (macadam base at Cottage Park). Laid by city force. | 1,157 | 3,087 77 | 1919 1919 |  |
| Bowdoin street (Dorehester). | 78 feet west of Mt. Ida road to 2 feet east of westside of Quincy street. Pine wood block. Laid by James Doherty. | 386 | 1,885 | 1909 |  |
| Bowdoin street (Dorchester). | 2 feet east of west side of Quincy street to 96 feet west of Winter street (east side tracks). Topeka (macadam base). Laid by city force. | 1,033 | 3,857 | 1918 |  |


| Bowdein street (Dorchester) | At Tovar street. Aztee asphart. Laid by McGuire \& M |  | 25 | 1919 | Nov. 17, 1924. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Bowdoin strect (Dorchester) | 96 feet west of Winter street to Haneock street. Mack brick block. Laid by Central Construction Company. | 310 | $\left\{\begin{array}{r}1,438 \\ 993\end{array}\right.$ | $1910-11$ 1913 |  |
| Bowdoin street (Dorchester) | At Washington strcet. Pine wood block. Laid by William J. Barr | 14 | 100 | 1912 |  |
| Bowen street (South l boston) | C street to D street. Sicilian rork asphalt. Laid by Jones \& Meehan | 509 | 735 | 1901 |  |
| Bowen street (South Boston) | D street to E street. Sicilian rock asphalt. Laid by Joncs \& Mechan | 514 | 742 | 1901 |  |
| Bowen street (South Boston) | E street to F street. Bitulithic (crushed stone base). Laid by Warmen Brothers Company. | 500 | 722 | 1903 |  |
| Bowen street (South Boston) | At Dorchester street. Bitulithic. Lat by Warren Brothers Commeny | 4 | 6 | 190.5 |  |
| Boylston road (Roxbury) | Boston \& Albany Railroad Pridge to IIemenway street. Back Bay Fens. Bituhthic (macadam base). Laid by Wamen Brothers Company. | 1,100 | 8,253 | 1918 | Aug. 15, 1923. |
| Boylston street (eity proper) | Washington street to Tremont street. Pine wood hlock. Laid by Warren Biothers Company. | 479 | 2,000 | 1917 | Aug. 15, 1922. |
| Boylston street (eity proper) | Tremont strect to 9 feet west of Tremont street. Pine wood block. Laid by Bernard E. Grant. | 9 | 40 | 1917 | Nov. 15, 1922. |
| Boylston street (eity proper) | North side of Tremont street to Charles street. Pine wood block. Lad by James Doherty. |  | 1,497 | 1920 | Oct. 1f, 1925. |
| Boylston street (eity proper) | 9 feet west of Tremont street to the west street line of Boylston place. Pine wood bloek. Laid by Fred s. Gore. | 360 | 809 | 1915 |  |
| Boylston street (city proper) | West street line of Boylston place to $\$ 9$ feet east of Carver street. Pine wood block. Latid by United States Wood Presmrving Company. | 155 | 487 | 1901 |  |
| Boylston street (eity proper)........ | 89 feet east of Carver street, aeross Arlington street. Pine wood block. Laid by Clark \& Gore. | 1,18. | 8,693 | 1915 |  |
| Boylston street (city proper) | Arlington street across Berkeley street. I'ine wood block. Laid by Coleman Brothers. | 776 | 4,251 | 1914 |  |
| Boylston street (city proper). | Berkeley street, across Clarendon street. I'ine wood block. Laid by Coleman Brothers. | 612 | 3,400 | 1914 |  |
| Boylston strect (city proper). | At Huntington avenue. Bitulithic. Laid by Coleman Brothers |  | 68 | 1914 |  |

List of Streets Having a Smooth Pavemeni.- Continued.

| Streets. | Limits. | Length in Feet. | $\begin{aligned} & \text { Area, } \\ & \text { Square } \\ & \text { Yards. } \end{aligned}$ | Year Laid. | Guaranty Expires. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Boylston street (city proper). | Clarendon street, across Dartmouth street. Pine wood block. Laid by Coleman Brothers. | 650 | 3,543 | 1914 |  |
| Boylston street (city proper) | Dartmouth street to east side of Exeter street. Pine wood block. Laid by Coleman Brothers. | 548 | 3,044 | 1914 |  |
| Boylston street (eity proper). | At Exeter street (in tracks). Pine wood block. Laid by Coleman Brothers, |  | 68 | 1914 |  |
| Boylston street (eity proper)... | East side of Exeter street to 107 feet west of Exeterstreet. Bitulithic. Laid by Coleman Brothers. <br> Bitulithic. Laid by Warren Brothers Company . | 144 | 327 20 | 1914 1919 | June 4, 1924. |
| Boylston street (eity proper and Roxbury). | 107 feet west of Exeter street to $\&$ feet east of Hereford street. Bitulithic. Laid by Warren Brothers Company. | 1,501 | 5,481 | 1913 |  |
| Boylston strect (Rosbury) | I $\ddagger$ feet west of St. Cecilia street to 90 feet east of Massachusetts avenue (south side). Aztec asphalt. Laid by James Doherty. |  | 242 | 1919 |  |
| Boylston street (Roxbury) | 90 feet east of Massachusetts avenuc to 40 feet east of Massachusetts avenue. Aztec asphalt. Laid by James Doherty. | 50 | 165 | 1919 | Aug. 30, 1924. |
| Boylston street (Roxbury) | 40 fecteast of Massachusetts avenue to 5 feet east of Massachusetts avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 35 | 140 | 1904 |  |
| Boylston street (Roxbury) | 5 feet east of Massachusetts avenue to Massachusetts avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 5 | 17 | 1901 |  |
| Boylston street (Roxbury) | Massachusetts avenue to 3 feet west of Massachusetts avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 3 | 12 | 1901 |  |
| Boylston street (Rosbury). | 3 feet west of पassachusetts avenue to westerly street line of Memenway street. Bitulithic erushed stone base. Laid by Warren Brothers Company. | 387 | 1,384 | 1905 |  |
| * Boylston street (Roxbury) (Fens).... | Easterly side Gaston square (both main and side drives) to Audubon road and on Audubon road to Agassiz road. Bitulithic (macadam base). Laid by Warren Brothers Company. | 2,700 | 0,996 | 1920 | Aug. 10, 1925. |


| Boylston street (West Roxbury).. | 26 feet east of Amory street to Amory street. Mexican asphalt. Laid by Central Construction Company. | 26 | 85 | 1919 | Dec. 6, 1924. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Boylston street (West Roxbury). | Amory street to 51 fect west of Amory street. Mexican asphalt. Laid by Central Construction Company. | 51 | 318 | 1919 | Dec. 6, 1924. |
| Boynton street (West Roxbury) | At south street. Aztec asphalt (macadam base). Laid by Bermudez Company. | 3 | 9 | 1918 | Sept. 28, 1923. |
| Brackettstreet (Brighton) | At Washington street. Bitulithic (macadam base). Laid by Warren Brothers Company. | 10 | 30 | 1920 | July S, 1925. |
| Braddock park (city proper) | At Columbus avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 9 | 34 | 1906-07 |  |
| Bradfordstreet (city pro,er) | Waltham street to Shawmut avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 58:3 | 1,233 | 1897 |  |
| Bradfield avenue (West Roxbury) | At Centre street. Asphalt. | 15 | 44 | 1920 | Unfinished. |
| Bradleestreet (Dorchester) | At Washington street. Pine wood block. Laid by William J. Ba | 3 | 11 | 1913 |  |
| Bradwood street (West Roxbury). | At Belgrade avenue. Topeka (nacadam base). Laid by Rowe Contracting Company. | 43 | 237 | 1920 | Unfinished. |
| Brattle square (city proper) | 7 feet north of Brattlestrect to 6 feet south of Elm street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 268 | 683 | 1888 |  |
| Breckar strect (Brighton) | At Washington street. Bitulithic (macadam base). Laid by Warren Brothers Company. | 10 | 38 | 1920 | July $8,1925$. |
| Bremen street (East Boston). | 22 feet west of Saratoga street to Saratoga street. Aztec asphalt. Laid by Bermudez Company. | 22 | 82 | 1919 | May 1, 1924. |
| Bremen street (East Boston).......... | Saratoga street to 20 fect east of Saratogastrect. Aztec asphalt. Laid by Bermudez Company. | 20 | 72 | 1919 | May 1, 1924. |
| Brent street (Dorchester) | At Washington streat. Topeka (macadam base). Laid by Warren Brothers Company. | 10 | 33 | 1918 | Sept. 25, 1923. |
| Brighton avenue (Brighton) | Street line of Commonwealth aveuue to 2 feet east of Harvard avenue. Aztec asphalt (macadam base). Laid by Bermudez Company. | 1,895 | 9,284 | 1917 | Dee. 7, 1922. |

List of Streets Having a Smooth Pavement.- Continued.

| Streets. | Limits. | Length in Feet. | $\begin{aligned} & \text { Area, } \\ & \text { Square } \\ & \text { Yards. } \end{aligned}$ | Year Laid. | Guaranty Expires. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Brighton avenue (Brighton) | 2 feet east of Harvard avenue to 1 foot west of Harvard avenue. Bitulithic. Laid by Coleman Brothers. <br> Pine wood block (street ear tracks). Laid by Coleman Brothers | 37 6 | 230 89 | 1914 1914 |  |
| Brighton avenue (Brighton) | 1 foot west of Harvard avenue to 2 feet east of Islingtonstreet. Aztee asphalt (maeadam base). Laid by Bermudez Company. | 1,243 | 5,982 | 1917 | Dee. 7, 1922. |
| Brighton avenue (Brighton) | At Islingtonstreet. Bitulithie (macadam base). Laidby Warren Brothers Company. |  | 3.5 | 1919 | Sept. 4, 1924. |
| Brighton avenue (Brighton) | 2 feeteast of Islington street to Cambridge street. Aztee asphalt (macadam base). Laid by Bermudez Company. <br> Bitulithic (macadam base). Laid by Warren Brothers Company........ | 300 | 620 1,846 | 1917 1919 | $\begin{array}{ll} \text { Dec. } & 7,1922 . \\ \text { Sept. } & 4,1924 \end{array}$ |
| Brighton street (eity proper) | Between Leverett street and Poplar street (not including next item). Trimdad asphalt (eobble base). Laid by Barber Asphalt Paving Company. | 599 | S09 | 1802 |  |
| Brighton street (city proper) | Between Leverett street and Chambers street. Aeme asphalt. Laill by Warren Brothers Company. |  | 523 | 1908 |  |
| Brighton street (eity proper) | Poplar street to 7 feet north of Allen street. Trinidad asphalt (eobble base). Laid by Barber Asphalt Paving Company. | 233 | 488 | 1592 |  |
| Brighton street (city proper) | 7 feet north of Allen street to Allen street Mexican asphalt (crushed stone base). Laid by Central Construction Company. | 7 | 27 | 1917 |  |
| Brimmer street (eity proper) | Beacon street to center of Byron street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 116 | 322 | 1895 |  |
| Brimmer street (eity proper) | Center of Byron street to Chestnut street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 180 | 536 | 1906 |  |
| Brimmer street (city proper). | Chestnut street to Pinckney street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 791 | 2,442 | 1895 |  |
| Brinsley street (Dorchester) | At Washington street. Pine wood block. Laid by William J. Barry. | 5 | 26 | 1912 |  |

Public Works Department.

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| Broadway (city proper) | Park square to Eliot street. Black gum wood bloek. Laid by United States Wood I'reserving Company: | 93 | 425 | 1907 |
| :---: | :---: | :---: | :---: | :---: |
| 13roadway (*its proper) | Fliot street to Tremont street. Pine wood block. Laid by Coleman Brothers. | 964 | 4,405 | 1913-14 |
| Broadway (city proper). | Bridge over Boston Elevated Ralway. Pine wood block. Laid by Coleman Brothers. | 55 | 244 | 1913 |
| Broadway (city proper) | Shawmut avenue to Washington street. Pine wood block. Latd by Coleman Brothers. <br> Laid by city force | 408 | 1,346 571 | 1913 1919 |
| Broadway (city proper) | Bridge over Boston \& Albany Ralroad. Jennison Wright wood block, Laid by Boston Bridge Works. | 210 | 812 | 1919 |
| Broadway (city proper). | 105 feet west of Albany street to Albany street. Pine wood block. Laid by New York, New Haven \& 1Iartford Railroad Company. | 106 | 611 | 1913 |
| Broadway (city proner and south Buston). | Drawbridge over Fort Point ehannel. Pine wood block. Laid by Boston Brilge Works. | 210 | 934 | 1914 |
| Bromfield street (city proper) | At Tremont street. Pine wool block. Laid by Coleman Brothe | 12 | 31 | 1915 |
| Brookline avenue (Roxbury) | Beacon strect to 29 feet north of Newbury strect. Aztec asphalt (macadam base.) Laid by Bermudez Company. | 306 | 1,473 | 1918 |
| Brook avenue (Roxbury).............. | Bridge over Boston \& Albany Railroad. Pine wood block. Laid by Michael Merhan. | 87 | 248 | 1919 |
| Brooks street ( $\mathrm{Br}_{\text {righthen }}$ ) . . . . . . . . . . . . | Bridge over Boston \& Albany Railroad (central roadway). Sicilian roek asphalt. Laid by Buston Asphalt Company. |  | 130 | 1902 |
| Brookside avenue (West Roxbury) | At Green street. Topeka. Laid by Cential Construction Company | 6 | 19 | 1919 |
| Brookview strect (Dorchester) | At Harrard street. Topeka. Laid by Rowe Contraeting Company | 12 | 47 | 1920 |
| Browning avenue (Dorchester) | Bernard street to Wales street. Bitulithic. Laid by H. J. McGuire | 791 | 2,284 | 1914 |
| Brunswick street (Roxbury and Dorchester). | Blue Hill avenue to Normandy street. Aztee asphalt. Laid by Central Construction Company. | 638 | 1,849 | 1916 |
| Buekingham street (eity proper)...... | At Columbus avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | $\pm$ | 13 | 1906 |

List of Streets Having a Smooth Pavement.- Continued.

| Streets. | Limits. | $\begin{aligned} & \text { Length } \\ & \text { inlect. } \end{aligned}$ | Area, Square | $\begin{aligned} & \text { Ycar } \\ & \text { Laid. } \end{aligned}$ | Guaranty Expires. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Buckminster strect (Brighton) | Commonwealth avenue to Allston Street Playground. Topeka. Laid by Domenick Vozzella Company. | 500 | 1,449 | 1919 | Nov. 28, 1924. |
| Bunker Hill street (Charlestown) | At Tufts street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. |  | 161 | 1897 |  |
| 13urke street (Rosbury) | At Columbus avenue. Bermudez asphalt. Laid by Boston Asphalt Company. | 26 | 66 | 1906 |  |
| Burroughs street (West Roxbury) | At Centre street. Bitulithic. Laid by Warren Brothers Compan | 2 | 12 | 1913 |  |
| Byron street (East Boston). | S fect south of Saratoga street to Saratoga strect. Standard asphalt. Laid by Bermudez Company. | 8 | 32 | 1918 | May 1, 1924. |
| Byron street (Vast Boston) | Saratogastreet to 8 feet west of Saratoga street, Standard asphalt. Laid by Bermudez Company. | s | 86 | 1918 | May 1, 1924. |
| C street (South Bosto:) | 13 feet northeast of West Broadway to W'est Broadway. Acme asphalt. Laid by Warren lerothers Company Bessemer briek block gutters. Laid by Warren Brothers Company | 13 \{ | 44 7 | 1917 | $\begin{array}{ll} \text { Oct. } & 18,1922 . \\ \text { Oct. } & 18,1922 . \end{array}$ |
| Cabot street (Roxbury) | 151 feet west of Tremont strent to Ruggles street. Trinidad asphalt. Laid by liarber Asphalt P'aving Company. <br> At Windsor street. Tonekia. Laid by Central Construction Company.... | 1,236 | $3,5.11$ 30 | 1891 1919 | July 9, 1924. |
| Cabot strect (Roxbury) | Easterly side of luagles strect to 7 feet east of Vernon street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 716 | 2,967 | 1892 |  |
| Cabot strect (Roxbury) | 7 feet cast of Vernon street to 7 feet north of Linden Park street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 477 | 1,376 | 1897 |  |
| Cabot strect (Roxbury) | 7 feet north of Linden Park strect to Linden Park strect. Mack brick block. Laid by J. E. Burns \& Co. | 7 | 35 | 1909 |  |
| Callender street (Dorchester) . | 51 feet west of Carlos sircet to 17 fect east of Blue Hill avenue. Trinidad asphalt. Laid by D. M. Biggs \& Co. | 1,241 | 3,988 | 1915 |  |

Cambridge street (Brighton).
('ambridge street (Brighton) ('ambridge street (Brighton).
Cambridge street (Brishton).

Cambridge strect (Brighton)
Camden street (city proper).
Cameron street (Dorchester)
Capen strect (Dorchester)... Carleton street (city proper). Carlow st reet (Roxbury). Carmel street (Roxbury) . Carolina avenue (West Roxbury) Carver strect (city proper). Carversireet (city proper)

[^31]Cazenove street (eity proper)
List of Streets Having a Smooth Pavement.- Continued.

| Streets. | Limits. | Length in Feet. | Area, Square Yards. | Year Laid. | Guaranty Expires. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cazenove street (city proper) | Ai Chandler street. <br> Acme asphalt (macadam base). Laid by Warren Brothers Company Bessemer brick block gutters. Laid by Warren Brothers Company. | 3 | 5 5 | ${ }_{1916}^{1916}$ | Oct. 25, 1921 Oct. 28, 1921 |
| Cedrie street (Roshury) | Magazine street to Langdon street. Aztee asphalt. Laid by Central Construction Company. | 610 | 1,356 | 1916 | Nov. 11, 1921. |
| Central street (eity proper) | 8 feet west of lioad street to 21 feet east of kilby street. Aeme asphalt. Laid ly Warren Brothers Company. | 287 | S24 | 1916 |  |
| Central street (eity proper) | 21 feet cast of Killby street to 7 feet east of Kilby street. Aztee asphalt. Lail by James Doherty. | 14 | 40 | 1919 |  |
| Central street (city proper) | 7 feet east of Kilby strect to Kilby street. Pine wood block. Laid by James Doherty. | 7 | 21 | 1919 | Oct. 10, 1924. |
| Centre street (Dorchester) | 70 feet east of Washington street to Washington street. Pine wood bloek. Laid by William J. Barry. | 70 | 255 | 1913 |  |
| Centre street (Rovbury and West Roxbury). | (South side). Forbes street to 264 feet east of Barbara street. Topeka (macadam base). Laid by Central Construction Company. |  | 699 | 1920 | Dec. 22, 1925. |
| Centrestreet (West Roxbury) | $26 t$ feet east of Barbara street to 6 feet east of Boylston street. Topeka (macadam base). Laid by Central Construetion Company. | 884 | 2,652 | 1920 | Dec. 22, 1925. |
| Centre street (West Roxbury) | Green street to 14 feet west of Eliot street. <br> Bitulithie. Laid by Warren Brothers Company.. <br> Pine wood block. (Brows to street ear rails.) Laid by Warren Brothers Company. | 1,366 | 5,248 283 | $\begin{aligned} & 1913 \\ & 1913 \end{aligned}$ |  |
| Centrestreet (West Roxbury) | 14 feet west of Eliot street to 23 feet west of Allendalestreet. Topeka (macadam base). Laid by Rowe Contracting Company. | 5,535 | 23,068 | 1919 | Aug. 12, 1924. |
| Centrestreet (West Roxbury) | 23 feet south of Allendale street to 106 feet east of Chureh street. Asphalt (maeadam base). Laid by the Bermudez Company. | $6,49 \mathrm{~S}$ | 16,602 | 1920 | Unfinished. |

Public Works Department.

| Centre street (West Roxbury) . | 106 feet east of Chureh strect to 64 feet east of Manthorne road. Topeka. Laid by Rowe Contracting Company. | 1,464 | 9,828 | 1920 | Unfinished. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Centrestreet (West hoshury) | At Richwood strect. Topeka. Laid by Central Construction Cot |  | 68 | 1917 |  |
| Centervale park ( ${ }_{\text {archester }}$ ) | Bournesidestreet to Upland avenue. Aztec asphalt. Laidby Central Construction Company: | 515 | 2,219 | 1916 | Nov. 27, 1921. |
| Chambersstrcet (eity proper) | Gireen street, across Poplar strect. 'Prinidad asphalt. Laid by Barber Asphalt l'aving Company. | 460 | 1,022 | 1902 |  |
| Chambers street (eity proper) | Brightonstreet to 6 feet west of Auburn street. Trinidad asphalt. Laid by Barber diphalt l'aving Company. | 152 | 337 | 1895 |  |
| Chambers strect (eity proper) | © feet west of Luburn street to 8 feet east of Charles street. Trinidad asphalt. Laid ty Barler Asphalt Paving Company. | 112 | 249 | 1895 |  |
| Champney street (Brighton) | At Justin road. Mexican asphalt. Laid by Central Construction Company, | 7 | 29 | 1919 | April 29, 1924 |
| Chandlerstrect (city proper) | Arlin rton pllare to 11 feet west of Arlington square. Topeka. Laid by lowe Contracting Company. | 11 | 22 | 1919 | May 30, 1924. |
| Chandler street (eity proper) | 9 feet west of Arlingtonsquare to 3 fect east of Berkeley street. line wood blork. Laid by lreds. \&. A. D. Gore Corporation. | 502 | 2,212 | 1912 |  |
| Chandlerstreet (eity proper | 3 feet east of Borkeler street to Berkeley street. Bitulithic. Laid by Waren Brothers Company. | 3 | 13 | 1906 |  |
| (handlerstreet (eity proper) | Berkeles strect to 3 feet west of Berkeley street. Bilutithic. Laid by Warren Brothers Company. | 3 | 17 | 1906 |  |
| Chandlerstreet (eity prozer | 3 feet we st of Berkeley street to 2 feet east of C'larendon street Bensmerbrick block gutters. Laid by Warren Brothers Compans......... Acme:ayhalt (maradim base). Laid by Warren Brothers Company ...... $\}$ ) Bensmer brick block gutters. Laid by Warren Brothers Company ....... | atie | 2,211 -296 | $\begin{aligned} & 1916 \\ & 1916 \end{aligned}$ | $\begin{aligned} & \text { Oct. } \\ & \text { Oct. } \\ & \text { Os, } \\ & 1 \end{aligned} 1921 .$ |
| Chandlerstreet (city prozer) | $\because$ fent east of Clarenion strect to Clarendon strect. Bitulithic. Laid by . N:arren Brothers ('ommany. |  | s | 191.4 |  |
| Chandlerstreet (city proper) | ( laremtonstrect to ${ }^{\circ}$ feet east of Columbus avenue. <br> Aeme atahalt (macadam batc). Laid by Warren Brothers Company...... <br> Bessemer brick block gutters. Laid by Warren Brothers Company........ . . | 518 \{ | $\begin{array}{r} 2,155 \\ \underset{290}{ } 95 \end{array}$ | $\begin{aligned} & 1916 \\ & 1916 \end{aligned}$ | $\begin{aligned} & \text { Oct. } 2 x, 1921 . \\ & \text { Oct. } 2 \mathrm{~s}, 1921 . \end{aligned}$ |
| Chandlerstrect (city proper) | 9 feet east of Columbus avenue to Columbus avenue. Trinidad asphalt. Laid by Barber Asphalt laving Company. | 9 | 4. | 1906 |  |

List of Streets Having a Smooth Pavement.- Continued.

| Streets. | Limits. | Length in reet. | $\begin{aligned} & \text { Area, } \\ & \text { Square } \\ & \text { Yards. } \end{aligned}$ | $\begin{aligned} & \text { Year } \\ & \text { Laid. } \end{aligned}$ | Guaranty <br> Expires. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Chardon court (city proper) | ('hardon street to 13: feet east of Chardon stret | 134 | 330 |  |  |
| Charlesstreet (eity proper) | At Boylston street. Pine wood block. Laid by Clark \& Ciore |  | 14 | 1915 |  |
| Charlesstreet (eity proper) | At Pinckney street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. |  | 2 | 189.5 |  |
| Charlesstreet (city proper) | 7 feet south of Fruitstreet to 10 feet north of Allen street. Pine wood block. Laid by John McCourt Company. | 730 | 3,253 | 1920 | Aug. 20, 1925. |
| Charlesstreet (Dorchester) | East street line of Ditson street to Geneva avenue. Conerete road. Laid by city force. | 494 | 1,327 | 1916 |  |
| Charlesstrect (Dorchester) | At Geneva arenue. Topeka (macadam). Laid by department forces | 1 | 9 | 1920 |  |
| * Charlesgate East (Rosbury) | Beaconstreet to Commonwealth avenue. Bitulithic (madacam base). Laid by Warren l3rothers (ompany. | 333 | 1,039 | 1918 | Aug. 15, 1923. |
| * Charlesgate East (Rosbury) | Commonwealth avenue to Boston A Albany Railroad. Bitulithic (macadam base). Laid by Warren Brothers Company. | 341 | 972 | 1915 | Aug. 15, 1923. |
| * Charlesgate Wrest (Rosbury) | Beaconstreet to Commonwealth arenue, Back Bay Fens. Bitulithic (macadam base). Laid by Warren Brothers Company, | 205 | 659 | 191. | Aug. 15, 1923. |
| * Charlesgate West (Roxbury) | Connonvedthavenue to Bostonis Albanv Railroad Bridge, Back Bay Fens. Bitulithic (macadam base). Laid by Warren Brothers Company. | 350 | 1,340 | 1918 | Aug. 15, 1923. |
| * Charlesgate West (Roxbury) | (Easterly brunch) Commonwealth avenue to 172 feet southwest, near Newhury street. Bitulithic (macadam base). Laid by Warren Brothers Company. | 172 | 607 | 1918 | Aug. 15, 1923. |
| Charter street (eity proper). | Hanover strect to 14 fect west of Hanover street. Sieilian rock asphalt. Lad by Boston Asphalt Company. | 14 | 50 | 1896 |  |
| Charter street (eity proper) | 14 feet west of 1 Ia nover street, across Unity street. Trinidad asphalt (eobble base). Laid by Barber Asphalt Paving Company. | 306 | 615 | 1894 |  |


| Chase street (Dorchester) | East Cottage street to Willis street. Trinidad asphalt. Laid by Centıal Construction Company. | 307 | 856 | 1915 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Chauncy street (city proper) | Summer street to 6 feet south of Summer strect. Pine wood block. Laid by Northern Construction Company. | 6 | 29 | 1915 |  |
| Chelsea Bridge North (Charlestown). | South side draw to Chelsear line. Jennison Wright pine. Wood block. Laid by Standard Ensineering Company, Inc., Toledo, Ohio. | 319 | 1,418 | 1919 |  |
| Chelsea street (Last Moston) | 75 feet north of Bennington street to 165 feet north of Saratoga street. Aztee asphalt (macadam base). Lad by Bernudez Company. <br> Aztec asphalt (at Naratoga street). Lail by Bermudez Company ........... | 604 | 1,540 382 | 1919 1919 | $\begin{array}{ll} \text { May } & 1,1924 . \\ \text { May } & 1,1924 . \end{array}$ |
| Cherry sticet (eity | 7 feet west of W:ishington street to 8 feet east of Shawmut avenue. Trinidad asphalt. Latid by Barber . Isphalt Paving Company. | 319 | 567 | 1892 |  |
| Cherry street (eity proper) | S feet east of Shawnut avenue to Shawmut avenue. Sicilian rock asphalt. Laid by Boston Isphalt Company. | 8 | 14 | 1898 |  |
| Chester street (Brighton) | Commonwealth avenue to 20 feet north of Commonwealth avenue. Mexican asphalt (nacadam base). Laid by Central Construction Company. | 20 | 50 | 1917 | May 21, 1923. |
| Chester street (Brighton) | 10 feet south of Briyhton avenue to Brighton avenue. Aztec asphalt (macadam base). Laid by Bermudez Company. | 10 | 22 | 1917 | Dec. 7, 1922. |
| Chester street (13righton) | Brighton avenue to 10 feet north of Brighton avenuc. Aztec asphalt (macadam base). Laid by Bermudez Company. | 10 | 22 | 1917 | Dec. 7, 1922. |
| Chestnut street (eity proper) | At Brimmer street. Trinidad asphalt. Laid by Central Construction Company. | 1 | 3 | 1915 |  |
| Chestnut Hill avenue (Brighton) | At Washington street. Bitulathe. Laud by Waren Brothers Company | 4 | 20 | 1913 |  |
| Chestnut Ifill avenue ( $3_{\text {righton }}$ ) | Intersection of north roadway, Commonwealth avenue. Mexican asphalt (macadam base). Laid by Central Construction Company. | 90 | 587 | 1918 | Mlay 21, 1923. |
| Child street (West Roxbury) | At South street. Bitulithic. Laid by Warren Brothers Company | 3 | 11 | 1913 |  |
| Chilmark street (Brighton) | At Commonwealth avenue. Pine wood block. Laid by Clark \& Gore | 19 | 76 | 1915 |  |
| Chipman street (Dorchester) | At Norfok street. Bitulithic. Laid by James Dohert | 1 | 4 | 1913 |  |
| Chiswick road (Brighton). | At Commonwealth avenue. Nexican asphalt (macadam base). Laid by Central Construction Company. | 16 | 170 | 1918 | May 21, 1923. |

List of Streets Having a Smooth Pavement.- Continued.

| Streets. | Limits. | Length in Feet. | Area, Square Yards | Year Laid. | Guaranty <br> Expires. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ('hweh street (city proper) | Boylston street to 55 feet south of Boylston street. Pine wool block. Laid by Clark \& (iore. | 55 | 193 | 1915 |  |
| Chureh street (city proper ${ }^{\text {a }}$ | 55 feet south of Boylsten street to 10 feet north of Providence street. Pine wood buck. Laill by Coleman Brothers. | 100 | 292 | 1913 |  |
| (humeh street (enty proper) | 6 feet south of Fayette street to 6 reet north of Melrose street. Pine wood block. Laid by Fred S. and A. D. Gore Corporation. | 174 | 518 | 1911 |  |
| Church street (West Roxbury | 10 fect north of Centre street to 46 feet north of Centre street. Topeka (macadam base). Laid by Rowe Contracting Company. | 36 | 106 | 1920 | Unfinislied. |
| Chureh street (West Roxbury) | Centre street to 10 feet north of Centre street. Topekia (maeadam base). Laid by Rowe Contracting Company. | 10 | 33 | 1920 | Unfinished. |
| Claremont park (elty proper) | At Columbus avenue. Trindad asphalt. Laid by Barber Asphalt Paving Company. | 9 | 34 | 1900 |  |
| Clarendon street (city proper) | Tremont street to 11 feet north of Tremont street. Asphalt. Laid by B. F. Grant Company. <br> Unionite. Laid by 13. E. Grant Company. | 11 | 3 47 | 1920 1920 | Sept. 1s, 1925 <br> Sept. 18, 1925 |
| Clarenden street (eity proper) | 11 feet nortly of Tremont street to 4 feet south of Warren avenue, Bitulithic. Laid by Warren Brothers Company. | 320 | 1,422 | 1914 |  |
| Clirendon street (city proper) | Each side of Warren avenue. Pine wood block. Laid by Boston Pavng Company. | 8 | 40 | 1913 |  |
| Clarendon street (eity proper) | 4 feet north of Warren avenue to 5 feet south of Columbus avenue. Bitulithic. Laid by Warren Brothers Company. | 855 | 3,506 | 1914 |  |
| Clarendon street (eity proper) | 5 feet south of Columbus avenue to Columbus avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 5 | 2.4 | 1906 |  |
| Clarendon street (eity proper) | 15 feet south of Boylston street to Boylston street. Pine wood block. Laid by Coleman Brothers. | 15 | 60 | 1914 |  |

| Clarendon | Boylston street to 14 feet north of Boylston street. Pine wood block. Laid by Coleman Brothers. | 14 | 56 | 191.4 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Clarendon street (eity proper) | 14 feet north of Boylston street to 16 feet north' of Boylston street. Bituhithic. Laid by Coleman Brothers. | 32 | 101 | 1914 |  |
| Clarendon street (city proper) | 46 feet north of $130 y l$ ston street to 19 feet south of Newhury street. Bitulithie (erushed stone base). Laid by Warren Brothers Company. | 20: | 839 | 190.5 |  |
| Clareadon street (eity .proper) | 19 feet south of Newbury street to $6 l$ feet north of Newbury street. Bitulithie (macadam base). Laid by Warren Brothers Company. | 116 | 467 | 1919 | June 4, 1924. |
| Clarendon street (eity proper) | 61 feet north of Newbury street to south street line of Commonwealth avenue. Bitulithic (crushed stone base). Laid by Warren Brothers Company. | 20.3 | 816 | 190.7 |  |
| Clarendon street (eity proper). | South street line of Commonwealth avenue to north street line of Commonwealth avenue. Bitulithic (macadan base). Laid by Warren Brothers Company. | 200 | 730 | 1966 |  |
| Clarendon street (city proper) | North street line of Commonwealth avenue to Beacon street. Bitulithie. Laid by Warren Brothers Company. | 565 | 2,260 | 190.7 |  |
| Clark street (eity prope | Hanover street to 18 feet east of Hanover street. Sieilian rock asphalt. Laid ly Boston Asphalt Company. | 18 | 35 | 1593 |  |
| (`lark street (eity proper) | 18 feet east of Hanover street to 8 feet west of North street. Trinidad asphalt (cobble base). Laid by Barber Asphalt Paving Company. | 293 | Sfit | 1542 |  |
| Clarkwood street (Dorchester). | At Norfolk street. Bitulithic. Laid by Warren Broth | 5 | 2.) | 191. | Nov. 4, 1923. |
| Claybourne street (Dorchester) | 187 feet south of Dakota street to Park street. Bitulithic. Laid by James Doherty. | 911 | 2.6 .54 | 1915 |  |
| Cleveland place (city proper) | Margaret street to 192 feet northwest of Margaret strect. Concrete (artifieial stone). Laid by V. Grande. | 192 | 293 | 1915 | May $29,1923$. |
| Cobb street (eity proper) | 9 feet west of Washington street to 9 feet east of Shawmut avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 329 | 957 | 1897 |  |
| Cobb street (eity proper) | 9 feet east of Shawmut avenue to Shawmut avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 9 | 27 | 1898 |  |
| Colonial avenue (Dorehester) | At Talbot avenue. Brick block. Laid by James Doherty | 16 | 57 | 1911 |  |

List of Streets Having a Smooth Pavement. Continued.

| Streets. | Limits. | $\begin{aligned} & \text { Length } \\ & \text { in Feet. } \end{aligned}$ | $\begin{aligned} & \text { Area, } \\ & \text { Square } \\ & \text { Yards. } \end{aligned}$ | $\begin{aligned} & \text { Year } \\ & \text { Laid. } \end{aligned}$ | Guaranty <br> Expires. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Columbia street (South Boston). | At Hamlin street. Topeka (macadam base). Laid by John T. Shea, Jr.. |  | 51 | 1920 | Sept. 28, 1925 |
| * Columbia road (Dorchester) | Bridge over New York, New Haven \& Hartford Railroad. Metropolitan brick. | 163 | 362 | 1903 |  |
| * Columbia road (1)orchester) | Bridge over Shoreliam strect. Mack brick. | 59 | 131 | 1902 |  |
| * Columbia road (Dorchester) | Edward Everett square to Stoughton strect (east roadway). Bitulithic (macadam base). Laid by Warren Brothers Company. | 1,416 | 4,444 | 1915 |  |
| Columbia road (Dorchester).......... | 83 feet south of Dudley strect aeross Davenport avenue. Topeka (Telford macadam base). Laid by city force. | 572 | 2,176 | 1919 |  |
| Columbia road (Dorchester) | At 1Iancock street. Mack brick block. Laid by Central Construction Company. <br> Mack brick block. Laid by city force. |  | 210 152 | 1911 |  |
| * Columbia road (Dorchester) | Hancock street to Blue Hill avenue (east roadway). Bitulithic (macadam base). Laid by Warren Brothers Company. | 7,015 | 22,135 | 1915 |  |
| Columbia road (Dorchester) | At Washington street. Pine wood block. Laid by William J. Barry..... | 20 | 68 | 1912 |  |
| Columbus avenue (city proper) | 134 feet south of Arlington street to Boston \& Albany Railroad Bridge. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 912 | 3,570 | 1904 |  |
| Columbus avenue (city proper). | Bridge over New York, New Haven \& Hartford Railroad (in street car tracks). Metropolitan brick block. Laid by Boston Elevated Railway Company. |  | 149 | 1906 |  |
| Columbus avenue (city proper) | Sce Cazenove street. |  |  |  |  |
| Columbus avenuc (eity proper). . . . . . | Boston \& Albany Railroarl Bridge to northerly side of Canden street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 4,083 | 15,742 | 1906-07 |  |
| Columbus avenue (city proper and Roxbury). | Northerly side of Camilen street to 67 feet north of Station street. Bermudez asphalt. Laid by Boston Asphalt Company. | 3,846 | 15,579 | 1906-07 |  |


| Colunibus avenue (Roxbury) | At Walnut avenue. Acme asphalt (macadain base). Laid by Warren Brothers Company. | 8 | 60 | 1917 | Sept. 17, 1922. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Columbus square (eity proper) | Columbus avenue to 9 feet east of Columbus avenue. Trinidad asphalt. Laid by Barber Asphalt Paring Company. | 9 | 46 | 1906 |  |
| Columbus square (city prope | 9 fecteast of Columbus avenuc to 4 feet east of Pembroke street Bitulithic. Laid by Fred s. © A. D. Gore Company. | 235 | 1,774 | 1912 |  |
| $\dagger$ Commonwealth avenue (city proper), | Arlington street to Berkeley street. Bitulithic (macadam base). Laid by Warren Brothers Company. | 631 | 4,718 | 1916 | Nov. 22, 1921. |
| $\dagger$ Commonwealth avenue (city proper), | Berkeley strect to Clarendon street. Bitulithic (macadam base). Laid by Warren Brothers Company. | 580 | 4,340 | 1916 | Nov. 22, 192 I |
| $\dagger$ Commonwealth avenue (city proper), | Clarendon strect to Dartmouth street. Bitulithic (macadam base). Laid by Warren Brothers Company. | 575 | 4,015 | 1916 | Nov. 22, 1921. |
| $\dagger$ Commonwealth avenue (city proper), | Dartmouth strect to Excter street. Bitulithic (macadam base). Laid by Warren Brothers Company. | 555 | 3,857 | 1916 | Nov. 22, 1921. |
| $\dagger$ Commonwealth avenue (eity proper), | Exeter street to Massachusetts avenuc. Bitulithic (macadam base). Laid by Warren Brothers Company. | 2,320 | 17,634 | 1916 | Sept. 11, 1921. |
| $\dagger$ Commonwealth avenue (Roxb | Massachusctts avenue, across Charlescate West. Bitulithic (macadam base). Laid by Warren Brothers Company. | 1,107 | 8,340 | 1918 | Nov. 1, 1923. |
| $\dagger$ Commonwealth avenue (Roxbury | Charlescate West to street line of Beacon strect. <br> Bitulithic (macadam base). Laid by Warren Brothers Company. Asphalt block gytters. Laid by Warren Brothers Company. . Aztee asphalt (macalam base.) Laid by Bermudez Company . | 908 | 7,443 693 5.33 | 1916 | Sept. 11, 1921. <br> lune 1, 1923. |
| * Commonwealth avenue (Roxbury and Brighton). | Beacon street to Cottage Farm Bridge (north roadway). Pine wood block. Laid by Clark it (iore. <br> (Nouth roadway.) Mexican asphalt (macadam base). Laid by Central Construction Company. | 3,502 | 19,592 12,511 | 1915 1917 | May $21,1923$. |
| $\dagger$ Commonwealth avenue (Brighton) | Cottare Farm Bridge over Boston \& Albany Railroad. Sicilian rockasphalt. Laid by Boston Asphalt Company. | 140 | 1,556 | 1596 |  |
| $\dagger$ Commonwealth avenue (Brighton).. | (ottage Farm Bridge, across Brighton avenue (not including next item). Mexican asphalt (macadam base). Laid by Central Construction Company. | 3,591 | 26,243 | 1917-18 | May 21, 1923. |

List of Streets Having a Smooth Pavement.- Continued.

| Streets. | Limits. | Lenath in Fect. | Area, <br> square <br> Yards | Y'ear Laid. | Guaranty <br> Expires. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\dagger$ Commonwealth aveme (Brighton) | (South roadway.) 11 feet west of Winslow road to 210 feet west of Naples road. Endurite (macadam base). Laid by Warren Brothers Company. |  | 1,577 | 1912 |  |
| $\dagger$ Commonwealth avemue (Brighton). | Brighton avenue to llarvard aveme (side roals). Mexican asphalt (mateadlan base). Laid by Central Construction Company. | 35 | 9,354 | 1917-15 | May 21, 1923. |
| $\dagger$ Commonwealth avenue (Brighton) | At Fuller street. Asphalt (macadam base). Laid by the Bermudez Com1:thy. |  | 6;3 | 1920 |  |
| $\dagger$ Commonwealth avenue (Brighton) | Harvard avenucto the east eurb line of Allston street (side roads). Nexican asphalt (macadian base). Laid by Central Construction Company. | 21 | 9,291 | 1917-18 | May 21, 1923. |
| $\dagger$ Commonwealth aveme (Brighton) | At Buckminster strect. Topeka. Laid by Domenick Vozzella Company. |  | 32 | 1919 | Nov. 28, 1924. |
| $\dagger$ Commonwealth avenue (Brighton) | West curb line of Allston strect to the north street line of Wiarren street (side roads). Mexican asphalt (macadim base). Laid by Central Construction Company. |  | 3,172 | 1917 | May 21, 1923. |
| $\dagger$ Commonwealth avenue (Brighton) . | (.Northerly roadway.) ' East street line Kinroff road to east strect line Chestnit Hill avenue. Mexican asphalt (macadan base). Laid by Contral Construction Company. |  | 3,693 | 1918 | May 21, 1923. |
| $\dagger$ Commonwealth avenue (Brighton) | Westerly street line Chestnut Hill avenue to Newton line (north road). Mexican asphalt (macalam base). Laid by Central Construction Company. |  | 8,122 | 1917-15 | May 21, 1923. |
| Compton street (city proper) | At Tremontstreet. Topeka. Laid by Rowe Construetion Company | 13 | 38 | 1919 | May 31, 1924. |
| Conant street (Roxbury). | Parkerstreet to Huntington avenue. Aztee asphalt (macadam base). Laid by Bermudez Company. | 1,556 | 3,625 | 1919 | Nov. 1, 1924. |
| Concord square (eity projer) | At Tremont street. Asphalt. Laid by B. E. Grant Company | 15 | 61 | 1920 | Sept. 18, 1925. |
| Coneordsquare (eity proper). | At Columbus avenue. Trinidad asphlt. Laid by Barber Asphalt Paving Company. | 9 | 41 | 1906 |  |


| Congress square (city proper) | Congress street, across Congress square. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 201 | 388 | 1900 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Congreve street (West Roxbury). | At Centre strect. Asphalt (macadam base). Laid by the Bermudez Company. | 19 | 52 | 1920 | Unfinished. |
| Cooper street (eity proper) | North Marginstreet to east side of Endicottstreet. Trinidad asphalt. Laid by Barber Asphalt I:aving Company. | 163 | 504 | 1887 |  |
| Cooper street (eity proper) | East side of Endicott street to 10 feet east of Wa-hington Street North. Mexican a<phalt. Laid by Central Construction Company. | 231 | 680 | 1917 |  |
| Corbett street (Dorchester) | At Norfolk street. Bitulithic. Laid by James Dohert | 46 | 184 | 1914 |  |
| Corey street (Cliarlestown). | 124 feet north of Moulton street to Moulton street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 124 | 289 | 1897 |  |
| Cornhill court (city proper) | At Washington street. Pine wood block. Laid by James Doherty | 9 | 8 | 1908 |  |
| Corning street (city proper) | Washington street to 8 feet east of shawnut avenue. Acme asphalt. Laid by Warren Brothers Company. | 329 | 700 | 1908 |  |
| Corona street (Dorchester) | At Geneva arenue and Bowdoin street. Mack brick. Laid by Central Construction Company. | 10 | 27 | 1911 |  |
| Corona street (Dorchester) | At Geneva avenue. Topeka (macadam base). Laid by department forces. | 1 | 3 | 1920 |  |
| Cornwall street (West Roxbury) | At Amory street. Mexican asphalt (macadam base). Laid by Central Construction Company. | 7 | 23 | 1919 | Dec. ${ }^{\text {(i, }} 1924$. |
| Cortes street (city proper) | At Arlington street. Pine wood block. Laid by Fred S. \& A. D. Gore Corporation. | 8 | 20 | 1911 |  |
| Court avenue (city proper) | At Washington street. Mack brick block | 7 | S | 1910 |  |
| Court street (city proper) | Washington street to 9 fect west of Washington street. Pine wood block. Laid by James Doherty. | 9 | 27 | 1908 |  |
| Court street (eity proper) | 9 fect west of Washington street to 5 fect east of Court square west. Asphalt. laid by the Bermudez Company. | 293 | 810 | 1920 |  |
| Court square (eity proper) | (East road) Court street to 35 feet south of Court strcet. Asphalt. Laid by the Bermudez Company. | 35 | 79 | 1920 |  |

List of Streets Having a Smooth Pavement. - Continued.

| Streets. | Limits. | Length in Feet | $\begin{aligned} & \text { Area, } \\ & \text { Square } \\ & \text { Yarils. } \end{aligned}$ | $\begin{aligned} & \text { Year } \\ & \text { Laid. } \end{aligned}$ | Guaranty <br> Expires. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Court square (city proper) | (East road) 3.5 feet south of C'ourt street to 20 feet north of Williams court. Acme asphalt. Laid by Warren Brothers Company. | 236 | 735 | 191.4 |  |
| Court mquare (eity proper) | (1)ast road) 20 feet north of Williams court to south of Williams eourt. Acme asphalt. Laid by Warren Brothers Company. | 37 | 118 | 1913 |  |
| Court square (eity proper) | (Soutli road) East road. Court square to West road, Court square. Acme asphalt. Laid by Warren Brothers Company. | 74 | 181 | 1913 |  |
| Court square (eity proper) | (West road) 291 feet south of Court street to 266 feet south of Court street. Acme asphalt. Laid by Warren Brothers Company: | 25 | 65 | 1913 |  |
| Court square (city proper) | (West road) $266 ;$ feet south of Court street to 148 feet south of Court street. Acme asphalt. Laid by Barber Asphalt Paving Company: | 118 | 30.5 | 1914 |  |
| Court square (eity proper) | (West road) 148 feet south of Court street to 8 feet south of Court street. Trinidad asphalt. Laid by Barber Asphalt Paving Company: | 140 | 346 | 1901 |  |
| Cumberland street (city proper) | At Huntington avenuc. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 4 | 17 | 1596 |  |
| Cummings road (Brighton) | 114 feet west of Corey road to Commonwealth avenue. Mexiean asphalt. Laid by Central Construction Company. | 903 | 2,212 | 1917 | Aug. 8, 192. |
| Cummington street (Roxbury) | At Commonwealth avenue. Mexican asphalt (macadam base). Laid by Central Construction Company. | 21 | 74 | 1917 | May 21, 1923. |
| Cunard street (Roxbury) | At Columbus avenuc. Bermudez asphalt. Laid by Boston Asphalt Com- pany. | 16 | 60 | 1906 |  |
| Curtis street (East Boston) | Each side Saratoga street. Aztee asphalt. Laid by Bermudez Company, | 16 | 71 | 1919 | May 1, 1924. |
| Curtis street (East Boston) | Bridge over Boston \& Albany Railroad. Trinidad asphalt. Laid by E. R. Taylor Company. | 41 | 139 | 1906 |  |
| Cushing avenue (Dorehester) | At Columbia road. Topeka (macadam base). Laid by eity force. | 7 | 40 | 1918 |  |


| Cushman road (Brighton) | Murdock street to Etna street. Asphalt. Laid by | 334 | 975 | 1920 | Unfinished |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cushman road (Brighton) | Etna street to 6 feet east of Glencoe street. Asphalt. Laid by John J. Lane, | 308 | 88 | 1920 | Unfinished. |
| Cushman road (Brighton). | 6 feet east of Glencoe street to Glencoe street. Mexican asphalt. Laid by CentralConstruction Company. | 6 | 15 | 1917 |  |
| Custer street (West Roxbury) | At South street. Bitulithic. Laid by Warren Brothers Compan | 1 | 3 | 1913 |  |
| Custom House street (eity proper) | At India street. Mexican a-phalt. Laid by Central Construction Company. | 2 | 10 | 1917 |  |
| D street (South Boston). | S feet north of West Fifth street to 2 feet north of Gold street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 134 | 500 | 1889 |  |
| D atreet (Scuth Boston). | 14 feet southwest of West Broadway to West Broadway. Acme asphalt. Lad by Warren Rinthers Company . Bessemer brick block gutters. Laid by Warren Brothers Company | 14 | $\stackrel{46}{8}$ | $\begin{aligned} & 1917 \\ & 1917 \end{aligned}$ | Oct. 18, 1922. Oct. 18, 1922. |
| D street (South Bostcn) | West Broadway to 13 feet northeast of West Broadway. Aeme asphalt. Laid by Warren Brothers Conpany Bessemer brick block gutters. Laid by Warren Brothers Company | 13 | ${ }_{3}^{48}$ | $\begin{aligned} & 1917 \\ & 1917 \end{aligned}$ | Oct. 18, 1922. Oct. 18, 1922. |
| Dacia street (Roxbury) | 2 feet north of Woodeliff street to 3 feet south of Dove street. Bitulithic. <br> Laid by Warren Brothers Company. | 294 | S50 | 1906 |  |
| Dakota street (Dorchester) | At Washington street. Pine wood block. Laid | 3 | 14 | 1913. |  |
| Dakota street (Dorchester) | At Geneva avenue. Topeka (macadam base). Laid by department rorces, | 1 | 7 | 1920 |  |
| Damrell street (South Boston) | Dorchester avenue to 5 feet west of Ames street. Mark brick block. Laid by Central Construction Company. | 571 | 1,650 | 1910 |  |
| Dane street (West Roxbury). | 6 feet west of Holbrook street to Orchard street. Trinidad asphalt. Laid by Chales J. Jaccbs Company. | 589 | 1,706 | 1915 |  |
| Dartmouth street (eity proper) | At Tremont street. Asphalt. Laid by B. E. Grant Company. | 4 | 12 | 1920 | Sept. 18, 1925. |
| Dartmouth street (city proper) | Each sile of Warren avenue. Pine wool block. Laid by Boston Paving Company. | 8 | 30 | 1913 |  |
| Dartmouth street (eity proper) , | At Columbus avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company. |  | 16 | 1906 |  |

List of Streets Having a Sinooth Pavement.-Continued.

| Streets. | Limits. | Length in Feet. | $\begin{aligned} & \text { Area, } \\ & \text { Suluare } \\ & \text { Yards. } \end{aligned}$ | Year Laid. | Guaranty Expires. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Dartmouth strcet (eity proper)........ | Bridge over New York, New Haven \& Hartford Railroad. <br> Pine wood bloek. Laid by New York, New Haven \& Martford Railroad Company. <br> Metropolitan brick blcek (in strcet ear tracks). Laid by Boston Elevated Ritilway Company. | 118 | 397 117 | 1913 1901 |  |
| Dartmouth street (eity proper)........ | 3 feet south of Stuart street to Huntington avenue. Bitulithie. Laid by James Doherty. | 356 | 1,776 | 1912 |  |
| Dartmouth strect (eity proper)....... | Huntington avenue to 83 feet south of Boylston street. Bitulithie. Laid by Coleman Brothers.. <br> Aeme asphalt. Laid by Warren Brothers Company <br> Trinidad asphalt. Laid by Barber Asphalt Paving Compa | 151 | 134 496 501 | $\begin{aligned} & 1914 \\ & 1912 \\ & 1901 \end{aligned}$ |  |
| Dartmouth street (eity proper). | S3 feet south of Boylston street to 15 feet scuth of Boylston street. Acme asphalt. Laid by Warren Brothers Company. <br> Bitulithic. Laid by Coleman Brothers <br> Trinidad asphalt. Laid by lBarber Asphalt Paving Company | 68 | 10 473 67 | 1912 1914 1901 |  |
| Dartmouth street (city proper)........ | 15 feet south of Boylston street to Boylston street. Fine wood block. Laid by Coleman Brothers. | 15 | 128 | 1914 |  |
| Dartmouth street (eity proper)....... . | Boylston street to 15 feet north of Boylston street. Pine wood block. Laid by Coleman Brothers. | 15 | 117 | 1914 |  |
| Dartmouth street (city proper)........ | 15 feet north of Boylston street to north street line Public Alleys Nos. 349 and 440 . Bitulithic. Laid by Coleman Erothers. | 129 | 890 | 1914 |  |
| Dartmouth street (city proper)........ | North street line Public Alleys Nos. 439 and 440 to 4 feet south of Newbury street. Bitulithic. Laid by Warren Brothers Company. | 120 | 938 | 1914 |  |
| Dartmouth street (eity proper)........ | 4 feet south of Newbury street to 9 feet south of south street line of Commonwealth avenue. Bitulithie (crushed stone base). Laid by Warren Brothers Company. <br> Bitulithie at Newk ury street. Laid by Warren Brothers Company......... | 286 | 2,228 75 | $\begin{aligned} & 1903 \\ & 1919 \end{aligned}$ | June 4, 1924. |

Public Works Department．
Nov．22， 1921.

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| :---: | :---: |
| 3 | \％\％ |
| $\begin{aligned} & \dot{3} \\ & \% \end{aligned}$ | $8$ |


| $\stackrel{\rightharpoonup}{9}$ | $\stackrel{\cong}{\ominus}$ | $\begin{aligned} & \text { } \\ & \vdots \\ & 6 \\ & 0 \\ & \hline- \end{aligned}$ | $\stackrel{8}{8}$ | $\stackrel{\infty}{2}$ | $\stackrel{O}{9}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| O | $\stackrel{\text { ¢ }}{\substack{\text { a }}}$ | 0 | 18 | ＊ | \％ | | $\begin{array}{l}\text { feet south of south street line of Commonwealth avenue to } 10 \text { feet north of } \\ \text { north street line of Commonwealth avenue．} \\ \text { Laid by Warren Brothers Company．}\end{array}$ | 219 |
| :--- | :--- |

10 feet north of north street line of Commonwealth avenue to Beacon street．
Bitulithic（crushed stone base）．Laid by Warren Brothers Company． At Cclumbus avenue．Bermudez asphalt．Laid by Boston Asphalt Com－ pany． 11 foet asphalt．Laid by Barber Asphallt Paving Company．
dad 26 feet west of Marrison avenue to Harrison avenue．Aztee asphali．Laid by Bermudez Company．
At lieath street．Mack brich block．Laid by Field，Barber \＆Underwood，
At Dearborn street．Acme asphalt．Laid by Warren Brothers Company ．． Albany street to 56 feet south of Albany street．Mexican asphalt．Laid by
Bermulez Company＇． 56 feet south of Nhany street to 27 feet north of Dulley street．
Acme as，hallt．Laid by Warren Brothers Company ．．．．．．．．．．．．．．．．．．．．．．．
Bessemer brick block gutters．Laid by Warren Brothers Compan

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List of Streets Having a Smooth Pavement.- Continued.

| Ntreets. | Limits. | 1.enoth in Fret. | $\begin{aligned} & \text { Area, } \\ & \text { Aquare } \\ & \text { Y:ards. } \end{aligned}$ | Year Laid. | Guaranty <br> Expires. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Derne street (eity promer) | Temple street to 5 feet east of Maneock strect. Mack briek block. Laid by J. E. Burns © Co. | 305 | 610 | 1909 |  |
| Wernestrect (xity proper) | F fort cast of Hancock street to Hancock strect. Bitulithic. Laid by Warren Brothers ( ompany. | 5 | 30 | 1902 |  |
| Devonshierstreet (eity proper) | Dork square to 75 feet south of Dork srfuare (west side). Pine wood block. Latid by Bemard E. (irant. |  | 44 | 1916 | Dec. 14, 1921 |
| 1)evonshirestreet (eity proper) | 75 feet south of Dook square to state street (each side of tracks). Pine wool block. Laid by Bernard E. Grant. | 230 | 517 | 1916 | Dec. 14, 1921. |
| Devonshire street (eity proper) | 5 feet north of citatestreet to 6 feet south of Waterstrect. Pine wood block. Laid by Bemard E. (irant. | 391 | 1,278 | 1916 | Dec. 14, 1921. |
| Devonshire street (city proper) | 6 feet south of Water street to 1 foot north of Milk strect. Pine wood bloek. Jaid by James Doherty. | 2.55 | 766 | 1920 | June 20, 1925. |
| Devonshire street (eity proper) | 17 feet south of Nilk strect to north side of Framlin street. Pine wood block. Laid by James Doherty. | 418 | 1,408 | 1920 | June 20, 1925. |
| Devonshire strect (eity proper). | 9 feet north of Summer street to Summer street. Pine wood block. Laid by Northern Construction Company. | 9 | 51 | 1915 |  |
| DeWolf street (Dorehester) | It flancoek street. Bessemer brick block. Laidy y Fred S. \& A. D. Gore Corporation. | 8 | 24 | 1911 |  |
| Dighton street (Brighton) | At Washington strect. Bitulithic (macalam base). Laid by Warren Brothers Company. | 10 | 27 | 1920 | July 8, 1925. |
| Dillaway street (eity proper). | Dore strect to 2 feet north of Hollis street. Bitulithic. Laid by James Doherty. | 259 | 452 | 1914 |  |
| Dillaway street (eity proper) | 2 feet north of Hollis street toHollis street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 2 | 4 | 1891 |  |


| Willon strect (eity 1 ) | Lenox street to sawyer street. Trinidad asphalt. Laid by Barber Isphadt Paving ('ompany. | 204 | 29.5 | 1902 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| I) sanestreet (eity promer) | $\&$ fect west of Broad strect to 297 fect west of l3rond street. Tinindad as:ahalt. Laid by Barber hshalt l'aving ('ompany. | $2 \times 9$ | 877 | 1910 |  |
| 1)osme street (eity proper) | 2!2 ferd west of Broal street to 7 fect east of kilby street. Iztec asphalt l.aid hy d:omes l moherty. | 1:3 | 27 | 1919 |  |
| 1)0:mestreet (city mrol |  1)wherty. | 7 | 16 | 1919 | Oct. 10, 19:4. |
| 1)onstreet (I)or |  | 1 | : | 1315 |  |
| 1)orehester avenue (1)or | fis feet north of tietoriastreet to 10 feet south of 11 atlan strect. D'ine wood block ladl by William J. Barry. | 476 | 2,12 | 1919 | Aug. 23, 1924. |
| Dorehester avenum (1)orehes | ]fs feet somb of Bullows place to 2 feet north of Richmond street. Dine woot block. Laid by bames Dohurty. | 4.33 | 1,17\% | 1917 | Nov. 12, 1922. |
| I)orehester street (South Boston) | in feet north of Fast Bromlway to East Broadway. Bitulithic. Lid by Warren lerethers Company. | 5.5 | 1.30 | 1919 | June 11, 1924. |
| Dorchester avenue (Kouth Roston) | 3 feet nortli of Ralston street to north side of bridere over Old Coblony Railroal. I'ineword block. Land by Willian d. Barry. | 527 | 1,93: | 1919 | Aug. 2I, 1924. |
| Worchester street (routh le | West Brombway to, 129 fect north of. West lijphth street, minus intersectons at W'est Fourth and W'est Fiith streets, and (west side) from $1: 9$ ferf north of West Eighth street to West Eighth street. Botulithic (orushed stone lase). Laml by Warien brothers ( $o m p a n y$. | 1,312 | 5,775 | 190.) |  |
| 1 )orchester strect (South lioston) | $9 t$ feet not th of Vinton street to Vinton street. Trinidal asphatt. Land by barber Asphalt laving Company. |  | 190 | 1901 |  |
| I)orchester strect (South luoston) | S feet north of lagers strect to $15 t$ feet north of I)rerhester avenue. Ritulithes. Laid hy Warmen Brothers Company. | $15: 3$ | 113 | 1914 |  |
| Dote street (rity !roper | 9 feet west of W:ashington street to 『 feet east of Tremont street. Bitulithic. Laid by W:uren brothers ('ompany. | 437 | 775 | 19 I 4 |  |
| Dore street (rity proper) | 3 feet east of Tremont street to Tremont street. I'ine wood block. Laid by Rernsurd f.. (irant. | 3 | 6 | 1917 | Nuv. 15, 1922. |

List of Streets Having a Smooth Pavement.- Continued.

| Streets. | Limits. | Length in Feet. | Area, Square Yards | $\begin{aligned} & \text { lear } \\ & \text { Laid. } \end{aligned}$ | Guaranty <br> Expires. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Doris street (Dorchester) | At Tieadway road. Aztee asphalt. Laid by Central Construction Company. | 7 | 21 | 1916 | Nov. 17, 1921. |
| 1)ove streat (Roxbury) | At Blue Hill avenuc. Mexiean asphalt (erushed stone base). Laid by Central Construction Company. | 3 | 9 | 1917 |  |
| Dove strect (Roxbury) | At Daeia street. Bitulithic. Laid by Warren Brothers Company | 1 | 3 | 1906 |  |
| Dover street (sity proper) | At Tremont street. Asphalt. Laid by B. E. Grant Company. |  | 15 | 1920 | Sept. 18, 1925. |
| Downing street (Roxbury) | Whittier street to Vernon street. Maek brick block. Laid by J. E. Burns \& Co. | 323 | 750 | 1909 |  |
| Draper street (Dorcheste | At Bowdoin street. Aztee asphalt (maeadam base). Laid by Bermudez Company. | 11 | 32 | 1919 | May 9, 1924. |
| Dadley street (Roxbury | 70 feet west of Guild row to 24 feet east of Harrison avenue. Pine wood block. Latid by James Doherty. | 841 | 4,134 | 1912 |  |
| Dudley strent (Roxbur | 24 fect east of Harrison avenue to 4 feet east of Magazine strect. Mack brick bloek. Laid by James Doherty. | 2,666 | 10,755 | 1910 |  |
| Dudley street (Roxbury) | Dummore strect to Magazine street (east side). Sicilian rock asphalt. Laid by Boston Asphalt Company. |  | 350 | 1902 |  |
| 1)unbar avenue (Dorchester) | At Washington street. Topeka (macadam base). Laid by Warren Brothers Company. | 10 | 40 | 1918 | Sept. 25, 1923. |
| Dunbar avenue (Dorebester) | 9 feet west of Washington street to 491 feet west of Washington street. Mexican asphalt (macadam base). Laid by Martino DeMatteo. | 482 | 1,768 | 1919 | June 3, 1924. |
| Dundee strcet (Roxbury) | At Massachusetts avenue. Sieilian rock asphalt. Laid by Boston Asphalt Company. | 4 | 13 | 1901 |  |
| Dunlap street (Dorehester) | Washington strect to 11 feet west of Washington street. Pine wood block. Laid by William J. Barry. | 11 | 25 | 1913 |  |


| Dunlap street (Dorchester) | 11 fect west of Washington street to 6 feet east of Whitfield street. Trinid:ul asphalt. Laid by Wilham J. Rafferty it Co. | 787 | 1,759 | 1915 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Dunmore street (Rosbury) | Dudley street to 57 feet east of Dudley street. Mack hrick block. Laid by lames Doherts: | 57 | 135 | 1910 |  |
| Dunster road (West Roxbury) | Centre street to 2 feet north of Centre street. Topeka (macadam base). Laid by Rowe Cuntracting Company. | 2 | 7 | 1919 | Aug. 12, 1924. |
| Dunster road (West Roxbury) | 2 feet north of Centre strect to 7 feet south of Dane street. Mexican asphalt. Laid by Central Censtruction Company. | 854 | 2,468 | 1917 | June 12, 1922. |
| Dunster road (West Roxbury) | 7 fect south of Dane street to Dane street. Trinidad asphalt. Laid by Chales J. Jacobs Company. | 7 | 23 | 1915 |  |
| Dunster road (West lioxhury) | Dane street to 7 feet north of Dane street. Trinidad asphalt. Laid by Charles J. Jacobs Company. | 7 | 26 | 1915 |  |
| Dunster road (West Roxbury) | 7 feet noth of Dane street to Pond street. Mexican asphalt. Laid by Central Construction Company. | 900 | 2,006 | 1917 | June 12, 1922. |
| Dustin strect (Brighton) | At Ncrth Beacon street. Bitulithic. Laid by Warren Brothers Company, | 10 | 31 | 1918 | Dec. 2t, 1923. |
| Dustinstreet (Brighton) | At Cau'rilsestreet. Bitulithic | 12 | 37 | 1919 | Sept. 4, 1924. |
| Dwight street (city pro;er) | if feet west of Shavmut avenue to 11 feet east of Tremont street. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 696 | 2,017 | 1893 |  |
| Dwight street (city projer) | 11 fest east of Tremont street to Tremont street. Asphalt. Laid by B. E. (irant Company. | 11 | 33 | 1920 | Sept. 18, 1925. |
| Estreet (South Boston) | 5 feet south of Bolton strect to West Third street. Trinidad asphalt. Laid by Barber Asphalt P'aving Company. | 10t | 392 | 1892 |  |
| Estreet (South Boston) | 15 feet northeast of West Broadway to West Broadway. Acme asphalt. Laid by Warren Brothers Company. | 15 | 58 | 1917 | Oct. 18, 1922. |
| E street ( Wouth Boston) | West Broalway to 24 feet southwest of West Broadway. Aeme asphalt. Laid by Warren Brothers Company Bessemer brick block gutters. Laid by Warren Brothers Comp | $24\}$ | 83 | $\left.\begin{array}{l} 1917 \\ 1917 \end{array}\right\}$ | Oct. 18, 1922 |
| Estreet (South Boston) | 24 fect southwest of West Broalway, across West Fourth street. Bitulithic. Laid by Warren Brothers Company. | 311 | 1,137 | 1903 |  |

List of Streets Having a Smooth Pavement.- Continued.

| Stheets. | Limits. | length in lieet | $\begin{aligned} & \text { Area. } \\ & \text { Square } \\ & \text { Yards. } \end{aligned}$ | Y'ear laid | Guaranty <br> Expires. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Es strect (South Boston) | West Serenth street to West Eighth street. Trinidad asphalt. I.aid by Barber Asphalt l'aving Company: | 311 | 500 | 1904 |  |
| East Broadwny (South Boston) | West side Dorchester street to west side L street. Bitulithic. Laid by Warren Brothers Company. | 2,731 | 10,248 | 1919 | June 11, 1924. |
| Castburn street (Brighton) | At Washington street. Bitulithic (macadam base). Laid by Warren Brothers Company: | 10 | 23 | 1920 | July S, 1925. |
| Eastmanstreet (Dorchester) | At Elderstreet. Topeka. Laid by Central Construction Company | 7 | 21 | 1920 | Oct. 14, 1925. |
| Esst Concord street (city proper) | At Albany street. Pine wood block. Laid by Bernard E. Grant | 12 | 45 | 1917 |  |
| East Cottagestreet (Dorchester) | It I'leasant strect. Topeka (macadam base). Laid by Central ('onstruction Company. |  | 104 | 1920 | Sept. 22, 1925. |
| East Fourth street (South Boston) | Dorchester street to 4 feet east of Dorchester street. Bitulithic. Laid by Warren Brothers Company. | 4 | 17 | 1905 |  |
| East Fourth street (South Boston) | \& fect west of K street, across P strect. Pine wood block. Laid by John E. (Quinn. | 2,655 | S,681 | 1919 | May 24, 1925. |
| East Fourth street (South Boston) | P' street to 96 feet west of Farragut road. Pine wood block. Laid by James Doherty. | 426 | 1, 4.50 | 1911 |  |
| East Fourth street (South Boston). | 96 feet west of Farragut road to Farragut road. Mack brick block. Laid by Janies Doherty. | 96 | 329 | 1911 |  |
| East Newton street (eity proper) | Washington street to Harrison avenue. Aztec asphalt (macadam basc). Laid by Bermudez Company. | 604 | 2,20b | 1919 | April 23, 1924. |
| East Newton street (city proper) | Harrison avenue to 13 feet west of Albany street. Aztec asphalt (macadan base). Laid by Bernudez Company. | 701 | 2,634 | 1919 | May 14, 1924. |
| Easton street (Brighton). | North Harvard street to Myrick street. Asphalt. Laid by John J. Lane.. . | 660 | 1,911 | 1920 | Nov. 20, 1925. |


| 1920 | Nov. 20, 1925. |  |
| :--- | :--- | :--- |
| 1920 | Nov. 20, 1925. |  |
| 1917 | Nov. 3, 1922. |  |
| 1912 |  |  |
| 1914 |  |  |
| 1920 | Oct. 14, 1925. |  |
| 1919 | Scpt. $4,1924$. |  |
| 1919 | Sept. $4,1924$. |  |
| 1915 |  |  |
| 1914 |  |  |
| 1907 |  |  |
| 1913 |  |  |
| 1918 | Nov. | $4,1923$. |
| 1917 | Sept. $17,1922$. |  |
| 1904 |  |  |
| 1919 | June 11,1921 |  |



| Myrick street to 7 feet west of Mansfield street. Asphalt. Laid by John J. Lane. | 218 |
| :---: | :---: |
| 7 feet west of Manyfield street to 64 feet west of Mansfield street. Asphalt (macadam base). Laid by John J. Lane. | .7 |
| At North Russellstreet. Aztec asphalt. Laid by lermudez Comp | 3 |
| Fisev street to Beach street. Acme asphalt. Laid ly Warren Brothers Company. | 46.4 |
| At Norfork street. Bitulithic. Laid by Iames Doh | 9 |
| Columbia road to Humphreysstrect. Topeka. Laidby Central Construction Company. | 816 |
| At Cambridge street. Bitulithic (macadam base). Laid by Warren Brothers Company: | 12 |
| At (ambridge street. Bitulithie (matadam base). Laid by Warren Brothers Company: | 12 |
| ('entre street to West Rowhry lranch, Boston \& Providence Division. Now York, New llavend Hartford Railroal. Trinidad ampalt. haid by Charles.J. Jacohs Company. | 596 |
| Onsouthside at Broadway. line wood hork. Latid ly Codeman Brothers |  |
| Diast side of Broadway to Columbus atemue. l'ine wood block. Laid by United States Wond Preserving Compans: | 16.4 |
| At Centrestreet. Bitulithir. Laid by Warren Brothers Company | 2 |
| At Norfok street. Bitulithic. Laid by Warren Brothers Company | s' |
| At ceacrstrect. A(measphalt (macadambase). Laidby Warren Brothers ('omp:tay. | 19 |
| 7 feet south of Casile strect to 7 feet north of Dover strect. Bitulithie (crushed stone base). Latid by Warren Brothers Company. | S08 |
| 125 feet west of East Broadway to East Broadway. Bitulithic. Laid by W:arren Brothers Company. | 125 |

Easton street (Brighton)
Eastonstrect (Brighton)
E:aton strect (city proper). Edinboro'street (city proper) Edson street (1)orehester) Elder street (Dorehester) Bleanor street (Brighton)
Elgin street (West Roxbury)
Elkostreet (Brighton)
Eliot street (city proper)
Eliot street (city profer)
Eliot strect (West Rosbury). Dlizabeth street (1) orchester) Elm llill arenue (Roxbury).
Emeraldstreet (eity proper). .
Emerson street (South Boston)

City Document No. 22.
List of Streets Having a Smooth Pavement.- Continued.

| Streets. | Limits. | Length in Feet. | Area, Square lards | Year <br> Laid. | Guaranty Expires. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Emerson street (South Boston) | East Broadway to 34 feet east of East Broadway. Bitulithic. Laid by Warren l3rothers Company. | 34 | 139 | 1919 | June 11, 1924. |
| Emerson street (South Roston). | 7 feet west of $K$ street to $K$ street Pine wood block, Laid by John E. Quinn. | 7 | 21 | 1920 | May 24, 1925. |
| limerson street (South Boston). | 22 feet west of East Fourth street to East Fourth street. Pine wood block. Laid by John E. Quinn. | 22 | S8 | 1920 | May 24, 1925 |
| Emerson street (Kouth Boston). | 8 feet west of MI street to M1 street. Pine wood block. Laid by John E. Qumn. | S | 20 | 1920 | May 24, 1925. |
| Finlicott street (city proper) | Cooper street, across Thacher street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 320 | 1,0S2 | 1599 |  |
| Lipping sticet (Dorchester) | Washington street to 1 foot east of Norfolk street. Mexican asphalt. Laid by Central Construction Company. | 240 | 557 | 1917 | May 25, 1922. |
| Cuping street (Dorchester) | 1 foot east of Norfolk street to Norfolk street. Bitulithic. Laid by James Doherty. | 1 | 6 | 1913 |  |
| Fissex place (city proper) | Tufts street to 7 feet south of Essex street. Sicilian roek asphalt. Laid by Boston Asphalt Company. | 195 | 336 | 1901 |  |
| Pssex strect (Brighton) | Commonwealth avenue to 22 feet north of Commonwealth avenue. Pine wood block. Laid by Clark \& (iore. | 22 | 161 | 1915 |  |
| Lissex street (Brighton). | From 22 feet north of Commonwealth avenue to bridge abutment. Aztec asphalt. Laid by Bernudez Company. | 240 | 679 | 1918 | 1 |
| Essex street (Brighton) . | Bridge abutment to Cambridge line. Pine wood block. Laid by James Doherty. | 520 | 1,445 | 1913 |  |
| Etna street (Brighton). | At North Beacon street. Bitulithic. Laid by Warren Brothers Company . . | 10 | 35 | 1918 | Dee. 24, 1923. |
| Etna street (Bughton) | At Cushman road. Asphalt. Laid by John J. Lane. | 39 | 113 | 1920 | Unfinished. |


| Euclid street (Dorchester) | At Washington street. Topeka (macadam base). Laid by Warren Brothers Company. | 10 | 33 | 1918 | Sept. 25, 1923. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Eustis street (Roxbury) | 138 feet cast of Winslow strect to 163 feet west of Albany street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 130 | 2.41 | 1906 |  |
| Eustis street (Roxbury) | 12 feet west of Dearborn street to Dearborn street. Acme asphalt. Laid by Warren Brothers Company Bessemer brick block gutters. Lad by Warren Brothers Co | 12 | $\stackrel{29}{7}$ | $\begin{aligned} & 1916 \\ & 1916 \end{aligned}$ | Nov. 20, 1922. Nov. 20, 1922. |
| Eustis street (Roxbury) | Dearborn street to 6 feet east of Dearhorn strcet. Acme asphalt. Lail by Warren Brothers Company. Bessemer briek block gutters. Laid by Warren Brothers Comp | 6 | 16 4 | $\begin{aligned} & 1916 \\ & 1916 \end{aligned}$ | Nov. 20, 1922. |
| Eustis strcet (Roxbury) | 6 feet east of Dearborn street to 9 feet west of Hampden street. Bitulithic. Laid by John F. Beatty. | 1,270 | 3,689 | 1914 |  |
| Eustis street (Roxbury) | Hampden street to Magazine street. Bitulithic. Laid by John F. Beatty. | GS6 | 1,990 | 1914 |  |
| Evelyn street (Dorchester) | At Norfolk street. Bitulithic. Lad by Warren Brothers | 8 | 25 | 1918 | Nov. 4. 1923. |
| Everett avenue (Dorchester) | At Stoughton street. Topeka (macadam base). Laid by department forces, | 4 | 21 | 1920 |  |
| Everett street (Brighton) | At Ncrth Beacon street. Bitulithic. Laid by Warren Brothers Company | 10 | 31 | 19 IS | Dec. 24, 1923. |
| Everton street (Dorchester) | Olney strect to Geneva avenue. Topeka. Laid by Central Construction Company. | 677 | 2,026 | 1916 | lune $26,1922$. |
| Exchange place (city proper | S feet east of Congress street to 36 feet west of Kilby street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 207 | 597 | 1903 |  |
| Exchange place (eity proper) | 30 feet west of liilby street to 9 feet west of Kilby strect. Aztee asphalt. Laid by James Doherty. | 21 | 62 | 1919 |  |
| Exchange place (city proper) | 9 feet west of Kilby street to Kilby street. Pine wood block. Laid by James Doherty. | 9 | 27 | 1919 | Oct. 10, 1924. |
| Exchange street (city proper) | 173 fect north of State strect to 25 feet south of Dock square. Pine wood block. Laid by Central Construction Company: | 139 | $2 \cdot 12$ | 1913 |  |
| Exeter place (eity proper) | 8 feet west of Chauney street to 7 fect east of Harrison avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company: | 155 | 35.3 | 1597 |  |

List of Streets Having a Smooth Pavement.- Continued.

| Streeta. | Limits. | Length in Feet. | $\begin{aligned} & \text { Area, } \\ & \text { Square } \\ & \text { Yards. } \end{aligned}$ | Year Laid. | Guaranty Expires. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Fxeter street (city proper) | At Ifuntington avenur |  |  |  |  |
|  | Rituhthic. Laid by Fred S. \& A. D. Gore Corporation Situlithic. daid by Warren Brothers Company..... |  | 14 | 1912 1909 |  |
| Exeter strect (eity proper) | Huntmgton avenue to 16 feet south of Boylston strect. Bitulithie. Laid by Roston Elevated Railway Company. | 541 | 2,126 | 1914 |  |
| Exeter strect (eity proper) | 16 feet south of Boylston street to Boylston street. Bitulithic. Laid by Colenan Brothers. | 16 | 85 | 1914 |  |
| Exeter street (eity proper) | Boylston street to 15 feet north of Boylston street. Bitulithic. Laid by Warren Brothers Company. | 15 | 62 | 1919 | June 24, 1924. |
| Vxeter street (eity proper) | 15 feet north of Boviston street to south street line Commonwealth avenue. Bitulithic (macadam base). Laid by Warren Brothers Company. | 552 | 2,208 | 1919 | June 24, 1924. |
| Exeter street (city proper) | South street line of Commonwealth avenue to north street line of Commonwealth avenue. Bitulithic (macadam base). Laid by Warren Brothers Company. | 200 | 730 | 1916 | Nov. 22, 1921. |
| Exeter strect (city proper) | South side of Marlborough street. Bitulithic. Laid by James Doherty | 3 | 13 | 1914 |  |
| Exeter street (eity proper) | North side of Marlborough street. Bitulithic. Laid by James Doherty | 2 | 9 | 1914 |  |
| Exeter street (city proper) | Company. <br> At Beacon street. Trididad asphalt. Laid by Barber Asphalt Paving | 2 | 9 | 1909 |  |
| Fabin street (eity proper) | Newland street to lvanhoe strect. Sieilian roek asphalt. Laid by Boston Asphalt Company. | 415 | 606 | 1895 |  |
| Fabyan street (Dorchester) | 15 feet east of Blue Hill avenue to 4 feet east of Harvard street. Trinidad asphalt. Laid by Martino DeMatteo. | 687 | 1,981 | 1915 |  |
| Fabyan street (Dorchester) | 4 feet east of Harvard street to Harvard street. Topeka. Laid by Rowe Contracting Company. | 4 | 15 | 1920 | June 1, 1925. |


| Fairbanks street (Brighton) | At Washington street. Bitulithic (macadam base). Laid by Warren Brothers Company. | 10 | 31 | 1920 | July 8, 1925. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Fairfield street (city proper) | Boylston street to 5 feet north of Boylston street. Bitulithic. Laid by Warren Brothers Company. | 5 | 23 | 1913 |  |
| Fairfield street (eity proper) | 13 feet south of Newbury street. Bitulithic (macadam base). Laid by Warren Brothers Company. | 60 | 267 | 1919 | June 4, 1924. |
| Fairfield street (eity proper). | Each side of Marlborough street. Bitulithic. Laid by James Doherty. | 6 | 26 | 1914 |  |
| Fairfield street (eity proper) | At Beacon strcet. Trinidad asphalt. Laid by Barber Asphalt Paving Company' | 3 | 12 | 1909 |  |
| Falkland terrace (Rrighton) | IIobart street to Brookdale road. Topeka. Laid by John J. | 661 | 1,949 | 1920 | Sept. 25, 1925. |
| Falmouth street (Roxbury) | 30 feet north of Norway street to 6 feet north of Massachusetts avenue. I'ine wood block. Laid by James Doherty: | 634 | 2,433 | 1909 |  |
| Falmouth street (Roxbury).. | 6 feet north of Massachusetts avenue to Massachusetts avenue. Sicilian rock asphait. Laid by Boston Asphatt Company: | 6 | 25 | 1901 |  |
| Farquhar street (West Roxbury) | Intersection of Selwyn street. Topeka (macadam base). Laid by Martino DeMatteo. | 33 | 85 | 1920 | Nov. 11, 1925. |
| Farquhar street (W'est Roxbury | Selwy street to Centre street. Topeka. Laid by Martino DeMatteo | 905 | 2,620 | 1920 | Nov. 11, 1925. |
| Farrington avenue (Brighton) | At Harvard avenue. Bitulithic. Laid by Coleman Brot | 2 | 6 | 1914 |  |
| Faxon strect (Roxbury) | At Smith street. Aztec asphalt (macadam base). Laid by Bermudez Company. | 7 | 16 | 1919 | Nov. S, 1924. |
| Fay street (city proper) | 5 feet west of Harrison avenuc to 8 feet south of Dover street. Sicilian rock asphalt (cobble base). Laid by Boston Asphalt Company. | 305 | 532 | 1894 |  |
| Fayette street (city proper).......... | Broadway to 7 feet west of Broadway. Pine wood block. Laid by Coleman Brothers. | 7 | 16 | 1913 |  |
| Fayette street (city proper) | 7 feet west of Rroadway to Arlington strect. line wood block. Laid by Fred S. \& A. D. Gore Corporation. | 839 | 1,914 | 1911 |  |
| Federal street (eity proper) | Milk street to 8 feet south of Franklin street. Pine wood block. Laid by James Dolierty. | 474 | 1,670 | 1919 | Unfinished. |

List of Streets Having a Smooth Pavement.- Continued.


| Frankfort street (East Boston) | At Neptune road. Mexiean asphalt. Laid by Central Construction Company. | 20 | 67 | 1916-17 | Aug. 2, 1923. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Franklin street (eity proper).. | At Federal street. Pine wood bloek. Laid by dames Dohert | 10 | 40 | 1919 | Untinished. |
| Franklin street (city proper) | AtIndiastrect. Mexicanasphalt. Laid by Central Construction Company, | 1 | 4 | 1901 |  |
| Fruit street (city proper) | Blossomstreet to 2 feet north of Charles street. Acme asphalt. Laid by Warren Brothers Company. Bessemer brick block gutters. Laid by Warren Brothers Company. | 947 2 | 1,425 303 | $\begin{aligned} & 1917 \\ & 1917 \end{aligned}$ | $\begin{aligned} & \text { Nov. } 15,1922 . \\ & \text { Nov. } 15,1922 . \end{aligned}$ |
| Fruit street (،ity proper) | To 2 feet north of Charles street to Charles street. Pine wood blork. 1ail by John McCourt Company. | 2 | 10 | 1920 | Aus. 20, 1925. |
| Fuller strect (Brighton) | At Commonwealth avenue. Asphalt (macadam base). Laid by the Bermudez Company. | 20 | 79 | 1920 |  |
| Gi street (South Boston) | Eaeh side of East Broadway. Bitulithie. Laid by Warren Brothers Company. | 58 | 193 | 1919 | June 11, 1924. |
| (i street (South Boston). | 110 feet north of East Sixth street to 17S feet north of East Seventh street. Bitulithie. Laid by Warren Brothers Company. | 230 | S.S | 1905 |  |
| Caffney street (Brighton) | Commonwealth avenue to Buston \& Albany Railroad. Mexican asphalt. Laid by Central Construction Company. <br> Pine wood block (brows to street ear rails). Laill by Central Construction Company. | 779 | 3,914 28 | 1917 1917 | June 29, 1922 June 29, 1922. |
| Gainsborough street (Roxbury) | 10 feet east of IIuntington avenue to Providence Division of New York, New Haven \& IIartford IRailroad. Bitulithie (erushed stone base). Laid by Warren Brothers Company. | 539 | 2,037 | 1903 |  |
| Garclen Courtstreet (city proper) . | North square to 7 feet south of Fleet street. Bitulithic (crushed stone base). Laid by Warren Brothers Company. | 226 | 365 | 1906 |  |
| Gardner street (Brighton) | At Flarsard avenue. Bitulithie. Laidby Coleman Broth | 2 | 6 | 1914 |  |
| Garrison street (eity proper). | At Huntington avenue. Sicilian roek asphalt. Laid by Boston Asphalt Company. | 4 | 16 | 1896 |  |
| Gates street (South Boston). | At Dorchesterstrect. Bitulithic. Iaid by Warren Brothers Compan | 5 | 16 | 1905 |  |
| Gay strect (Roxbury) | At Linclen Park street. Mack brick block. Laid by J. E.Burns \& Co | S | 19 | 1909 |  |

List of Streets Having a Smooth Pavement.-Continued.

| Streets. | Limits. | Length in Feet. | Area, Square Yards | Year Laid. | Guaranty <br> Expires. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Gaylord street (Dorchester) | At Washington street. Pine wood bloek. Laid by William J. Barry | 3 | 9 | 1913 |  |
| Genesee street (city proper) | Harrison avenue to $\mathbf{1 5}$ fect east of Harrison avenue. Aztec asphalt. Laid by Bermuilez Company. | 15 | 34 | 1918 |  |
| Genesee street (rity proper) | 15 feet east of Harrison avenue to 66 feet west of Albany street. Seyssel roek asphalt. Laid by Jones id Meehan. | 431 | 956 | 1599 |  |
| Genesee street (city proper) | 66 feet west of Albany street to 15 feet west of Albany street. Asphalt. Laid by the Bermudez Company. | 51 | 114 | 1920 |  |
| Geneva avenue (Dorchester) | 185 feet west of Beechwood street to 9 feet east of Bowdoin street. Mack briek block. Laid by Central Construetion Company. | 1,329 | 5,123 | 1911 |  |
| Geneva avenue (Dorchester). | 9 feet east of Bowdoin street to Bowdoin street. Topeka. Laid by city force. | 9 | 20 | 1919 |  |
| Geneva avenue (Dorehester). | Bowdoin street to 222 feet south of Charles street. Topeka (maeadan base). Laid by department forces. | 2,384 | 4,208 | 1920 |  |
| Geneva avenue (Dorchester). | 112 fect north of Vinson street to 9 feet south of Vinson street. Topeka (macadam base). Laid by department forees. | 151 | 222 | 1920 |  |
| Geneva avenue (Dorehester) | Park street to 10 feet north of Dorehester avenue. Topeka (maeadam base). Laid by department forees. | 465 | 1,797 | 1920 |  |
| Geneva avenue (Dorchester) | At Levant street. Aztee asphalt (maeadam base). Laid by MeGuire \& N1cGourty. |  | 54 | 1919 | Nov. 24, 1924. |
| Glenarm street (Dorchester) | At Washington street. Pine wood bloek. Laid by William J. Barry | 10 | 23 | 1912 |  |
| Gleneoe street (Brighton) | North Beacon strect to 1 foot south of North Beacon street. Bitulithie. Laid by Warren Brothers Company. | 1 | 3 | 1918 | Dee. 24, 1923. |
| Glencoestreet (Brighton). | 1 foot south of North Beacon street to Saybrook street. Mexiean asphalt. Laid by Central Construction Company. | 415 | 972 | 1917 | Aug. 2, 1922. |

Aug. 2,1922 .
July 14, 1921.
Nov. $5,1925$.
Nov. $5,1925$.
Nov. $5,1925$.
Dec. $10,1924$.




List of Streets Having a Smooth Pavement. - Continued.

| Streets. | Limits. | Length in Feet. | Area, Square Yards. | Year Laid. | Guaranty Expires. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Gold street (South Boston) | B street to C street. Sicilian rock asphalt. Laid by Jones \& Meehan | 512 | 730 | 1901 |  |
| Gold street (South Boston) | C street to D street. Sicilian rock asphalt. Laid by Jones \& Meehan | 513 | 741 | 1901 |  |
| Gold street (South Boston) | At Dorchester street. Bitulithic. Laid by Warren Brothers Compa | 4 | 6 | 1905 |  |
| Goldsmith street (West Roxbury) | At Centre street. Topeka (macadam base). Laid by Rowe Contracting Company. | 12 | 27 | 1919 | Aug. 12, 1924. |
| Gordon street (Brighton) | At North Beacon street. Bitulithic. Laid by Warren Brothers Company. | 10 | 31 | 1918 | Dec. 24, 1923. |
| Gordon street (Brighton) | At Cambridge street. Bitulithic (macadam base). Laid by Warren Brothers Company. | 12 | 37 | 1919 | Sept. 4, 1924. |
| Govestreet (East Boston) | 8 feet east of Venice strect to Cottage street. Topeka. Laid by Warren Brothers Company. | 434 | 1,430 | 1917-18 | April 26, 1923. |
| Grace street (Dorchester) | Walton street to Roslin street. Bitulithic. Laid by D. M. Biggs \& Coo | 303 | 873 | 1915 |  |
| Granby street (Roxbury) | At Commonwealth avenue. Pine wood block. Laid by Clark \& Gore | 19 | 88 | 1915 |  |
| Gray street (city proper) | At Clarendon street. Bitulithic. Laid by Warren Brothers Company. | 3 | 7 | 1904 |  |
| Green street (West Roxbury) | 10 feet east of Washington street to 7 feet west of Call street. Topeka. Laid by Central Construction Company. | 878 | 2,751 | 1919 | Dec. 6, 1924 |
| Greenough avenue (West Roxbury).... | At Centre street. Bitulithic. Laid by Warren Brothers Company. | 2 | 18 | 1913 |  |
| Greenview avenue (West Roxbury).... | Centre street to 413 feet east of Centre street. Topeka. Laid by John Kelly Company. | 413 | 686 | 1919 | Oct. 30, 1924. |
| Greenvillestreet (Roxbury). | At Dudley street. Mack brick block. Laid by James Doherty. | 8 | 20 | 1910 |  |
| Greenwioh park (eity proper)......... | At Columbus avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 9 | 34 | 1906 |  |

Public Works Department.

| July $1,1924$. |
| :--- |
| Dee. 10, 1924. |
| Oct. 25, 1924. |
| June 11, 1924. |
| Sept. 28, 1923. |
| Aug. 21, 1924. |
| June 30, 1924. |
| Say $9,1924$. |
| Sept. 28, 1925. |



| Greenwich street (Roxbury) | Westminster street to Warwiek street. Topeka. Laid by Central Construction Company. | 365 | 1,383 |
| :---: | :---: | :---: | :---: |
| Greenwood street (Dorchester). | At Yorkstreet. Topeka (macadam base). Laid by RoweContraeting Company. |  | 35 |
| Groton street (eity proper) | Washington street to Shawmut avenue (block base). Trinidad asphalt. Laid by Barber Asphalt l'aving Company. | 316 | 528 |
| Guild row (Roxbury) | 42 feet north of Dudley street to Dudley street. Pine wood bloek. Laid by James Doherty. | 42 | 257 |
| Gurney street (Rosbury) | At Parkerstreet. Aztec asphalt (maeadam base), Laid by Bermudez Company. | 8 | 26 |
| H street (South Boston) | Eaeh side of East Broadway. Bitulithic. Laid by Warren BrothersCompany, | 53 | 184 |
| Half Moonstreet (Dorehester) | At Lingard street. Bitulithie. La | 1 | 8 |
| Hall street (West Roxbury) | At South strect. Aztec asphalt (maeadam base). Laid by Bermudez Company. | 2 | 6 |
| Hallam street (Dorrhester) | Dorrhester avenue to 10 feet east of Dorehester avenue. Pine wood block. Laid by William J. Barry. | 10 | 31 |
| Hallam street (Dorchester) | 10 feet east of Dorchester avenue to Auckland street. Mexican asphalt. Laid by Martino DeMatteo. | 311 | 897 |
| Halleek street (Roxbr | At station street. Ritulithie. Laid by John F, Beatt | 1 | 3 |
| Hamilton street (Dorchester) | Each side cf Bowdoin street. Aztee asphalt. Laid by Bermudez Company. | 39 | 132 |
| Inamlet street (Dorehester) | Belden strect to Columbia road. Trinidad asphalt. Laid by Central Construction Company. | 409 | 909 |
| Hamlin street (South Besto | East Eighth street to Columbia road. Topeka. Latd by John T. Shea, Jr., | 266 | 772 |
| 1Iammond street (*ity proper) | Shawmut avenue to Tremont street. Pine wood block. Laid by Fred S. \& A. D. Gore Corporation. | 1,115 | 4,214 |
| Hampshire strcet (Roxbury). | Ruggles street to Whittier street. Maek brick block. Laid by J. E. Burns © Co. | 362 | 1,050 |

List of Streets Having a Smooth Pavement. - Continued.

| Streets. | Limits. | Length in Feet. | Area, Square Yards | Year Lind. | Guaranty Expires. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 Iampshire strect (Roxbury) | Whittier strect to Vernon street. Mack briek block. Laid by J. F. Burns \& Co. | 36.1 | 1,055 | 1909 |  |
| Hampshire strect (Roxbury) | Vernon street to Linden Park strect. Mack brick block. Laid by J. E. Burns \& Co. | 6.45 | 1,8G4 | 1909 |  |
| Hampstead road (West Roxhury) | Arhorway to 1,000 feet northwest of Arborway. Topeka. Laid by John Kelly Company. | 1,000 | 3,250 | 1919 | Oct. 29, 1924. |
| 1 Iancock street (city proper). | Mt. Vernon street to 4 feet north of Mit. Vernon street. Mack bick block, | 4 | 14 | 1901 |  |
| IIancoek street (eity proper) | 4 fect north cf Mt. Vernon street to 7 feet south of Cambridge strect. Bitulithie (erushed stone base). Laid by Warren Brothers Company. | 928 | 2,383 | 1902 |  |
| Hancoek street (Dorchester) | At Columbia road (west road). Bitulithic (macadam base). Laid by Warren Brothers Company. |  | 281 | 1915 |  |
| Hancock street (Dorchester) | Columbia road to 345 feet northwest of DeWolf street (not including next item). Mack brick hlock. Laid by Central Construction Company. | 2,199 | 9,189 | 1910-11 |  |
| Hancock etreet (Dorchester) | (East sile) 73 feet north of 1 fowe street to 88 feet north of Cameron street. Concrete rad. Laid by city force. |  | 408 | 1918 |  |
| Inaneock street (Dorchester) | At Bowdoin street. Mack brick block. Laid by Central Construction Company. |  | 205 | 1913 |  |
| Itancoek street (Dorchester) | 345 feet northwest of DeWolf street to 19 fect west of Dorehester avenue. Bessemer trick block. Laid by Fred S. \& A. D. Gore Corporation. | 1,416 | 5,684 | 1911 |  |
| Hanover avenue (city proper). | Hanover street to North street. Aztec asphalt. Laid by Bermudez Company. | 300 | 306 | 1919 |  |
| Hanover strect (city pioper). | (West side) Tileston strect, across Charter street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 315 | 425 | 1907 |  |
| Hanover street (eity proper) | (East side) Tileston strect, across Charter street. Sicilian rock asphalt. Laid by Boston Asphalt Company. |  | 323 | 1896 |  |

Sept. 18, 1925.

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Hanson strcet (eity proper)...
Iarris avenue (West Roxbury) Ilarris street (city proper).

Harris strect (city proper).
Larrison avenue (city proper).
Harrison avenue (city proper).
Harrison avenue (city proper)
Harrison avenue (city proper).
Harrison avenue (city proper).
Harrison avenue (eity proper).
Harrison avenue (city proper)
Harrison avenue (city proper).
Harrison arenue (city proper).
List of Streets Having a Smooth Pavement. - Continued.

| Streets. | Limits. | Length in Fect. | Arca, Square Yards | Year Laid. | Guaranty Expires. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Harrison avenue (eity proper) | 7 feet south of East Springfield street to 104 feet south of East Springfield strect (east side). Trinidad asphalt. Laid by Barber Asphalt Paving Company. |  | 140 | 1888 |  |
| Harrison avenuc (city proper) | 6 feet north of East Springfield street to Northampton strect, not including 7 feet south of East Springfield street to 104 fect south of East Springfield street (east side). Bitulithic (crushed stone base). Laid by Warren Brothers Company. | 508 | 1,174 | 1905 |  |
| Harrison avenue (city proper) | Northampton strect to East Lenox street. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 427 | 1,090 | 1903 |  |
| Harrison avenue (Roxbury) | At Dudley street. Pine wood block. Laid by James Dohert | 16 | 72 | 1912 |  |
| Harvard avenue (Brighton) | 19 feet south of Cambridge street to Brighton avenue. <br> Bitulithic. Laid by Coleman Brothers. <br> Pine wood block (between tracks and brows to tracks). Laid by Coleman Brothers. | 843 \{ | 2,594 | $\begin{aligned} & 1914 \\ & 1914 \end{aligned}$ |  |
| Harvard avenue (Brightun) | Brighton avenue to north street line of Commonwealth avenue. <br> Bitulithic. Laid by Colcman Brothers. <br> Pine wood block (between tracks and brows to tracks). Laid by Coleman Brothers. | 88.4 | $\begin{array}{r} 3,211 \\ 600 \end{array}$ | 1914 1914 |  |
| Harvard avenue (Brighton) | North side of Commonwealth avenue to south side of Commonwealth avenue. Mexican asphalt (Telford macadam base). Laid by Central Construction Company. | 180 | 635 | 1917-18 | May 21, 1923. |
| Harvard avenue (Dorchester) | At Washington strect. Pine wood block. Laid by William J. Ba | 16 | 90 | 1912 |  |
| Harvard Bridge (city proper). | Bostonside of draw to 270 feet west of southerly abutment. Jennison Wright slab paving. Laid by Rowe Contracting Company. | 708 | 4,001 | 1919 |  |
| Harvard Bridge (city proper) | 270 feet west of southerly abutment to southerly abutment. Jennison Wright slab paving. Laid by Rowe Contracting Company. | 270 | 1,540 | 1919 |  |


| Harvard square (Charlestown) | At Harvard strect. Aztec asphalt (maeadam base). Laid by Bermudez Company. | 15 | 46 | 1918 | June | 8, 1923. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Harvard street (Charlestown) | 4 feet south of Harvard square to 17 feet south of Devens street. Aztee aヶphalt (macadam base). Laid by Bermudez Company. | 443 | 1,270 | 1918 | June | 8, 1923. |
| Harvard strect (city proper) | Washington street 9 feet west of Harrison avenue. Pine wood block. Laid bey J. H. AIeCarthy: | 401 | 844 | 1910 |  |  |
| Harvard street (Dorchester) | At W:shington street. Pine woal block. Laid by William J. Barry | 10 | 76 | 1912 |  |  |
| Harvard street (Dorehester) | 41 feet north of Fahyan street to $5 \nmid$ feet south of Brookview street. Topeka. Laid by Rowe Contracting Company. | 652 | 2,452 | 1920 | June | 1, 1925. |
| Harwood street (Dorchester) | Willowwood street to Lueerne street. Trinidad asphalt. Laid by James Doherty. | 723 | 2,112 | 1916 | Dee | 3, 1921. |
| Laskins street (Roxbury) | Ruggles street to fi feet south of Ruggles street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 6 | 14 | 1907 |  |  |
| Haskins street (Roxbury) | 6 feet north of Vernon strect to Vernon street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 6 | 13 | 1907 |  |  |
| Havelock street (Dorchester) | Blue Hill aremue to Morton street. Topeka. Laid by Rowe Contracting Company. | 661 | 1,953 | 1920 | July | 28, 1925. |
| Haviland street (Roxbury) | At Massachusetts avenne. Sieilian rock asphalt. Laid by Boston Asphalt Company. | 5 | 14 | 1901 |  |  |
| Hawes street (eits proper) | 9 feet east of Congress street to 8 feet west of Kilby street. Trinidad asphalt Laid by Barber Asphalt Paving Company. | 241 | 237 | 1904 |  |  |
| Hawes street (eity proper) | s feet west of Kilby street to Kilby street. Aztee asphalt. Laid by James Doherty: | S | 9 | 1919 |  |  |
| Hawley street (eity proper) | At siummer strect. Pine wood block. Laid by Northern Construction Company. | S | 25 | 1915 |  |  |
| Hayward place (eity proper) | W:ishington street to 9 feet east of Washington street. Pine wood block. Laid by Bernard E. Grant. | 9 | 20 | 1917 | Nov. | 4, 1922 . |
| Hayward plaee (eity proper) | 0 feet east of Washington street to Harrison avenue. Aeme asphalt. Laid by Boston Pavine Company. <br> Asphalt. Laid by the Bermudez Company | 251 | 87 477 | 1913 1920 |  |  |

List of Streets Having a Smooth Pavement.- Continued.

| Streets. | Limits. | tengtl in Fect. | $\begin{aligned} & \text { Area, } \\ & \text { Syuare } \\ & \text { Yards. } \end{aligned}$ | $\begin{aligned} & \text { Year } \\ & \text { Laid. } \end{aligned}$ | Guaranty Expires. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Heath strect (Roxbury) | Parker strect to 7 fect north of Lawn street and from 72 fect north of Lawn street to sif feet south of South Huntington avenuc. Mack brick block. Laid by Finld, Barker \&E Underwood, Inc. | 3,015 | 12,627 | 1910 |  |
| Helon street (Dorchrster) | 7 feet west of Bernard strect to 17 fect east of Talbot avenue. Trinidad asphalt. Laid by James Doherty. | 331 | 1,003 | 1915 |  |
| Helen strect (Dorchister) | 15 fect east of Talbot avenue to Talbot avenue. Mack brick block. Laid by James Doherty. | 15 | 93 | 1911 |  |
| Hencnway street (Roxbury) | It Boylston street. Bitulithic. Laid by Warren Brothers Compa | 5 | 25 | 1905 |  |
| Henry street (Dorelester) | It Bowdoin street. Topeka (macadam base). Laid by city forc | 20 | 101 | 1918 |  |
| 1 Ienry strect (East Boston) | At Maverick square. Aztec asphalt. Laid by Bermudez Company | 10 | 34 | 1917 | Dec. 15, 1922. |
| Ilenshaw street (Brightom) | It Cambridge strect. Bitulithic. Laid by Warren Brothers Company. Bitulithic (macadam base). Laid by Warren Brothers Company...... | 2.5 | $\begin{gathered} 274 \\ 2720 \end{gathered}$ | $\begin{aligned} & 1913 \\ & 1919 \end{aligned}$ | Scpt. 4, 1924. |
| Hereford street (eity proper) | Each side of Newbury strect. Pine wood block. Laid by Patrick Mechovern, | 7 | 31 | 1903 |  |
| 1 Iereford street (eity proper | Each side of Marlborough strect. Bitulithic. Laid by James Doherty | ${ }^{6}$ | 28 | 1914 |  |
| Hereford street (city proper) | At Beacon street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 3 | 12 | 1907 |  |
| Herrick street (Brighton) | At North Bearon street. Bitulithic. Laid by Warren Brothers Company.... | 10 | 28 | 1918 | Dec. 24, 1923. |
| Hewlett street (West Roxbury) | At Centre strect. Asphalt (macadam base). Laid by the Bermudez Company. | 8 | 26 | 1920 | Unfinished. |
| Hichborn street (Brighton) | At North Beacon street. Bitulithic. Laid by Warren Brothers Company.... | 10 | 28 | 1918 | Dec. 24, 1923. |
| High strect (Dorchester). | At Hancock street. Bessemer brick block. Laid by Fred S. \& A. D. Gore Corporation | s | 29 | 1911 |  |


| Hillerest street (West Roxbury) | Elgin street to 7 feet south of Elgin street. Trinidad asphalt. Laid by Charles J. Jacobs Company. | 7 | 23 | 1915 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Hillerest street (West Roxbury) | 7 feet south of Elyin street to Temple strect. Mexican asphalt. Laid by Central Construction Company. | 518 | 1,507 | 1917 | June 25, 1922. |
| Hinckley street (Dorchester) | At Pleasant street. Topeka (macadam base). Laid by Central Construction Company: | 4.4 | 112 | 1920 | Sept. 22, 1925. |
| Ifinsdale strect (Roxbury) | Commonwealth avenue to S fect south of Commonwealth avenue. Mexican asphalt (macadam base). Laid by Central Construction Company. | S | 28 | 1917 | May 21, 1923. |
| Hinsdale street (Roxbury) | S feet south of Commonwealth avenue to Cummington street. Mack brick block. Laid by Fred S. \& A. D. Gore Corporation. | 226 | 856 | 1911 |  |
| Holbrook street (West Roxbury) | At Centre street. Topeka (macadam base). Laid by Rowe Contracting Company. | 9 | 27 | 1919 | Aug. 12, 1924. |
| Hollis street (city proper) | Tremont strect to 1 foot east of Tremont street. Pine wood block. Laid by Bernard E. Grant. | 1 | 3 | 1917 | Nov. 15, 1922. |
| Hollis street (eity proper) | 7 feet eant of Tremont street toward Washington strect. Trinidad asphalt Laid by Barber Asphalt I'aving Company'. | 254 | 478 | 1891 |  |
| Hohlen street (Dorehester) | 8 fect west of Columbia road to 416 feet west of Columbia road. Mexican asphalt. Laid by Martino DeMattco. | 408 | I,059 | 1919 | July 11, 192 \%. |
| Holiday street (Dorchester) | Earh side of Geneva avenue. Topeka (macad:m base). Laid by department forees. | 1 | 7 | 1920 |  |
| Holton street (Brighton) | Everett street to Antwerp strect. Acme asphalt. | 694 | 2,007 | 1919 | July 31, 1924. |
| Holyoke street (city proper) | It Columbus avenne. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 9 | 34 | 1906-07 |  |
| Homes avenue (Dorchester) | Each side of (ieneva avenue. Topeka (macadam base). Laid by department forces. | 2 | 9 | 1920 |  |
| Homestead street (Roxbury).. | Elm IIill avenue to Humboldt avenue. Mexican asphalt. Laid by Central Construction Company. | 1,123 | 3,253 | 1917 | July 18, 1922 |
| Hopestill street (Dorchester) | 3 feet south of Aspinwall road to 8 feet south of Aspinwall road. Barrington brick block. Laid by Charles J. Jacobs Company. | 5 | 14 | 1907 |  |

List of Streets Having a Smooth Pavement.- Continued.

| Streets. | Limits. | Length in Feet. | $\begin{aligned} & \text { Area, } \\ & \text { Square } \\ & \text { Yards. } \end{aligned}$ | Year Laid. | Guaranty <br> Expires. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Hogestill strect (Dorchester) | 10 feet south of Aspinwall road to 6 feet north of Southern avenue. Trinidad asphalt. Lail by Charles J. Jacobs Company. | 302 | 872 | 1915 |  |
| Howe street (Dorchester) | At Haneock street. Mack brick block. Laid by Central Construction Company. | 10 | 29 | 1910 |  |
| Howesstreet (Dorchester) | At Pleasant street. Topeka (macadam base). Laid by Central Construction Company. | 38 | 89 | 1920 | Sept. 22, 1925. |
| Howland street (Rosbury). | 231 feet west of Ilumboldt avenue to 6 feet east of Marold street. Bitulithic. Laid by John F. Beatty. | 422 | 1,219 | 1915 |  |
| Hubert street (Roxbury) | Sfeet west of Shawmutavenue to 3 feeteast of Westminsterstrect. Aztee asphalt. Laid by Central Construction Company. | 444 | 1,282 | 1916 | Aug. 18, 1921. |
| Hubert street (Roxbury) | 3 feet east of Westminster street to Westminsterstreet. Topeka. Central Construction Company. | 3 | 10 | 1919 | June 24, 1924. |
| Hulion street (city proper) | 7 feet south of Beach street to 7 feet north of Kneeland street. Mexican asphalt. Laid by Central Construction Company. | 306 | 816 | 1917 |  |
| Hulson street (city proper) | 7 feet south of Kneelandstreet to 6 feet north of Harvard street. Mexican asphalt. Laid by Central Construction Company. | 35 S | 955 | 1917 |  |
| Hudson street (city proper) | 6 feet south of Harvard street to 82 feet north of Curvestreet. Mexican asphalt. Laid by Central Construction Company. | 822 | 2,192 | 1917 |  |
| IIumboldt avenue (Roxbury) | At Seaver street. Acme asphalt (macadam base). Laid by Warren Brothers Company. | 21 | 90 | 1917 | Sept. 17, 1922 |
| Hunnewell avenue (Brighton). | At Atkins street. Mexican asphalt. Laid by Central Construction Company. | 7 | 18 | 1917 | July 18, 1922. |
| Hantington avenue (eity proper) | At Boylston street (east side). <br> Bitulithic. Laid by Coleman Brothers. <br> Trinidad asphalt. Laid by Barber Asphalt Paving Company. |  | $\begin{aligned} & 444 \\ & 302 \end{aligned}$ | 1914 1901 |  |


| Huntington avenue (city proper) . . . . . | Boylston strect to 159 feet south of Boylston strcet (west side). Pine wood block. Laid by Coleman Brothers. | 159 | 786 | 1914 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Huntington avenue (eity proper). | At St. James avenue. Bitulithic. Laid by James Doher | 100 | 578 | 1912 |  |
| Huntington svenue (city proper) | At St. James avenue and Dartmouth street. Bitulithic. Laid by Boston Elevated Railway Company. | 40 | 328 | 1914 |  |
| Huntington avenue (city proper) . . . . . | At Dartmouth street. Aemeasphalt. Laid by Warren Brothers Company, |  | 180 | 1912 |  |
| Huntington avenue (eity proper) | 159 feet south of Boylston street to 9 feet south of Dartmouth street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. Bitulithie. Laid by Boston Elevated Railway Company | 325 | 2,57 $17 \%$ | $\begin{aligned} & 1901 \\ & 1914 \end{aligned}$ |  |
| Huntington avenue (city proper) . . . . . | 9 feet sonth of Dartmouth street to 84 feet north of bridge over Boston \& Albany Railroad. Bitulithic (crushed stone base). Laid by Warren Brothers Company. | 600 | 3,350 | 1906 |  |
| Huntington avenuc (city proper) . . . . . | S4 feet north of bridge over Boston \& Albany Railroad to bridge over Boston \& Albany Railroad. Bitulithic. Laid by Warren Brothers Company. | S. 1 | 490 | 1909 |  |
| Huntington avenue (city proper) | AtExeterstreet. Bitulithie. Laid by Boston Elevated Railway Company, |  | 101 | 1914 |  |
| Huntington avenue (eity proper). | Bridge over Boston \& Albany Railroad. Pinewoodblock. Laid by Central Construction Company. | 92 | 6333 | 1916 | Dec. 11, 1921. |
| Huntington avenue (city proper) | Bridge over Boston\& Albany Railroad to 70 feet south of bridge over Boston \& Albany Railroad. Trinidad asphalt. Laid by Simpson Brothers Corporation. | 70 | 434 | 1909 |  |
| Huntington avenue (eity proper) | 70 feet south of bridge over Boston \& Albany Railroad to north side of Cumberland street, minus (685 feet north of West Newton street to 38 feet north of West Newton street (west roadway). Sicilian rock asphalt. Laid by Boston Asphalt Company. | 1,520 | 6,6i3. | 1896 |  |
| Huntington avenue (city proper).... | 685 feet north of West Newton street to 38 feet north of West Newton street (west roadway). Trinidad asphalt. Laid by Barber Asphalt Paving Company. |  | 1,831 | 1907 |  |
| Huntington avenue (Roxbury)....... | North side of Cumberland street to 10 fect north of Massachusetts avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 737 | 4,08:3 | 1896 |  |
| Huntington avenue (Roxbury).... . . . | 9 feet south of Massachusetts avenue to $S$ feet north of Gainsborough street. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 570 | 3,155 | 1896 |  |

List of Streets Having a Smooth Pavement.- Continued.

| Streets. | Limits. | Iength in Feet. | Area, quare lards | $\begin{aligned} & \text { Year } \\ & \text { laid } \end{aligned}$ | $\begin{gathered} \text { Guaranty } \\ \text { Expires. } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Huntington avenue (Roxbury, south side). | At Jamaicaway. Bitulithic (Telford macadam base). Laid by Warren Brothers Company. |  | 450 | 1920 | Aug. 21, 1925. |
| IIyde Park avenue (Hyde Park, west side). | West street to Riverstreet. Topeka. Laid by Martino DeMatteo. |  | 4,289 | 1920 | Unfinished. |
| I street (South Boston) | 23 feet north of Emerson street to Emerson street. Bitulithic. Laid by Warren Brothers Company. | 23 | SS | 1919 | June 11, 1924. |
| 1 street (South Boston) | East Broadway to 23 feet south of East Broadway. Bitulithic. Laid by Warren Brothers Company. | 23 | 87 | 1919 | June 11, 1924. |
| I street (houth Boston) | 23 feet south of East Broalway to 8 feet north of East Fourth street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 242 | 914 | 1910 |  |
| Idlewild street (Brighton) | Commonw ealth avenue to 17 feet south of Commonwealth avenue. Mexican asphalt (macadam base). Laid by Central Construction Company: | 17 | 38 | 1917 | May 21, 1923. |
| Idlewid street (Brighton) | 17 feet south of Commonwealth avenue to 7 feet north of Brainerd road. Bitulithic. Laid by Charles J. Jacobs Company. | 362 | 1,046 | 1915 |  |
| Imrie atreet (Brighton). | At Cambridge street. Bitulithic (macadam base). Laid by Warren Brothers Company. | 12 | 25 | 1919 | Sept. 4, 1924. |
| Indiastreet (city proper) | 9 feet east of Milk street to angle near Export street. Mexican asphalt. Laid by Central Construction Company. | 553 | 2,123 | 1917 |  |
| Intervale street (1) orchester) | Eaeh sicle of Normandy street Aztec asphalt. Laid by Central Construction Company. | 2 | 7 | 1916 | Oet. 13, 1921. |
| Ipswich street (Roxbury) | Bridge over waterway. Siciiian rock asphalt. Laid by Boston Asphalt Company. | 61 | 267 | 1898 |  |
| Irmastreet (Dorchester) | Callender street to 7 feet south of Callender street. Trinidad asphalt. | 7 | 32 | 1915 |  |
| Irmastreet (Dorchester) | 7 feet south of Callender strect to Woodrow avenue. Bitulithic. Laid by Warren Brothers Conipany. | 591 | 1,732 | 1919 | May 26, 1924. |


List of Streets Having a Smooth Pavement. - Continued.

| Streetn. | Limits. | Length in Feet. | Area, Square I ards. | Year Laid. | Guaranty Expires. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Kempatrect (South Boston) | At Dorchester avenue. Pine wood block. Laid by William .J. Barry | 10 | 30 | 1919 | Aug. 21, 1924. |
| Kennard avenue (city proper) | At Poplar street. Trinidal asphalt. Laid by Barber Asphalt Paving Company | 1 | 3 | 18.9 |  |
| Kennard avenue (eity proper). | At Allenstreet. Mexican asphalt. Laid by Central Construction Company, | 2 | 4 | 1917 |  |
| Kenneth strect (West Roxbury). | At Beech street. Topeka. Laid by Rowe Contracting Com | 10 | 31 | 1920 | Unfinished. |
| Kenney street (Roxbury) | Day street to 503 feet west of Day street. Trinidad asphalt. Laid by James Doherty. | 503 | 1,113 | 1915 |  |
| Kent strect (Roxbury) | Roxbury street to Vernon street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 440 | 933 | 1911 |  |
| Kenton road (West Roxbury) | Washington street to 839 feet east of Washington street. Topeka. Laid by - Rowe Contracting Company. | 839 | 1,900 | 1919 | Dec. 6, 1924. |
| Kenwood atreet (Dorchester) | At Washington strect. Pine wood block. Laid by Wilian J. Barry | 10 | 30 | 1913 |  |
| Kerwinstreet (1)orchester) | At Talbot avenue (crosswalk). <br> Barrineton brick block. Laid by Janes Doherty Mack brick block. Laid by James Doherty.... | $\stackrel{9}{5}$ | 51 37 | $\begin{aligned} & 1907 \\ & 1911 \end{aligned}$ |  |
| Keyes street (West Roxbury) | At South street. Aztec asphalt (macadam base). Laid by Bermudez Company. | 3 | 11 | 191S | Sept. 28, 1923. |
| Kilby strect (eity proper). | Milk street to $\mathbf{7}$ fect north of Milk street. Pine wood block. Laid by James Doherty. | 7 | 83 | 1910 |  |
| Kilby street (city proper). | 7 feet north of Milk street to 9 feet south of State street. Pine wood block. Laid by James Doherty. | 624 | 3,273 | 1919 | Oct. 10, 192 |
| King street (Dorchester) . | At Florida street. Topeka (macadam base). Laid by city force. |  | 7 | 1919 |  |
| Kingston street (eity proper). | Summer street to 6 feet south of Summer street. Pine wood block. Laid by Northern Construction Company. | 6 | 18 | 1915 |  |


| Kingston street (eity proper) . . . . . . . | 6 feet south of Essex street to 7 feet north of Beach street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 479 | 1,828 | 1910 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Kirkland street (eity proper) . . . . . . . | 10 feet south, of Broadway toward Corning street. Acme asphalt. Laid by Warren Brothers Company. | 361 | 519 | 1909 |  |
| Kittredge street (W'est Roxbury) . . . . . | Cornell street to Beech street. Bitulithic. Laid by Charles J. Jacobs Compaty. | 547 | 1,588 | 1916 | July 6, 1921 |
| L street (South Boston) | Each side of East Fourth street. Pine wood block. Laid by John E. Quinn, | 17 | 58 | 1920 | May 24, 1925. |
| Ifaconia street (city proper) | Washington street to Irarrison avenue. Mexican asphalt. Laid by Central Construction Company. | 314 | 6.8 | 1917 |  |
| La Grange strect (eity proper) | Tremont strect to 10 feet cast of Tremont strect. Pine wood block, Laid by Bernard E. Grant. | 10 | 20 | 1917 | Nov. 15, 1923. |
| La Grange street (city proper) | 10 feet east of Tremont street to 3003 feet west of Washington street. 'Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 171 | 335 | 1897 |  |
| Lake street (Brighton) | At Commonwealth avenue. Mexican asphalt (Telford macadam base). Laid by Central Construction Company. | $1{ }^{6}$ | S1 | 1918 | May $21,1923$. |
| Lamont street (Roxbury) | At Linden l'ark and Vernon strects. Mack brick block. Laid by J. E Burns \& C'o. | 14 | 25 | 1909 |  |
| Lawn street (Roxbury) | At Heath street. Mack brick block. Laid by Fiedd, Barker \& I'nderwood, Inc. | S | 32 | 1910 |  |
| Lawn street (Roxbury | At Heath strect. Mack brick block. Laid by Field, Barker \& I nderwood, Inc. | 8 | 23 | 1910 |  |
| Lawrence street (eity proper) | At Berkeley street. Bitulithic. Laid by Warren Brothers Company....... | 4 | 9 | 1906 |  |
| Lawrence strect ${ }^{\text {(city }}$ proper)....... . | Each side of Clarendon street. Bitulithic. Laid by Warren Brothers Company. | j | 1.4 | 1914 |  |
| Lawrence street (Charlestown) | East side of Lawrence :wenue, arcoss Miller strect. Sicilian rock asplaalt. Laid by Jones \& Meehan. | 385 | 1,011 | 1901 |  |
| Leicester street (Brighton) | At Washington strect. Bitnlithic (macadam base). Laid by Warren Brothers Company. | 10 | - 31 | 1919 | July $\mathrm{x}, 192 \mathrm{~s}$ |
| Leroy street (Dorchester) | At (ieneva avenue. Topeka (maeadam base). Laid by department forees, | 1 | 7 | 1920 |  |

List of Streets Having a Smooth Pavement. - Continued.

| Streets. | Limits. | Length in Feet. | $\begin{aligned} & \text { Area, } \\ & \text { square } \\ & \text { Yards. } \end{aligned}$ | $\begin{aligned} & \text { Year } \\ & \text { Lad. } \end{aligned}$ | Guaranty <br> Expires. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Leshie street (Dorchester) | Dix strect to Centre street. Trinidad asphalt. Laid by D. M. Riggs \& Co., | 374 | 1,090 | 1915 |  |
| Levant street (Dorchester) | Geneva avenue to Topliff strect. Aztec asphalt. Laid by McGuire \& MeGourty. | (689 | 2,019 | 1919 | Nov. 24, 1924. |
| Lewis street (city proper) | At Moon strect. Bitulithie. Laid by Warren Brothers Company | 1 | 2 | 1906 |  |
| Lincolu place (city proper) | Worecster strect to $\&$ feet south of Worcester street. Mexiran asphalt. Laid by Central Construction Company. | 8 | 12 | 1919 | Nov. 11, 1924. |
| Lincoln plate (city proper) | S feet south of Worcester street to West Springfield street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 203 | 298 | $1 \triangleleft 97$ |  |
| Linden street (Brighton) | 10 feet north of Brighton avenue to Brighton avenue. Aztee asphalt (macadan base). Laid by Bermudez Company. | 10 | 22 | 1917 | Dee. 7, 1922. |
| Linden street (Brighton) | Brighton avenue to 10 feet south of Brighton avenue. Aztec asphalt (macadam base). Laid by Bermudez Company. | 10 | 22 | 1917 | Dec. 7, 1922. |
| Linden street (3righton) | 22 feet north of Conmonwealth avenue to Commonwealth avenue. Mexican asphalt (macalam base). Laid by Central Construction Company. | 22 | 125 | 1917 | May 21, 1923. |
| Linden Park street (Roxbury) | 12 feet east of Cabot street to 1 feet cast of Elmwood street. Mack brick block. Laid by J. E. Burns \& Co. | 1,015 | 3,242 | 1909 |  |
| Lingard street (Dorchester) | Magnolia street to Hartford street. Bitulithic. Laid by James Doherty, | 594 | 1,591 | 1915 |  |
| Lithgow strect (Dorchester) | Wainwright strect to Talbot avenue. Mexican asphalt. Lad by Central Construction Company. | 683 | 2,012 | 1917 | May 30, 1922. |
| Lithgow street (Dorchester) | At Washington street. Topeka (macadam base). Laid by Waren Brothers Company: | 10 | 3.4 | 1918 | Sept. 25, 1923. |
| Long avenue (Brighton) | 6 feet north of Commonwealth avenue to 17 feet north of Commonwealth avenue. Mexican asphalt (macadam base), Laid by Central Construetion Company. | 11 | 31 | 1918 | May 21, 1923. |


| Long avenue (Brighton) | 16 fect north of Commonwealth avenue to Allston street. Trinidad asphalt. Laid by Central Construction Company. | 760 | 2,578 | 1914 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Longwood avenue (Roxbury) | 51 feet north of Huntington avenue to 9 feet south of Brookline avenue. Mack brick block. Laid by Field, Barker \& Underwood, 1ne. | 2,078 | 7,850 | 1910 |  |
| Lonsdale street (Dorchester) | At Florida street. Topeka (macadam base). Laid by city force | 42 | 121 | 1919 |  |
| Lorette street (West Roxbury) | Centre street to Hillcrest street. Aztec asphalt. Laid by Central Construction Company. | 502 | 1,451 | 1916 | July 10, 1922. |
| Lorne street (West Roxbury) | IIarvard street to 646 feet northwest of Harvard street. Mexican asphalt. Laid by Central Construction Company* | 646 | 1, S 80 | 1917 | Oct. 15, 1922. |
| Lovell street (East Boston) | At Neptune road. Mexican asphalt. Laid by Central Construction Company. | 20 | 67 | 1917-18 | Aug. 2, 1923. |
| Lovering street (city proper) | 8 feet east of Washington street to 8 feet west of 1Iarrison avenue. Acme asphalt. Laid by James Doherty. | 306 | 525 | 1913 |  |
| Lucas street (city proper) | Middlesex street to 2 feet north of Shawmut avenue. Asphalt blocks. | 98 | 81 | 1902 |  |
| Lucas street (caty proper) | 2 feet north of Shawmut avenue to Shawmut avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 2 | 2 | 1598 |  |
| Lueas street (city proper) | Shawmut avenue to 2 fect south of Shawmut avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 2 | 2 | 1898 |  |
| Lucas street (city proper) | 10 feet south of Shawmut avenue to 9 feet north of Washington street. Scoria hlock. Laid by Paving Service. | 322 | 254 | 1915 |  |
| Lucerne street (Dorchester) | Callender street to 7 teet south of Callender strcet. Trinidad asphalt. Laid by D. M. Biggs \& Co. | 7 | 38 | 1915 |  |
| Lucerne street (Dorchester) | 7 feet south of Callender street to Woodrow avenue. Aztec asphalt. Laid by Bermudez Company. | S05 | 2,357 | 1919 | Oct. 20, 1924. |
| Lyndhurst strect (Dorchester) | At Washington street. Pine wood block. Lasd by William | 10 | 30 | 1913 |  |
| Lynn street (city proper). | Cooper street to Thacher street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 294 | 457 | 1906 |  |
| M street (South Boston) | At Emerson street. Pine wood block. Laid by John E. Quinn | 7 | 30 | 1920 | May 24, 1925. |

List of Streets Having a Smooth Pavement.- Continued.

| Streets. | Limits. | in Feet <br> Length | $\begin{aligned} & \text { Area, } \\ & \text { Square } \\ & \text { Yards. } \end{aligned}$ | $\begin{aligned} & \text { Yoar } \\ & \text { Laid. } \end{aligned}$ | Guaranty Expires. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Mackin street (Brighton) | Western avenue to Waverly street. Bitulithic. Lad by A. H. Archer. | 292 | 656 | 1915 |  |
| Magazine street (Roxbury) | At Dudley strect. Mack brick block. Laid by James Doherty | 10 | 30 | 1910 |  |
| Main street (Charlestown) | Boston \& Maine Railroad to Somerville line. Concrete road. Laid by city force. | 139 | 672 | 1919 |  |
| Maitland street (Roxbury) | Beacon street to Boston \& Albany Ralroad. Mack brick block. Latd by Fred S. \& A. D. Gore Corporation. | 186 | 537 | 1912 |  |
| Malcolm street (city proper) | Pinckney street to MIt. Vernon strect. Pine wood block. Laid by Fred S. \& A. D. Gere Corporation. | 312 | 244 | 1912 |  |
| Malcolm strect (city proper) | 54 feet south or Mt. Vernon street to $\delta$ feet north of Chestnut strect. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 200 | 150 | 1592 |  |
| Malden strcet (city proper) | 12 fect east of Washington strect to Harrison avenue. Trinidad asphalt, Lad by Barber Asphalt Paving Company. | 519 | 1,501 | 1902 |  |
| Mall street (Roxbury) | At Dearborn stieet <br> Acme asphalt. Laid by Warren Brothers Company <br> Bessemer brick block gutters. Laid by Warren Brothers Company | 10 | 34 5 | $\begin{aligned} & 1916 \\ & 1916 \end{aligned}$ | Nov. 20, 1922. Nov. 20, 1922. |
| Mallet street (Dorchester). | At Florida street. Topeka (macadam base). Laid ty city force | $\delta$ | 50 | 1919 |  |
| Malvern street (Brighton). | At Brighton avenue. Aztee asphalt (macadam base). Laid by Bermudez Company. | 10 | 22 | 1917 | Dec. 7, 1922. |
| Mansfield street (Brighton) | Easton street to 7 feet south of Easton street. Asphalt. Laid by John J. Lane. | 7 | 22 | 1920 | Nov. 20, 192 |
| Mansfeld street (Brighton). | 7 feet south of Easton street to 34 feet south of Easton street. Asphalt (macadam base). Laid by John J. Lane. | 27 | 51 | 1920 | Nov. 20, 192 |
| Maple street (Roxbury) | At Seaver street. Acme asphalt (macadam base). Laid by Warren Brothers Company. | 20 | 48 | 1917 | Sept. 17, 1922. |


List of Streets Having a Smooth Pavement.- Continued.

| Streets. | Limits. | Length in Feet. | Area, Square Yards. | Year Laid. | Guaranty Expires. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Marvinstreet (Roxbury) | Shawnut avenue to Washington strect. Pine wood block Laid by Boston Paving Company | 256 | 573 | 1913 |  |
| Mason strect (city proper) | West st eet to ${ }^{\circ}$ feet sonth of West street. Black gum wood block Laid by United states Wood Preserving Company. | 6 | 14 | 1908 |  |
| Mason street (eity proper) | 6 feet sonth of West street to 213 feet south of West street. Asphalt. Laid by the Bermudez ('ompany. | 209 |  | 1920 |  |
| Mason strect (eity proper) | 213 feet south of W'est street to 256 feet south of West street. Asphalt (granite block base). 1aid by the Bremulez ('ompany. | 43 | 91 | 1920 |  |
| Masou street (city proper) | 256 feet south of West street to 449 freet south of West street. Bitulithic (sraniteblock base). Lail by Warren Brothers Company. | 130 | 300 | 1907 |  |
| Mason street (eity proper) | 449 feet south of Wrst strect to 73 fect north of Avery strect. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 96 | 200 | 1909 |  |
| Mason strect (city proper) | 73 feet north of Avery street to $6: 3$ feet north of Avery sirect. Seyssel rock asphalt. Laid by Iones of Mcehan. | 10 | 23 | 1899 |  |
| Mason street (city proper) | 6:3 feet north of Avery street to Avery street. Bitulithic. Laid by Coleman Brothers. | 63 | 169 | 1914 |  |
| Mason strect (city proper) | Angle $5: 3$ feet north of Avery street to 12 feet cast of Tremont strect. Trinidad asphalt. Laid by Barber Isphalt Paving Company. | 73 | 175 | 1900 |  |
| Mason street (city proper) | 12 feet east of Tremont street to Tremont strect. Pine wood block. Laid by Coleman Brothers. | 12 | 31 | 1915 |  |
| Massachusetts avenue (city proper) | Albany strect to 2 feet east of Uarrison avenuc. <br> (Nortlis roadway.) Dine wood block. I.aid by Fred S. \& A. D. Gore Corporation. <br> (South roadway.) Sicilian rock asphalt. Laid by Boston Asphalt Company, | 622 | 1,899 1,866 | 1912 |  |
| Massachusetts avenue (eity proper). | 2 feet cast of Harrison avenue to Harrison avenue. Bitulithic. Laid by Warren Brothers Company. | 2 | 16 | 1905 |  |


| Massachusetts avenue (city proper).... | Larrison avenue to 3 feet west of Harrison avenue. Bitulithic. Laid by Warren Brothers Company. | 3 | 25 | 1905 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Massachusetts avenue (city proper) | 3 feet west of II: rrison avenue to Washington street. <br> (North roadway.) Pine woodblock. Jaidby Fred S.\& A. 1). Gore Corporation. Pine wood bloek. Laid by department forces. <br> (South roudway.) Sicilian roek asp!alt. Laidby boston Isphalt Company. | 670 | , 782 | $\begin{aligned} & 1912 \\ & 1920 \\ & 159 \cdot 4 \end{aligned}$ |  |
| Massachusetts avenue (rity proper) | Washington streat to Nhawmut avenue. <br> (Northromlway.) Pine woodblock. Laidby Freds.\& A. D. Gore ('orporation. <br> (South roadway.) Icme asplalt. Laidby Warren Brothers Company. . . . . | 311 | $1,00: 3$ 1,008 | 1912 1910 |  |
| Massachusetts avenue (eity proper) | Shawmut avenue to 13 feet east of Trémont street. <br> (North roadway.) Pine wood block. Laid by Fred S. \& A. D. (iore Corporation. <br> (South roadway.) Aeme asphalt. Laidby Warren Brothers Company . . . | $921\{$ | 2,889 2,916 | 1912 1910 |  |
| Massachusetts avenue (city proper)... | I3 feet east of Tremont street to Tremont street. Asphalt. Laid by B. E. Grant Company: | 13 | 107 | 1920 | Sept. IS, 1925. |
| Massachusetts avenue (eity proper) | Tremont street to 16 feet west of Tremont street. Asphalt. Laidby B. E. Grant Company. | 16 | 135 | 1920 | Sept. 1S, 1925. |
| Massachusetts avenue (city proper) | 16 feet west of Tremont street to 13 feet east of Columbus avenue. (Vorthroadway.) Bitulithie. Laidby Warren Brothers Company (Gouth roadway.) Aemeasphalt. Laid by Warren Brothers Company | $5 \not 56$ | $\begin{aligned} & 1,5!7 \\ & 1,565 \end{aligned}$ | $\begin{aligned} & 1907 \\ & 1910 \end{aligned}$ |  |
| Massachusetts avenue (eity proper) | I3 feet east of Columbus wenue to Columbus wenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 13 | 106 | 1906-07 |  |
| Massachusetts avenue (rity proper). | Columbus wrenue to Providence Division, New York, New Hasend Iartford Railroad. Bitulithic (crushed stone base). Laid by Warren Brothers Company. | 469 | 2,218 | 190:-0t |  |
| Massachusetts avenue (Roxbury) | Providence IVivision. New York, New Hawen \& IIartford Railroad to IIuntington avenue. Bitulithic (crushed stone base). Laid by Warren Brothers Comprany. | 551 | 2,100 | 1903-06 |  |
| Massachusetts avenue (Roxbury). | Ifuntingtonavenue, across Boylston street. Sicilian rock asphalt. Laidby Boston Asphalt Company. | 1,778 | 8,506 | 1901 |  |
| Massachusetts avenue (loxbury) | Boylston strect to hridge over Boston \& Albany Railroad. Arme asphalt. Laid by Warren Brothers Company . . . . . Sicilian rock asphalt. Laid by 13 oston Asphalt Company. | $99\{$ | 410 12 | 1909 1901 |  |

360 City Document No. 22.
List of Streets Having a Smooth Pavement.- Continued.

| Stheets. | Limits. | Length in Feet. | Area, Square <br> Yards. | Year Laid. | Guaranty <br> Expires. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Massachusetts avenue (Rovbury) | Bridge over Boston \& Albany Railroad. Pine wood block. Laid by Coleman Brothers. | 75 | 500 | 1908 |  |
| Massachusetts avenue (Roxbury) | Bridge over Boston \& Albany Railroad to 47 feet north of Newbury street. Trinidad asphalt. Laid by James Doherty. | 175 | 586 | 1914 |  |
| Massachusetts avenue (Roxbury) | 47 feet north of Newbury street to 27 feet south of Marlborough street. Sicitian rock asphalt. Laid by Boston Asphalt Company. | 656 | 3,301 | 1901 |  |
| Massachusetts avenue (eity proper). | 27 feet south of Marlborough strect to south side of Beacon street. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 326 | 1,557 | 1901 |  |
| Massaehusetts avenue (eity proper) . | Each side of Beacon street. Pine wood block. Laid by James Doherty. |  | 38 | 1920 | [Sept. 11, 1925. |
| Massachusetts avenuc (city proper).. | Southerly side Beacon street to Harvard Bridge. Bitulithic (crushed stone base). Laid by Warren Brothers Company. | 237 | 1,080 | 1902 |  |
| Matchett street (Brighton) | Washington street to 35 feet south of Pertshire road. Mexican asphalt. Laid by Central Construction Company. | 852 | 2,105 | 1917 | July 5, 1922. |
| Matchett street (Brighton) | 35 fect s uth of Pertshire road to north street line Pertshire road. Mexican asphalt. | 68 | 197 | 1919 | June 12, 1924. |
| Maverick square (East Boston) | Sumnerstreet, across Maveriek street. Aztee asphalt. Laid by Bermudez Company. | 499 | 2,954 | 1917 | Dee. 15, 1922. |
| Maveriek street (East Boston) | 7 feet west of Londonstreet to 7 feet east of Havre street. Bitulithic (crushed stone base). Laid by Warren Brothers Company. | 162 | 558 | 1903 |  |
| Maveriek street (East Boston) | At Maverick square. Aztee asphalt. Laid by Bermudez Company | 11 | 45 | 1917 | Dee. 15, 1922 |
| Maverick street (East Boston). | Bridge over Boston \& Albany Railroad. <br> Trinidad asphalt. Laid by E. IR. Taylor Company <br> Metropolitan brick block (in street oar tracks).... | $38\{$ | $\begin{aligned} & 59 \\ & 72 \end{aligned}$ | $\begin{gathered} 1906-07 \\ 1906 \end{gathered}$ |  |
| May street (West Rovbury) | At Centre street. Topeka (macadam base). Laid by Rowe Contracting Company. | 57 | 214 | 1919 | Aug. 12, 1924 |






| 56 feet east of Pleasant street to Pleasant street. To Laid ly Central Construction Company. |
| :---: |
| Pleasant street to 10 feet west of Pleasant street. Topeka (macadam base). Laid by ('entral Construction Company. |
| Rosechair strect to Boston street. Trinidad asphalt. Laid by Charles J. Jacobs Company. |
| 7 feet south of Custie strent to Cobb street. Sieilian rock asphalt. Laid by Boston lsphalt Company. |
| At Blue Hill avenue. Mexican asphalt. Laid by Central Construction Company. |
| Belurade avenue to New York, New Haven \& Hartford Railroad. Topeka (macadam base). Laid by Mlartino Dellatteo. |
| 101 feet south of Mclean street (front Brick <br> Asphalt (cobble bast). Laid by the B |
| Chambersstreet to infeet east of Blossom street. Bitulithic (crushed stone base). Ladd by Warren l'rothers Company. |
| Sfect cant of Blowsom atrect to 1 lhossom street. deme asphalt. Laid by Warren Brothers Company Bessemer brick block rutters. Laid by Warren Bro |
| 7 feet east of East Dedham street to $\mathrm{S}_{\mathrm{f}}$ feet west of Malden street. Sicilian rock asphalt. Latid by Boston Asphalt Company: |
| Sfeet west of Maldenstreet to Maddenstreet. Trinidad asphalt. Laid by Barber Asphatt l'aving Company. |
| Broadway to 7 feet west of Broadway. Pine wood block. Lathly Coleman 13rothers. |
| 7 feet west of Broanay to Arlington street. l'ine wood block. Laid by Fred S. \& . . D. Gore Corporation. |
| t Wishingt on strect. line wood block. Laid by William |


List of Streets Having a Smooth Pavement.-Continued.

| Streetm. | Limits. | Length in Fect. | $\begin{aligned} & \text { Area, } \\ & \text { Cubare } \\ & \text { Yardls. } \end{aligned}$ | $\begin{aligned} & \text { Year } \\ & \text { Laid. } \end{aligned}$ | Guaranty <br> Expires. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Melvinside terraee (Dorchester | Dorchester avenue to Deer strect. Bitulithic. I aid by James Doherty.. At Deer street. Mexican asphalt. Laid by CentralConstruction Company: | 193 | 402 6 | $\begin{aligned} & 1915 \\ & 1919 \end{aligned}$ | Aug. 22, 1924 |
| Mercerstreet (South Boston) | At Dorchester street. 13itulithic. Laid by Warren Brothers Company . | 4 | 16 | 1905 |  |
| Meridian street (East lloston) | It Maverick square. Aztee asphalt. Laid by Bermudez Comapuy | 9 | 12 | 1917 | Dec. 15, 1922. |
| Meridian street (East Bostou) | 24 fect north of Trenton strect to 9 feet east of Eutaw street. Sicilian rock asphalt. Laid by Jones \& Meehan. | 221 | 540 | 1900 |  |
| Middleton strcet (Dorchester) | At Norfolk street. Bitulithic. Laid by Warren Brothers Company | 9 | 26 | 1918 | Nov. 4, 1923. |
| Middleton street (Dorchester) | South strect line of Wildwood street to 1 foot south of Theodore street. Bitulithic. Laid by Warren Brothers Company: | 246 | 711 | 1919 | May 27, 1924. |
| Middletonstreet (Dorchester) | Theorlore strcet to 1 foot south of Theodore strect. Mexican asphalt. Laid by C'entral Construction Company. | 1 | 3 | 1917 | July 26, 1922. |
| Milfordstrect (city proper) | At Tremont street. Asphalt. Laid by B. F. Grant Company | 14 | 15 | 1920 | Sept. 18, 1925. |
| Milk street (city proper) | 20 fect west of rast side of Pearl street, across Oliver street. Pine wood block. Laid by James Doherty. | 300 | 1,156 | 1910 |  |
| Milk strcet (city proper) | Oliver street to S feet west of Broad street. Pine wood block. Laid by James Doherty. | 279 | 1,045 | 1911 |  |
| Miller street (Charlestown) | 10 feet west of Main street to Lawrence street. Sicilian rock asphalt. Laid by Jones di Meehan. | 193 | 365 | 1901 |  |
| Millet street (Dorchester) | Each side of Talbot avenue. Mack brick block. Laid by James Doherty.. | 26 | 135 | 1911 |  |
| Milton avenue (Dorchester) | Each side of Norfolk street. Laid by James Doherty | 18 | 123 | 1914 |  |
| Milton street (city proper) | Spring street to 2 feet north of Spring street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 2 | 3 | 1895 |  |


| 1899 |  |
| :---: | :---: |
| 191.1 |  |
| 1918 | June 18, 1923 |
| 1916 | July 24, 1921 |
| 1920 | Unfinished. |
| 1920 | July S, 1925 |
| 1920 | sept. 18, 1925. |
| 1913 |  |
| 1914 |  |
| 1920 | Sept. 18, 1925 |
| 1916 | Oct. 21, 1921 |
| 1906 |  |
| I 591 |  |
| 1906 |  |
| 1919 | May 1, 1924. |
| 1919 | May 1, 1924. |




## Milton strect (city proper).

Mindora strect (Rovbury).
Minton street (West Roxbury)..
Montebello road (West Roxbury).
Montelair avenue (West Roxbury)
Montfern avenue (13righton).
Montgomery street (city proper)
Montgomery st reet (city proper)
Montgomery street (city proper)
Montgomery street (city proper).
Montgomery street (city proper)
Moonstreet (city proper).
Moonstrect (eity proper).
Moon strect (eity proper).
Moore street (East Boston)
List of Streets Having a Smooth Pavement.- Continued.

| Streets. | Limits. | Length in Feet. | Area, Square Yards. | Year Laid. | Guaranty <br> Expires. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Moore street (East Boston) | Q feet west of Saratoza street to Saratoga street. Aztec asphalt. Laid by Bermudez Company. | 8 | 34 | 1919 | May 1, 1924. |
| Marrill street (Dorehester) | At Pleasant street. Toneka (macadam base). Laid by Central Construction Company. | 17 | 51 | 1920 | Sept. 22, 1925 |
| Morsestrect (Dorchester) | At Washington strect. Pine wood block. Laid by William J. Barry | 10 | 30 | 1912 |  |
| Morton street (cily proper) | Salem street to 33 feet west of Salem street. Sieilian rock asphalt. Laid by Boston Asphalt Company: | 33 | 26 | 1901 |  |
| Morton street (eity proper) | 33 feet west of Salem street to 84 fect east of Endicott strect. Conerete road. Laid by John E. Leahy Construction Company. | 209 | 162 | 1918 |  |
| Morton street (eity proper) | St feet east of Endicott street to 51 feet east of Endicott street. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 33 | 26 | 1901 |  |
| Morton street (city proper) | 51 feet east of Endicott street to 6 feet east of Endicott street. Standard asphalt. Laid by Central Construction Company. | 45 | 35 | 1916 |  |
| Morton street (Dorcheter) | At Baird street. Bitulithic. Laid by Warren Brethers Company |  | 290 | 1919 | May 26, 1924 |
| Morton street (1)orehester) | At Wilcock street. Topeka (macadam base). Laid by Rowe Contracting Company. |  | 97 | 1920 | July $\quad 1,1925$. |
| Morton street (1)orehester) | AtIIavelockstrect. Topeka (macadambase). Laid by Rowe Contracting Company. |  | 94 | 1920 | July 2S, 1925. |
| Morton street (Dorchester) | Each side of Norfolk street. Bitulithic. Laid by Warren Brothers Company, | 16 | 106 | 1918 | Nov. 4,1923 |
| Motley street (Roxbury) | At Columbus avenue. Bermudez asphalt. Laid by Boston Asphalt Company. | 9 | 21 | 1906 |  |
| Motte street (eity proper) | 7 feet east of Wayhington street to 12 feet west of Harrison avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 317 | 598 | 1892-99 |  |


List of Streets Having a Smooth Pavement.-- Continued.

| Streets. | Limits. | Length in Fect. | Arca, Square Yards | Year Laid. | Guaranty Expires. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Mystic street (city proper) | 7 feet west of Malden strcet to 7 feet east of East Dedham street. Sicilian rock asphalt. Laid by Boston Asphalt Corupany. | 190 | 209 | 1896 |  |
| Mystic street (city proper) | East Dedharn street to East Canton street. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 202 | 315 | 1896 |  |
| Mystic street (eity proper) | East Canton street to East Brookline street. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 202 | 315 | 1896 |  |
| N street (South Boston). | East Fourth street to $S$ fect south of East Fourth strect. Pine wood block. Laid by John E. Quinn. | 8 | 33 | 1919 | May 24, 1925. |
| Nashua street (city proper) | At post office. Pine wood block. Lad by city force | 17 | 72 | 1916 |  |
| Nassau street (city proper) | At Ash street. Acme asphalt. Laid by Warren Brothers Company | 7 | 15 | 1909 |  |
| Nelson strect (Dorchester) | At Norfolk strect. Bitulithic. Laid by James Doh | 15 | 71 | 1914 |  |
| Neponset avenue (Dorchester) | Adams strect to 25 feet south of Ashmont street (west side). Topeka. Laid by city force. |  | 3,596 | 1918 |  |
| Neptune road (East Boston) | West side Boston, Revere Beach \& Lynn Railroad to Bennington street. Mexican asphalt. Laid by Central Construction Company. | 1,700 | 8,492 | 1917-18 | Aug. 2, 1923. |
| Neptune road (East Boston) | Bennington street to 10 feet north of Bennington street. Aztec asphalt. Laid by licrmudez Company. | 10 | 75 | 1919 | May 1,1924. |
| Newburn street Roxbury) | Sterling street to Weston street. Topeka. Laid by Central Construction Company. | 291 | 650 | 1919 | July 7, 1924. |
| Newbury street (city proper) | Arlington street to Berkeley street. Bitulithic (macadam base). Laid by Warren Brothers Company. | 632 | 2,524 | 1919 | June 4, 1924. |
| Newbury street (city proper) | Berkeley street to Clarendon street. Bitulithic (macadam base). Laid by Warren Brothers Company. | 576 | 2,327 | 1919 | June 4, 1924. |


| Newbury street (eity proper) | Clarendon street to Dartmouth street. Bitulithic (macadam base). Laid by Warren Brothers Company. | 575 | 2,333 | 1919 | June | 4, 1924. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Newbury street (eity proper) | Dartmcuth street to Exeter street. Bitulithic (macadam base). Laid by Warren 13 rothers Company. | 555 | 2,224 | 1919 | June | 4,1924. |
| Newbury street (eity proper) | Exeter street to Fairfield street. Bitulithie (maeadam base). Laid by Warren Brothers Company. | 622 | 2,500 | 1919 | June | 4, 1924. |
| Newbury street (eity proper) | Fairfield street to 10 feet west of Fairfield strect. Bitulithic (maeadam base). Laid by Warren Brothers Company. | 10 | 41 | 1919 | June | 4,1924. |
| Newbury street (eity proper and Roxbury). | 10 feet west of F:arfield street to S feet east of Hereford street. Pine wood block. Laid by United States Wood Preserving Company. | 937 | 3,748 | 1901 |  |  |
| New bury street (Roxbury) | 8 feet east of Hereford street to 300 feet east of Massachusetts avenue. Pine wood bloek. Land by Patriek MeGovern. | 413 | 1,652 | 1906 |  |  |
| Newbury street (Roxbury) | Massachusetts avenue to 16 feet west of Massachusetts avenue. Trinidad asphalt. Lad by James Doherty. | 16 | 55 | 1914 |  |  |
| Newland street (eity proper) | West Brookline street to Pembroke street. Sicilian rock asphalt. Laid by Buston Asphalt Company: | 158 | 228 | 1902 |  |  |
| Newland street (eity proper) | Pembroke street to West Newton street. Sicilian roek asphalt. Laid by Boston Asphalt Company. | 155 | 224 | 1902 |  |  |
| Nightingale street (Dorchester) | At Talbot avenue. Mack brick block. Laid by | 13 | 81 | 1911 |  |  |
| Nozfolk street (Dorchester) | Washington street to 6 feet south of Washington street. Pine wood bloek. Laid by William J. B:ary. | 6 | 75 | 1913 |  |  |
| Norfolk street (Dorchester) | 78 feet west of Talbot avenue to 57 feet east of Edson street. Bitulathic. Laid by James Doherty l'ine wood bloek. (Brows to street car rails.) Lind by James Doherty | \} 1,795 | 6,550 538 | 1913 1913 |  |  |
| Norfolk street (Dorchester) | 57 feet east of Edson street to 51 fect east of bridge over New York, New ILaven \& Hartford Raihood, Midland Division. <br> Bitulithie. Lail byy James Dcherty............... Pine wood block. (Brows to street ear rails.) Lak by James Doherty.... | $\} 2,29: 2$ | 8,071 671 | 1914 1914 |  |  |
| Norfolk street (Dorehester) | 51 feet east of bridge over New York, New Haven \& Hartford Railroad, Midland Division, to bridge over New York, New liaven \& Hartford Railroad Midland Livision. Bitulithic. Laid by Warren Brothers Company. | 51 | 200 | 1919 | Oct. | 11, 1924. |

List of Streets Having a Smooth Pavement.- Continued.

| Stieets. | Limits. | Length in Feet. | $\begin{aligned} & \text { Area, } \\ & \text { Square } \\ & \text { Yards. } \end{aligned}$ | Year Laid. | Guaranty Expircs. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Norfolk street (Dorchester) | Bridge over New York, New Haven \& Hartford Railroad, Midland Division, to 75 feet west of bridge over New York, New Haven \& Hartford Railroad, Mulland Division. | 75 | 345 | 1919 | Oct. 11, 1924. |
| Norfolk street (Dorchester) | 75 teet west of bridge over New York, New Haven \& Hartford Railroad, Midland Division, to Blue Hill avenue. Bitulithic. Laid by Warren Brothers Company. | 3,592 | 17,692 | 1918 | Nov. 4, 1923. |
| Norman street (eity proper) | 7 fect north of Green street to South Margin street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 391 | 697 | 1905 |  |
| Normandy street (Dorehester) | North side 1ntervale street to Devon street. Aztec asphalt. Laid by Central Construction Company. | 485 | 1,403 | 1916 | Oct. 13, 1921. |
| Normandy street (Dorchester) | Seaver street to Columbia road. Trinidad asphalt. Laid by James Doherty, | 45 S | 1,330 | 1915 |  |
| North square (city proper) | North street to Moon street. Bitulithic (erushed stone base). Laid by Warren Brothers Company. | 235 | 1,217 | 1906 |  |
| Northampton street (city proper) | At Columbus avenue. Trinidarl asphalt. Laid by Barber Asphalt Paving Company. | 9 | 34 | 1906 |  |
| Northampton street (city proper)..... | North side Tremont street. Asphalt. Laid by Bernard E. Grant Company. |  | 6 | 1920 | Sept. 18, 1925. |
| Northampton street (city proper) . . . . | 14 feet south of Tremont street to 9 feet north of Shawmut avenue. Wood block. Laid by Fred S. \& A. D. Gore Corporation. | 894 | 3,370 | 1911 |  |
| Northampton street (eity proper).... . | Shawmut avenue to Washington street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 370 | 648 | 1905 |  |
| Northampton street (city proper). | At Albany street. Pine wood block. Laid by Bernard E. Girant. |  | 47 | 1917 | Jan. 19, 1923. |
| North Anderson street (city proper) . . | 7 feet south of Parkman street to Parkman street. <br> Acme asphalt. Laid by Warren Brothers Company <br> Bessemer brick block gutters. Laid by Warren Brothers Company | 7 \{ | 16 4 | $\begin{aligned} & 1916 \\ & 1916 \end{aligned}$ | $\begin{aligned} & \text { Nov. } 28,1921 . \\ & \text { Nov. } 28,1921 . \end{aligned}$ |


| North Anderson strect (city pro | Parkman street to Fruit street. <br> Acme asphalt. Laid by Warren Brothers Company <br> Bessemer brick block gutters. Laid by Warren Brothers Comp | 77 | 17.1 4.3 | 1916 1916 | $\begin{aligned} & \text { Nov. } 28,1921 . \\ & \text { Nor. } 28,1921 . \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| North Beacon street (Brighton) | Cambridge strect to Market street. Bitulithic. Laid by Warren Brothers Company: | 3,237 | 11,53\% | 1915 | Der. 21, 1923. |
| North Beacon street (Brighton) | East side of bridge over Charles river to the Watertown line. Pine wood block. Laid by A. (i. Tomasello. | 193 | 1,170 | 1917 |  |
| North Beunet strect (eity proper) | Hanover street to Salem street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 45.) | 910 | 1904 |  |
| North Grove strect (eity proper) | Cambridge street to Fruit strect <br> Arme asphalt. Laid by Warren Brothers Company <br> Bessemer brick block gutters. Laid by Warren Brothers Company | 458 | 1,265 | $\begin{aligned} & 1917 \\ & 1917 \end{aligned}$ |  |
| North IIarvard strect (Brighton) | At Easton strect. Asphalt (macadam base). Laid by John J. Lane |  | 43 | 1920 | Now 20.1925 |
| North Harvard street (Brighton) | 33 feet north of Soldiers Field road to Cambridge line. Pine wood blork Laid by Rowe Contracting Conpany: | 219 | 973 | 1914 |  |
| North Margin street (rity proper) | stillman street to 6 feet south of Thacher street. Trinidad asphalt. Laid by Barber Axplalt Paving Company: | 511 | 1,161 | 159.5 |  |
| North Margin street (eity proper) | 6 feet north of Thacher strect to 190 feet north of Thacher strect. Sicilian roek asphalt. Laid by Boston Asphalt Company: | 1 S. | 476 | 1597 |  |
| North Russell strect (city proper) | Cambridge strect, aeross Eaton strect. Aztec anphalt. Laid lys Bermudez Company: | 434 | 99 | 1917 | Now. 3, 192 |
| Norton strect (Dorchester) | East side of Bowdoin street. Azter asphalt. Laid by Bernudez Company... | - | s2 | 1919 | Nay 3 , 1994. |
| Norway strect (Roxbury) | Falmouth street to 4 feet west of St. Paul strect. Pine wood block. Laid by United States Wood Ireserving Company. | 307 | 917 | 1909 |  |
| Norway street (Rosbury). | East side of Massachusetts avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company. | $s$ | 12 | 1901 |  |
| Norwell street (Dorehester) | At Talbot avenue. Mack brick hlock. Laid by dames Doherty. | 13 | 43 | 1911 |  |
| Norwich strect (eity proper) | Mystie street to Meander strect. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 221 | 339 | 15996 |  |

List of Streets Having a Smooth Pavement．－Continued．


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List of Streets Having a Smooth Pavement.- Continued.

| Streets. | Limits. | Length in Feet. | $\begin{aligned} & \text { Area. } \\ & \text { Stuare } \\ & \text { Yards. } \end{aligned}$ | $\begin{aligned} & \text { Year } \\ & \text { Laid. } \end{aligned}$ | Guaranty <br> Expires. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Park street (West Roxbury) | At Atwill road. Topeka (macadam base). Laid by Rowe Contracting Company. |  | 40 | 1919 | Oet. 22, 1924. |
| Parker street (Roxbury) | 10 feet north of Edgar street to 8 feet south of Caldwell street. Bitulithic. Granite block base. Laid by Warren Brothers Company. | 218 | 8:37 | 1912 |  |
| Parker street (Roxbury) | 8 feet south of Caldwell street to 6 feet north of Ward street. Standard asphalt and Aztec asphalt (granite block base). Laid by Central Construction Company. | 457 | 1,767 | 1917 |  |
| Parker street (Roxbury). | 8 feet north of Conant eet to Tremont street. Aztee asphalt (macadam base). Laid by Bermudez Company. | 651 | 2,532 | 1919 | Oct. 2.5, 1924. |
| Parkland street (Brighton) | Winship street to Acadamy Hill road. Aztec asphalt. Laid by Coleman Brothers. | tio | 524 | 1917 | Oct. 16, 1922. |
| Parkman street (eity proper) | North Grove street to 7 feet cast of North Anderson street Aeme asphalt. Laid by Warren Brothers Company Bessemer briek block gutters. Laid by Warren liroihers Company | 203 | $\begin{aligned} & 369 \\ & 100 \end{aligned}$ | $\begin{aligned} & 1916 \\ & 1916 \end{aligned}$ | $\begin{aligned} & \text { Nov. } 2 \times, 1921 . \\ & \text { Nov. } 2 \mathrm{c}, 1921 . \end{aligned}$ |
| Parkman street (eity proper) | 7 feet east of North Anderson street, across Blossom street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 23.4 | 534 | 1898 |  |
| Parkman street (city proper) | Blossom street to 7 fect of west Nortl Russell street. Acme asphalt. Laid by Warren Brothers Company. | 229 | 476 | 1910 |  |
| Parkman street (eity proper) | 7 feet west of North Russell street to North Russell street. Aztec asphalt. Laid by Bermudez Company. | 7 | 12 | 1917 | Nov. 3, 1922. |
| Parkton road (West Roxbury) | Perkins street to Perkins street. Concrete road. Laid by city forces | 1,169 | 2,903 | 1916 |  |
| Parkvale avenue (Brighton). | Brighton avenue to 10 feet south of Brighton avenue. Aztec asphalt (macadam base). Laid by Berınudez Company. | 10 | 22 | 1917 | Dec. 7, 1922. |
| Parkvale avenue (Brighton). | 10 feet south of Brighton avenue to Glenville avenue. Aztec asphalt. Laid by Bermudez Company. | 879 | 2,548 | 1918 | July 25, 1923. |






List of Streets Having a Smooth Pavement.-Continued.

| Streets. | Limits. | Length in Fect. | Area, Square lards | Year Laid. | Guaranty Expires. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Pemberton square (eity prope | Front of Suffolk County Courthouse. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 323 | 1,365 | 189.4 |  |
| Pembroke strect (eity proper) | Each side of Tremont street. Asphalt. Laid by B. E. Grant Com | 32 | 125 | 1920 | Sept. 18, 1925. |
| Pembroke strcet (city proper) | At Columbus square. Bitulithic. Laid by Fred S. \& A. D. Gore Corporation. | 4 | 17 | 1912 |  |
| Percivalstrect (Dorchester) | At Bowdoin strect. Topeka (macadam base). Laid by city force | 2 | 7 | 1918 |  |
| Perham street (West Roxbury) | New York, New Haven \& IIartford Railroad to Vermont strect. Mexican asphalt. Laid by Central Construction Company. | 2,630 | 6,195 | 1917 | Sept. 12. 1922. |
| Perth strect (Dorchester) | Quincy street to Fayston street. Bitulithic. Laid by James Doherty | 218 | 630 | 1915 |  |
| Perthshirc road (Brighton) | Bigelow strect to Matchett street. Mexican asphalt. Central Construction Company. | 593 | 1,716 | 1919 | June 12, 1924. |
| Phillips strcet (Roxbury) | Conant strect to 7 fect south of Conant street. Aztec asphalt (macadam base). Laid by Bermudez Company. <br> 7 feet north of Smith street to Smith street. Aztec asphalt (macadam base). Laid by Bermudez Company. | 7 7 | 18 19 | 1919 1919 | $\begin{aligned} & \text { Nov. } 1,1924 . \\ & \text { Nov. } 1,1924 . \end{aligned}$ |
| Phillips strect (Roxbury). | Smith street to 7 feet sonth of Smith street. Aztec asphalt (macadam base). Laid by Bermudez Company. | 7 | 16 | 1919 | Nov. 24, 1924. |
| Piedmont street (city proper) | At Broadway. Pine wood block. Laid by Coleman Brothers. | 11 | 26 | 1913 |  |
| Pinckney street (city proper). | Charles street, across Brimmer street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 261 | 701 | 1895 |  |
| Pinestrect (city proper). | 7 feet east of Washington street to 10 feet west of Harrison avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 403 | 567 | 1896 |  |
| Pleasant stroet (Dorchester) | East Cottage street to north side of Stoughton street. Topeka (macadam base). Laid by Central Construction Company. | 1,415 | 5,823 | 1920 | Sept. 22, 1925. |


| Pleasant street (Dorchester) | North side of Stoughton street to 20 feetsouth of Savin Hill avenue. Topeka. Laid by Francis J. Burke. | 854 | 2,546 | 1920 | Dec. 18, 1925. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Pleasant street (Dorehesterz | 20 feet south of Savin Hill avenue to 49 feet south of Savin IIill avenue. Topekit (macadam base). Laid by Francis J. Burke. | 29 | 130 | 1920 | Dec. 18, 1925. |
| 1'leasant street (1)orchester) | St feet north of Hancock street to llancock street. Bessemer brick hlock. Laid by Fred S. \& A. J. Gore Corporation. | S4 | 1,112 | 1911 |  |
| Popestreet (East Boston) | At Saratoga strect. Aztee asphalt. Laid by Bermudez Company | 20 | 211 | 1919 | May 1, 1924. |
| Poplar strect (city proper) | Chambers street, aeross Spring street. Trinidad asphalt (cobble base). Laid by Barber Asphalt P'aving ('ompany. | 615 | 1,2,50 | 1892 |  |
| Poplar stıeet (eity proper) | $S_{1}$ ring strect to $S$ feet south of Charles strect. Trinidad asplalt (cobble base). Laid by Barber Asphalt Paving C'ompany. | 572 | 1,175 | 1887 |  |
| Porter street (eity proper) | Bridge over Boston Elevated Railway. Pine wood block. Laid by Coleman Prothers. | 11 | 18 | 1913 |  |
| Porter strect (East l3oston) | Bridge over Joston \& Albany Railroad. Acme asphalt. Laid by W. A. Murtfeldt Company. | 37 | 128 | 1907 |  |
| Porter street (Roxbury) | At Amory street. Mexican asphalt (macadam base). Laid ly Central Construction Company. | S | 21 | 1919 | Dee. 6, 1924. |
| Powellton road (Dorchester). | Columbiat road to Glenarm street. Pitulithic. Laid by James Joherty | 329 | 9.50 | 1915 |  |
| l'rentiss strect (Roxbury) | Eich side Columbus avenue. Bermudez asphalt. Laid by Boston Asphalt Company. | 10 | 36 | 1906 |  |
| 1'rescott street (Charlestown) | At Harvard street. Aztec asphalt (macadam base). Laid by Bermudez Company. |  | 15 | 191S | June S, 1923. |
| Prescott street (East Boston) | Bridge over Boston \& Albany Railroad. Acme asphalt. Laid by W. A. Murtfelitt Company. | 36 | 125 | 1907 |  |
| Prince strect (city proper) | Garden Court strect to Hanover street. Bitulithic (erushed stone base). Laid by Warren Jirothers C'cmpany. | 134 | 223 | 1906 |  |
| Prince street (city proper) | 9 feet west of Hanover street to 293 feet west of Hanover street. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 2S4 | 634 | 1895 |  |
| Prince street (city proper) | 293 feet west of Hanover strect to 15 feet east of Salem strect. Sicilian rock asphalt. Laid by Jones \& Meehan. | 198 | 457 | 1900 |  |

List of Streets Having a Smooth Pavement. - Continued.

| Streets. | Limits. | Length in Fect. | $\underset{\text { Area, }}{\substack{\text { Auare }}}$ Yards | $\begin{aligned} & \text { Year } \\ & \text { laid. } \end{aligned}$ | Guaranty Expires. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| l'rince street (eity proper) | 1.) feet east of Salem street to Salem strect. Sicihan rock asphalt. Laid by Boston Asphalt Conepany. | 15 | 40 | 1901 |  |
| 1 'rince street (West Roxbury) | Arborway at Centre strect to 1 foot north of Arborway. Topeka (macadam hase). Latil by Rowe Contracting Company. | 1 | 8 | 1919 | Aug. 12, 1924. |
| Prince street (West Roxburs) | 1 font north of Arborway to Pond strect. Trinidad asphalt. Laid by Charles J. Jacols Company. | 1,379 | 4,079 | 1915 |  |
| Providence street (eity proper) | Park sutuare to 75 feet east of Church strect. Pine wood block. Laid by Fred S. it A. D. Gore Corporation. | 161 | 1,400 | 1912 |  |
| Providence street (eity proper). | At east side of Church strect. Bessemer brick block. Laid by Coleman Brothers. |  | 23 | 1918 |  |
| Providence street (eity proper). | Arliugton street to 5 feet west of Arlington street. Bessemer brick block. Laid by Coleman Brothers. | E | 19 | 1918 |  |
| Public Ailey No. I2 (wity proper) | Poplar street to Public Alley No. I.1. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 77 | 68 | 1903 |  |
| Publie Alley No. 102 (rity proper) | 23 feet south of Marshall strect to Creek square. Seyssel rock asphalt. Laid by Jones it Mcehan. | 182 | 184 | 1899 |  |
| P'ublic Alley No. 301 (eity proper) | Pinckney street to River street. Trinidad asphalt. Laid by Simpson Brothers Corporation. | 270 | 400 | 1897 |  |
| Publie Alley No. 101 (eity proper) | Between Huntington avenue and St. Botolph street, from 96 fect west of Irvington street to 60 feet east of Garrison street. Trinidad asphalt. Latid by Simpson lirothers Corporation. | 350 | 362 | 1899 |  |
| Public Alley No. 102 (city proper) | Between Huntington avenue and St. Botolph sticet, from 67 feet west of Garrison strect to 77 feet east of West Newton strect. Trinidad asphalt. laid by Simpson Brothers Ccrporation. | 358 | 374 | 1899 |  |

Public Alley No. 103 ("ity proper) Between Huntington avenue and St. Botolph street, from 65 feet west of
West Newton street to 62 feet cast of Cumberland street. Trinidad asphalt. Leicl by simuson 13 rothers Corporation
Between IIuntington avenue and $S$. Botolph street, from 66 feet south of Simpherliand strect tornothers Corporition.
Rear of northeast side of Massachusetts avenue, from 91 feet east of Huntin_ton awnue to fit fect west of st. Botolph street. Trinidad asp, halt.
Laid ly simpson Brothers Corporation.
Between Beacon street and Marlborough street, from 53 feet enst of Massachusetts avenue to Hereford strect. Trinidad asphailt. Laid by Barber
Asphalt Yavme Company.
Between Beacon street and Marlborough street, from Her-ford strect to Gloucester street. Trimdad asplialt. Laid by Barber Asphalt Paving
Company.
Between Bearon strent and Marlhorough street, from Ciloucester street to Pairfich street. Trinidad asphath. Laid by Barber Asphalt Paving
Company.
Between Beaw street and Marlborough street, from Fairield street to Exeter strect. Trinidal asphalt. Laid by Barber Asplailt P'aving Con-
pany.
It Dartmouth street. Bitulithic. Laid by Warren 13rothers Company... Dartmouth st reet to if feet east of Dartmouth street. Bitulithic. Laid by
Warren Brothers Compuy
Bet ween Beacon strect and Marllorough st reet, from 4 f cet east of 1 art mouth street to 12 feet west of Clarendon street. Mrinidad :isphailt. Laid by
Sinpsoal krothers Corporation.
12 feet weat of Clarendon street to Clarendon street. Bitulithic. Laid by
Warren lirohers Company.
Clarendoa street to 19 fect east of Clarendon street. Bitulithic. Laid by
Warren Brothers Company:

| Public Alley No. 103 (city proper) | Between Huntington avenue and St. Botolph street, from 65 feet west of West Newton street to 62 feet east of Cumberland street. Trinidad asphalt. Litil by simpson lbrothers Corporation. | 355 | 370 | 1899 |
| :---: | :---: | :---: | :---: | :---: |
| Public Alley No. 104 (Roxbury ) | Between LIuntington avenue and St. Botolph street, from 66 feet south of Cumberland street to Public Alley No. 405. Trinidad asphalt. Laid by Simpson lirothers Corporation. | 534 | 533 | 1899 |
| Public Aliey No. 405 (Roxbury) | Rear of northeast side of Massachusetts avenue, from 91 feet east of Huntinzton :twenue to fi2 fect west of St. Botolph street. Trinid:al asphalt. Laid by Simpson Brothers Corporation. | 100 | 89 | 1899 |
| Pubic Mlay No. 414 (rity proper) | Between Beaeon street and Marlborough street, from 53 feet east of Massachusetts avenue to Hereford street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 609 | 569 | 1901 |
| Pubiic Atley No. 415 (wity proper ) | Between Beacon street and Marlborough street, from Merdford street to (iloucester street. Trinidad asplalt. Laid by Barber Asphalt Paving Company. | 394 | 378 | 1901 |
| Pubic Ahey No. thi (city prozer) | Between Bearon street and Marlborough street, from Ciloucester street to Pairfich street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 520 | 490 | 1901 |
| Public Alley No. 117 (eity proper) | Between Branon street and Marlborough street, from Fairield street to Exeter strect. Trinidad asphalt. Laid by Barber Asphalt P'aving Company. | 620 | 379 | 1901 |
|  | At Dartmouth street. Bitulithic. Laid ly Warren 13rothers Company. | 4 | 4 | 1903 |
| l'ublic Mlley No. 419 (eity prozer | Dartmouth street to I feet east of Dartmouth strect. Bitulithic. Laid by Warren Brothers Company. | 4 | 4 | 1903 |
| Public Alley No. 119 (rity proper) | Between Beacon strect and Marlborough street, from 4 feet east of Dart mouth street to 12 feet west of Clarendon street. Trinidad anphalt. laid by Simpsoa 13rothers Corporation. | 550 | 488 | 1599 |
| Public Alley No. 119 ( (eity propre | 12 feet west of Clarendon street to Clarendon strect. Bitulithic. Laid by Warren lirothers Company. | 12 | 11 | 1905 |
| Public Alley No. t20 (city projer). | Clarendoa street to 10 feet east of Clarendon street. Bitulithic. Laid by Warren Brothers Company. | 10 | 9 | 1905 |

List of Streets Having a Smooth Pavement. - Continued.
Streers.
Public Alley No. 120 (city proper) $\ldots \ldots$

| Public Alley No. 426 (city proper). | Between Commonwealth avenue and Marlborough street, from Exeter street to Fairfield street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 620 | 591 | -1901 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Public Alley No. 42s (eity proper and Roxbury). | Between Commonwealth avenue and Marlborough street, from Gloucester street to Hereford street. 'Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 392 | 376 | 1901 |  |
| Publie Alley No. 129) (Roxbur | Between Commonwealth avenue and Marlborough street, from 55 feet west of Hereford street to 77 feet east of Massachusets avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 530 | 501 | 1901 |  |
| P'ublic Alley No. 129 (Roxbury) | At Massachusetts avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 5 | 4 | 1901 |  |
| Public Alley No. 430 (Rovbury) | At Massachusetts avenue. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 7 | 6 | 1901 |  |
| Public Alley No. 431 (city proper and Roxbury). | Between Commonwealth avenue and Newbury street, from 7 feet east of Hereford street to S:3 feet west of Gloucester street. Trinidad asphalt. Laid by Simpson Brothers Corporation. | 305 | 271 | 1899 |  |
| Public Alley No. 433 (city proper) | At Exeter strect. Bitulithic (macadam base). Laid by Warren Brothers Company. | 10 | 9 | 1919 |  |
| Public Alley No. 43.4 (city proper) | Exeter street to 17 feet east of Exeter street. Bitulithic (macadam base) | 17 | 17 | 1919 | June 4, 1924. |
| Public Alley No. 431 (city proper) | Between Commonwealth avenue and Newbury strect, from 17 feet east of Exeter street to 3 feet west of Dartmouth street. Nicilian rock asphalt. Laid by Boston Asphalt Company. | 535 | 463 | 1901 |  |
| Public Alley No. $43:$ (city proper) | 3 feet west of Dartmouth street to Dartmouth street. Bitulithic. Laid by Warren Brothers Company. | 3 | 3 | 1903 |  |
| Public Alley No. 435 (eity proper) | At Dartmouth street. Bitulithic. Laid by Warren Brothers Company...... | 3 | 3 | 1903 |  |
| Public Alley No. 435 (city proper) | At Clarendon street. Bitulithic. Laid by Warren Brothers Company | 4 | 4 | 1905 |  |
| Public Alley No. 436 (city proper) | Clarendon street to 15 feet east of Clarendon street. Bitulithic. Laid by Warren Brothers Company. | 15 | 13 | 1905 |  |
| Public Alley No. 436 (eity proper) | Between Commonwealth avenue and Newbury street, from 15 feet east of Clarendon street to Berkeley strect. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 562 | 528 | 1901 |  |

List of Streets Having a Smooth Pavement. - Continued.

| Streets. | Limits. | Length in Feet. | Yards. <br> Area, | Year <br> Laid. | Guaranty Expires. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Public Alley No. 437 (city proper) | Retween Commonwealth avenue and Newbury street, from Berkeley street to $\mathrm{Arl}_{j} \mathrm{ng}$ ton strect. Trinidad asphalt. Laid by Barber Asphalt Paving Company: | 628 | 558 | 1898 |  |
| Public Alley No. 13s (city proper) | Arlington street to 3 feet west of Arlington street. Trinidad asphalt. Laid by Rarber Asphalt Paving Company. | 3 | 3 | 1901 |  |
| Public Alley No. 43 S (eity proper) | Between Newbury street and Boylston strect, from 3 feet west of Arlington street to 3 feet east of Berkeley street. Nicilian rock asphalt. Laid by Boston Asphalt Company. | 625 | 583 | 1901 |  |
| l'ublic Alley No. 43S (eity proper) | 3 feet east of Berkeley street to Berkeley street. Bitulithie. Laid by Warren Brothers Company. | 3 | 3 | 1903 |  |
| Public Alley No. 139 (city proper) | Clarendon street to 3 feet west of Clarendon street. Bitulithie. Laid by Warren Brothers Company: | 3 | 3 | 1905 |  |
| Public Alley No. 139 (city proper) | Clarendon street to Dartmouth street. Vitrified briek | 553 | 492 | 1894 |  |
| Public Alley No. 439 (eity proper) | At Dartmouth street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 1 | 1 | 1894 |  |
| Public Alley No. 440 (city proper)..... | Between Newbury street and Boylston street, from Dartmouth street to 3 feet west of Dartmouth street. Bitulithic. Laid by Coleman Brothers. | 3 | 7 | 1914 |  |
| Publie Alley No. 4.40 (city proper) $\ldots$... | Between Newbury street and Boylston street, from 3 feet west of Dartnouth strect. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 5 | 4 | 1901 |  |
| P'ublic Alley No. 410 (city proper).... | Retween Newbury street and Boylston street, from 8 feet west of Dartmouth street to 12 feet east of Exeter street. Sicilian roek asphalt. Laid by Boston Asphalt Company: | 535 | 507 | 1901 |  |
| Publie Alley No. 440 (eity proper)..... | 12 feet east of Exeter street to Fxeter street. Bitulithic (macadam base). Laid by Warren Brothers Company. | 12 | 11 | 1919 |  |
| Public Alley No. 441 (eity proper).... | Exeter street to 14 feet west of Exeter street. Bitulithic. Warren Brothers Company. | 14 | 13 | .$^{1919}$ |  |


| Public Alley No. 441 (city proper). | Between Newbury strect and Boylston street, from 14 feet west of Exeter street to Fairfield street. Sicilian rock asphalt. Laid by l3oston Asphalt Company: | 606 | 538 | 1903 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Public Alley No. 442 (eity proper) | Between Newbury street and Boylston street, from 59 feet west of Fairfiek street to 110 feet east of Gloncester street. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 351 | 312 | 1901 |  |
| Public Alley No. 442 (city proper) | Between Newbury street and Boylhton street, from 110 feet east of filoucester street to Gloucester street. Pine wood block. Laid by Boston Asphalt Company. | 100 | 89 | 1901 |  |
| Public Alley No. 444 (Roxbury) . | 350 feet west of ILereford street to 532 feet west of Hereford street. Concrete road. Laid by Boston Transit Commission. | 182 | 318 | 1911-1.5 |  |
| Public Alley No. 701 (city proper)... | Tremont street to 15 feet east of Tremont street. Asphalt. Laid by B. E. Grant Company. | 15 | 22 | 1920 | Sept. 18, 1925. |
| Public Alley No. 701 (city proper)... | Between Union Park street and Upton street, from 130 feet east of Tremont street to Shawmut avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 521 | 611 | 1×99 |  |
| Public Atley No. 702 (city proper). | Between Shawmut avenue and Tremont street, from Worrester street to 7 feet southwest of Worcester strect. Mexican asphalt (macadam base). Laid by Central Coustruction Company. | 7 | 7 | 1919 |  |
| Public Alley No. 702 ( ity proper) | Between Shawmut avenue and Tremont street, from 7 leet southwest of Worcester strect to West Springfield street. Neyssel rock asphalt. Laid by Jones \& Meehan. | 203 | 205 | 1599 |  |
| Public Alley No. 703 (city proper) | 40 feet west of Newland street to 40 fect east of Public Alley No. 702 . Seyssel rock asphalt. Laid by Jones \& Meehan. | $11 \times$ | 10:3 | 1599 |  |
| Public Alley No. 705 (eity proper). | At Tremont street. Asphalt. Lad by B. E. Grant Company | 11 | 25 | 1920 | Sopt. 18, 19:5. |
| Public Alley No. 705 (eity proper) | Street line of Tremont street to street line of Shawnut avenue. Concrete. | 649 | 1,26: |  |  |
| Public Alley No. 818 (Roxbur | Concrete. |  | 11 |  |  |
| Public Alley No. 901 (Roxbury).. | From 113 feet west of Hemenway street to 113 feet west of Hemenwaly street. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 573 | 550 | 1902 |  |
| Pullic Alley No. 905 (Roxbury)...... | At Massachusetts arenue. Sicilıan rock asphalt. Laid by Boston Asphalt Company. | 5 | 4 | 1901 |  |

List of Streets Having a Smooth Pavement.- Continued.

| Streets. | Limits. | Length in Feet. | $\begin{aligned} & \text { Area, } \\ & \text { Square } \\ & \text { Yards. } \end{aligned}$ | Year Laid. | Guaranty <br> Expires. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Public Alley No. 908 (Roxbury). | Massachusetts avenue to Marlborough street. Barington brick block. Laid by Boston Construction Company. | 552 | 493 | 1915 |  |
| Quincy street (Dorchester) | At Bowdoin street. Topeka (macadam base). Laid by city | 8 | 41 | 1918 |  |
| Quint avenue (Brighton) | At Brighton avenue. Aztec asphalt (macadam base). Laid by Bermudez Company. | 10 | 22 | 1917 | Dec. 7, 1922. |
| Raleigh street (Roxbury). | At Beacon strect. Aztec asphalt (macadam base). Laid by Bermudez Company. | 12 | 27 | 1918 | June 1, 1923. |
| Ralston street (South Boston). | Each side of Dorchester avenue. Pine wood block. Laid by William J. Barry. | 20 | 57 | 1919 | Aug. 21, 1924. |
| Randall street (city proper and Roxbury). | 8 fcet east of Harrison avenue to 6 fect west of Fellows street. Trinidad and Aztec asphalt. Laid by Central Construction Company. | 325 | 724 | 1916 | Aug. 18, 1921. |
| Randall street (Roxbury). | 6 feet east of Fellows street to 1 foot west of Albany street. Trinidad and Aztec asphait. Laid by Central Construction Company. | 264 | 765 | 1916 | Aug. 18, 1921. |
| Randall street (Roxbury). | 1 foot west of Albany strcet to Albany street. Mexican asphalt. Laid by Bermudez Company. | 1 | 4 | 1918 |  |
| Raven street (DGrchester) | 6 fect south of Crescent avenuc to $\mathbf{4 4} \mathbf{f}$ feet south of Crescent avenue. Bitulithic. Laid by James Doherty. | 438 | 1,264 | 1915 |  |
| Reedsdale strcet (Brighton) | At Brighton avenue. Aztec asphalt (macadam base). Laid by Bermudez Company. | 10 | 25 | 1917 | Dec. 7, 1922. |
| Richwood street (West Roxbury) | 28 feet west of Centre strcet to Montview street. Topeka. Laid by Central Construction Company. | 1,237 | 2,882 | 1917 | June 19, 1923. |
| Ridgewood street (Dorchester) | Drapes street to Topliff street. Bitulithic. Laid by James Doherty ...... | 1,063 | 3,075 | 1915 |  |
| Rill street (Dorchester) | At Hancock street. Mack brick block. Laid by Central Construction Company. | 10 | 29 | 1910 |  |


| 1916 | Dee. 11, 1921. |
| :---: | :---: |
| 1912 |  |
| 1920 |  |
| 1914 |  |
| 1920 |  |
| 1914 |  |
| 1891 |  |
| 1917 |  |
| 1913 |  |
| 1918 | Sept. 28, 1923. |
| 1916 | June 24, 1921. |
| 1918 | Sept. 25, 1923. |
| 1911 |  |
| 1904 |  |
| 1904 |  |
| 1917 | July 28, 1922. |


List of Streets Having a Smooth Pavement.- Continued.

| Streets. | limits. | Length in leet | $\begin{aligned} & \text { Area, } \\ & \text { Siquare } \\ & \text { lards } \end{aligned}$ | Year Lairl. | Guaranty <br> Expires. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Ruggles street (Rosbury) | Washington strect to Shawmut avenue. l'ine wood block. Laid by Boston l'aving Company. | 45.5 | 1,274 | 1913 |  |
| Rugglesstreet (Rosbury) | 7 feet west of Shaw mut avenue to Cabot street. Trinidad asphalt. Laid by Barber Asphalt 1'asing Company. | 1,048 | 3,002 | 1907 |  |
| Rugglesstreet (Roxbury) | Each side of Columbus avenue. Bermudez asphalt. Laid by Boston Asphalt Company. | 7 | 35 | 1906 |  |
| Ruggles street (Roxbury) | Cabot street to Tremont street. Mack brick block. Laid by J. E. Burns \& Co. | 460 | 1,874 | 1909 |  |
| Rutland square (eity proper) | At Cohmbus avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 9 | 56 | 1906-07 |  |
| Rutland stuare (eity proper) | At Tremont street. Asphalt. Laid by B. E. Grant Company ............. | 15 | 61 | 1920 | Sept. 18, 1925. |
| Rutland street (eity proper) | At Tremont street. Asphalt. Laid by B. E. Grant Compan | 1.1 | 56 | 1920 | Sept. 18, 192\%. |
| Ryan street (city proper) | Mystie strect to Harrison avenue. Sieilian rock asphalt. Laid by Boston Asphalt Company. | $3 \%$ | 5s. | 1530 |  |
| St. Alphonsus street (Roxbury) | Each side of Conant street. Aztee asphalt (macadam base). Laid by Central Construction Company. | 1.1 | 36 | 1919 | Nor. 1, 1924. |
| St. Alphonsus street (Rosbury) | 9 feet north of Tremont street, across Smith street. Bitulithic (erushed stone base). Laid by Warren Brothers Company. | 512 | 1,479 | 1905 |  |
| St. Andrew road (East Boston) | At Waupello road. Aztee asphalt. Laid by James Doherty | 8 | 27 | 1919 | June 27, 1024. |
| St. Botolph strect (eity proper) | 9 feet east of West Newton street to West Newton strect. Bitulithic. Laid by Central Construction Company. | 9 | 36 | 1917 |  |
| St. Botolph street (eity proper) | West Newtonstreet to 9 feet west of West Newtonstreet. Bitulithic. Laid by Central Construction Company. | 9 | 36 | 1917 |  |

Public Works Department.

List of Streets Having a Smooth Pavement.- Continued.

| Streets. | Limits. | Length in Feet. | $\begin{aligned} & \text { Srea, } \\ & \text { Square } \\ & \text { lards. } \end{aligned}$ | $\begin{aligned} & \text { Year } \\ & \text { Laid. } \end{aligned}$ | Guaranty <br> Expires. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Salem street (eity proper) | Endicott street to 6 feet south of Cross street. Sicilian rock asphalt. Laid by Boston Asphalt Company: | 172 | 328 | 1901 |  |
| S'alem street (city proper) | $t$ fect north of Cross street to $\overline{5}$ feet north of south side of Baldwin place. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 700 | 1,384 | 1901 |  |
| Salem street (city proper) | 5 fect north of south side of Baldwin place to 64 feet north of Baldwin place. Bitulithic. Laid by Warren Brothers Company. | 74 | 150 | 1913 |  |
| Salem street (eity proper) | 61 feet north of Baldwin place to 1 foot north of Prince street. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 117 | 262 | 1901 |  |
| Salutation street (eity prope | Hanover street to Commercial street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 340 | 253 | 1905 |  |
| Santuit street (Dorehester) | Roseland street to Welles avenue. Topeka. Laid by city force | 386 | 946 | 1917 |  |
| Saratoga street (East Boston) | 73 feet west of Chelsea street to C'helsea street. Aztec asphalt (macadam base). Laid by Bermudez Company. | 73 | 778 | 1919 | May 11924. |
| Salcombe street (Dorchester) | At Stoughtonstreet. Topeka (macadam base). Laid by department forces. | 10 | 31 | 1920 |  |
| Saratoga street (East Boston). | Chelsea strect to 120 feet west of Byron strect. Aztee asphait. Laid by Bermudez Company. | 2,8>1 | 1,105 | 1919 | May 1,1924. |
| Saratoga street (East Boston) | 120 feet west of Byronst reet to 13ennington street. Standard asphalt. Laid by Bermudez Company. | 2,994 | 14,535 | 1915 | May 1, 1924. |
| Saratoga street (East Boston) | Bridge over Boston, Revere Beach \& Lynn Railroad. Mack brick | s9 | 321 | 1913 |  |
| Saratoga street (East Boston) | At Waupello road. Aztec asphalt (macadam base). Laid by James Doherty. |  | 45 | 1919 | June 27, 1924. |
| Saratoga street (East Boston) | West side bridge over Belle Isle inlet to Winthrop line. Metropolitan brick block. Laid by Lawler Brothers. | 100 | 378 | 1914 |  |


| Sarsfield street (Rovbury)....... . . . . | At Columbus avenue. Bermudez asphalt. Laid by Boston Asphalt Company. | 18 | 40 | 1906-07 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Saundersatreet (Brishtoa) | At North Beacon street. Bitulithic. Laid by Warren Brothers Company, | 10 | 31 | 1918 | Dee. 24, 1923. |
| Saunders strect (Brigh:on) | At Cambridge street. Bitulithic | 12 | 37 | 1919 | Sept. 4, 1924. |
| Saville street (West Roxbury) . . . . . . . | strat ord strect to l'ark street. Mexican asphalt. Laid by Central Construetion Company. | 31. | 740 | 1917 | Sept. 30, 1922. |
| Sa, in lill avenue (Dorehest | At Pleasant street. Toneka. Laid by Francis |  | 26 | 1920 | Dec. 1s, 1925. |
| Sawyer avenue(Dorche | It Pleasant street. Topeka. Laid by Francis J. Bur | 12 | 51 | 1920 | Dec. 15, 1925. |
| Sehiller street (Rosbury) . . . . . . . . . . . | At Heath street. Mack brick block. Laid by Field, Barker \& Underwood, Ine. | 8 | 25 | 1910 |  |
| School street (Roxbury | iif fect east of Amory street to Amory strect. Mexican asphalt. Laid by Central Construcion Company. | 54 | 250 | 1919 | Dec. $6,1924$. |
| School street (Dorehes | At Washington street. Pine wood block. | 10 | 2 S | 1913 |  |
| Sears street (eity proper) | It India street. Mexican asphalt. Laid by Central Construction Company. | 1 | 6 | 1916 |  |
| Sewler strect (Roxbury) | Walnut avenue to Blue Hill avenue. Acme asphalt (macadam base). Laid by Warren Brothers Company. | 1,093 | 15,760 | 1917 | sicpt. 17, 1922. |
| Seaverns avenue (West Roubury) . . . | At Centre street. Bitulithic. | 4 | 2 S | 1913 |  |
| Sedgwiek street (W'est Roxl)ury) . . . . . . | At South street. Bitulithic | 2 | 6 | 1913 |  |
| Selwyn street (West Roxbury) . . . . . . . | 423 feet north of Ardale street to 10 feet south of Farquhar strect. Texro asplialt. Laid by Meciuire \& MeGourty. | 1,200 | 3,559 | 1919 | Aug. 20, 1924. |
| Selwyn street (West lRoxbury) . . . . . . . | 10 feet south of Farquhar street to Farquhar street. Topeka. Laid by Marino DeMattco. | 10 | 30 | 1920 | Nov. 11, 1925. |
| Seneca strect (eity proper)........... | 4 feet east of Harrison avenue to 8 feet west of Albany street. Mack brick block. Laid by Paving service. | 503 | 829 | 1910 |  |
| Shawmut avenue (city proper)....... | 132 feet sonth of Castle street, across Cherry street. Trinidad asphalt. Laid by Central Construction Company. | 327 | 956 | 1915 |  |

List of Streets Having a Smooth Pavement．－Continued．
势

G $\stackrel{0}{9} \stackrel{0}{9} \stackrel{\infty}{9}$ 1903
1918
1903
1901
1901 $\stackrel{8}{8} \stackrel{10}{8}$ 888电大 $\infty$ $\theta$

0

气⿵
$\varepsilon$

| Simmons street (Roxbury). | Vernon street to Linden Park street. Maek briek block. Laid by John E. Burns \& Co. | 645 | 1,434 | 1919 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Smith street (Roxbury) | Parker street to 6 feet north of Phillips street. Aztee asphalt (maeadam base). Laid by Bermudez Company. | 607 | 1,755 | 1919 | Oet. 24, 1924. |
| Smith strect (Roxbury) | (f feet north of Phillips street to St. Alphonsus street. Mexican asphalt (erushed stone base). Laid by Central Construction Company. | 576 | 1,664 | 1917 |  |
| Smith street (Roxbury) | st. Alphonsus strect to LI Hntington avenue. Aztee asphalt (macadam base). Laid by Bermudez Company: | 582 | 1,690 | 1919 | Nov. 8, 1924. |
| South street (West Roxbury) | Centre street to 12 feet north of Jamaica street. Bitulithic. Laid by Warren Brothers Company <br> line wood bloek. (Brows to street ear rails.) Laid by warren Brothers Company: | 1,295 | $\begin{array}{r} 4,417 \\ \quad 290 \end{array}$ | $\begin{aligned} & 1913 \\ & 1913 \end{aligned}$ |  |
| South street (West Roxbury) | 12 feet north of Jamaica street to north side Keyes strect (east vide). Bitulithic. Laid by Warren Brothers Company ................................ l'ine wood block. (Brows to street car rails.) Laid by Warren Brothers Company. |  | 200 10 | 1913 1913 |  |
| South street (West Roxbury) | Nortlı side of Fieyes street to 25 feet north of Boynton street (east side.) Aztec asphalt (maradam base). Laid by Rernudez Company. |  | 267 | 1918 | Sept. 28, 1923. |
| South street (West Roxbury) | 25 feet north of Boynton street to north side of Arborway. Aztee asphalt (macalam base). Laid by Bermudez Company: | 1,331 | 3,520 | 1918 | Sept. 28, 1923. |
| South street (West Roxbury) | 120 feet west of Giuernsey street to Centre street. Topeka. Laid by Rowe Contracting Company. <br> Asphalt (macadam base). Laid by The Bermudez Company. | 11 295 | 54 1,113 | 1920 1920 | U'nfinished. Unfinished. |
| South strect (Brighton) . | Chestnut IIill avenup to 13 feet east of Commonwealth avenue. Aztee asphalt. Laid by Coleman Brothers. | 600 | 1,504 | 1917 | Nov. 17, 1922. |
| South street (Brighton) | 13 fect eant of Commonwealth avenue to Conmonwealth avenue. Mexican asphalt (Telford macadam base). Laid by Central Construetion Company. | 13 | 54 | 1918 | May 21, 1923. |
| Southern avenue (Dorchester) | At Washington street. I'ine wood block. Laid by William J. Barry | 10 | 42 | 1913 |  |
| Southern avenue (1)orchexter) | Each side of Talbot avenue. Mack brick block. Laid by James Doherty. . | 30 | 193 | 1911 |  |
| South IIuntington avenue (West Roxbury.) | At Centre street. Topeka (maciudam base.) Laid by Central Construction Company. | 12 | 68 | 1920 | Dee. 22, 1925. |

List of Streets Having a Smooth Pavement.- Continucl.

| Streets. | Limits. | Length in Fect. | $\begin{aligned} & \text { Area, } \\ & \text { Sisuale } \\ & \text { lards. } \end{aligned}$ | Iear Laid. | $\begin{gathered} \text { Guaranty } \\ \text { Expires. } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| South Margin street (eity proper) | 2 feet east of Norman street to 7 feet east of Staniford strect. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 187 | 380 | 1905 |  |
| Nouthwick street (Dorchester) | Neponset avenue to Freeport street. Mexician asphalt. Laid by Central Construction Company: | 350 | 1,022 | 1915 | Mar. 29, 1923. |
| Sparhawk street (Brighton) | At Cambridge strect. Bitulithic (macadam base). Laid by Warren Brothers Company. | 17 | 5 s | 1919 | Sept. 4, 1924. |
| Spaulding street (West loxbury) | At South street. Aztec asphalt (macadam base). Laid by Bermudez Company. | 3 | 11 | 1918 | Sept. 28, 1923 |
| Spear place (city proper) | At Pleasant street. Pine wood block. Laid by Coleman Broth | 10 | 9 | 1913 |  |
| Speneer street (Dorchester) | At Tallot avenue. Mack brick block. Laid by James Doherty | 12 | 61 | 1911 |  |
| Apofford road (Brighton) | At Commonwealth avenue. Mexican asphalt (macadam base). Laid by Central Construction Company. | 20 | 47 | 1917 |  |
| Spring street (eity proper) | Allen street to 3 feet north of Allen street. Mexican asplalt. Laid by Central Construction Company. | 3 | 7 | 1917 |  |
| Spring street (eity proper) | 3 feet north of Allen street to Poplar street. Bitulithic. Laid by Warren Brothers Company. | 202 | 400 | 1913 |  |
| Spring street (eity proper) | Poplar street to Chambers street. Trinidad asphalt (cobble base). Laid by Barber Asphalt Paving Company. | 212 | 425 | 1595 |  |
| Spring street (eity proper). | Chambers street to Levrrett street. Trinidad asphalt (cobble base). Laid by Barber Asphalt Paving Company. | 216 | 444 | 1895 |  |
| Spruce street (city proper)........... | Beacon street to 11 feet north of Beacon street. Topeka (macadam basc). Laid by Bernard E. Grant. | 11 | 14 | 1917 | Nov. 15, 1922. |
| Stanhope street (eity proper) | At Trinity place. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 7 | 15 | 1907 |  |


| 1914 |  |
| :---: | :---: |
| 1908 |  |
| 1916 | Dec. 14, 1921 |
| 1919 | ()at. 25, 1924 |
| 1914 |  |
| 1919 | June 23, 1921 |
| 1919 | June 23, 1924 |
| 1919 | June 23, 1924 |
| 1919 | June 23, 1924 |
| 1919 | June 23,1921 |
| 1597 |  |
| 1892 |  |
| 1*? |  |
| $1!101$ |  |
| 1892 |  |
| 1917 | Jin. 19, 19, 3 |




Stanton street (Dorchester).
State street (city proper).
Ntation slrect (Roxbury).
Station strect (Rosbury).
Sterling street (Roxbury)
Sterling street (Roxbury).
Sterling street (Rosbury)

Sterling street (Rosbury)

$$
\begin{aligned}
& \text { Sterens street (city prop r). } \\
& \text { stilhman strect (eity proper). }
\end{aligned}
$$

sitilman strect (rity prop $\cdot \mathrm{r})$.
stillman sireet (city proper).
Stothlard street (city mon)er)
stolighton street (rity proper).
List of Streets Having a Smooth Pavement. - Continued.


| 1917 | May 30, 1922 |
| :---: | :---: |
| 1913 |  |
| 1911 |  |
| 1917 | Aus. 15, 1922 |
| in97 |  |
| 1896 |  |
| 1919 | Nov. 19, 1924 |
| 1906; |  |
| 1900 |  |
| 1915 |  |
| 1917 | June 2r, 102 |
| 1919 |  |
| 1913 |  |
| 1!\% |  |
| 1:1.5 | Iam. 15, 1! ${ }^{\text {a }}$ |



| At Lithow street. Mexican amphalt. Lai |  |
| :---: | :---: |
|  Lzid by William .l. Barry. | (i, ${ }^{\text {a }}$ |
| 21. feet west of Norfolk street to 58 feet east of Blue llill avenue. Mack brick block. I aill by James Doherty. | 4,300 |
| Boybtonstreet to 9 feet south of Boyston street. Pine worl block. Laid by Warren Brothers Company. | 9 |
| r feet north of 1 a (irange street to La Grange strect. Trinidad asphalt. Laid by Barber Axphalt P'aving Company. |  |
| 1)wight street to \Iilford street. Sicilian rock asphait. Laid by Roston Lsiphalt Conmany. | 194 |
| Bowloin street to Levant street. Aztee asphalt, Laid by Meciuire it Me ivarts. | 211 |
| Wastinston street to 9 feen west of Washington street. Trimidnd amphalt. Lath hy Barber Axphatt Paving Compans. | 9.5 |
| 9.5 feet weat of W:ahington street to 22 feet e2st of Tronont street. Trinidad land anphalt. Laid by Thited States Paving Company: | $3 \times 15$ |
| 2f fert mast of Tremont strent to Tremont street. Pine wool blowk. Laid by Compman Brothers. | 22 |
| Aprine sireett to Ivory strowt. Mexican asphalt. Latill by Central Constru:tion Compans: | 1,0.) |
| lori La strea | 4 |
| Broatway. Pine woot howek. | 10 |
| It Cohubus avenue. Bermulez asphalt. Lail by Boston Asphalt Com- panv. | 9 |
| It Worthingtom strect. Trimidal awhalt. Laid by Central Construction Company. | 4 |


List of Streets Having a Smooth Pavement.- Continued.


| At Washington street. Topeka (macadam base). Laid by Warren Brothers Company. | 10 | 33 | 1918 | Sept. 25, 1923. |
| :---: | :---: | :---: | :---: | :---: |
| Bowioin street to Cameron street. Aztee asphalt | 200 | 576 | 1919 | Nov. 17, 192.t |
| Sacin Hill avenue to tia feet north of Doris street. Aztec asphalt. Laid by Central Construction Company. | 337 | 1,261 | 1916 | Nov. 17. 1921. |
| It Washington street. Pine wool block. Laid | 10 | 32 | 1913 |  |
| Scollay square to 19 feet north of Boylston street (except neat two items). Pine wood block. Laid by Coleman Brothers. | 2,83.1 | 9,5.57 | 191\% |  |
| 29 feet north of Winter street, across Temple place (west side). l'ine wood block. Laid by United States Wood Preserving Company. |  | 68.5 | 1900 |  |
| (West side.) Park street to Boylston street. Pine wood block. Laid by James i) oherts: |  | 1,958 | 1020 | Oct. 16, 1925. |
| 19 feet north of Boylston street to 8 feet north of Eliot st. Pine wood block. Laid by Bernard E. Grant. | 453 | 2,016 | 1917 | Nov. 15, 1922. |
| Sfeet south of Eliotstreet to 21 feet south of the north side of Common street, Pine wood block. Laid by Bernard E. (irant. | 424 | 1,S8 1 | 1917 | Nov. 15, 1922. |
| Bridge over Boston d Albany Railroad. <br> standard asphalt. Laid by Boston \& Albany Raifroad Company. <br> Portland stone brick. Laid by Boston \& Albany Railroad Company | 6.) $\{$ | $\begin{aligned} & 190 \\ & 129 \end{aligned}$ | $\begin{aligned} & 1912 \\ & 1912 \end{aligned}$ |  |
| See Arlington square. |  |  |  |  |
| New York, New Haven \& Hartford lkailrom Bridge to 2 feet north of Dover street. Topeka. Laill by Rowe Contracting ('ompany'. | 831 | 4,088 | 1919 | May 31, 1924. |
| 2 feet north of Dover street to 9 feet south of north side of Northampton street. (Not including next item). Asphalt. Laid by 13. E. Grant Company: | 3,726 | 22,201 | 1920 | Sept. 18, 1925. |
| (West side.) North sitle of Walthan street to 20 feet south of North side of Clarendon street. Unionite. Laid by B. L. (irant Company". | 110 | 423 | 1920 | Sept. 18, 192.5. |
| St. Alphonsus street to Phillips street. Bitulithic (crushed stone base). Laid by Warren Brothers Company: | $58 \%$ | 1,8.74 | 1902 |  |

Torrey street (Dorchester). .
Tovar street (1)orchester). Treadway street (Dorchester)

Tre:nlett strect ( Dorchester) Tremont street (city proper).

Tremont street (city proper)
Tremont street (eity proper).
Tremont street (eity proper).
Tremont street (city proper)
Tremont streat (city proper).
'remontstreet (eity proper).
Tremont street (city proper).
Tremont street (city proper)
Prenont street (rity proper)
Tremont street (liovbury).
List of Streets Having a Smooth Pavement.- Continued.

| Srreets. | Limits. | Length in Feet. | $\begin{aligned} & \text { Area, } \\ & \text { Square } \\ & \text { Yards. } \end{aligned}$ | Year Laid. | Guaranty <br> Expires. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Tremont street (Brighton) | (West side.) At Washington strect. Bitulithic. (macadam base Laid by Wiarren Brothers Company. |  | 22 | 1920 | July 8, 1925. |
| Trea' street (Dorchester) | Clarkson street to fi feet north of Coleman street. Trinidad asphalt. Laid by William J. Rafferty \& Co. | 222 | 498 | 1915 |  |
| Trescolt street (Dorchester) | Pleasant street to $1 f$ feet west of Pleasant street. Topeka (macadam base). Laid by Central Construction Company. | 16 | 48 | 1920 | Sept. 22, 1925. |
| Tresoott street (1)orchester). | 16 ieet west of Pleasant street to 7 feet east of Bakersfield street. Bitulithic. Laid by James Doherty. | 383 | 1,107 | 1914 |  |
| Trinity place (eity proper)..... | Huntington avenue to St. James avenuc. Bitulithic. Laid by James Dohesty. | 124 | 346 | 1912 |  |
| Trinity place (eity prozer) | St Janesavenue, across Stuart street. Bitulithic. Laid by James Doherty, Bitulithic. Laid by Warren Brothers Company. | 384 | $\begin{array}{r} 1,373 \\ 171 \end{array}$ | $\begin{aligned} & 1912 \\ & 1920 \end{aligned}$ | Oct. $2.5,1925$. |
| Trinity place (city proper) | Stuart street to 5 feet south of Stuart street. Trinidad asphalt. Laid by Barber Asphalt l'aving Company. | 5 | 7 | 1899 |  |
| Trinity place (eity proper) | 5 feet south of Stuart strect. across Stanhope street. Trinidad asphalt. (East side.) Laid by Barber Asphalt Paving Company (West side.) Laid by Barber Asphalt Paving Company. | $262\{$ | $\begin{aligned} & 402 \\ & 321 \end{aligned}$ | $\begin{aligned} & 1907 \\ & 1900 \end{aligned}$ |  |
| Trull street (Dorchester) | At Hancock street. Mack brick block. Laid by Central Construction Company. | 10 | 29 | 1910 |  |
| Tuckerman street (South Boston) | Dorchester street to Middle strect. Aztec asphalt. Laid by Central Construction Company. | 367 | 764 | 1916 | Sept. 11, 1921. |
| Tudor street (South Boston). | C street to D street. Sicilian rock asphalt. Laid by Jones \& Meehan.... | 506 | 731 | 1901 |  |
| Tudor street (South Boston). | At Dorchesterstreet. Bitulithic. Laid by Warren Brothers Company.. | 4 | 6 | 1905 |  |
| Tufts street (eity proper). | 8 feet west of South street to 7 feet east of Lincoln street. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 212 | 473 | 1901 |  |


| Tufts street (eity proper)............. | 8 feet west of Lincoln street to 13 feet east of Kingston street. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 239 | 527 | 1901 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Tufts strect (city proper). | 13 feet east of Kingston street to Kingston street. Trinidad asphalt. Laid by Barber Asphalt l'aving Company. | 13 | 33 | 1910 |  |
| Tufts street (Chirlestown) | Bnnker Hill street to 141 feet north of Bunker Hill street. Trinidad asphalt. Lad by Barber Asphalt Paving Company. | 111 | 415 | 1597 |  |
| Turner street (Brighton). | Washington strect to 2 feet north of Washington street. Bitulithic. Laid by Warren Brothers Company. | 2 | ${ }^{6}$ | 1919 | July s, 1925. |
| Turner street (Brighton). | 10 feet north of Washington street to Faneuil street. Aztee asphalt. Laid! by Coleman Brothers. | 1,2.1.1 | 2,898 | 1917 | Sept. 17, 1922. |
| Tyler street (city proper) | 6 feet south of Beach strect to 8 feet north of Kineeland street. Nexican asphalt (crushed stone base). Laid by Central Construction Company. | 306 | 815 | 1917 |  |
| Tyler street (eity proper). | Kneeland strect to Harvard street. Mexican asphalt (crushed stone base). Laid by Central Construetion Company. | 319 | 850 | 1917 |  |
| Tyler street (city proper). | Harvard street to Oak street. Sicilian rock asphalt. Laid by Boston Asphalt Company. | 51 S | 1,3.51 | 1901 |  |
| Tyler street (eity proper) | 7 feet south of Oak street to 6 feet north of Curve street. Mexican asphalt (crushed stone base). Laid by Central Constuction Company. | 428 | 1,152 | 1917 |  |
| Union avenue (West Roxbury) | At Green street. Tepeka. Laid by Central Construction Con | 6 | 15 | 1919 | Dec. 6, 1921. |
| Union Park (eity proper) | 15 feet east of Tremont street to Tremont strect. Asphalt. Laid by B. E. Grant Company. | 15 | tio | 1920 | Sept. IS, 1925. |
| Unıon Park (eity proper) | Tremont street to 15 feet west of Tremont street. Asphalt. Laid by R. F. Grant Company. | 15 | (i) | 1920 | Sept. 18, 1925. |
| Union Park (city proper) | 15 feet west of Tremont street to Montgomery street. Asphalt (macadam base). Laid by R, E. (irant Company. | 87 | 326 | 1920 | sept. $18,1925$. |
| Union Park street (eity proper) | Washington street to Harrison avenue. Acme asphalt. Laid by the Bernudez Company. | 461 | 2.401 | 1920 |  |
| Unity street (city proper). | Charter street to Tileston street. Trinidad asphalt. Laid by Barher Asphalt Paving Company. | 330 | 500 | 1597 |  |

List of Streets Having a Smooth Pavement－Continued．
Guaranty
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| Waohusett street (West Roxbury).. . . | Walk Hill street to 24 feet east of Patten street. Topeka. Laid by John Kelly Company. | 191 | 524 | 1919 | Dec. 15, 1924. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Wachusett street (West Roxbury) | 24 feet cast of Patten street to 23 feet west of Patten street. Topeka. Laid by John lielly Company. | 71 | 194 | 1919 | Dec. 15, 1924. |
| Wachusett street (West Roxbury) | 23 feet west of Patten street to Eldridge road. Topeka. Laid by John Kelly Company. | 670 | 1,967 | 1919 | Dec. 15, 1924. |
| Walden street (Roxbury) | At Heath strect. Mack brick block. Laid by Field, Barker \& Underwood, Ine. | 8 | 18 | 1910 |  |
| Waldo terrace (Bri | W:ahington street to 1 foot north of Washington street. Bitulithic. Laid by Warren Brothers Company. | 1 | 2 | 1913 |  |
| Waldo terrace (Bright | 1 foot north of Washington street to Ilenshaw street. Aztee asphalt. Laid by Coleman l3rothers. | 291 | 406 | 1917 | Oct. 16, 1922, |
| Wales street (Dorchester) | At Talbot avenue. Mack brick block. Laid by James I | 15 | S2 | 1911 |  |
| Walk Hill street (Dorehester) | West side Fottler road to Rlue Hill avenue. Mexican asphalt (macadam base). Laid by Martino DeMatteo. | 710 | 3,236 | 1919 | June 28, 1924. |
| Walnut avenue (Roxbury and West Roxbury). | 29 feet north of Columbus avenue to 13 feet south of Columbus avenue. Acme asplaalt (macirlam base). Laid by Warren Brothers Company. | 68 | 214 | 1917 | Sept. 17, 1922. |
| Walnut street (eity proper) | Beacon street to 12 feet north of Beacon street. Topeka (macadam base). Laid by Bernard E. Grant. | 12 | 21 | 1917 | Nov. 15, 1922. |
| Walpole street (Roxbury) | At Columbus avenue. Bermudez asphalt. Laid by Boston Asphalt Compally. | 18 | 46 | 1906-07 |  |
| Waltham street (eity proper | At Tremont street. Asphalt. Laid by | 18 | 69 | 1920 | sept. 1s, 1925. |
| Walton street (Dorchester) | At Waslingtonstreet. Topeka (macadam base). Laidby Warren Brothers Company'. | 10 | 30 | 1918 | Sppt. 25, 1923. |
| Warren avenue (city proper) | Berkeley street to $\&$ feet west of Berkeley street. Jitulithie. Laid by Warren brothers Company. | 4 | 25 | , |  |
| Warren avenue (city proper) | 4 feet west of Rerkeley street to $t$ fect east of Pembroke street. Pine wood block. Latid by Boston l'aving Company. | 2,046 | 12,217 | 1913 |  |
| Warren street (IRoxbury) | At Washington street. Pine wood block. Laid by James Doherty | 10 | 73 | 1911 |  |

List of Streets Having a Smooth Pavement-Continued.

| Streets. | Limits. | $\begin{aligned} & \text { Length } \\ & \text { in F'eet. } \end{aligned}$ | $\begin{aligned} & \text { Area, } \\ & \text { Squitre } \\ & \text { Y'ards. } \end{aligned}$ | Year Laid. | Guaranty Expires. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Warren street (Roxbury) | At Dudley strect. Dine wood block. Laid by James Doherty | 23 | 216 | 1912 |  |
| Warren street (Charlestown). | Winthrop street, across Soley street. Mexican asphalt. Laid by Central Construction Company. | 128 | 302 | 1917 |  |
| Wiarren street (Brighton) | Cambridge street to 176 feet east of Cambridge street. Bitulithie (maeadam base). Laid by Warren Brothers Company. | 176 | 1,245 | 1919 | Sept. 4, 1924, |
| Warrenton street (city proper) | s feet south of Eliot street to 392 feet south of Eliot street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 384 | 1,045 | 1891 |  |
| Warrenton street (city proper) | 302 feet south of Eliot street to 10 feet north of Tremont street. Trinidad asphalt. Laid by Barber Asphalt Paving C'ompany. | 269 | 630 | 18.4 |  |
| Warrenton strcet (city proper) | 13 fect south of Shawmut avenue to Washington street. Trinidad asphalt. Laid by Barber Asphalt l'aving Company. | 464 | 928 | 1591 |  |
| Warwick street (Roxbury) | llammond street to liugeles street. Topeka. Laid by CentralConstruction Company. | 1,369 | 3,961 | 1919 | June 24, 1924. |
| Washington street (Chariestown) | At Harvard street. Aztee asphalt (macadam base). Laid by Bermudez Company. | S | 1 S | 1915 | June S, 1923. |
| Washington Street North (Charlestown) | Bridge over Boston \& Maine Railroad, Fitchburg Division. Trinidad asphalt. Laid by Simpson Brothers Corporation. | 61 | 543 | 1899 |  |
| Washington strect (eity proper) | 8 feet south of Cornhill to 78 feet south of Court avenue. Pine wood block. Laid by James Doherty. | 509 | 1,475 | 190s |  |
| Washington street (eity proper) | 78 feet south of Court avenue to 5 feet south of Milk street. <br> Black gum wood block. Laid by United States Wood Prescrving Company. line wood block. Laid by Bernard E. Grant. | \} $538\{$ | 218 1,642 | 1907 | Nov. 4, 1922. |
| Washington street (eity proper) | 5 feet south of Milk street to 57 feet north of Essex street. Black gum wood block. Laid by United States Wood Preserving Company. Pine wood block. Laid by Bernard E. Grant. | \} 1,923 \{ | 1,341 6,449 | 1906 | Nov. 4, 1922. |


| ¢ | $\begin{gathered} \stackrel{9}{9} \\ \stackrel{9}{9} \end{gathered}$ |
| :---: | :---: |
| - | $\div$ |
| 8 | 苍 |



| on street | 57 feet north of Essex strect to 54 feet south of Boylston street. Pine wood block. Laid by Bernard E. Grant. | 213 | 360 |
| :---: | :---: | :---: | :---: |
| Washingt on street (eity proper) | $5 t$ feet south of Boytston street to $s$ feet north of Beach street. Pine wood block. Laid by Beruard E. (irant. | 132 | 301 |
| Washington street (eity prope | s feet north of leach sireet to Eliot strect. Pine wood block. Laid by dimes Doherty. | 216 | Stio |
| Wash | At Pleasant street. l'ine wood block. Laid by |  | 20 |
| Washington street (city | Bridec over Boston \& Albany Railroad. Metropolitan brick. Laid by W. A. Martfeldt ('ompany. | (6) | 216 |
| Washington street (Roxbing | Williams street to 27 fret north of Marvin strect. Sine wood blork. 1aid by James Doherty. | 1,026 | 4,779 |
| Washington street (Roxlsury | 27 feet north of Marvin street, aeross Zeigler street (west side). Trinidad asphalt. Laid by 13 arber Asphalt Paving Company. |  | 210 |
| Washingt on street (Rosbury) | Zeigler street to 20 feet north of Dudley street. line wood block. Laid by James Doherty. | 186 | 745 |
| Washingt on street (Roxbury | 20 feet north of Dudtey street to Dudley strect. Pine wood block. Laid by James Doherty. | 20 | 105 |
| Washington street (Roxloury) | Dudley street to 130 feet south of Dudley street. line wood block. Laid by James Doherty. | 1:30 | 9.30 |
| Washington street (West Lioxb | fa Grangestreet southerly. Topeka (macadam base). <br> East roadway. Maintained by Massachusetts llighway Commission <br> West roadway. Maintained by Massachusetts Highway Commission | 1,559 | 9,624 5,191 |
| Washington street (West Roxbury | 29 feet south of Grove street to 529 feet south of Cirovestreet (east roadway). <br> Concrete road. Maintained by Massachusetts Ifighway Commission. | 500 | 1,055 |
| Washington street (Roxbury and Lorchester). | Blue Hill avenue to 16 feet south of Fenelon street, and from Eldon street to 12 feet south of Bowdoin street. Pine wood block. Laid by William J. Barry: | 1,010 | 18,023 |
| Washington street (Dorchester) | 42 feet south of Bowdoin street, across Talbot avenue. Pine wood block. Laid by Witliam J. Barry. | 3,440 | 16,402 |
| Washington street (Dorchester) | 5.5 feet south of Talbot avenue to north side of Ashmont street. Topeka (macadam base). Laid by Warren Brothers Company. | 1.655 | 5,042 |

List of Streets Having a Smooth Pavement.- Continued.

| Streets. | Limits. | Length in leet. | Area, Square lards. | Year Laid. | Guaranty <br> Expires. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Washington street (Dorchester) | North side of Ashmont street to 85 fect north of Armandine street (west side). Topeka (macadam base). Laid by Warren Brothers Company. |  | 314 | 1918 | Sept. 25, 1923. |
| Washington street.(Dorchester) | 85 feet north of Armandine street to 12 feet south of Armandine street. Topeka (macadam base). Laid by Warren Brothers Company. | 123 | 325 | 1918 | Sept. 25, 1923. |
| Washington street (Brighton) | Cambridge street to 118 feet west of Chestnut IIill avenue. Bitulithic. Laid by Warren Brothers Company. <br> Pine wood block. (Brows to street car rails.) Laid by Warren Brothers Company. | 1,020 | 5,007 217 | 1913 |  |
| Washington street (Brighton) | 118 feet west of Chestnut Hill avenue to 22 feet east of Oakland strect. <br> Biutlithic (macadam base). Laid by Warren BrothersCompany. | 1,029 | 3,914 | 1919-20 | July S, 1925. |
| Washington street (Brighton) (north side). | 22 fect east of Oakland street to 33 feet west of Lake strect. Bitulithic (macadam base). Laid by Warren Brothers Company. |  | 1,529 | 1920 | July 8, 1925. |
| Washington street (Brighton) | 33 feet west of Lake street to 28 feet west of Tremont strect. Bitulithic (macadam base). Laid by Warren Brothers Company. | 2,318 | 8,678 | 1919-20 | July s, 1925. |
| Water strect (city proper) | 2 feet west of Devonshire street to Devonshire street. I'ine wood block. Laid by Bernard E. Grant. | 2 | 6 | 1916 | Dec. 14, 1921. |
| Water street (city proper) | Devonshire street to 7 feet east of Devonshire street. Pine wood block. Laid by Bernard E. Grant. | 7 | 33 | 1916 | Dec. 14, 1921. |
| Water street (city proper) | 7 feet east of Devonshire street to 8 feet west of Congress street. Black gum wood block. Laid by United States Wood Preserving Company. | 198 | S85 | 1907 |  |
| Water street (eity proper) | 7 feet east of Congress street to 8 feet west of Kilby street. Residual asphalt. <br> Laid by Central Construction Company. | 241 | 666 | 1915 |  |
| Waterstreet (city proper) | 8 feetwest of Kilby street to Kilby street. Pine wood block. Laid by James Doherty. | 8 | 24 | 1919 | Oct. 10, 1924. |
| Water street (city proper) | Liberty square to 35 feet east of Liberty square. Pine wood block. Laid by James Doherty. | 35 | 115 | 1919 | Oct. 10, 1924. |


List of Streets Having a Smooth Pavement. - Continued.

| Streets. | Limits. | Lengeth in Feet | Area, square Iards | $\begin{aligned} & \text { Yrar } \\ & \text { Laid. } \end{aligned}$ | Ginaranty <br> Expires. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| West Broulway (South Boston). | 36 feet east of bridge over New England Division, New York, New Haven \& Hartford hailroad to 148 feet west of F street. <br> Aeme asphalt. Laid by Warren Brothers Company <br> Bessemer briek block gutters. Laid by Warren Brothers Company | 2,153 | $\begin{array}{r} 7,438 \\ 857 \end{array}$ | $\begin{aligned} & 1917 \\ & 1917 \end{aligned}$ | $\begin{aligned} & \text { Oct. 18, } 1922 . \\ & \text { Oct. is, } 1922 . \end{aligned}$ |
| West Broadway (South Boston) | 14 S feet west of F street to 267 feet east of F street. Sicilian rock asphalt. Laid by Boston Asphalt Conpany. | 416 | 1,537 | 1597 |  |
| West Broadway (South Boston) | 267 feet east of F street to 28 feet west of Dorchester street. Sieilian roek asphalt. Laid by Boston Asphalt Company. | 410 | 1,246 | 1898 |  |
| West Broadway (South Boston) | 2s feet west of Dorchester street (south) to west side of Dorchester street (north). Bitulithic (erushed stone base). Laid by Warren Brothers Company. |  | 61 55 | 1905 1919 | June 11, 1924. |
| West Brookline street (eity prope | 15 feet east of Tremont street to Tremont strect. Asphalt. Laid by B. E. (irant Company. | 15 | 61 | 1920 | Sept. 1s, 1925. |
| West Brookline street (city proper) | Tremont street to 15 feet west of Tremont street. Laid by B. E. Grant Company. | 15 | 59 | 1920 | Sept. 1S, 1925. |
| West Brookline street (eity proper) | At Warren avenue. Pine wood block. Laid by Boston l'aving Company. | / | 16 | 1913 |  |
| Westbrook strcet (East Boston) | At Saratoga street. Standard asphalt. Laid by Bermudez Comp | 8 | 32 | 1918 | May 1, 1924. |
| West Canton street (eity proper) | 20 feet east of Tremont street to Tremont strect. Asphalt. Laid by B. E. Grant Company. | 20 | 79 | 1920 | Sept. 18, 192\%. |
| West Canton strect (eity proper)...... | Tremont street to 13 feet west of Tremont street. Asphalt. Laid by B. E. Grant Company. | 13 | 53 | 1920 | Sept. 18, 1925. |
| West Canton street (city proper) ...... | 13 feet west of Tremont street to 34 feet west of Tremont street. Asphalt (macadam base). Laid by B. E. Grant Company. | 21 | 80 | 1920 | Sept. 18, 1925. |
| V/est Canton street (city proper) | 34 feet west of Tremont street to 4 feet east of Warren avenue. Aeme asphalt (macadam base). Laid by Warren Brothers Company Bessemer brick block gutters. Laid by Warren Brothers Company. | 564 | $\begin{array}{r} 1,798 \\ 308 \end{array}$ | 1916 1916 | $\begin{aligned} & \text { Oct. } 21,1921 . \\ & \text { Oct. } 21,1921 . \end{aligned}$ |


| West Canton street (city proper). | 4 feet east of Warren avenue to Warren avenue. Pine wood block. Laid by Boston P'aving Company. | 4 | IS | 1913 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| West Canton street (city proper) | Warren avenue to 4 feet west of Warren avenue. Pine wood block. Laid by Boston Paving Company. | 4 | 18 | 1913 |  |
| West Canton strect (city proper) | 4 feet west of Warren avenue to 2 feet east of Appleton street. Acme asphalt (macadam base). Laid by Warren Brothers Company. <br> Bessemer brick block gutters. Laid by Warren Brothers Company. . . . . . . | 257 | 828 145 | $\begin{aligned} & 1916 \\ & 1916 \end{aligned}$ | $\begin{array}{ll} \text { Oct. } & 21,1921 . \\ \text { Oct. } & 21,1921 . \end{array}$ |
| West Canton strect (city proper) | 2 fect cast of Appleton strect to Appleton street. Bitulithic. Laid by Freds. d. A. D. (iore Corporation. | 2 | 11 | 1912 |  |
| West C'anton strect (city prop | At (columbus avenue. Trindad anphalt. Laid by Barber Asphalt Paving Compiny. | 9 | 34 | 1906-67 |  |
| West Concord street (city proper) | At 'Tremont street. Asphait. Laid by 13. F. Grant Company | 16 | 83 | 1920) | Sept. 18, 1925. |
| West I Cedhame street (eity proper | At Tremont street. Asphalt. Laid by 13. F. Cirant Comp | 15 | $5!$ | 1920 | Sept. IS, 1925 |
| West lifth strect (South Boston) | It Dorchester strect. Bitulithic. Lidid by Warren Brothers Com | 4 | 15 | 1905 |  |
| West Fourth strect (routh Bosion | At Dorchester street. Bitulithic. Laid by Warren Brothers Company | \% | 19 | 190.5 |  |
| West Fourth street (South Boston) | 2 feet east of E street to E street. Bitnlithic. Laid by Warren Brothers ('ompany. | 2 | 7 | 1903 |  |
| West Fourth street (South Boston) | Fstreet to 207 feet west of Estreet. Bitulithic. Iaid by Wirren Brothers Company. | 207 | 759 | 1903 |  |
| Westland avenue (Roxbury) | At Massarhusetts avemue. Sicilian rock asphalt. Iaid by Boston Asphalt Company. | 1 | 9 | 1901 |  |
| Westhand Fintrane to fens (Rosbury) | Westerly eurb linc of llenenway street to is feet west of easterly curb line of the Fenway. Bitulithic (matudambata). Laid by Warren brothers ('onit):any. | 150 | 2,564 | 1920 | Nov. 5, 1925. |
| Westminsterstrect (Roxbury).. | 11:ammond street to 23 fret sontly of IIammont street. Pine wood block. Laid by fred S. \& A. 1). Gore ('orporation. | 23 | 120 | 1912 |  |
| Westminster street ( Roxbury) | 23 fect south of Ilammond street to 6 feet north of Rugghes street. Topeka. 1aid by C'entril C'onstruction Company. | 1,153 | 3.553 | 1919 | June 24, 1924. |
| Westminster strcet (Roxlyury). | 6 fere north of Rugglesstreet to Rugglesstreet. Trinidud asphalt. Laidby Barber Asphalt Paving Company. | 6 | 19 | 1907 |  |

List of Streets Having a Smooth Pavement.- Continued

| Year <br> Laid. | Guaranty <br> Expires. |
| :---: | :---: |
| 1919 | May 14, 1924 |
| 1920 | Sept. 18, 1925 |
| 1920 | Sept. 18, 1925 |

$\square$


1,176

55 $\qquad$ |  |
| :---: |
|  |

3,932
$0 \quad 0$
$2 \Leftrightarrow$

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Limits.
Washington street to Shawmut avenue. Azter asphalt (macadam hase).
11 feet east of Tremont street to Tremont street. Asphalt. Laid by B. E.
Girant Company.
Tremont st rect to 17 feret west of Tremont street.
17 feet west of Tremont street to 13 feet east of Columbus avenue. Bitulithic
(rrushed stone base). Laid by Warren Brothers Company.
13 feet east of Columbus avenue to Columbus avenue. Bitulithic. Laid by
Fred S. \& A. I. Gore Corporation.
Columbus avenue to 4 feet south of Ifuntington avenue (not including New Vork, New Havend Hartford Railroad Bridge). Bitulithic (crushed stone
I feet south of IHuntington avenue to Ifuntington avemue. Sicilian rock asplaalt. Laid by Boston Asphalt Company.
Iluntington avenue to a feet north of Huntington avenue. Sieilian rock isphalt. Laid by Boston Asphalt Company.
4 feet north of Huntington avenue to 11 feet north of Huntington avenue. Mexican asphalt (crushed stone base). Iaid by Central Construction
Company. 11 feet north of Huntington avenue, across Belvidere street. Bitulithic (erushed stone base). Laid by Warren Brothers Company. 151 feet west of Riverdale street to 146 feet east of Riverdale street. Topeka
(macadam base). Laid by department forces.
At Columbus avenue. Trinidad asphalt. Laid by Barber Asphalt Paving
\& Company.
Public Works Department.


West Seventh street (South Boston)
West Sixth street (South Boston)...
West Siath strect (South Boston) ..
West Springfiek street (city proper)
West Gpringfield strect (rity proper)
West Apringfich street (city proper)
West Third strect (Nouth Boston)
West Tremlett street (1)orchester)
Westeott street (Dorchester)
Weston street (Roxbury).
Weston street (Roxbury).
Weston street (Roxisury)
Westville street (Dorchester).
Westwood street (Dorchester)
Wharf street (city proper)
Wheatland avenue (Dorchester)
List of Streets Having a Smooth Pavement.- Continued.

| Streets, | Limits. | Length in Feet. | Area, Square rards. | Year <br> Laid. | Guaranty Expires. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Whecler street (eity proper) | Shawmut avenue to Corning street. Aeme asphalt. Laid by Warren Brothers Company. | 360 | 585 | 1909 |  |
| Whitfich street (Dorchester) | 13 feet north of Talbot avenue to Talbot avenue. Mack brick block. Laid by James Doherty. | 13 | 60 | 1911 |  |
| Whitlield street (I)orchester) | Talbot :avenue to 13 feet south of Talhot avenue. Mark brick block. Laid by James Doherty. | 13 | 57 | 1911 |  |
| Whittichl street (borchester) | 13 feet south of Talbot avenue to 6 feet north of Southern avenue. Trinidad asphalt. Laid by Central Construction Company. | 88 | 265 | 1914 |  |
| Whitfield street (Dorchester) | 9 feet south of Southern avenue to 2 feet north of Norfolk street. Trinidad asphalt. Laid by Central Construction Company. | 414 | 1,212 | 1914 |  |
| Whitfield street (Dorchester) | 2 feet north of Norfolk street to Norfolk street. Bitulithie. Laid by James Doherty. | 2 | 7 | 1914 |  |
| Whitman street (Dorchester) | At Norfolk street. Bitulithic. Laid by James Doherty | 1 | 4 | 1913 |  |
| Whitmore street (enty proper) | 8 feet sonth of Kineelnul street to 6 feet north of Harvard street. Sicalian rock asphalt. Laud by Boston Asphalt Company. | 235 | 417 | 1895 |  |
| Whitmore street (rity proper) | ff feet north of Harvard street to Harvard street. Bine wood block. Laid Sy. II. MteCarthy. | (i) | 10 | 1910 |  |
| Whitney street (Roxbuns) | At Conant street. Aztec asphalt (maeadam base). Laud by Bermudez Compiny. | 7 | 18 | 1919 | Nov. 1, 1924 |
| Whitney street (Roxbury) | Each side Smith strect. Aztec asphatt (macadam base). Laid by Bermudez Company. | 14 | 40 | 1919 | Nov. 8, 1924. |
| Whittemore terrace (Dorchester) | At Ilaneock street. Mack brick block. Laid by Central Construction Com- pany. | 10 | 26 | 1910 |  |
| Whittier street (Roxbury). | Cabot street to Tremont street. Mack brick block. Laid by John E. Burns \& Co. | 636 | 1,874 | 1909 |  |


| Whittier street (Roxbury) | Tremont street to 5 feet east of Columbus avenue. Mack prick bloek. Laid by John E. Burns \& Co. | 207 | 782 | 1909 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Whittier street (Roxhury) | 5 feet east of Columbus avenue to Columbus avenue. Bermudez asphalt. Laid by Boston Asphalt Company. | 5 | 25 | 1906-07 |  |
| Wiget street (eity proper) | Salem street to 6 feet west of Salem street. Sieilian reek asphalt. Laid by Boston Asphalt Company. | 6 | 7 | 1901 |  |
| Wiget street (city proper) | t feet west of Salem street to North Margin street. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 253 | 233 | 1897 |  |
| Wiggin street (eity proper) | North Bennet street to Tileston street. Trinidad asphalt. Laid by Barber Asphalt l'aving Company. | 108 | 120 | 1905 |  |
| Wigglesworth street (Roxbury) | At Longwood avenue. Maek brick bloek. Laid by riekl, Rarker\& [Tnderwood, 1 ne. | 8 | 23 | 1910 |  |
| Wilbur street (Doreliester) | C'ushing avenue to Uphan avenue. Topeka. Laid by Central Construction Company | 336 | 828 | 1920 | Oet. 20, 1925. |
| Wilcoek street (Dorchester) | Blue Hill avenue to Morton street. Topeka (maeadam base). Laid by Rowe Contracting Company. | $7: 8$ | 2,279 | 1920 | July $7,1925$. |
| Wilder street (Dorchester) | It W:shington street. D'ine woorl liock. Land by | 10 | 30 | 1912 |  |
| Wilham Jackson avenue (Brightan). | Chestnut Ifill wenue to Academy Ilill road. Asphalt. Latid by John J litne. | 502 | 957 | 1920 | Nov. 30, 19:5. |
| Willumms strcet (Roxbury) | Washington street to Shawmut avenue. Topeka. Latid by C'entral Construction Compiny. | 514 | 1,490 | 1919 | June 24 , 1924. |
| Williams street (Roxbury) | Shawmut avenue to Westminster street. Topeka. Iand by C'entral c'onstruction Company. | 441 | 1,277 | 1919 | June, 21, 19:4. |
| Willis street (Dorchester) | At Pleasant street. 'Topeki (macoulam base). Land ly Central ('instruction Company. | 41 | 102 | 1920 | Sept. 22, 1925. |
| Willowwood street (Dorrhester) | At Norfolk street. 13itulithic. Laid by Warren Brothers Company | 8 | 25 | 1918 | Nov. 4, 1923. |
| Wilmore street (Dorehester) | At Norfolk street. IBitulithie. Jand by Warren Brothers Company | 11 | 40 | 1918 | Nov. 4, 1923. |
| Winehester street (city proper) | At Broadway. I'ine wond block. Laid by Colemin Brothers | 10 | 28 | I913 |  |

List of Streets Having a Smooth Pavement.- Continued.

| Limits. | Length in Feet. | $\begin{aligned} & \text { Srea, } \\ & \text { Squate } \\ & \text { Yalds. } \end{aligned}$ | Year Laid. | Guaranty Expires. |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| At kitaughton street. Topeka (maradam base). Laid by Department forees | 3 | 10 | 1920 |  |  |
| Showmut avenue to Westminster strect. Topeka. Laid by Central Construction Company. | 425 | 1,605 | 1919 | July | 9, 1924. |
| Westminster street to Warwick street. Topeka. Land by Central C'onstruction Company. | 365 | 1,379 | 1919 | July | 9, 1924. |
| Warwick strect to Cabot street. Topeka. Laid by Central Construction Company. | 16.4 | 621 | 1919 | July | 9, 1924. |
| At Washington street. Bitulithie. Lavd by Warren Brothers Comp | 18 | 140 | 1913 |  |  |
| It Zeigler street. Bitulithic. Laid by John F. Bea | I | 3 | 1914 |  |  |
| At Dudley street. Maek brick bloek. Laid by James Doher | 8 | 23 | 1910 |  |  |
| Washington street to 10 feet east of Tremont street. Bitulithic. Laid by Waren Brothers Company. | 50.5 | 1,122 | 1913 |  |  |
| 10 fect east of Tremont street to Tremont street. Pine wood block. Laid by Coleman Brothers. | 10 | 31 | 191.7 |  |  |
| At Bowdoin street. Mack brick block. Laid by Central Construction Company. | 9 | 45 | 1913 |  |  |
| At Maverick square. Azter asphalt. Land by Bermulez Compans | 9 | 17 | 1917 | Dec. | 15, 1922. |
| At Washington street. Bitulithic. Laid by Warren Brothers Company | 12 | 212 | 1913 |  |  |
| At Norfolk street. Bitulithic. Laid by James Doherty | 1 | 4 | 1913 |  |  |
| Woodrow avenue to Jones avenue. Topeka. Laid by Rowe Contracting Company. | 313 | 595 | 1920 | July | 29, 1925 |
| Dacia street to Blue Hill avenue. Bitulithic. Laid by Warren Brothers Company. | 310 | 896 | 1906 |  |  |


| At Wollaston terrace. Topeka (macadam base). Laid by Rowe Contracting Company. |  | 10 | 1920 | July 29, 1925 |
| :---: | :---: | :---: | :---: | :---: |
| 49 feet east of Irma st reet to 10 feet west of Irma strect. Bitulithic (mradam base). Laid by Warren Brothers Company. | 89 | 302 | 1919 | May 26, 1924 |
| At Lucerne street. Aztec asphalt (macadam base). Laid by Bermudez Company. |  | 2.5 | 1919 | Oct. 20, 1924 |
| At Norfolk street. Bitulithic. | 8 | 25 | 1918 | Nov. 4, 1923 |
| Washington strcet to 3 kect west of Harrison avemue. Mexican asphalt (macadam base). Laid by Central Construction Company. | 660 | 3,807 | 1919 | Nov. 11, 1924. |
| 3 feet west of Harnison avenue to Harrison avenue. Mexican asphalt. Laid by Central Construction Company. | 3 | 2.4 | 1919 | Nov. 11, 1924. |
| Columbus avenuc to 2 Iect cast of Columbus avenue. Mexiean asphalt. Laid by Central Construetion Company. | 2 | 8 | 1919 | Nov. 11, 1924. |
| 2 feet east of Columbus avenue to 10 feet east of Columbus avenue. Trinidad asphalt. Laid by Barber Asphalt Paving Company. | 8 | 31 | 1906-07 |  |
| 10 Ieet east of Columbus avenue to Tremont street. Mexican asphalt (macadam base). Laid by Central Construction Company. | 635 | 2,160 | 1919 | Nov. 11, 1924. |
| Tremont street to 5 feet east of Tremont street. Asphalt. Laid by B. E Grant Company. | 5 | 22 | 1920 | Sept. 18, 1925. |
| 5 fect west of Tremont street to Tremont street. Asplalt. Laid by B. E. Grant Company. | 5 | 22 | 1920 | Sept. 18, 1925 |
| Tremont street to Shawmut avenue. Mexican asphalt (macadam base). Laid by Central Construction Company. | 832 | 3,151 | 1919 | Nov. 11, 1924 |
| Shawmut avenue to Washington strcet. Mexican asphalt (macadam base). Laid by Central Construction Company. | 340 | 1,289 | 1919 | Nov. 11, 1924. |
| Coleridge street to 70 feet north of Cowper street. Mexican asphalt. Laid by Central Construction Company. | 316 | 1,090 | 1917 | Aug. 6, 1922. |
| 45 feet south of Homer street to 9 feet north of Horace strect. M1exican asphalt. Laid by Central Construction Company: | 335 | 1,186 | 1917 | Aug. 6, 1922 |

List of Streets Maving a Smooth Pavement.-Concluded.

| Streets. | Limits. | Length in Feet. | Area, Square Yards | Year Laid. | Guaranty Expires. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Wordsworth strcet (East Boston) | 8 feet south of Saratoga street to Saratoga street. Standard asphalt. Laid by Bermudez Company. | 8 | 32 | 1918 | May 1, 1924. |
| Wordsworth street (East Buston) | Saratoga street to 11 feet west of Naratoga street. Standard asphalt. Laid by Bermudez Company: | 11 | 53 | 1918 | M1ay 1, 1924. |
| Worthington street (Roxbury) | Each side of Nimith street. Aztee asphalt (macadam base) | 14 | 42 | 1919 | Nov. 8, 1924. |
| Worthington street (Roxbury) | S feet south of Longwood avenue to Longwood avenue. Mack brick block. Laid by Field, Barker \& Underwood, Inc. | 8 | 23 | 1910 |  |
| Worthington strett (Roxbury) | fongwood avenue to 8 feet north of Longwood avenue. Mack brick block. Laid by Field, Barker \& Underwood, Inc. | 8 | 26 | 1910 |  |
| Worthington street (Roxbury) | S feet north of Longwood avenue to street No. 220. Trinidad asphalt. Laid by Central Construction Company. | 828 | 2,395 | 1915 |  |
| V'armouth street (city proper) | Company: <br> At Columbus avenue. Trinidad asphalt. Laid by Barber Asphalt l'aving | 9 | 34 | 1906 |  |
| York street (Dorchester). | Greenwood street to Glenway street. Topeka. Laid by Rowe Contracting Company. | 440 | 1,274 | 1919 | Dee. 10, 1924. |
| \%eigler street (Roxbury) | 7 feet east of Washington street to Warren strect. Granitoid concrete btocked paventent. Laid by R. S. Blome Company. | 315 | 916 | 190s |  |
| Zeisher street (Roxbury) | Warren street to Harrison avenue. Bitulithic. Laid by John F. Beatty. | 177 | 380 | 1914 |  |
| Zeigler street (Roxbury) | S feet east of Harrison avenue to 9 feet west of Dearborn street. Bitulithic. Laid by John F. Beatty. | 866 | 1,864 | 1914 |  |
| Zeigler street (Roxbury | 9 feet west of Dearborn street to Dearborn street. Acme asphalt. Laid by Warren Brothers Company. Bessemer brick block gutters. Laid by Warren Brothers Company | $9\{$ | 15 | $\begin{aligned} & 1917 \\ & 1917 \end{aligned}$ | $\begin{aligned} & \text { Nov. 20, } 1922 . \\ & \text { Nov. 20, } 1922 . \end{aligned}$ |

TOTALS OF SMOOTH PAVEMENT STREETS, FEBRUARY I, 1921.

| Kind. | Under Guaranty. |  | Not Under Guaranty. |  | Totals. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Length, Fect. | $\begin{aligned} & \text { Area, } \\ & \text { Siuare } \\ & \text { Yards. } \end{aligned}$ | Length, <br> Fect. | $\begin{aligned} & \text { Area, } \\ & \text { A, inare } \\ & \text { Yards. } \end{aligned}$ | Length, Feet. | $\begin{aligned} & \text { Area, } \\ & \text { Square } \\ & \text { Yards. } \end{aligned}$ |
| Black gum. |  |  | 1,142 | 6,806 | 1,142 | 6,806 |
| Pine. | 19,317 | 84,195 | 36,334 | 169,074 | 55,651 | 253,269 |
| Jennison Wright pine. |  |  | 529 | 2,230 | 529 | 2,230 |
| Jennison Wright slab wood pavement... |  |  | 1,103 | 6,152 | 1,103 | 6,152 |
| Total, wood block | 19,317 | 84,195 | 39,108 | 184,262 | 58,425 | 269,457 |
| Brick Block. |  |  |  |  |  |  |
| Mack. |  |  | 24,595 | 93.9093 | 24,595 | 95,809 |
| Barrington. |  |  | 566 | 558 | 566 | 558 |
| Metropolitan |  |  | 569 | 2,293 | 569 | 2,293 |
| Vitrified. |  |  | 12 | 11 | 12 | 11 |
| Canton block. |  |  | ${ }_{6} 36$ | 1,764 | 636 | 1,764 |
| Bessemer. | 334 | 5,872 | 1,385 | 6,207 | 1,719 | 12,079 |
| Portland stone.. |  |  |  | 128 |  | 128 |
| Miscellanenus. |  |  | 25 | 41 | 25 | 41 |
| Total, brick block | 334 | 5,872 | 27,788 | 106,811 | 28,122 | 112,683 |

SUMMARIES OF SMOOTH PAVEMENT STREETS, FEBRUARY I, 1921.

| Kind. | Under Guaranty. |  | Not Under Guaranty. |  | Totals. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Length, Feet. | $\begin{aligned} & \text { Area, } \\ & \text { Square } \\ & \text { Yards. } \end{aligned}$ | Length, <br> Feet. | $\begin{aligned} & \text { Area, } \\ & \text { Square } \\ & \text { Yards. } \end{aligned}$ | Length, Feet, | $\begin{aligned} & \text { Area, } \\ & \text { Square } \\ & \text { Yards. } \end{aligned}$ |
| Asphalt, | 108,033 | 421,839 | 123,488 | 340,713 | 231,521 | 762,552 |
| Unionite | 121 | 470 |  |  | 121 | 470 |
| Asphalt block. |  |  | 98 | 774 | 98 | 774 |
| Bitulithic. | 43,657 | 203,321 | 64,258 | 227,457 | 107,915 | 430,778 |
| Topeka. | 44,967 | 159,830 | 9,313 | 28,424 | 54,280 | 188,254 |
| Endurite. |  |  | 10 | 1,614 | 10 | 1,614 |
| Filbertine. | 326 | 959 |  |  | 326 | 959 |
| Granitoid concrete blocked pavement. |  |  | 315 | 946 | 315 | 946 |
| Concrete road. | 192 | 293 | 8,910 | 23,584 | 9,102 | 23,87 |
| Roman road. | 433 | 1,250 |  |  | 433 | 1,250 |
| Wood block. | 919,317 | 84,195 | 39,108 | 184,262 | 58,425 | 268,457 |
| Brick block. | 334 | 5,872 | 27,788 | 106,811 | 28,122 | 112,683 |
| Scoria block. |  |  | 322 | 254 | 322 | 254 |
| Total of all smooth pavements. | 217,380 | 878,029 | 273,610 | 914,839 | 490,990 | 1,792,868 |

LIST OF STREETS PAVED WITH GRANITE BLOCKS HAVING A MAINTENANCE GUARANTY.

| Streets. | Limits. | Length in Feet. | Asea, Square Yards | Year Laid. | Guaranty: Expires. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| A street (South Boston) | 7 feet west of Gold street to Dorehester avenue. (Old block.) Laid by Central Construction Company. | 54 | 209 | 1918 | Nor. 9, 1922. |
| Albany street (eity proper) | Kinceland street to Boston \& Alhany Railroad Bridge. Laid by Coleman Brothers. (New.) | 1,272 | 5,828 | 1918 | Aug. 13, 1923. |
| Albany street (eity proper) | 52 feet south of Seneca street to 0 leet south of Oneida strect. Laid by James Doherty. (Old block.) | 74 | 444 | 1920 | Unfinished. |
| Albany street (eity proper) | 6 feet south of Oneida street to 13 feet south of Genesee stieet. Laid by James Doherty. (New block.) | 248 | 1,488 | 1920 | I'nfinished. |
| Albany street (eity proper) | 13 leet soutl of Generee street to 84 feet south of Troy strect. Laid byJanmes Doherty: (Old block.) | 328 | 1,968 | 1920 | Unfinished. |
| Albany street (eity proper) | Dover street to 7 feet north of Stoughton street. Laid by Bernard E. Grant, (New.) | 3,577 | 22,144 | 1917 | Jan. 21, 1923. |
| Albion place (Charlestown) | At Main street. Laid by William J. Barry. (Reeut block.) | 13 | 37 | 1919 | Unfinished. |
| Alden street (eity proper) | At Sudbury street. Laid by Simpson Brothers Corporation. (New | 6 | 24 | 1918 | Sept. 6, 1923. |
| Amory street (Roxbury). | Centre street to 10 feet north of Bragdon street. Laid by James Doherty. (New.) | 1,398 | 5,525 | 1917 | June 1, 1922. |
| Anderson street (eity proper) | At Cambridge street. Laid by Central Construction Company. (Reeut.). | 8 | 25 | 1919 | Aug. 16, 1924. |
| Ashland street (West Roxbury) | Washington street to 51 feet south of Washington street. (New block.) Laid by Walliam J. Barry. | 51 | 194 | 1920 | Dec. 24, 1925. |
| Atlantic avenue (city proper) | South street line of Kinceland strect to 91 feet south of Summer street. Laid by Coleman Brothers. (Old.) | 1,153 | 8,790 | 1918 | Nor. 2, 1923. |
| Atlantic avenue (city proper) | 67 feet north of Summer street aeross Broad street. Laid by Bernard E Grant. (Old.) | 2,021 | 17,095 | 191\$-19 | Oet. 3, 1924. |

List of Streets Paved with Granite Blocks Having a Maintenance Guaranty. - Continued.

| Streets. | Limits. | length in Fect. | $\begin{aligned} & \text { Area, } \\ & \text { Square } \\ & \text { Yards. } \end{aligned}$ | Year Laid. | Ciuaranty <br> Expires. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Atlantic avenue (eity proper) | Broad strcet to south side of South Market street. Laid by Rossetti \& Co. (Vew.) | 1,281 | 11,152 | 1918 | Jan. 17, 1924 |
| Atlantic avenue (rity proper) | South side of South Market street to Commercial street. Laid by D'()nfro Brothers. (New.) | 1,270 | 11,013 | 1918-19 | May 31, 1924 |
| Auburn strect (Charlestown) | It Main street. Laid by William J. Barry: (hec | 16 | 48 | 1919 | June 12, 1925 |
| Austin street (Charlestown) | At Main street. Laid by William J. Barry. (Reeut.) | 13 | 37 | 1919 | .June 12, 1925 |
| Baldwin stıeet (Charlestown) | At Main street. Laid by William J. Barry. (Reeut.) | 12 | 52 | 1919 | June 12, 1925 |
| Baldwin street (Charlestown) | At Main street. Laid by Coleman Brothers. (Reeut.) | 10 | 32 | 1920 | July 8, 1925 |
| Batterymareh street (city proper) | 2 feet west of Broad street to 93 feet west of Broad street. Laid by Bernard E. Grant. (New.) | 91 | 282 | 1916 | Oct. 20,1921 |
| Batterymarch strcet (city proper) | Angle to Franklin street. Laid by Reruard E. Cirant. (New | 197 | sos | 1916 | Oct. 20, 1921 |
| Peaeh street (eity proper) | 1rarrison avenue to Atlantie avenue. Laid by Bernard E. Grant. (New.) | 1,264 | 4,811 | 1917 | Aug. 6, 1023 |
| Beacon street (city proper) | 12 feet west of Tremont street to 21 feet west of Park street. Laid by Bernard E. Grant. (New.) | 827 | 2,318 | 1917 | Oct. 21, 1922 |
| Beaeon street (city proper) | 21 feet west of Park street to Charles street. Laid by Bernard E. Grant. (Gutters-old blocks.) | - | 1,125 | 1917 | Nov. 15, 1922 |
| Belcher lane (eity proper) | At Atlantic avenue. Laid by Bernard E. Grant. (Old | 9 | 9 | 1919 | Oct. 3, 1924 |
| Belden street (Dorehester) | At Dudley street. Laid by DeStefano Brothers. (Old bloek.). | 10 | 17 | 1920 | Unfinished. |
| Bellflower street (Dorchester) | At Dorehester avenue. Laid by William J. Barry. (Recut.) | 11 | 33 | 1919 | Aug. 30, 1924 |
| Bennington street (East Boston) | Central square aeross Marion street. Laid by McGuire \& MeGourty. (Recut.) | 878 | 3,317 | 1919 | Dee. 13, 1924 |


| 1919 | Dec. 13, 1924. |
| :---: | :---: |
| 1919 | Dec. 13, 1924. |
| 1919 | Dec. 12, 1924. |
| 1920 | Sept. 9, 1925. |
| 1920 | Sicpt. 9, 1925. |
| 1919 | Aug. 16, 1921. |
| 1918 |  |
| 1919 | Aug. 30, 1921. |
| 1919 | Aug. 30, 192.l. |
| 1919 | Oet. 3, 1:324. |
| 1918 | Oet. $\bar{\therefore}$, 1923. |
| 1915 | Oct. $\overline{5}, 1923$. |
| 1919 | Dec. 13, 1921. |
| 1920 | June 12, 1925. |
| 1919 | Dec. 12, 1924. |
| 1919 | July 19, $192 \pm$. |
| 1919 | Dce. 12,1924. |





Bennington street (East Boston).
Bennington strect (East I?oston)

## Benton strect (Roxbury)

Blackstone strect (city proper).
Blackstone strcet (city proper)
Blossom street (eity proper) Bowker strcet (city proper) Boylston street (Roxbury).

Boylston street (Roxbiry)
13road street (city proper) Broadway (eity proper) Broadway (city propeI)

Brooks street (East Boston)
Bunker Hill street (Charlestown) Burke strect (Roxbury). Burlington avenue (Roxbury)

Cabot street (Roxbury)
List of Streets Paved with Granite Blocks Having a Maintenance Guaranty.-Continurd.

| Stueets. | Limits. | Length in Fect | $\begin{aligned} & \text { Area, } \\ & \text { Suare } \\ & \text { Yards. } \end{aligned}$ | Year Laid. | Guaranty Expires. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cambridge street (eity proper) | Charles strect across אouth Rnssell strect. Laid by Central Constauction Company: (Kecut.) | 1,30? | 5,20; | 1919 | Iug. 16, 1924. |
| Cambridge strect (Charlestown) | Main street to 73 feet west of Main strect. Laid by Will'am J. Barry. (Recut.) | 73 | 90.5 | 1919 | June 12, 1925. |
| Cambridge street (Charlestown | 73 feet west of Mainatere to G3 feet west of Ruthenford avenue. Laid by Coleman Brothicis. (Old.) | 11\% | 973 | 1920 | July 18, 19\%\%. |
| Canalstrcet (city proper) | Haymarket spluate to Causewas strect. Laid by Bernard E. Cirant. (New.) | 1,060 | 5,493 | 1917 | July 9, 1922. |
| Causeway street (eity proper) | 1: feet west of Washington Street North, across Prince Streft. Laid by Bernard E. Grant. (Old.) | 251 | 1,720 | 1919 | Nov. 1, 1924. |
| Central strect (city proper) | At Atlantic avenue. Laid by Rossetti\& Co. (New | 52 | 278 | 1918 | Jan. 17, 192.f. |
| Chamning street (city proper) | Federal strect to 9 fect cast of Federal strect. Laid by James Doherty: (Recut.) | 9 | 20 | 1919 | April 29, 192\%. |
| Channing street (eity proper) | 9 feet east of Federalstreet to Congress street, Laidly Iance Doherty. (Old.) | 221 | 426 | 1919-20 | April $29,192.7$ |
| Chapman street (Charlestown) | At Main street. Laid by William J. Parry. (Recut. | 10 | 22 | 1919 | June 12, 1925. |
| Chapman street (Charlestown) | Fach side Rutherford avenue. Laid by Coleman Brothers. (Reeut.) | 31 | 105 | 1920 | July 8, 1925. |
| Chates street (Charlestown) | At Main strect. Laid by William J. Barry. (Recut.) | 10 | 16 | 1920 | June 12, 1925. |
| Charter strect (eity proper) | At Commercial street. Laid by Bernard E. Grant. (Old) | 9 | 25 | 1918 | Nov. 1, 1924. |
| Chureh street (city proper) | Tremont strcet to 6 feet south of Fayette street. Laid by James Doherty. (Old.) | 129 | 372 | 1919 | July 15, 1924. |
| Clark strect (eity proper). | At Commercial street. Laid by D'Onfro Brothers. (Old.). | 10 | 26 | 1919 | Aug. 13, 1924. |
| Clifton street (Dorchester) | At Dudiey street. Laid by DeStefano Brothers. (Old.). | 10 | 62 | 1920 | Unfinished. |


| Clinton street (eity proper) | Merchants row, aeross Commercial street. Laid by Coleman Brothers. (New.) | 593 | 2,589 | 1918 | July 27, 1923. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Columbia road (Dorchester) | 8 feet north of Dudley street to 52 feet south of East Cottage street. Laid by Bernard E. Grant. (New.) | 1,460 | 4,709 | 1916 | Nov. 18, 1921. |
| Columbia road (Dorehester) | Fach side of Jorchester avenue. Laid by William J. Barry. (Recut.) | 28 | 62 | 1919 | Aug. 30, 1924. |
| Columbus avenue (Roxbury) | 67 feet north of Station street to Tremont street. Laid by Bernard E. Giant. (lecut.) | 186 | 1,328 | 1919 | Dee. 12, 1924. |
| Commerce street (city proper) | At Atlantic arenue. Laid by Rossetti\& Company. (New | 39 | 173 | 1918 | Jan. 17, 1924. |
| Commercial street (city proper) | Hanover street, actoss Mull street. Laid by Bernard E. Grant. (Old | 1,453 | 9,048 | 1918-19 | Nov. 1, 192.1. |
| Commercial street (eity proper) | Hull street to l'rince street. Laid by Bernard E. Grant. | 234 | $1,17 \mathrm{~S}$ | 1918 | Nov. 1, 1924. |
| Commercial street (eity proper) | Noith side of Fleet street, across Hanover street. Laid by D'Onfro Brothers. (Old.) | 1,341 | 9,050 | 1918-19 | Aug. 13, 1924. |
| Common street (city proper) | At Tremont street. Laid by James Doherty. | 49 | 173 | 1919 | July 15, 1924. |
| Congress street (city proper) | Atlantie avenue to llarbor line. Laid by Joln E. Quinn. (New.) | 611 | 4,084 | 1918 | Aug. 2s, 1923. |
| Congress street (city proper) | 35 feet nortl of Atlantic avenue to Atlantic avenue. Laid by Bernard E. Grant. (Uld.) | 35 | 160 | 1919 | Oct. 3, 1924. |
| Congress street (city proper | Franklin street to $1: 38$ feet North of Franklin street. Laid by James Doherty. (Old.) | 138 | 610 | 1920 | sept. 2,1925. |
| Corinth street (West Rox | At Washington street. Laid loy William J. Barry. (New | 19 | 7.1 | $19: 0$ | Dec. $24,192 \%$. |
| Corning street (city proper) | At Tremontstreet. Laid by James 1)oherty. (Old.) | 10 | 31 | 1919 | July İ, 1924. |
| Crescent avenue (Dorchester) | At Dorchester avenue. Laid by Willian J. Barry. (Reeut.) | 12 | 71 | 1919 | Aug. 30,1924 . |
| Cruss street (city proper) | Commercial street to 9 feet east of North street. Laid by Coleman Brothers. (New.) | 467 | 998 | 1918 | July 2s, 1923. |
| Cross street (city proper) | 3 feet west of North strcet to 4 feet east of Hanover stıeet. Laid by Coleman Brothers. (New.) | 287 | 627 | 1918 | July 28, 1923. |
| Cross street (eity proper) | 4 feet west of IIanover street to 2 feet east of Endicott strect. Laid by Coleman Brothers. (New.) | 439 | 781 | 1918 | July 2s, 192\%. |

List of Streets Paved with Granite Blocks Having a Maintenance Guaranty. - Continued.

| Streets. | Limits. | Length in Feet. | $\begin{aligned} & \text { Area, } \\ & \text { Square } \\ & \text { Yards. } \end{aligned}$ | $\begin{aligned} & \text { Year } \\ & \text { Laid. } \end{aligned}$ | Gitaranty <br> Expires. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cross street (city proper) | 1 foot west of Endicott street to 9 feet east of Haymarket square. Laid by Coleman Brothers. (New.) | 195 | 585 | 1918 | July 28, 1923. |
| Cunard street (Roxbury) | Each side of Tremont street. Laid by Bernard E. Cirant. (Recut.) | 22 | 85 | 1919 | Dee. 12,1924 |
| Dartmouth street (city proper) | Tremont street to 1 feet south of Warren avenue. Laid by James Doherty. (New.) | 502 | 2,210 | 1918 | Oct. 26, 1923. |
| Dartmouth street (city proper) | 4 feet north of Warren avenue to Columbus avenue. Laid by James Doherty, (New.) | 536 | 2,381 | 1918 | Oct. 26, 1923. |
| Dartmouth street (city proper) | 10 feet north of Columbus avenue to bridge over New York, New Haven \& Hartford Railroad. Laid by Janes Doherty. (New.) | 46.1 | 1,490 | 1918 | Oct. 26, 1023. |
| Dartmouth strect (eity proper) | Bridge over Boston \& Albany Railroal to 3 feet sonth of Stuart street. Laid by James Doherty. (New.) | 131 | 182 | 1918 | Oct. 26, 1923. |
| Devens street (Charlestown.) | At Main street. Laid by William J. Barry. (Recut.) | 57 | 200 | 1919 | June 12, 1925. |
| Devonshire street (city proper) | Dock square to 75 feet south of Dock square. Laid by Bermard E. Grant. (New.) | .75) | 11. | 1916 | Dec. 4, 1921. |
| Devonshire street (city proper) | North side of Franklin street to 100 feet south of Franklin street. Laid by James Doherty. (Old.) | 100 | 390 | 1920 | Sept. 2, 1925. |
| Dorchester avenue (city proper) | Congress street to Summer strect. Laid by John E. Quinn. (New.) | 316 | 2,107 | 1918 | Aug. 26, 1923. |
| Dorchester avenue (South Boston) | 128 feet north of Leeds street to 176 feet north of Hyde street. Laid by Central Construction Company. (Recut.) | 615 | 2,748 | 1918 | Sept. 5, 1920. |
| Dorchester avenue (South Boston) | 176 feet north of Hyde street to 3 feet north of Ralston street. Laid by William J. Barry. (Recut.) | 368 | 1,635 | 1919 | Aug. 30, 1924. |
| Dorcheater avenue (South Boston) | South abutment. Bridge over Fort Point Channel to 3 feet south of West Sceond street. Laid by John Kelly Company. (Old.) | 719 | 3,489 | 1920 | Dec. 24, 1925. |

Dorchester avenue (South Boston).
Dorchester avenue (Dorchester).
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Dorchester avenue (Dorchester)
Doris strcet (Dorchester). .
Dorset street (Dorchester).
Dudley street (1)orchester).
Dunstable street (Charlestown) . Dunstable street (Charlestown). East Cottage street (Dorchester). East Fourth street (South Boston) Eastern avenue (city proper). Eden street (Charlestown). At Main street. Laid by William J. Barry. (Recut.)..

| Dorchester avenue (South Boston) | South side bridge over Old Colony Railroad to 150 feet south of Washburn street. Laid by William J. Barry. (Recut.) | 525 | 2,333 | 1919 | Aug. 30, 1924. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Dorchester avenue (Dorchester) | 150 feet south of Washburn street to 67 feet north of Vietoria street. Laid by William J. Barry. (Recut.) | 3,381 | 15,027 | 1919 | Aug. 30, 1924. |
| Dorchester avenue (Dorchester) | 10 feet south of Hallam street to $S$ feet south of Savin Hill avenue. Laid by William J. Barry. (Recut.) | 553 | 2,478 | 1919 | Aug. 30, 1924. |
| Dorchester avenue (Dorchester) | 8 feet south of Savin Hill avenue to 52 feet north of East strect. Laid by Bernard E. Grant. (Recut.) | 1,895 | 8,422 | 1917 | Nov. 17, 1922. |
| Dorchester avenue (Dorchester) | 52 fect north of East street to 148 feet south of Charles street. (Recut.) East sile and between tracks laid by James Doherty. West side taid by Bernard E. Grant | 2,742 | 7,408 4,125 | $\begin{array}{r} 1918 \\ 1917 \end{array}$ | $\begin{aligned} & \text { Dec. } 1,1923 . \\ & \text { Dec. } 18,1922 . \end{aligned}$ |
| Dorchester avenue (Dorchester) | 14 S feet south of Charles street to 45 feet south of Park street. 1, aid by James Dohert! - (Old.) | 691 | 2,884 | 1918 | Dec. 19, 1923. |
| Durchester avenue (Dorchester) | Sonth side of bridge over New York, New Haven \& Hartford Railroad (l'eabody square) to 118 feet south of Bellows place. Laid by James Doherty. (Old.) | 3,934 | 16,610 | 1917-1S | June t, 1923. |
| Dorchester avenue (Dorchester) | 2 feet north of Richmond strect to Washington street. Laid by James Doherty. (Old.) | 609 | 2,394 | 1917-1S | June 4, 1923. |
| Doris strcet (Dor | Each side of Dorchester avenue. Laid by William J. Barry. (Recut.) | 9 | 47 | 1919 | Aug. 30, 1924. |
| Dorset street | A | 11 | 33 | 1919 | 0, 1924. |
| Dudley street (1)orch | 50 fect west of Magnolia street to Columbia road. Laid by De stefano Brothers. (Old.) | 1,412 | 5,914 | 1920 | nfinishe |
| Dunstable street (Charle | At Main street. Laid by William J. Barry | 19 | 20 | 1919 | June 12, 1925. |
| Dunstable street (Charlesto | At Main street. Laid by William J. Barry | 10 | 25 | 1920 | June 12, 1925. |
| East | At Dorchester avenuc. Laid by William J. Barry. (Re | 10 | 67 | 1919 | Aug. 30, 1024. |
| East Fourth street (South Buston) | S feet west of F street across P' street. Laid by John E. Quinn. (Recut.) | 159 | 3,436 | 1919-20 | Fay $24,1925$. |
| Eastern avenue (city proper) | At Commercial street. Laid by D'Onfro Brothers | 9 | 62 | 1919 | ug. 13, 1924. |
| Eden street (Charlestown) | At Main street. Laid by William J. Barry. (Recut.) | 34 | Sō | 1919 | June 12, 1925. |

List of Streets Paved with Granite Blocks Having a Maintenance Guaranty. - Continued.


| 1920 | July 8, 1925. |
| :---: | :---: |
| 1919 | Aug. $16,1924$. |
| 1920 | Unfinished. |
| 1919 | Aug. $30,1924$. |
| 1919 | June 12, 1925. |
| 1!19 | Ang. 16192ı. |
| 1917 | sept. 21,1922 |
| $1921)$ | Sept. 3, 1925. |
| 1919 | Nov. 1,192\%. |
| 1919 | Iug. 30, 1924. |
| 1915 | , 11110 19, 1923. |
| 1917 | I) ${ }^{\prime} \mathrm{C}^{\prime} .17,1922$. |
| 1917 | I)ce. 17, 192\% |
| 1917 | Dee. 17, 1922. |
| 1917 | Dec. 17, 1929. |
| 1917 | Dec. 17, 1922. |
| 1919 | June 12, 1925. |
| 1919 | Aug. 30, 1924. |



| $\bigcirc$ |
| :---: |
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Frothingham avenue. (Charlestown) Garden street (city proper). . (ienesce street (eity proper). Graft on street (Dorchester) Cireen strect (Charlestown). (irove street (city proper). . 11:mover strect (city froper)
11:nnover strect (city proper). H:mover street (eity proper). IIarbor View street (1)orehester) LIfrrison avente (eity proper). Itarrison atventu (eity proper). LIarrison atvemus (eity proper).
IIarrison :wセente (cify proper)..
Harrison avenne (eily proper).
Harrison avenue (eity proper).
Harvard street (Charlest own) IIar vest street (Dorehester).
List of Streets Paved with Granite Blocks Having a Maintenance Guaranty.- Continued

| Streets. | Limits. | Length in Feet. | Area, Square Yards | Year Laid. | Guaranty <br> Expires. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Have street (East Boston) | 122 feet south of Bennington street to Bennington street. Laid by MeGuire \& Meciourty. (Recut.) | 122 | 556 | 1919 | Dec. 13, 1924. |
| Hawkins street (eity proper) | Sudbury street to Chardon strect. Laid by Simpson Brothers Corporation. (Old.) | 444 | 904 | 1918 | Sept. 6, 1923. |
| Haymarket square (eity proper | Laid by Berıard E. Grant. (New.) | 496 | 6,708 | 1917 | Sept. 15, 1922. |
| Henchman street (eity proper) | At Commereial street. Laid by Bernard E. Grant. (Old | 10 | 20 | 1918 | Nov. 1, 1924. |
| Henley street (Charlestown) | East side of Main street. Laid by William J. Barry. (Recut. | 17 | 45 | 1919 | June 12, 1925. |
| High street (eity proper) | Each side of Federal street. Laid by James Doherty. (Recut.) | 20 | 90 | 1919 | June 12, 1925. |
| Howell street (Dorchester) | At Dorehester avenue. Laid by William J. Barry. (Recut.) | 11 | 33 | 1919 | Aug. 30, 1924. |
| Howes street (Dorchester) | At Dorchester avenue. Laid by William J. Barry. (Recut.) | 10 | 30 | 1919 | Aug. 30, 1924. |
| Hull street (city proper) | It Commercial street. Laid by Bernard E. Grant. (New | 8 | 20 | 1918 | Nov. 1, 1924. |
| Humphreys street (Dorchester) | At Dulley street. Laid by DeStefano Brothers. (Old ) | 9 | 53 | 1920 | Unfinished. |
| India street (city proper) | State street to 9 feet cast of Milk street. Laid by Bernard E. Cirant. (New.) | 381 | 4,430 | 1917 | June 19, 1922. |
| India street (eity proper) | Angle near Export street to Atlantic avenue. Laid by Rossetti \& Co. (Old.) | 136 | 520 | 1918 | Jan. 17, 1924. |
| Irving street (eity proper) | At Cambridge street. Laid by Central Construction Company. (Recut.).. | 8 | 25 | 1919 | Aug. 16, 1924. |
| Jefferson street (eity proper) | At Tremont street. Laid by James Doherty. (Recut.) | 68 | 93 | 1919 | July 15, 1920. |
| Lake street (Brighton) | At Washington street. Laid by Warren Brothers Company. (Recut.).. | 11 | 48 | 1919 | July S, 1925. |
| Leigh street (city proper). | At Albany street. Laid by James Doherty. (Old.) | 21 | 96 | 1920 | Unfinished. |
| Lincoln street (city proper) | Essex street to Beach street. Laid by Bernard E. Grant. (New.) | 505 | 2,442 | 1917 | July 29, 1922. |
| Lincoln street (Charlestown). | At Main street. Laid by William J. Barry. (Recut.) | 10 | 32 | 1919 | June 12, 1925. |





Lineoln street (Charlestown) Linden Park street (Rosbury). Loeust street (Dorehester) ... London street (East Boston). M street (South Bostom). Main street (Charlestown) Main sircet (Charlestown). Marion street (East Bosteme). Mattluws street (city broper). Mayfielil street (1)orchester). Mead strect (Charlestown).
 Mercantile strect (wity moner) Mereathtike staet (rity proner) Mildeldsex strent (Charlestonn) Mill strect (Charlestowa). Miller strect ( 8 'landestown). Miller strect ( $($ llarlestown). Mishawum strect (C'harlastown) Mishatwum street (Charle stown) Monadnoek street (Dorchester)
List of Streets Paved with Granite Blocks Having a Maintenance Guaranty. - Continued.

| Shmets. | Limits. | Length in Fert. | $\begin{aligned} & \text { Area, } \\ & \text { suare } \\ & \text { liarls. } \end{aligned}$ | $\begin{aligned} & \text { Yoar } \\ & \text { Laid. } \end{aligned}$ | Ginaranty <br> Expires. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Monmment aremu ( 6 lanlentown) | At Main street. Laid by Willian J. Barry: (Rerut.) | 10 | 31 | 1919 | June 12, 1925. |
| Motley street (Roxbury) | At Tremont street. Laid by Bernard E. (irant. (Recut) | 12 | 15 | 1919 | Dec. 12, 1924. |
| 11t. Vernon strect (t)wercester) | Wheh side Dorchester avemer. Laid by William I. Barry. (f | 22 | 70 | 4919 | Aug. 30, 1924. |
| N street (South Buston) | 9 feet north of Bast Fourth street to bast Fourth street. Kaid by John B. (Quinn. (Hecut.) | ! | 36 | 1919 | M1:y 24, 1925. |
| Neponset areme (1)orcheoter) | Routh side llollbrook street to tancent north side Chickatambut street. (Elast side and tracks.) Laid by John F. lanch. (Old.) | 3.4.5 | 1,147 | 1917 | April 26, 1923. |
| Neponsct avenue( ${ }^{\text {archester }}$ ) | Tangent noith side Chickatawbut street to 25 feet south of Ashmont strect. Laid by John F. Ly neh. (old.) | 1,336; |  | 1917-18 | April 26, 1923. |
| Newbury street (Rosburs) | 300 fect east of Massachusetts avenue to Masachusetts arenue. Laid by James 1)oherty. (New.) | 300 | 1,210 | 1919 | Dee. 15, 1924. |
| North street (eity proper) | Each sisle of Blackstonestreet. Laid by Coleman Brothers | $\because 4$ | 101 | 1920 | Scpt. 9, 192-5. |
| North strect (eity proper) | It Commereialstreet. Laid by 1)'Onfro Brothers. (Oht | 10 | 40 | 1919 | Alig. 13, 1924. |
| North Anderson street (eity proper) | At Cambridge street. Laid by Central Construction Company. (Reeut.) | 10 | 28 | 1919 | Aug. 16, 1924. |
| Northern avenue (city proper) | Atlantic avenue to bridge. Laid by Bernard E. Grant. (Old. | 166 | 1,186 | 1919 | Oct. 3,1924. |
| Oak strect (Charlestown) | At Main street. Laid by William J. Barry. (Recut. | 13 | 42 | 1919 | June 12, 1925. |
| Oliverstreet (city proper) | At.Atlantic avenue. Laid by Bernard E. Grant. (Old. | 32 | 126 | 1919 | Oct. 3.1924. |
| Oneidastreet (eity proper) | 13 feet west of Albany street to Albany street. Laid by James Doherty. (New.) | 13 | 29 | 1920 | Unfinished. |
| Oswego street (city proper) | 13 fect west of Albany street to Albany street. Laid by James Doherty. (New.) | 13 | 20 | 1920 | Unfinished. |


| Brookline avenuc to Roston \& Albany Railroad. Laid by James F. Coughlan Company. (New.) | 399 | 1,687 | 1917-1 | 19 |
| :---: | :---: | :---: | :---: | :---: |
| 45 feet north of East Fourth street to East Fourth street. Laid by John E. (2uinn. (Recut.) | 45 | 132 | 1920 | May 24, 1 |
| Eayt Fourth strect to 27 fret south of Eaxt Fourth strect. Laid Ly. John E. (Uninn. | 27 | 10. | 1920 | May ${ }^{24}$, 192 |
| At Benninuton strect. Laid hy MrGuire \& MrCGouty. (Recut | 12.4 | 54, | 1919 | Der |
| Bearon street to lige lewt south of Bearon street. Laid by Warrm Beothers Company. (Nrw.) | 152 | 72. | 1918 | July |
| 39feet north of Treanont strect to 7 frert north of Tremont street. Laid by Warren Brothels Company. (Nev.) | 32 | 137 | 1918 | July |
| Each side of Dorclester avenue | 70 | 251 | 1918 | Dec. |
| At Attantic avenuc. Laid by Bernard E. Grant. (Mld | 22 | 97 | 1919 | Oct. 3, 1924 |
| At Main strect. Laid by William J. Barry | 11 | 12 | 1919 | June 12, 1925 |
| At Main street. Laid by William J. Barry. (Recu | 13 | 31 | 1919 | June 12, 19 |
| 67 feeq mortl. of Washington street to Washington street. Laid by William J. Barry. (Now.) | ${ }_{6} 6$ | 310 | 1920 | Dec. 24 |
| W:ashingtonstreet to 6 feet south of Washington strect. Laid hy William I. Barry. (New.) | ${ }_{61}$ | 231 | 1920 | Dec. |
| At Benniugton street. Liaid hy MeGuire is MeGourty | 12 | 45 | 1919 | Dec. 13, 1924. |
| At Dorchester avenue. Laid by William J. Barry. | 11 | 33 | 1919 | Aug. 30, 19 |
| At Tremont street. Laid by Bernard E. Grant. (Recut. | 12 | 37 | 1919 | De |
| $\begin{gathered}\text { Bennington street to } 8 \text { feet north of Bennington street. Laid by Mrechire it } \\ \text { MleGourty }\end{gathered}$ (Recut.) | s | ${ }^{32}$ | 1919 | Dec. 13, 19 |
| At Devensstreet. Laid br William J. Barry. | 4 | s | 1919 | June |
| Commercial street. Laill by Bernard E. Grant. | 10 | 23 | 1919 | Nov |

Overland street (Roxbury). .
P strect (South Boston).
P street (iouth Boston). Paris street (East Boston) l'ak street (city proper). l'ark strect (city proper) Park street (Dol chester). Pearl street (city proper). Phipps street (Charlestown) . Plea<ant strect (Charlostown). Poplar strcet (West Roxibury) Poplar street (West Roshoury).

Porter strect (Last Boston) . . Power strect (South Boston). Prentiss street (Rosbury Prescott street (East Boston). Prescott street (Charlestown). Prince street (city proper).
List of Streets Paved with Granite Blocks Having a Maintenance Guaranty. - Continucd.

| Streets. | Limits. | Length in Feet. | Area, Square 1 ards | Year Laid. | Guaranty Expires. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Public Alley No. 70 (rity proper) | East Prookline strect to West Newton street. Laid by John Landis. (Recut.) | 364 | 566 | 1920 | Nov. 16, 1925, |
| Public Alley No. Sis (city proper | St. Stephen strect to Public Alley No. 819. Laid by John Landis. (Recut.) | 893 | 790 | 1920 | Nov. 20, 192. |
| Putnan street (East Ruston) | Each side of Bennington street. Laid by McGuire \& MeGourty. (Recut.) | 18 | 70 | 1919 | Dec. 13, 1924 |
| Lawsinnstrect (South Buston) | At Dorchester avenue. Laid b) William J. Barry. (Reeut.) | 11 | 33 | 1919 | Aug. 20, 1924 |
| Rwhinster street (rity projer) | At Albany street. Laid by James Doherts. (New.) | 14 | 33 | 1920 | Unfinished. |
| Lumusy street (1)orchester) | It Dorchester asenue. Laid by Willian J. Barry. (Recut | 10 | 33 | 1919 | Aug. 30, 1924. |
| Roseclair street (Dorchester) | At Dorchester avenue. Laid by William J. Barry: (Reeut. |  | 51 | 1919 | Aug. 30, 1924. |
| Rugrles street (Roxbury) | 20 feet north of Tremont street to Tremont street. Laid by Bernard E. Grant. (Recut.) | 20 | 77 | 1919 | Dee. 12, 1924 |
| Rutherford avenue (Charlestown) | 6 feet south of Chapman street to C'ambridge street. Laid by Coleman Brothers. (Recut.) | 3,806 | 16,653 | 1920 | July $8,192 \%$ |
| St. Cocelia street (Roxbury) | At Boylston strect. Laid by James Barry. (Recut) | 15 | 44 | 1919 | Aug. 30, 1924 |
| Salum street (Charlestown) | At Main street. Laid ty William J. Barry. (Recut | 10 | 28 | 1919 | 1 'nfinisheed. |
| Salutation street (city proper) | At Commercial street. Laid by D'onfro Brothers. (New | 6 | 5 | 1919 | Aug. 13, 1924 |
| Sarsfield street (Roxbury) | It Tremont street. Laid by Bernard E. Grant. (Recut. | 12 | 27 | 1919 | Dec. 12, 1924 |
| Surin Hill avenue (I)orchester) | Each side Dorchester avenue. Laid by William J. Barry: (Recu | 18 | 118 | 1919 | Aug. 30, 1924 |
| School street (eity proper) | Wushington street to Tremont street. Laid by Bernard E. Grant. (New.) | 570 | 1,298 | 1916 | Nov. 13, 1921 |
| School street (Charlestown) | At Main street. Laid by William J. Barry. (Recut.) | 11 | 25 | 1919 | June 12, 1925. |
| Shirley street (Roxbury) | Massachusetts avenue to 473 feet north of Norfolk avenue. Laid ky Gore, Incorporated. (Old.) | 403 | 2,179 | 1919 | July 2, 1924. |


| 716 | 1918 | July 10, 1923. |
| :---: | :---: | :---: |
| $\left.\begin{array}{l} 331 \\ 200 \end{array}\right\}$ | 1920 | Dec. 24, 1925. |
| 3.74 | 1920 | Dec. 24, 1925. |
| 50 | 1919 | Junc 12, 1925. |
| 35 | 1920 | July s, 1 |
| 190 | 1915 | Jan. 17, 192 |
| 16 | I919 | Aug. 16, 192 |
| 1,350 | 1918 | sipt. 5, 1922. |
| 20 | 1919 | June 12, 1925 |
| 1,332 | 1918 | Oct. 1, 1923. |
| 1,217 | 1917 | June 19, 1922. |
| 4,317 | 191. | O.t. 1, 1923. |
| 34 | 1919 | Dee. 12, 1924 |
| 31 | 1919 | Aug. 3i), 1 |
| 76 | 1918 | Supt. 6, 1923 |
| 3,435 | 1918 | supt. 6, 1923. |
| 37 | 1919 | June 12, 1925. |
| 10,1:9 | 1917 | July 16, 1!122 |


| Somerset street (city proper) | Beacon strect to 18 feet north of Ashburton place. Laid by Warren Brothers Company. (New.) | 335 |
| :---: | :---: | :---: |
| South street (West Roxbury) | 125 feet east of Washingtion strect to Washington strect. (New.) Laid by William J. Barry. (Recut.). | 125 |
| South street (West Roxbury) | Washington street to 67 feet north of Washington street. Laid ly William J. Barry. (New.) | (67 |
| South Eden strect (Charlestown) | At Main street. Laid by William J. Barry, (Recut.) | 15 |
| South Eden street (Charlestown) | At Rutherford asenue. Laid by Coleman Brothers. (Recut.) | 10 |
| South Market street (rity proper) | At Atlantic avenue. Laid by D'Onfro Brothers. (New. | 43 |
| South Russell street (rity proper) | At Cambridge street. Laid by Central Construction Company. (ha | 8 |
| Suuthampton street (South Boston). | Dorchester avenue to 109 feet west of Dorebester avenue. Laid by Central Construction Company. (Recut.) | 109 |
| Stacey strect (Charlestown) | At Main street. Laid by William J. Barry. (Recut.) | 13 |
| State strect (city proper) | S feet west of Merchants row to 6 feet west of India strect. Laid by Joln E. Quinn. (Old.) | 376 |
| State street (rity proper) | 6 feet west of India strect to 6 feet east of India street. Laid by Bernarel E. Grant. (New.) | 266 |
| State street (city p | 6 feet east of India strect to Atlantic avenue. Laid bs John E. (Qumn. (New.) | 609) |
| Station street (Roxbury) | At Columbus avenue, Laid by Bernard E. Cirant. (Recut.) | 11 |
| Sudan strect (Dorchester) | At Dorchester avenuc. Laid by William J. Barry. (Recut.) | 19 |
| Sudbury square (eity prop | At Sudbury street. Laid by Simpson Brothers Corporation. (New.) | 21 |
| Sudbury street (eity proper) | Court street to Haymarket square. Laid by Simpson Brothers Corporation. (New.) | 933 |
| Sullivan street (Charlestown) | At Main street. Laid by William J. Barry. | 12 |
| Summer street (eity proper) | West side of South street to Harbor line, Fort Point channcl. Laid loy Henry J. Clark. (New.) | 1,362 |

List of Streets Paved with Granite Blocks Having a Maintenance Guaranty.- Concluded.

| Streets. | Limits. | Length in Feet. | $\begin{aligned} & \text { Area, } \\ & \text { Anarare } \\ & \text { lards. } \end{aligned}$ | Year Laid. | Guaranty <br> Lipires. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Summer street (South Boston) | Harbor line to west side of A street. Laid by John McCourt Company. (Oll.) | 655 | 5,531 | 1919 | Sept. 17, 1920 |
| Taft street (Dorchester) | At Dorehester avenue. Laid by William J. Barry. (Recut.) | 10 | 30 | 1919 | Aug. 30, 1924. |
| Terry street (Roxbury) | At Tremont strect. Laid by Bernard E. Grant. (Recut.) | 12 | 33 | 1919 | Dec. 12, 192 |
| Texas street (Roxbury) | At Tremont street. Laill by Bernard E. Grant. (Recut.) | 13 | 21 | 1919 | Dec. 12, 1924 |
| Thompson street (Charlestown) | At Main street. Laid by William J. Barry. (Recut.) | 11 | 22 | 1919 | June 12, 19:5 |
| Thornley street (Dorchester) | At Dorehester avenue. Laid by William J. Barry. (Recut.) | 10 | 33 | 1919 | Aug. 30, 192 |
| Tibibetts town way | At Rutherford avenue. Laid by Coleman Brothers. (Reeut.) | 10 | 20 | 1920 | July 8, 192 |
| Tremont street (city proper) | 21 feet south of north side of Common street to 3 feet north of Broalway. Laid by James Doherty. (New.) | 40.4 | 1,818 | 1919 | July 15, 1924. |
| Tremont street (city proper) | 2 feet south of Broadway to east side bridge Boston \& Albany Railroad. Laid by James Doherty. (New.) | 738 | 3,401 | 1919 | July 15, 1924. |
| Tremont street (eity proper) | 2 feet North of Dover strect to 9 feet south of north side of Northampton street (inclucling tracks). Laid by B. E. Grant Company. (Recut.) | 27 | 7,337 | 1920 | Sept. 18, 1925 |
| Tremont street (Roxbury) | Ifammond street arross Vernon street. Laid by Bernard E. Grant. (Rerut). | 2,182 | 14,275 | 1919 | Dec. 12, 1924 |
| Tremont strect (Roxbury) | Vernon street to 178 feet west of Texas street. Laid by Bernard E. Grant. (Reeut.) | 1,35 | 8,637 | 1919 | Dee. 12, 1924 |
| Troy street (city proper). | At Albany street. Laid by James Doherty. (Old.) . . . . . . . . . . . . . . . . . . | 13 | 53 | 1920 | Unfinished. |
| Union street (Charlestown) | At Main street. Laid by William J. Barry. (Recut.) | 11 | 36 | 1919 | June 12, 1925 |
| Virginia street (Dorchester) | At Dudley street. Laid by DeStefano Brothers. (Old.) | 10 | 29 | 1920 | Unfinished. |
| Walker street (Charlestown). | At Main street. Laid by William J. Barry. (Recut.) | 12 | 30 | 1919 | June 12, 1925 |
| Walpole street (Roxbury) | At Tremont street. Laid by Bernard E. Grant. (Recut.) | 12 | 33 | 1919 | Dec. 12, 1924 |
| Warren street (Charl | At Thompson square. Laid by William J. Barry. (R | 18 | 60 | 1919 | June 12, 1925 |

Public Works Department.

| Warrenton street (city proper) . . . . . . | 10 feet north of Tremont street to Tremont street. Laid by James Doherty. (Reeut.) | 10 | 22 | 1919 | July 15, 1924. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Washburn street (South Boston) | At Dorchester avenue. Laid by William J. Barry, (Recut.) | 11 | 33 | 1919 | Aug. 30, 1924. |
| Washington street (Brighton) | 22 feet east of Oakland street to 20 feet west of Lake street (south side). Laid by W'arren Brothers. (Recut.) |  | 1,682 | 1919 | July $8,1925$. |
| Washington Street North (city proper), | South abutment bridge over Charles River to Causeway street. Laid by Bernard E. Grant. (Old.) | 182 | 1,970 | 1919 | Nov. 1, 1924. |
| Washington Street North (eity proper), | Causeway street to 10 feet north of Causeway street. Laid by Bernard E. (irant. (Old.) | 64 | 690 | 1919 | Nov. 1, 1924. |
| Washington street (city proper) | 1Inymarket square to 24 feet south of Elm street. Laid by Bernard E. (irant. (New.) | 76 | 3,645 | 1917 | Sept, 24, 1922. |
| Washington street (West Roxbury) | William .J. Barry. <br> East side Archdale road to 69 feet west of Corinth street. I Aaid by $\left\{\begin{array}{c}\text { New } \\ \text { Recut }\end{array}\right.$ | 3,387 | $\left.\begin{array}{r}10,900 \\ 5,659\end{array}\right\}$ | 1920) | Dee. 24, 192\%. |
| Washingt on street (West Roxbury) | 142 feet south of Walk Hill street to east side of Archalale road. Laid by Sinpson Brothers Corporation. (New.) | 2,76.5 | 14,512 | 1918-19 | May 2e, 1924. |
| Washington street (West Roxbury). | Arborway across Asticou road (west side). Laid by James Doherty, (New.) |  | 2,123 | 1916 | Dec. 2, 1921. |
| West Cedar street (eity proper) | At Cambrilge street. Laid by Central Construction Company. (Recut.).. | 9 | 25 | 1919 | Aug. 16, 1924. |
| West Fourth street (Wouth Boston) | Dorchester avenue to 111 feet east of Dorchester avenue. Laid by Central Construction Company, (liecut.) | 111 | 432 | 191s | Nov. 9, 1921. |
| Weston street (Roxbury) | At Tremont street. Laid by liernard E. Grant. (Recut.) | 12 | 29 | 1919 | Dee. 12, 1921. |
| Winthrop street (Charlestown). | At Main street. Laid hy William J. Barry. (Recut.) | 10 | 22 | 1919 | June 12, 1925. |
| Wood street (Charlestown) . . . . . . . . . | At Main street. Laid by William J. Barry. (Reeut.) | 10 | 22 | 1919 | June 12, 1925. |
|  | SUMMARY. |  |  |  |  |
|  | Recut blocks | 34,577 | 174,949 |  |  |
|  | Old blocks relaid | 22,128 | 121,694 |  |  |
|  | New blocks | 35,780 | 1 2,722 |  |  |
|  | Total granite block pavements having a maintenance guaranty . . . . . . . . . | 92,485 | 179,365 |  |  |

Table Showing the Unit Cost of Bituminots Pavement Repars per Square Yard

## Street surface from 1911 to 1920, Inclusive.

 Wheet Asphalt.W'ith $1 \frac{1}{2}$-Inch Wearing Surface and $1 \frac{1}{2}$-Inch Bind
W'ith $1 \frac{1}{2}$-Inch Wearing Surface and $1 \frac{1}{2}$-Inch Binder on a Cemont Concrete Base.

| $\mathrm{Stremet}^{\text {fin }}$ | Limits. | $\begin{aligned} & \text { Year } \\ & \text { Laid. } \end{aligned}$ | 1911. | 1912. | 1913. | 1914. | 1915. | 1916. | 1917. | 1918. | 1919. | 1920. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Albany street | East Concord street to 22.5 feet north of Massachusetts avenue. | 1884 | \$0.281 | 80.235 | \$0.150 | 80.174 | 80.311 | 30.059 | 8 |  |  |  |
| Andwews strect | East Dedham street to East Concord street. | 1899 |  |  |  |  | . 009 |  |  |  |  |  |
| Arch street | Milk street to Franklin street | 1915 |  |  |  |  | $\dagger$ |  | 30.001 | \$0.023 |  | 80.081 |
| Areh street. | Frankin street to Summer street | 1915 |  |  |  |  | $\dagger$ |  | .026 | . 003 |  | . 088 |
| Arlington street | Boylston street to Beacon street | 1901 | *. 010 | . 002 | .014 | . 015 | . 056 | . 008 | . 066 | . 014 | \$0.021 | . 040 |
| Ash street. | Benuet street to Nassau street | 1905 |  |  |  |  | * |  | . 051 |  |  |  |
| Ash street. | North side Nassau street to north side Oak strect. | 1909 |  |  |  | * |  |  | . 027 |  |  |  |
| Auburn street | Leverett street to Poplar street | 1911 |  |  |  |  |  | * | . 024 | . 003 |  | 235 |
| Austin street. | Seminary place to Lawrence street. | 1891 | . 821 | . 109 | . 087 | . 164 | . 199 | . 372 | . 165 | . 913 |  | . 076 |
| Avon street. | Washington street to Chauney street | 1901 | *. 028 | . 023 | . 146 | . 045 | . 139 | . 064 | . 588 | . 374 | . 040 | . 957 |
| Barton court | Barton street to Brighton street. | 1904 |  |  |  | * |  |  |  |  | . 565 | . 023 |
| Batterymarch stre | Milk street to Liberty square. | 1896 | . 196 | . 319 | . 043 | . 067 | . 167 | . 119 | . 132 | . 050 |  |  |
| Beacon street | Charles street to Arlington street. | 1901 |  |  |  |  |  |  |  | . 439 | . 266 | . 246 |
| Beacon street | Charl | 18 | . 192 |  | . 053 |  |  |  |  |  |  |  |


Cost of Sheet Asphalt Repairs, 1911-20.-Continued.

| Streyt. | Limits. | Year Laid. | 1911. | 1912. | 1913. | 1914. | 1915. | 1916. | 1917. | 1918. | 1919. | 1920. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cohumbus avenue | 13. \& A. R. R. Bridge to northerly side Camden street. | 1907 |  |  |  |  |  |  | \$*0.295 | \$0.258 | \$0.149 | \$0.326 |
| Columbus avenue | Northerly side Camden street to 67 feet north of Station street. | 1907 |  |  |  |  |  |  | *. 100 | . 143 | . 198 | . 168 |
| Congress sputare | Congress street aeross Congress siquare, | 1900 | 80.116 |  | 80.051 | \$0.013 | 80.711 |  |  |  |  |  |
| Cooper street | North Margin street to Endicott street, | 1 Ss 7 | . 361 | \$0.426 | . 4.57 | . 329 | 1.232 | 80.592 | . 511 | .197 | . 086 | . 231 |
| Cooper street. | Washington street Nortll to east side of Endicott street. | 1908 |  |  |  |  |  |  |  | *. 004 | . 071 | . 175 |
| Corey street | 121 feet north of Moulton strect to Moulton street. | 1897 | . 247 |  | . 194 | . 121 | .220 |  |  | 1,158 |  |  |
| Corning street | Washington street to Shawmut avenue, | 1908 |  |  |  |  |  |  |  | * | . 014 |  |
| Court square | East-South-West | $\left\{\begin{array}{c} 1901-13 \\ 1914 \end{array}\right\}$ |  |  |  | * |  |  |  |  | *. 039 | 1.025 |
| Court street. | Washington street to Court square | 1904 |  |  | . 027 | *. 233 | . 299 | . 290 | . 278 | . 449 | . 247 | $\dagger$ |
| D street | West Fifth street to Gold street | 1889 | .284 | .204 | 211 | . 240 | . 770 | . 203 |  | 028 | . 005 |  |
| Dartmouth street | Huntington avenue to Boylston street. | 1901 | *. 039 | . 008 |  | . 011 |  | . 276 |  | . 047 |  | . 008 |
| Davis street. | Washington street to Harrison avenue, | 1892 | . 184 | . 680 | . 106 | . 130 | . 211 | . 208 | . 225 | . 14.5 | 239 | 126 |
| Dearbornstreet. | Albany street to 56 feet south of Albany street. | 1918 |  |  |  |  |  |  |  |  | . 053 |  |
| Devonshire street. | Milk street to Water street. | 1909 | . 056 | . 099 | . 459 | . 431 | 1.437 | . 291 | . 486 | 1.619 | . 616 |  |
| Devonshire street.. | Milk street to Franklin street | 1905 |  |  |  |  | *. 426 | . 420 | . 507 | . 934 | . 101 |  |
| Dillon street. . | Lenox street to Sawyer street. . . . . . . . | 1902 |  | * | . 010 |  | . 068 |  |  |  | . 083 |  |


Cost of Sheet Asphalt Repairs, 1911-20.—Continued.

| Streets. | Limits. | $\begin{aligned} & \text { Year } \\ & \text { Laid. } \end{aligned}$ | 1911. | 1912. | 1013. | 1914. | 1915. | 1916. | 1917. | 1918. | 1919. | 1920. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Hollis street. | Tremont street to Washington street. . | 1891 | 30.295 | \$0.072 | 80.080 | \$0.055 |  | 80.144 | 80.335 | $\dagger$ | 80.009 | 80.031 |
| Hulson street | Beaeh street to Curve street | 1891 | . 358 | 224 | . 188 | 305 | 80.218 | . 142 |  | 80.017 | . 019 | . 043 |
| Huntington avenue | Boylston street, across Dartmouth street. | 1901 | *. 037 | . 033 | . 007 | . 012 | . 027 | . 054 |  | . 129 | . 101 | . 030 |
| Huntington avenue | Bridge over Boston \& Albany Railroad to 70 feet south of bridge. | 1909 |  |  |  | * | . 050 |  |  | . 369 |  |  |
| Huntington avenue, west side. | 685 feet north of West Newton strect to 38 feet north of West Newton street. | 1907 |  |  |  |  |  |  | * | . 487 | . 200 | . 022 |
| I street. | East Broadway to East Fourth street. . | 1910 |  |  | . 001 | . 003 |  |  |  |  |  |  |
| Joiner street. | Park street to Chelsea street | 1906 |  |  |  |  |  | *. 310 | . 661 | . 500 |  | 229 |
| $K$ street. | East Fourth street to East Sixth street | 1906 |  |  |  |  |  | * |  |  | . 188 | . 096 |
| Kentstreet. | Roxbury street to Vernon street | 1911 |  |  |  |  |  | * |  | . 152 |  |  |
| Kilby street., | Milk street to Central street, including Liberty square. | 1898 | . 045 | . 028 | . 012 | . 019 | . 558 | . 057 | . 134 | . 446 | $\dagger$ |  |
| Kilby street. | Central street to State street | 1904 |  |  |  | *. 293 | $\dagger$ |  | . 094 | . 368 | $\dagger$ |  |
| Kingston strect. | Beach street to Essex street. | 1910 |  |  |  |  | *. 316 | . 341 | . 400 | . 291 | . 050 | .244 |
| Kirkland street. | Pleasant street toward Corning stweet. | 1909 |  |  |  | * |  |  |  |  | 018 |  |
| Laconia street. | Washington street to Harrison avenue.. | 1917 | . 013 | . 117 | . 048 | . 075 | . 059 | . 065 | $\dagger$ |  | . 021 | . 048 |
| La Grange street | Tremont street to Washington street. | 1897 | . 216 | . 147 | . 333 | . 056 | . 502 | . 081 | . 613 |  | . 218 | . 039 |
| Lincoln place. | Worcester street to West Springfield street. | 1897 | . 242 |  |  |  |  |  |  | . 957 |  |  |
| Lovering street. | Washington street to Harrison avneue, | 1913 |  |  |  |  |  |  |  |  | 153 |  |


Cost of Sheet Asphalt Repairs, 1911-20.—Continued.

| Streetr. | Limits. | $\begin{aligned} & \text { Year } \\ & \text { Laid. } \end{aligned}$ | 1911. | 1912. | 1913. | 1914. | 1915. | 1916. | 1917. | 1918. | 1919. | 1920. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Parkman street | North Anderson street, across Blossom street. | 1898 | s0.032 | 80.013 | s0.058 | 80.069 | \$0.623 |  | \$0.087 | \$0.039 | \$0.829 | \$0.256 |
| Parmenter street | Hanover street to Salem street | 1902 |  | *. 006 | . 213 | . 154 | . 531 | \$0.261 | . 346 | . 230 | . 173 | . 121 |
| Parnell street. | Leuox street to Sawyer street | 1902 |  | * |  |  | . 008 |  |  |  | . 003 |  |
| Pelham street | Washington street to Shawmut avenue. | 1897-1917 | . 028 | . 193 | . 105 | . 290 | . 145 |  | $\dagger$ |  |  | . 024 |
| Pinckney street | Charles street, aeross Brimmer street | 1895 | . 172 | . 036 | . 056 | . 096 | . 175 | . 040 | . 123 | . 180 | . 127 | . 175 |
| Pine street | Washington street to Harrison avenue.. | 1896 | . 052 | . 142 | . 031 |  | . 077 | . 262 | . 057 |  | . 478 | . 016 |
| River street. | Beaeon street to Mit. Vernon street | 1912 |  |  |  |  |  |  | * | . 075 |  | . 033 |
| Rochester street. | Harrison avenue to Albany street | 1914 |  |  |  |  |  |  |  |  | *. 004 | . 030 |
| Rogers street | Dorehester street to Preble street | 1891 |  |  |  | . 068 |  |  |  |  |  |  |
| Roxbury strect. | Guild row to Washington street | 1904 |  |  |  | *. 024 | . 117 |  | . 144 |  | . 438 |  |
| Ruggles street. | Shawmut avenue to Cabot street | 1907 |  |  |  |  |  |  | * | . 483 | . 164 | . 064 |
| Salutation street | Hanover street to Commereial street | 1905 |  |  |  |  | * |  |  |  | . 345 |  |
| Shawmut avenue. | 132 feet south of Castle street, across Cherry street. | 1915 |  |  |  |  |  | . 002 | ${ }^{0} 07$ | . 022 | . 067 | . 046 |
| South Margin street | Staniford street, aeross Norman street, | 1905 |  |  |  |  | *. 374 |  | . 417 |  |  | . 242 |
| Stoddard street. | Howard street to Court stre | 1892 | . 127 | . 023 | . 076 | . 066 |  | . 543 |  |  |  | . 388 |
| Temple place. | Washington street to Tremont street. | 1900 | . 154 | . 086 | . 183 | . 268 | . 504 | . 025 | . 341 | . 313 | . 131 | . 036 |
| Thacher street. | Washington street North to Endicott street. | 1892 | . 267 | $\ddagger .127$ | . 453 | . 093 | . 469 | . 214 | $\dagger$ |  | . 081 | . 052 |
| Tileston street | Hanover street across Unity street. | 1905 |  |  |  |  |  |  | . 103 | . 108 | . 232 |  |




| Streets. | Limits. | $\begin{aligned} & \text { Year } \\ & \text { Laid. } \end{aligned}$ | 1911. | 1912. | 1913. | 1914. | 1915. | 1916. | 1917. | 1918. | 1919. | 1920. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Allen street. | Charles street to Blossom street. | 1917 |  |  |  |  |  |  |  |  |  | 30.025 |
| Batterymareh street | Milk street to 93 feet west of Broad street. | 1909 |  |  |  | * | \$0.005 | \$0.131 | \$0.089 | 80.047 | 30.030 | . 045 |
| Blue Hill avenue. | Dewey street to north side of Savin street. | $\left\{\begin{array}{l} 1906 \\ 1908 \end{array}\right\}$ |  |  |  |  |  | * | $\ddagger$ |  | $\ddagger$ |  |
| Brighton street, | Leverett street to Allen street. | 1892 | 80.315 | 80.327 | \$0.271 | 80.123 | . 341 | . 214 | . 298 | . 010 | . 378 | . 390 |
| Chambers street. | Charles street to Brighton street | 1895 | . 115 | . 116 | . 154 | $\therefore 131$ | . 361 | . 006 | . 083 |  | . 160 | . 286 |
| Charter street. | Hanover street across Unity street..... | 1894 | . 273 | . 388 | . 255 | . 145 | . 628 | . 222 | . 079 | . 087 | .456 | . 252 |
| Clark street. | Hanover street to North street | 1892 | . 248 | . 223 | . 207 | . 219 | . 352 | . 391 | . 229 | . 466 | . 422 | . 079 |
| Groton street. | Washington street to Shawmut avenue.. | 1892 | . 041 | . 079 | . 031 | . 061 | . 144 | . 194 | . 360 | . 191 | . 088 |  |
| Moon street. | North square to Lewis street | 1891 | . 189 | . 248 | . 073 | . 071 |  | . 132 |  | 1.131 |  |  |
| Oxford street. | Beach street to Essex street | 1895 | . 227 | . 247 | . 182 | . 088 | . 248 | . 013 | $\dagger$ |  | . 008 |  |
| Parker street. | Caldwell street to Ward street | 1917 |  |  |  |  |  |  |  |  | .131 |  |
| Poplar street. | Chambers street to Charles street. . . . . . | $\left\{\begin{array}{l}1887 \\ 1892\end{array}\right\}$ | . 144 | . 172 | . 102 | . 109 | . 382 | . 157 | . 236 | . 014 | . 400 | . 344 |
| Rose street. | Harrison avenue to Albany street. . . . . . | 1917 |  |  |  |  |  |  |  |  | . 040 | . 737 |
| Smith street. | St. Alphonsus street to Phillips street. . . | 1904 |  |  |  | *. 040 |  |  | $\dagger$ |  |  | . 012 |
| Spring street. . | Poplar street to Leverett street. . . . . . . . | 1895 | . 333 | . 160 | . 183 | . 128 | . 454 | . 422 | . 093 | . 066 | . 582 | .677 |
| Sun Courtstreet. | North square to Moon street | $\left\{\begin{array}{l}1891 \\ \{1892\end{array}\right\}$ | . 24.5 | . 190 | . 119 | . 043 |  | . 139 |  | 1.150 | . 071 |  |
| Stillman street. | Endicott street across Norman street. . . | 1895 | . 035 | . 041 | . 286 | . 157 | . 061 | . 159 | . 033 | 1.648 | . 179 |  |
| Tyler street. | Beach street to Harvard street and Oak street to Curvestreet. | 1917 |  |  |  |  |  |  | $\dagger$ | . 026 | . 034 | . 019 |

With $1 \frac{1}{2}$-Inch Wearing Surface and $1 \frac{1}{2}$-Inch Binder on a $G$
Rock Asphalt.
With 2-Inch Wearing Surface on a Cement Concrete Base.

| Street. | Limits. | $\begin{aligned} & \text { Year } \\ & \text { Laid. } \end{aligned}$ | 1911. | 1912. | 1913. | 1914. | 1915. | 1916. | 1917. | 1918. | 1919. | 1920. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acton street | Washington street to Bradford street. . | 1896 | 80.021 | 80.241 | \$0.037 | 80.037 | \$0.036 |  |  |  | 80.170 |  |
| Areh street. | Summer street to Franklin street. | 1901 | *. 011 | . 025 | . 005 | . 207 | $\dagger$ |  |  |  |  |  |
| Athens street | West Second street to $A$ street. | 1895 |  | . 102 |  | . 031 | . 056 |  |  |  | . 061 |  |
| Athens street. | B street to C street | 1892 |  | . 059 |  |  | . 121 |  |  |  | . 034 |  |
| Athens street. | C street to D street. | 1901 | * | . 172 |  |  | . 226 |  |  |  | . 033 |  |
| Avery street. | Mason street to Washington street | 1897 | . 261 | . 144 |  | $\dagger$ |  |  |  |  |  |  |
| Barton street. | Leverett street to Milton street | 1895 | . 134 | . 054 | . 084 | . 011 | . 661 |  | 30.099 |  | 475 | 80.138 |
| Beacon street. | Arlington street to Dartmouth street | 1901 | *. 161 | . 039 | . 072 | . 072 | . 058 | \$0.041 | .059 | 30.092 | 22 | .0st |
| Bowen street. | C street to E street. | 1901 | * | . 125 | . 002 | . 021 | . 115 | . 036 |  |  | . 048 |  |
| Bradford street | Waltham street to Shawmut avenue | 1897 | . 005 | 034 | . 011 | . 031 | . 033 | . 140 |  |  | . 017 |  |
| Cobb street. | Washington street to Shawmut avenue | 1597 |  | 032 |  | . 024 |  |  |  | . 017 | . 031 |  |
| Decatur street. | Washington street to Harrison avenue. | 1892 | . 404 | 283 | 187 | . 127 | . 064 | . 449 | . 519 | 184 | 223 | . 127 |
| Dudley street, east side. | East side Dunmore street to Magazine street. | 1902 |  | * | . 091 | . 114 |  | 138 |  |  | 488 |  |
| Dwight street. | Shawmut avenue to Tremontstreet. | 1893 | . 012 | . 050 | . 280 | . 043 | 001 | . 066 | . 008 |  | .083 |  |
| Essex place. | Tufts street to Essex street | 1901 | *. 135 | . 057 | . 038 | . 141 | . 020 | . 367 | ${ }_{0} 086$ | . 297 |  | . 007 |
| Exeter place. | Chauncy street to Harrison avenue | 1897 | . 043 | . 045 | . 025 |  | 031 | . 052 |  | . 364 |  |  |

Rock Asphalt.- Continued.

| Strpet. | Limits. | Year Laid. | 1911. | 1912. | 1913. | 1914. | 1915. | 1916. | 1917. | 1918. | 1919. | 1920. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fabin street. | Newland street to I vanhoe street | 1895 |  |  | \$0.058 | \$0.101 |  | \$0.013 |  |  |  |  |
| Fay street. | Dover street to Harrison avenu | 1894 | \$0.058 | \$0.375 | . 016 | . 032 |  | . 095 | \$0. 430 |  | S0.02\% |  |
| Genesee street | Harrison avenue to Albany street | 1899 |  |  |  |  |  | . 018 | . 4.12 | 80.295 | .228 | \$0.424 |
| Gold street. | B street to D street | 1901 | *.034 | . 111 |  | . 012 | 80.048 |  |  |  | . 059 |  |
| Hanover street, East side, | Tileston street aeross Charter stree | 1896 | . 771 | . 310 | . 486 | . 187 | . 379 | . 451 | . 490 | . 622 | . 329 |  |
| Harrison avenue | Northampton street to Lenox street | 1908 |  |  | *. 043 | . 054 | . 305 |  | . 104 | . 085 | . 035 | 054 |
| Huntington avenue. | B. \& A. R. R. bridge to Massaehusetts avenue. | 1896 | . 016 | . 037 | . 059 | . 013 | . 061 | . 051 | . 072 | . 139 | . 141 | . 116 |
| Huntington avenue. | Massachusetts avenue to Gainsborough street. | 1896 | . 053 |  | . 012 | . 033 | . 020 | . 117 | . 093 |  | . 129 | . 019 |
| India street. | Milk street to India squar | 1901 | * | . 536 | . 215 | . 224 | . 365 | . 268 | $\dagger$ |  | . 019 | . 022 |
| K street | East Eighth street to East Sixth street, | 1896 | . 050 |  | . 413 | . 019 | . 130 | . 221 |  |  | . 639 | . 383 |
| Lawrenee street. | Lawrence avenue to Miller street | 1901 | * |  | . 036 | . 031 |  | . 014 |  | . 039 |  | .263 |
| Marlborough street | Arlington street to Clarendon street | 1901 | *. 025 | . 006 | . 027 | . 016 | . 005 | . 002 | . 009 | . 004 | . 015 | . 015 |
| Massachusetts avenue. | Albany street to Harrison avenue | 1894 | . 164 | . 056 | . 154 | . 106 | . 429 | . 157 | . 185 | . 317 | . 127 | . 118 |
| Massachusetts avenue. | Harrison avenue to Washington street, | 1894 | . 062 | . 058 | . 071 | . 138 | . 066 | . 268 | .124 | . 250 | . 284 | 1.254 |
| Massachusetts avenue.... | Huntington avenue to Boylston street, | 1901 | *. 154 | . 164 | . 214 | . 172 | . 299 | . 328 | . 280 | . 773 | . 069 | . 200 |
| Massaehusetts avenue.... | Newbury street to Beaeon street. | 1901 | *. 341 | . 617 | . 395 | . 237 | . 310 | . 029 | . 155 | . 667 | . 100 | . 454 |
| Mayo street. . . . . . . | Castle street to Cobb street | 1897 |  | . 017 |  | . 035 |  |  |  | . 015 | . 094 | . 035 |
| Meander street | East Dedham street to Malden street, | 1896 |  | . 010 | . 049 |  |  |  |  |  |  | . 801 |


| Meridian street | Trenton street to Eutaw street | 1900 | .243 |  | . 16 |  |  | . 652 |  |  |  | 1.080 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Miller street. | Main street to Lawrence street. | 1901 | * |  | . 231 | 027 |  | . 032 |  | . 170 |  | . 861 |
| Milton street | spring street to Brighton stree | 1899 | . 052 |  | $00^{8}$ |  | 099 |  | .053 |  | .054 |  |
| Motte street. | Wastington street to Harrison avenue, | 1892-99 | 150 |  | 059 | . 138 |  | . 175 |  | . 012 | 403 |  |
| Mystic strect. | Malden street to East Brookline street. | 1895 | . 017 | .00; | ${ }_{0} 93$ | 072 | 011 |  |  |  |  | 1.030 |
| Newlind street | West Brookline street to West Newton street. | 1902 |  | * |  | . 061 | . 014 |  |  |  |  |  |
| North Margin stree | Thacher street toward Endieott street, | 1897 |  | .085 | 021 | .053 |  | . 034 | 133 |  | . 172 | 153 |
| Norwick street | Mystic street to Meander street. | 1896 |  |  | 043 | . 024 |  | . 008 |  |  |  | . 464 |
| Ohio street. | Washington street to Shawmut avenue, | 1896 | . 009 | . 254 |  | 119 |  |  |  |  | . 260 |  |
| Oswego street | Harrison avenue to Albany street.. |  |  |  |  |  |  |  |  |  |  |  |
| Otter stre | Beacon street to Riverway | 1901 |  | . 016 | ${ }^{003}$ | . 015 |  | . 003 |  |  |  |  |
| Paul street | Emerald street to Tremont street. | 1597-99 | ${ }^{237}$ | . 051 | ${ }_{0} 43$ | . 082 |  | . 219 | 47 | . 021 | 021 | 111 |
| m street | Washington street to shawmut avenue, | 1897 | . 028 | 193 | 105 | . 290 | 145 |  | $\dagger$ |  |  |  |
| Pemberton squar | at Court House | 1894 | 029 |  |  | . 003 |  |  | . 002 | . 032 |  |  |
| Prince street. | Hanover street to Salem street | 995 | S12 | . 225 | . 409 | . 189 | . 314 | 298 | 23 | . 307 | 247 | .059 |
| Ryan street | Mystic street to Harrison avenu | 1896 | . 011 |  | .0s9 | . 039 |  | . 088 |  |  |  | . 59 |
| Salem street. | Endieott street aeross Prince street | 1901-13 | * | . 181 | . 015 | 145 | . 304 | . 408 | . 124 | .241 | 176 | 115 |
| Shawnut avenue | ${ }^{132}$ feet south of Castle street across | 1898 | . 325 | . 504 | . 114 | 214 | $\dagger$ |  |  |  |  |  |
| Silver str | B street to D street | 1901 | * | 193 |  | . 047 | . 033 | . 008 |  |  | 190 |  |
| Taylor street. | Dwight street to Mrilford street. | 1596 | . 012 | . 046 | . 024 | 069 |  | . 061 |  |  | . 031 | .025 |
| Tudor stree | C st | 1901 | * | . 193 |  | . 08 |  |  |  |  | .059 |  |

Rock Asphalt.- Concluded.

| Streeta. | Limits. | Year Laid. | 1911. | 1912. | 1913. | 1914. | 1915. | 1916. | 1917. | 1918. | 1919. | 1920. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Tufts street. | Kingston street to South street. | 1901 | *80.064 | \$0.033 | 80.029 | 30.018 | 80.117 | \$0.127 | 80.353 | 80. 104 | \$0.039 | \$0.021 |
| Tyler street. | Oak street to Harvard street | 1901 | *. 113 | . 180 | . 099 | .102 | . 178 | . 279 | . 207 | 422 | .024 | 482 |
| Warren street. | Winthrop street across Soley strect. . | 1901 | * | . 293 | . 513 | . 517 | 663 | . 626 | $\dagger$ |  |  |  |
| Waterford street | Washington street to Shawmut avenur | 1897 | . 18.4 | 168 |  | . 190 |  |  |  | . 614 | .245 |  |
| West Broadway | 196 feet east of Dorehenter avenue to A street. | 1892 | . 366 | . 105 | . 271 | . 307 | . 559 | 49.5 | . 656 | . 119 | $\dagger$ |  |
| West Broadway | 150 feet west of F street to 267 feet east of F strect. | 1897 | . 117 | . 099 | . 059 | . 121 | . 145 |  |  |  | . 408 | .173 |
| West Broadway . | 267 feet west of F strect to 28 feet west of Dorchester street. | 1898 | . 081 | . 022 | . 082 | . 132 | . 021 | . 319 | . 117 |  | . 283 |  |
| Whitmore street. | Kneeland street to Harvard strect..... | 1895 |  | . 055 | . 035 |  |  | . 038 |  |  | . 300 |  |

Summary of Table Showing the Cost of Asphalt Repairs, 1911-20.

| Year. | Contract Awarded to | Contract Priems. |  |  | Areas and Costrs. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\left\lvert\, \begin{gathered} \text { Concrete } \\ \text { Base per } \\ \text { Squate Yard Yat } \end{gathered}\right.$ | $\begin{gathered} \text { Extra } \\ \text { Binder } \\ \text { Cibic } \\ \text { ubic Yard } \end{gathered}$ |  | $\begin{gathered} \text { Cost of } \\ \begin{array}{c} \text { Maintenance } \\ \text { for Current } \\ \text { Year. } \end{array} \\ \hline \end{gathered}$ | Cinit iteat <br> l:epai red. | $\begin{gathered} \text { Rint Cost Cost } \\ \text { per sumare } \\ \text { Yird. } \end{gathered}$ |
| 1911 | Warren Brothers Company * | ${ }^{81} 34$ | 8100 | \$9 00 | 218,007 | 827,504 52 | 0930 | 8125 |
| 1912 | Warren Brothers Company | $12+$ | 110 | 1100 | 223,848 | 26,397 97 | 0933 | 118 |
| 1913 | Warren Brothers Company * | 137 | 1 | 1100 | 226,837 | 22,839 01 | 0729 | 101 |
| 1914 | Central Construction Company | 119 | 100 | 1100 | 237,204 | 23,354 52 | O<2 | 09 |
| 1915 | Ceutral Construction Company *, | 1 | 100 | 1100 | 238,545 | 40,633 s2 | 1500 | 170 |
| 1916 | Central Construction Company* | 116 | 250 | 400 | 280,268 | 25,941 | .0796 | 93 |
| 1917 | Centrill Construction Conpany*. |  |  |  |  | ( $29,4 \times 3 \times 29$ ) |  |  |
| 1917. | Warren Brothers Company $\dagger$ | 137 | 250 | 1200 | 299,82, | ( 83344 4, | .0729 | 102 |
| 1918 | The Bermudez Company * | 138 | 350 | 1200 | 312,523 | 50,198 5 s | .10so | 161 |
| 1919 | Central Construction Company*. | 183 | 200 | 800 | 312,816 | 40,14781 | .0700 | 129 |
| 1920 | The Bermudez Company * | 220 | 50 | 1400 | 340,713 | 39,273 77 | . $0 \pm 59$ | 115 |

Two=inch Bituminous Concrete Wearing Surface on a Cement Concrete Base.

| Streets. | Limits. | Year Laid. | 1911. | 1912. | 1913. | 1914. | 1915. | 1916. | 1917. | 1918. | 1919. | 1920. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Albany street | 44 feet south of Hamplen street to Eustis street. | 1907 |  |  |  |  |  |  | * | 81.372 | $\ldots$ | \$0.252 |
| Avery street, | Tremont street to Washington street. | 1914 |  |  |  |  |  |  |  |  | * | . 076 |
| Blagden street | Huntington avenue to Exeter street. | 1912 |  |  |  |  |  |  | * | 219 | 80.189 | . 137 |
| Boylston street. | East side of Exeter street to Hereford street. | 1913-14 |  |  |  |  |  |  |  | * | * | 267 |
| Browning avenue | Bernard street to Wales street | 1914 |  |  |  |  |  |  |  |  | * | . 052 |
| Centre street. | Green street to 14 feet west of Eliot street. | 1913 |  |  |  |  |  |  |  | * |  | . 033 |
| Claybourne street | 187 feet south of Dakota street to Park street. | 1915 |  |  |  |  |  |  |  |  |  | *. 006 |
| Columbus scuare. | Columbus avenue to Pembroke street. | 1912 |  |  |  |  |  |  | * |  | . 185 |  |
| Dartmouth street. | Stuart street across Huntington avenue | 1912 |  |  |  |  |  |  | * | . 009 | . 003 | . 130 |
| Exeter street. | Huntington avenue to Boylston street. . | 1914 |  |  |  |  |  |  |  |  | * | . 037 |
| Harsard avenue. | Cambridge street to Commonwealth avenue. | 1914 |  |  |  |  |  |  |  |  | * | . 010 |
| Marlborough street. | Massachusetts avenue to Chariesgate East. | 1914 |  |  |  |  |  |  |  |  | * | . 003 |
| Massachusetts avenue. | Tremont street to Columbus avenue, north roadway. | 1907 |  |  |  |  |  |  | * |  |  | . 004 |
| Norfolk street. | Talbot avenue to bridge over the Midland Division N. Y., N. H., \& H. R. R. | 1914 |  |  |  |  |  |  |  |  | * | . 036 |
| St. James avenue. . | Clarendon street to Huntington avenue | 1914 |  |  |  |  |  |  |  |  | *. 051 | . 228 |


$\ddagger$ Part repaved.
Twozinch Bituminous Concrete Wearing Surface on a Crushed Stone, Macadam or Granite Block Base.

| Streeta. | Limits. | Year <br> Laid. | 1911. | 1912. | 1913. | 1914. | 1915. | 1916. | 1917. | 1918. | 1919. | 1920. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Allen street | Blossom street to Chambers street. | 1905 |  |  |  |  | * |  | \$0.017 |  | 80.253 | 80.0\%0 |
| Ashburton place | Bowloin street to Somerset street. | 1904-11 |  |  |  | * |  |  | 023 |  |  |  |
| Belviderestreet | West Newton street to Massachusetts avenue. | 1903 |  |  | *80.078 | 80.034 | 80.768 |  | . 004 |  | 011 | . 061 |
| Berkeley street | Tremont strect to Columbus avenue. . | 1906 |  |  |  |  |  | * |  | 80.365 | .325 | . 173 |
| Berkeley strect | Boylston strect to Beacon street | 1903 |  |  | *. 005 | . 001 | .005 |  | . 025 |  |  | 22 |
| Blue 1illavenue | Brunswiek street to north side of Devon street. | 1906 |  |  |  |  |  | * |  |  | 1.268 |  |
| 13 owdoin street | Asliburton place to Cambridge street.. | 1902 |  | * | . 164 | . 075 | . 219 |  | . 016 |  |  | . 090 |
| Bowen street | E street to F street | 1903 |  |  | * |  |  |  |  |  | . 023 |  |
| Boylston street. | Massachusetts avenue across Hemenway street. | 1905 |  |  |  |  | * |  | 6.54 | . 370 | 299 | . 429 |
| Clarendon street | Boylston street to Beacon stree | 1905 |  |  |  |  | *.011 |  | .003 |  |  | 192 |
| 1)artmouth street | Newhury strect to Beacon street | 1903 |  |  | * | . 001 | 649 |  |  |  |  | . 016 |
| Dearborn street | Albany street to 56 southerly | 1918 |  |  |  |  |  |  |  |  | 0.15 |  |
| Emerald street | Castle street to Dover street | 1904 |  |  |  | *. 004 | .005 |  |  | . 175 |  | .01.5 |
| Gainsberough street | Huntington avenue to Providence Division N. Y. N. H. \& H. R. R. | 1903 |  |  | * | . 032 |  |  |  | 1.067 |  |  |
| (iarden Court street | North Square to Fleet strect. . . . . . . . . | 1906 |  |  |  |  |  | * | . 090 |  | . 611 |  |
| Hancoek street. | Mt. Vernon street to Cambridge street. . | 1902 |  | * | . 009 | . 027 | . 167 |  | . 001 |  |  | . 012 |
| Harrison avenue. | East Springfield street to Northampton street. | 1905 |  |  |  |  | * | \$0.279 | . 779 | . 253 | . 420 | . 215 |


Summary of Table Showing Cost of Bituminous Concrete Repairs, 1913-20.

| Iteme. | Contract Awarded to | Contract Prices. |  |  |  |  | Areas and Cost. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Situminous <br> Concrete <br> Full Depth Patches per siguare liard. | Bituminous Concrete surface ratches per square Y: ird. | $\begin{gathered} \text { Concrete } \\ \text { Base per } \\ \text { Square liard. } \end{gathered}$ | Extria Binder ner Cubic Yard. | Flush Coat per siquare yard. | Total Area Not Under Guaranty Maintained by the City. Square Yards. | Cost of Maintenance for Current Year. | Unit Area Repaired. | Unit Cost per Square Yard. |
| 1913 | Warren Brothers Co.* | \$1 37 | 180 80 | \$1 15 | 81100 |  | 40,888 | 81,625 60 | . 0309 | \$0.040 |
| 1914. | Central Construetion Co. | 109 | 52 | 100 | 1100 | $\dagger$ ¢ 0.07 | 62,315 | 1,417 89 | . 0531 | . 023 |
| 1915. | Central Construction Co. | 106 | 50 | 100 | 1100 | $\dagger .07$ | 83,473 | 10,396 54 | . 1685 | . 125 |
| 1916. | Central Construetion Co | 111 | 50 | 250 | 400 |  | 98,298 | 1,666 65 | . 0129 | . 018 |
| 1917. | Central Construetion Co | 137 | 77 | 250 | 1200 |  | 103,973 | \{ 1,33599 ) | . 0304 | . 036 |
| 1917. | Warren Brothers Co. |  |  | 2 5 |  |  | 100,973 | ( 2,38204 ) |  |  |
| 1918 | The Bermudes Co.* | 138 | 60 | 350 | 1200 |  | 122,814 | 16,244 76 | . 1007 | . 132 |
| 1919. | C'entral Construction Co. | 183 | 120 | 200 | \& 00 |  | 190,150 | $\left\{\begin{array}{l}13,767 \\ 77\end{array}\right\}$ | . 0469 | . 079 |
| 1919. | Warren Brothers Co.t. | 185 |  |  |  |  |  | ( 1,22047 ) |  |  |
| 1920. | The Bermudez $\mathrm{Co}^{*} \ldots .$. | 220 | 162 | 350 | 1400 | $\dagger .20$ | 227,457 | 14,33427 | . 0288 | . 063 |

## APPENDIX D.

## REPORT OF THE DIVISION ENGINEER OF THE SEIVER AND SANITARY DIVISION.

$$
\text { Boston, February 1, } 1921 .
$$

To the Commissioner of Public Works:
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, 1921.

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

| Sewer Service | \$616,461 55 |
| :---: | :---: |
| Sanitary Service | 1,508,102 71 |
| Street Cleaning and Oiling Service | 983,597 25 |
|  | \$3,108,161 51 |

Sewer Service.
During the year 1920-21 there were built throughout the city 8.06 miles of sanitary sewers and surface drains.

In city proper the work consisted principally of rebuilding old broken down sewers unfit for further use, such as North Anderson street, Bridge court, Oswego street and Unity court.

In Roxbury, a start was made on the rebuilding of the old wooden drain known as Muddy river conduit in Brookline avenue. This old wooden conduit had been reported upon many times as being structurally unsafe and in fact collapsed for a length of about 100 feet, thereby hastening the work of rebuilding.

In the West Roxbury district, a section of main Stony brook channel was started and sewerage works in anticipation of permanent parements were built in

Hinsdale road, Centre street, Castleton street, Zamora street and Washington street.

In Brighton, the building of a sanitary sewer in private land off Lake street to provide drainage for a large territory in Newton, which formerly drained on the surface of the ground, will abate a long standing nuisance.

In the Charlestown district, a sanitary sewer was built in Chelsea street, between Foss and Wapping streets.

In East Boston, the extension of the Lubec street outlet to tide water was completed.

In South Boston, Farragut road overflow was extended to deep water.

In the Hyde Park section, sewerage works were built in Bradlee street, Thatcher street, Huntington avenue and in Kennebec street.

In Dorchester, sewers were built in Tenean street, Wilcock street, Havelock street, Itasca street, Wilbur street and Wollaston terrace.

There were 6,824 catch-basins cleaned throughout the city and 27,010 cubic yards of material removed from same.

On October 31, 1920, our No. 5 engine at Calf Pasture station broke down and repairs are now being made under contract with the Simpson's Patent Dry Dock Company. New condensers and pumps have been installed on No. 3 and No. 4 engines.

## Principal Works Recommended for Coming Year.

West Roxbury.- Roslindale branch of Stony brook, from Forest Hills Playground to Lindall street; Grove street, from Washington street to Centre street; Washington street (Germantown outlet), between the Metropolitan sewer in Dedham street and Rockland street; Washington street, from Corinth street to Metropolitan parkway near LaGrange street.

Brighton.- Cleveland circle, from Beacon street to the Brookline line; Salt creek outlet, under Boston \& Albany Railroad tracks, near Ashford street; Western avenue and Everett street, between Telford street and Adams street.

City Proper.-Clinton street, between Commercial street and Atlantic avenue; MIt. Vernon street, from Charles street to Charles River Esplanade; Chatham street, from Commercial street to Merchants row.

Dorchester.- Whitten strcet, easterly, from Dorchester avenue about 1,000 feet; Dorchester brook, in Norfolk avenue to Wendover street; Davenport brook extension, about 500 feet easterly; Auckland street, from Freeport street brook to Savin Hill avenue, to remove flooding on Dorchester avenue.

Calf Pasture Pumping Station.- The question of a new boiler plant and new pumping units should be carefully investigated during the coming year, as the present equipment is fast becoming obsolete.

## Sanitary Service.

Owing to the unprecedented fall of snow during the first two months of the year, the collections of ashes, rubbish and garbage throughout the city were almost entirely suspended for that period, as all available equipment was employed on the removal of snow to allow the moving of food and coal. This situation although unusual in Boston was taken care of as soon as traffic conditions became normal. Ninety-seven new horses were bought to replace old ones and those that had died, and 112 teamsters-laborers were appointed from the civil service list, thereby placing the Sanitary Service in a position to give far better results as to the number of collections in the day labor districts.

In the Dorchester, East Boston, Hyde Park, Brighton and West Roxbury districts, known as the contract districts, a decided improvement was noticed as to collections in these districts, but I am still of the opinion that this contract system should be replaced gradually with day labor forces, as in the majority of cities throughout the United States the collection of waste is performed by the municipality.

## Street Cleaning and Oiling Service.

The question of municipal cleanliness is fast becoming an important factor in the minds of all good citizens and with clean streets comes a certain civic pride and improved health conditions that will amply repay the people for any money expended in this direction.

The work performed by the forces of the Street Cleaning Service during the unusual snow fall period was of great importance in cleaning the streets for business.

The use of a heavy asphaltic road oil during the past year as a dust layer has again proven its great value in preserving the surface of our macadam streets. The flushing and sprinkling of streets with motor and electric car flushers has in a great measure reduced the number of complaints relative to the dust nuisance from our old granite streets.

Yours respectfully,

> E. F. Murphy,

Division Engineer, Sewer and Sanitary Division.

## SEWER SERVICE.

The work of the 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 of 1918.

## The Duties of rhe Sewer Service.

1. Preparation of plans for sewerage works.
2. Construction and maintenance of all drainage works.
3. Investigation of complaints with 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 refrence ro their probable interference with sewerage works.

Total number of employees on pay roll January 31, 1920359
Total number of employees on pay roll January 31, 1921 ..... 333

Total amount of weekly pay roll January 31, 1920
\$9,341 09
Total amount of weekly pay roll January 31, 1921
$\$ 9,58149$
Total amount of monthly pay roll January 31 , 1920
$\$ 64166$
Total amount of monthly pay roll January 31,
1921 $\$ 41600$
Total amount of monthly pension rolls January 31, 1920 :
Veterans . . . . . . . . . $\$ 51088$
Laborers . . . . . . . . . $\$ 70816$
Total amount of monthly pension rolls January 31, 1921:
Veterans ..... $\$ 50180$
Laborers ..... $\$ 57113$
Average weekly pay roll, including monthly roll and exclusive of pension rolls, for fiscal year, charged as follows:
Maintenance ..... *\$6,405 32
Sewerage Works ..... $\$ 3,59006$
Average number of men employed ..... 338
Number of men on pension rolls January 31, 1920 : Veterans ..... 11
Laborers ..... 24
Number of men on pension roll January 31, 1921 : Veterans ..... 11
Laborers ..... 19
Average number of horses maintained by the service during the year ..... 27
Rate of wages paid to common laborers ..... $\$ 3.50$
(From April 2, 1920) ..... $\$ 4.00$
*Includes amount charged to: Paving Service \$2,905 98 $\stackrel{\text { Paning }}{\text { Sary Service }}$ 2,880 25
Water Service 1,045 77 Water Service ..... 1397
8383
Hyde Park avenue, Widening ..... 35102

Public Works Department.
Financial Statement from February 1, 1920, to January 31, 1921.

| Object. | $\begin{gathered} \text { Balances } \\ \text { on Hand, } \\ \text { February, } \\ 1920 . \end{gathered}$ | Appropriations, Loans and Transfers. | Transfers to. | Transfers from | Total Credits. | Expenditure during the Year. | $\begin{gathered} \text { Balances } \\ \text { on Hand, } \\ \text { January } 31 \text {, } \\ 1921 . \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sewer Service |  | \$534,814 74 | \$86,182 88 | \$4,055 55 | \$616,942 07 | \$616,461 55 | \$480 52 |
| Sewerage works. | \$343,661 21 | 800,000 00 |  |  | 1,143,661 21 | 848,04550 | 295,615 71 |
| Separate system of drainage. | 1422 |  |  |  | 1422 | 1422 |  |
| Old Harbor improvement. |  | 100,000 00 |  |  | 100,000 00 | 9,966 17 | 90,033 83 |
| Totals. | \$343,675 43 | \$1,434,814 74 | \$86,182 88 | \$4,055 55 | \$1,860,617 50 | \$1,474,487 44 | \$386,130 06 |

MAINTENANCE EAPENDITURES FEBRUARY 1, 1920, TO
JANUARY 31, 1921.

| Sewer Service. |  |  |
| :---: | :---: | :---: |
| Pumping Station, Calf Pasture, inside | \$190,041 04 |  |
| Pumping Station, Calf Pasture, outside | 25,586 17 |  |
| Pumping Station, Calf Pasture, engines | 43,951 90 |  |
| Pumping Station, Calf Pasture, boilers | 35,872 82 |  |
| Pumping Station, Union Park street | 7,515 82 |  |
| Pumping Station, Summer street | 1,306 53 |  |
| Pumping Station, Hyde Park | 1,108 70 |  |
| Moon Island |  | $\$ 305,38298$ 18,58744 13, |
| Main and intercepting sewers |  | 13,157 56 |
| Stony Brook. $\quad \$ 337,12798$ |  |  |
|  |  |  |
| Maintenance | . . | 4,001 67 |
| Miscellaneous Maintenance Charges. |  |  |
| Cleaning catch-basins |  | 92,365 17 |
| Yards and lockers |  | 72755 |
| Employed at yards |  | 21,486 17 |
| Horses, carts, harnesses, etc. | \$19,127 37 |  |
| Teaming . . | 17,627 95 |  |
|  | \$36,755 32 |  |
| Less amount earned by service teams | 31,999 84 |  |
| Automobiles |  | $\begin{array}{r} 4,75548 \\ 10,69024 \end{array}$ |
| Cleaning sewers | . . . | 30,73849 |
| Office salaries |  | 17,061 08 |
| Office expense |  | 2,783 42 |
| Repairing department buildings | \$572 83 |  |
| Repairing catch-basins, South Boston | 1,803 92 |  |
| Repairing catch-basins, East Boston | 3,191 45 |  |
| Repairing catch-basins, Charlestown | 1,279 06 |  |
| Repairing catch-basins, Brighton | 1,595 38 |  |
| Repairing catch-basins, West Roxbury | 1,782 72 |  |
| Repairing catch-basins, Dorchester | 4,948 67 |  |
| Repairing catch-basins, Hyde Park | 96797 |  |
| Repairing catch-basins, Roxbury | 2,109 68 |  |
| Repairing catch-basins, City Proper | 5,429 59 |  |
| Repairing sewers, Mouth Boston | 1,065 93 |  |
| Repairing sewers, East Boston | 88695 |  |
| Repairing sewers, Charlestown | 58655 |  |
| Repairing sewers, Brighton | 59700 |  |
| Repairing sewers, West Roxbury | 4,844 50 |  |
| Repairing sewers, Dorchester | 2,599 56 |  |
| Repairing sewers, Hyde Park | 56411 |  |
| Repairing sewers, Roxbury | 1,371 08 |  |
| Repairing sewers, City Proper | 2,968 28 |  |
| Pension roll (veterans) |  | 39,465 6,203 80 |
| Pension roll (laborers) | . . . | 6,940 65 |
| Carried forward |  | \$574,346 93 |


Brought foruard ..... \$8,639 91
T. Dennehy ..... 2100
Musolino \& Berger ..... 250
H. W. Doane Company ..... 125
New England Telephone and Telegraph Company ..... 4500
John Scala ..... 220
J. J. O'Hare ..... 1672
M. A. Dierkes ..... 1500
Pearl L. Kelley ..... 654
D. Mazarella ..... 188
Kearns Construction Company ..... 1398
J. P. Perry ..... 250
Perry \& Tibbetts ..... 125
W. F. Freeman ..... 188
M. Pollock ..... 1500
M. Friedman ..... 1500
J. F. Murphy ..... 1632
C. J. Bowen ..... 775
D. B. Chalitzky ..... 775
Morse Brothers ..... 1500
T. F. Bowes ..... 800
Charles Street Garage ..... 1425
Codman Square Garage ..... 1218
Charles L. Billups ..... 975
Thomas Clark ..... 125
James Misochi ..... 775
Amounts Collected by the City Collector for Sewer Service February 1, 1920, to January 31, 1921.
Mary L. Prout ..... \$6 75
J. Donnelly Sons ..... 325
Victory Cafe ..... 1500
Julia A. Flynn ..... 3000
August A. Bronzagne ..... 1500
M. A. Sullivan ..... 1500
T. J. Galvin ..... 675
J. H. Horrigan ..... 1402
Supply Department ..... 5000
P. J. Doyle ..... 1000
Jennie M. Malley ..... 846
J. F. Field ..... 2952
Edison Electric Illuminating Company ..... 47164
Metropolitan Water and Sewerage Board ..... 5,869 36
John F. Lynch ..... 24000
George Glavin ..... 750
M. Scanlon ..... 750
William Barrett \& Co. ..... 4425
Merchants Warehouse Company ..... 3750
George S. Monahan ..... 1138
John Holmes ..... 1000
J. J. Burke ..... 675
J. E. Quinn ..... 3000
Wilson \& Tomlinson ..... 18456
J. Mason Little, Trustee ..... 22007
Alice Colyer ..... 7606
Standard Street Motor Car Company ..... 750
E. Farrar ..... 725
H. Lebowitz ..... 750
Carried forward ..... $\$ 7,442 \quad 57$
Public Works Department. ..... 461
Brought forward ..... $\$ 7,412 \quad 57$
S. Margolis ..... 156
Quincy Market Cold storage Company ..... 61550
C. M. Callahan Compmy ..... 5979
T. Dennehy ..... 2100
Musolino \& Berger ..... 250
H. W. Doane Company ..... 4500
New England Telephone \& Telegraph Company ..... 220
John Scala ..... 1672
M. A. Dierkes ..... 1500
Pearl L. Kelley ..... 654
D. Mazarella ..... 1398
Kearns Construction Company ..... 250
Berry \& Tibbetts ..... 125
W. F. Freeman ..... 188
M. Pollock ..... 1500
M. Friedman ..... 1500
J. F. Murphy ..... 1632
C. J. Bowen ..... 775
D. B. Chalitzky ..... 775
Morse Brothers ..... 1500
T. F. Bowes ..... 800
Charles Street Garage ..... 1425
Codman Square Garage ..... 1218
Charles L. Billups ..... 975
Thomas Clark ..... 125
James Misochi ..... 775
Sewer Service.- Maintenance Expenditures, Detail, 1920-21.

| Accounts. | Total <br> Expenditure. | Labor. | Teaning. | Stoek. | Contracts. | Miscellaneous. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Automotiles (f). | 810,490 24 | 86,798 07 |  |  |  | Repairs <br> Equipment <br> Supplies <br> Fces | $\begin{array}{r} 866366 \\ 1,43812 \\ 1,72839 \\ 6200 \end{array}$ | 7 |
| ('leaning catcll-l)asins. | 92,365 17 | 38,055 91 | 84,840 12 | \$33144 | \$48,732 08 | Transportation, etc..... Advertisıng. | $\begin{array}{r} \$ 37322 \\ 3240 \\ \hline \end{array}$ | 40562 |
| Cleaning sewers | 30,738 49 | 17,259 01 | 7,747 73 | 198 s0 | 5,35148 | Advertising <br> Dumping <br> Coal. | $\begin{array}{r} \$ 130000 \\ 4600 \\ 12247 \end{array}$ |  |
| Engines and boilcrs. | 23379 | 11361 | 2775 |  |  | Waste, etc $\qquad$ Repairs and inspection. | $\begin{array}{r} 82373 \\ 6870 \\ \hline \end{array}$ | 9243 |
| Employed at yards. | 21,486 17 | 21,496 17 |  |  |  |  |  |  |
| Fuel and sil. | 2,914 05 |  | 3625 |  |  | Coal Oil and gasolene | $\begin{array}{r} 81,00392 \\ 1,873 \end{array}$ | 2,877 80 |
| Hardware and tools. | 2,883 59 |  | 3149 |  |  | Hose. <br> Hardware, repairs, etc.. | $\begin{array}{r} \$ 1,19740 \\ 1,65470 \end{array}$ |  |
| House connections | 7,869 62 | 7,251 13 | 28411 | 4728 |  | Transportation, etc..... | \$287 10 | 28710 |



| Horses, carts, harnesses, etc. | 19,127 37 | 8,128 50 | 19850 |  | Fodder. <br> Stable goods and supplies. <br> Veterinary services Repairs, wagons and harnesses. <br> Shoeing <br> Board. | $\begin{array}{r} 87,39108 \\ 60995 \\ 4450 \\ 1,04274 \\ 798835 \\ 91375 \\ \hline \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Maintenance, Stony brook Office expense | $\begin{array}{ll}4,001 & 67 \\ 2,783 & 42\end{array}$ | 3,546 24 24 | 32475 | 13065 | Postage and printing.. <br> stationery and supplies <br> Miscellaneous. | $\begin{array}{r} 840530 \\ 2,08488 \\ 26924 \end{array}$ |
| Oflice salaries. | $17,061 ~ 08$ 763 | 17,061 08 |  |  | $\left\{\begin{array}{l} 76 \text { pairs boots. } \\ 35 \text { coats..... } \\ 13 \text { pairs mitts. } \\ 299 \text { hats....... } \end{array}\right.$ | $\left.\begin{array}{l}\text {..... } \\ . . . . . \\ \cdots . .\end{array}\right\}$ |
| Stock <br> Teaming. <br> Yard and locker | $\begin{array}{r} 8,73969 \\ 17,62795 \\ 72755 \end{array}$ | $\begin{array}{r}271 \\ 17,627 \\ 45 \\ 45 \\ \hline 66\end{array}$ | 41775 4904 | 8,050 56 | (ias and electricity. <br> Miscellaneous. | $\begin{array}{r} \$ 42992 \\ 20293 \end{array}$ |
| Telephones............... | 42823 4,89686 | 3,192 93 | 5075 | 163 S6 | Electricity Repairs, ete. | $\begin{array}{r} 846379 \\ 1,025 \\ \hline 53 \end{array}$ |
| Miscellaneous, sumdries. | 27,348 31 | 24,819 31 | 1,377 25 | 41150 | Repairs, etc Transport:tion | $\begin{array}{r} 848559 \\ 25446 \end{array}$ |
|  | $\begin{array}{rl} 572 & 83 \\ 1,403 & 92 \\ 3,191 & 45 \\ 1,279 & 0 t \\ 1,595 & 3 x \end{array}$ | $\begin{array}{r} 29255 \\ 1,213 \\ 1,920 \\ 130 \\ 635 \\ 7168 \\ 715 \end{array}$ | $\begin{array}{lll}159 & 25 \\ 630 & 65 \\ 6\end{array}$ 15601 26111 | $\begin{array}{ll} 280 & 28 \\ 431 & 62 \\ 640 & 50 \\ 487 & 84 \\ 617 & 42 \end{array}$ |  |  |

Sewer Service.- Maintenance Expenditures, Detail, 1920-21.—Concluded.

| Accounts. | Total <br> Expenditure. | Labor. | 1.Teaming. | Stock. | Contracts. | Miscellaneous. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Repairing catch-basins, West Roxbury ....... | \$1,782 72 | \$712 68 | 825612 | \$81392 |  |  |
| « " " | 4.94867 | 2,178 69 | 68712 16845 | 2,08286 697 |  |  |
| " ${ }^{\text {" }}$ " $\mathrm{Clyde} \mathrm{Park...}$. | 966797 2,10968 | ${ }_{633} 93$ | 16848 | 1,112 37 |  |  |
| " City proper | 5,429 59 | 2,845 02 | 59613 | 1,988 44 |  |  |
| Repairing sewers, South Boston... | 1,065 93 | 48995 | 18875 | 38723 |  |  |
| - " " ${ }^{\text {a }}$ " Chast Boston.. | 88695 | 57020 | 23075 | 86 00 |  |  |
| ." Brighton... | 89700 | 57503 | 11739 | 20458 |  |  |
| " West Roxbury | 4,84450 | 3,153 29 | 57243 | 1,118 78 |  |  |
| " " Dorchester | 2,599 56 | 1,676 59 | 34713 | 57584 |  |  |
| " Hyde Park | 56411 | 26816 | 6493 | 23102 |  |  |
| ${ }^{\text {" }}$ " ${ }^{\text {" }} \quad$ Roxbury................. ${ }^{\text {City proper...... }}$ | 1,371 08 | 67737 | 286825 468 | 407 904 18 |  |  |
| " Annitics.......................... | $\begin{array}{r}2,968 \\ 651 \\ \hline 18\end{array}$ | 1,595 62 |  |  |  | \$651 00 |
| Pension roll, veterans and laborers | 13,144 45 | 13,144 45 |  |  |  |  |
|  | \$325,947 71 | \$199,394 92 | \$21,013 07 | 822,602 45 | \$54,083 56 | 828,853 71 |
|  |  |  |  |  |  |  |
| Fuet and oil.................. Hardware and tools........ 1,713 H3 |  |  |  |  |  |  |
| Engines and boilers........... 68800 |  |  |  |  |  |  |
| Totals. | \$279,333 57 | 8180,183 29 | \$21,013 07 | \$10,432 80 | \$54,083 56 | 813,620 85 |

Sewer Service.- Maintenance Expenditures, Detail, 1920-21.

| Accounts. | $\begin{aligned} & \text { Total } \\ & \text { Expendi- } \\ & \text { tures. } \end{aligned}$ | Labor. | $\begin{aligned} & \text { Con- } \\ & \text { tracts. } \end{aligned}$ | Teaming. | Waste. | $\begin{aligned} & \text { Coal and } \\ & \text { Wood. } \end{aligned}$ | $\begin{gathered} \text { Oil and } \\ \text { Ciasolene. } \end{gathered}$ | Packing. | Vatues. | $\begin{aligned} & \text { Trans- } \\ & \text { porta- } \\ & \text { tion. } \end{aligned}$ | riable. |  | Autos. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Pumping station, Calf Pasture: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Inside. | 8190,041 04 | \$29,391 98 |  |  | 861244 | 8149,669 82 | \$127 20 |  |  |  |  | \$10,239 60 |  |
| Outside. | 25,5.5617 | 19,636 87 | 869581 | \$253 50 |  |  |  |  |  |  | 81.71110 | 1.97783 | \$1.31106 |
| Engines | 13,951 90 | $33,459 \mathrm{~S} 5$ |  |  |  |  | 3,123 16 | 81,069 07 | 830299 |  |  | $5.996 \mathrm{~S}_{3}$ |  |
| Boilers | 35,872 82 | 26,373 07 | 4,330 00 |  |  |  |  |  |  |  |  | 5,16975 |  |
| Moon 1sland. | 18.55744 | 14,936 79 |  |  | 1112 | 5604 | 2100 |  |  | 8.4136 | 63965 | 1,847 62 | 23386 |
| Main and intercepting sewers.. | 13,157 56 | 9,276 19 |  | 2,852 87 |  |  |  |  |  |  |  | 89927 | 12923 |
| Pumping stations: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Union Park street | 7.51582 | 5,383 01 |  | 20600 |  | 3306.3 |  |  |  |  |  | 1,596 1s |  |
| Summer strect. | 1,306 53 | 65561 |  |  |  |  |  |  |  |  |  | 65092 |  |
| Hyde Park | 1,108 70 | 77513 |  |  |  |  |  |  |  | 560 |  | 32797 |  |
| Totals | \$337,127 9* | \$139,588 50 | \$5,025 81 | \$3,312 37 | \$623 56 | \$150,056 49 | \$3,271 36 | \$1,069 07 | \$302 99 | 884696 | \$2.350 7.5 | \$2s,705 97 | \$1,674 15 |

Recapitulation.- Maintenance Detail, 1920-21.

|  | Improved Sewerage. | Outside <br> Improved <br> Sewerage. | Totals. |
| :---: | :---: | :---: | :---: |
| Labor | \$139,88S 50 | \$199,394 92 | \$339,283 42 |
| Contracts. | 5,025 S1 | 54,083 56 | 59,109 37 |
| Teaming, hired and city . | 3,312 37 | 21,013 07 | 24,325 44 |
| Waste. | 62356 | 2373 | 64729 |
| Fuel.. | 150,056 49 | 1,126 39 | 151,182 88 |
| Oil. | 3,271 36 | 1,873 S8 | 5,145 24 |
| Packing. | 1,069 07 |  | 1,069 07 |
| Valves. | 30299 |  | 30299 |
| Transportation, ete. | 84696 | 91478 | 1,761 74 |
| Horses, etc. | 2,350 75 | 10,800 37 | 13,151 12 |
| Towing. |  |  |  |
| Pipe fittings and miscellaneous. | 28,705 97 |  | 28,705 97 |
| Telephone. |  | 42823 | 42823 |
| Automobiles, repairs and supplies. | 1,674 15 | 3,892 17 | 5,566 32 |
| Stock and miscellaneous supplies. |  | 32,396 61 | 32,396 61 |
|  | \$337,127 98 | \$325,947 71 | \$663,075 69 |
| Credits. |  |  |  |
| Outside Improved Seurerage. |  |  |  |
| Miscellaneous................... $\$ 15,23286$ |  |  |  |
| Labor......................... . 19,21163 |  |  |  |
| Stock. . . . . . . . . . . . . . . . . . . . . . 12,169 65 |  | 46,614 14 | 46,614 14 |
|  | \$337,127 98 | \$279,333 57 | \$616,461 55 |

## Supplies, Pumping Station, Calf Pasture.

3,264 pounds waste $12 \frac{1}{2}$ cents to 28 cents. 1,1197 3,938 gallons engine oil, 36 cents to 60 cents. 1,088 gallons cylinder oil, $39 \frac{1}{2}$ cents to 88 cents.

50 gallons sperm oil, $\$ 2$.
20 gallons Lard oil, \$2 to \$2.15.
3,366 pounds grease, 14 cents to 20 cents.
390 gallons kerosene, 16 cents to 25 cents.
Fuel Entire Seryice.
10,172 tons bituminous ccal
$125 \frac{1}{2} \frac{0}{0} 58$ tons Anthracite coal
1,464 81
Wood 4825

Coal at Pumping Station, Calf Pasture.


[^32]$\dagger$ Penalty.

Coal and Pumping Station, Calf Pasture.- Concluded.

| Date. | Contractor. | Tons. | Paid in 1920-21. |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Per Ton. | Total. |
| Sept. 28.. | Brought forward. | 6,344 |  | \$86,421 89 |
|  | Coastwise Coal Company. Lightering and Weighing. |  |  | 23343 |
|  | John Donahue. Stevedoring. |  |  | 21600 |
| Oct. 4 | Northern Coal Company | 1,672 | $\left\{\begin{array}{r}\$ 1500 \\ *\end{array}\right.$ | \} 25,18032 |
|  | Northern Coal Company. Demurrage . |  |  | 31871 |
|  | John Donahue. Stevedoring. . . . . . . . |  |  | 1,337 60 |
| Oat. 21 | Coastwise Coal Company . | $496 \frac{330}{2 \% 40}$ | 1300 | 7,175 59 |
|  | Coastwise Coal Company. Lightering and Weighing. |  |  | 40188 |
|  | John Donahue. Stevedoring. |  |  | 39680 |
| Nov. $9 .$. | Northern Coal Company . . . . . . . . . . . . | 1,660 | $\left\{\begin{array}{r}1600 \\ * 06\end{array}\right.$ | $\} 26,65960$ |
|  | John Donahue. Stevedoring. |  |  | 1,328 00 |
|  | Totals. | 10,172 |  | \$149,669 82 |

* Weighing.
Catch-basins Cleaned by Contract, 1920-21

Sewerage Works.
Expenditures February 1, 1920, to January 31, 1921.

| Accounts. | Labor. | Teaming. | Materials. | Miscellaneous. | Paid to Contractors. | Totals. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Engineers' salaries. | \$97,923 25 |  |  |  |  | 897,923 25 |
| Engineers' expense. | 2,562 03 | 868238 | 870064 | \$5,490 23 |  | 9,435 $2^{8}$ |
| Pumping stations and Moon Island. | 2,005 94 |  | 18323 | 47208 | 846,874 38 | 49,535 63 |
| Sundries. | 3,277 60 | 19125 | 1,956 87 | 89202 |  | 6,317 74 |
| Land-takings and court executions. |  |  |  | 30000 |  | 30000 |
| New manholes, entire city. | 4,541 24 | 1,091 79 | 2,663 62 | 5904 |  | 8,355 70 |
| New catch-basins, South Boston. | 70451 | 24625 | 41048 | 625 |  | 1,367 49 |
| New eatch-basins, East Boston. |  |  |  |  |  |  |
| New catch-basins, Charlestown. | 27470 | 8450 | 12014 |  | 25287 | 73221 |
| New catch-basins, Brighton. | 63231 | 25250 | 60130 | 957 |  | 1,495 68 |
| New catch-basins, West Roxbury | 9,282 88 | 1,491 50 | 6,314 23 | 3031 |  | 17,115 92 |
| New catch-basins, Dorchester. | 1,192 43 | 33832 | 81362 | 2500 |  | 2,369 37 |
| New catch-basins, Hyde Park | 68638 | 13250 | 22412 |  |  | 1,043 00 |
| New catch-basins, Roxbury.: | 1,922 57 | 58699 | 1,012 48 | 1522 |  | 3,537 26 |
| New catch-basins, City proper. | 6,187 56 | 1,895 77 | 3,574 36 | 23431 |  | 11,892 00 |
| Sewers built in entire city. | 55,375 23 | 2,405 58 | 33,694 93 | 4,754 32 | 540,391 91 | 636,621 97 |
| Totals. | \$186,568 64 | 89,399 33 | 852,270 02 | 812,288 35 | \$587,519 16 | \$848,045 50 |

## SEWERAGE WORKS LOAN EXPENDITURES FOR 1920-21.

South Boston.
Alger street, from Dorchester avenue to about 540 feet westerly \$14,518 92
Farragut road extension, from East Third street to about 350 feet northwesterly 26,784 94
$\$ 41,30386$
Built, 1,454.06 linear feet, 5 manholes, 6 catch-basins.

| East Boston. |  |
| :--- | ---: |
|  |  |
| Condor street, from Glendon street to East Eagle |  |
| street |  |
| Lubec street outlet in private land, between Cot- | $\$ 2,35500$ |
| tage street and existing conduit. |  |
| Murray court, from Orleans street to end of court, | 40833 |
| . | $\underline{1,90987}$ |

Built 251.50 linear feet, 2 manholes.

## Charlestown.

Rutherford avenue, from Chapman street to Cambridge street
$\$ 79329$
Chelsea street, from Foss street to Wapping street, $\quad 1,22357$
\$2,016 86
Built 98.40 linear feet, 1 manhole, 1 catch-basin.
Brighton.
Gardner street, from Babcock street to outlet about 485 feet westerly \$162 99
Perle street, at Washington street . . . . 48909
Wade street, from Commonwealth avenue to about 650 feet southwesterly 5,107 87
Washington street, from Tip Top street to Market street

1100
Carried forward
$\$ 5,77095$
Brought forward ..... $\$ 5,77095$Falkland terrace, from Hobart street to Brook-dale road4,464 13
Chestnut Hill avenue, from Cleveland circle to Commonwealth avenue ..... 16,07786
Glenville avenue, from Allston street to Greylock
Glenville avenue, from Allston street to Greylock roadPrivate land (outlet for Algonquin road), fromLake street to Newton line16,153 37Private land and Babcock street, from Salt Creek(outlet to Commonwelth avenue) Con(outlet to Commonwealth avenue)11,936 44
Market street, from Lothrop street to Washington street ..... 24,867 69
Larch street, from South Crescent circuit to Ken- rick street
Brayton road, from Kenrick street to Crescent avenue
South Crescent circuit, from Crescent avenue to ..... 20,165 66Regent street.South Crescent circuit and private land, fromLarch strect to Regent strectMurdock street, from North Beacon street toCushman road
$\left.\begin{array}{c}\text { Cushman road, from Glencoe street to Duston } \\ \text { street }\end{array}\right\}$14,172 28Cambridge street, from Hano street to Wiltonstreet2,753 21$\$ 116,36159$
Built 16,288.34 linear feet, 135 manholes, 33 catch-basins.
West Roxbury.
Richwood street, Centre street, Willow street and private land ..... $\$ 70000$
Belgrade avenue, from Anawan avenue to Centre street, and Beech street, from West Roxbury parkway to Belgrade avenue ..... 1,656 69Green street, from Amory street to Washingtonstreet15092
Redlands road, from Centre street to Abbott street ..... 21932
Westover street and private land, from Adding- ton road to Weld street ..... 1,324 94
Brown avenue, from Blakemore street to Garden street ..... 25188
Stony brook conduit, Section No. 10 ..... 57,091 70
Malcolm street, from New York, New Haven \& Hartford Railroad to Belgrade avenue ..... 1,124 84Carried forward$\$ 62,52029$

| rd | \$62,520 29 |
| :---: | :---: |
| Hastings street, from Centre street to Montview street | 5,828 03 |
| $\left.\begin{array}{l}\text { Private land and Paine street (near Brook street), } \\ \text { from Canterbury branch of Stony brook to } \\ \text { brook from Forest Hills Cemetery }\end{array}\right\}$ | \} 6,082 47 |
| Saville and Wren streets, from Park street to \} $\left.\begin{array}{l}\text { Oriole street and Board of Survey street No. } \\ 664 \text {, from Wren street to Emmons road . . }\end{array}\right\}$ | \} 15,54097 |
| South street, Lesher street and private land and Archdale road | 23,707 78 |
| Catch-basins and minor drains in various streets in Boston | 21,014 79 |
| Castleton street, from Jamaicaway to South) Huntington avenue, and Zamora street, from Castleton street to about 415 feet southerly, ) | \} 9,310 |
| Williams street and Forest Hills street, from) about 220 feet southeast of 7 Plainfield street to about 30 feet south of Williams street . | \} 7,404 |
| Centre street, from South street to Spring street, | 35,961 96 |
|  | \$187,370 89 |
| Built 11,044.91 linear feet, 57 manholes, 102 |  |
| Dorchester. |  |
| Catch-basins and minor drains, Dorchester and city proper | \$961 11 |
| Carson street, from Crescent avenue to 337 feet northeasterly | 1,075 00 |
| Elton street, from Auckland street to Dorchester avenue | 66532 |
| Fairview street, from Frost avenue to Train street | 8445 |
| Ridge road, from Oakland street to Randolph road and 430 feet southerly | 28047 |
| Wilbur street, from Cushing avenue to Upham avenue | 2,586 48 |
| Oak avenue, 506 feet from Adams street to 100 ) feet westerly. Colorado street, from Almont $\}$ street to 160 feet northeasterly | \} 1,30179 |
| Rockdale street, from Springdale street to Savin Hill avenue | 3,467 79 |
| Tenean street and private land, 250 feet north of Fulton street . | 6,262 47 |
| Wilcock street, from Morton street to Blue Hill avenue | 1,046 56 |
| Carried forward | \$17,731 44 |

Brought forward ..... \$17,731 44
Havelock street, from Morton street to Blue Hill avenue ..... 3,254 98
Kennebec street and outlet in private land and Ruskin road ..... 8,746 22
Wollaston terrace, from Woodrow avenue to Jones avenue ..... 1,233 87
Harvard street, from Fabyan street to Greenock street ..... 1,464 50
Massachusetts avenue, opposite Willow court, ..... 1,416 12
Catch-basins, manholes and surface drains in Boston ..... 9,267 38
Fox Point road, from Savin Hill avenue to about 134 feet southeasterly and easterly ..... 77698
Itasca street, from Oakland street to about 1,182 feet northwesterly ..... 9,416 93
Private land and Banfield avenue, from Delhi street to West Selden street ..... 5,151 13
Private land, from Delhi street to about 176 feet southeasterly ..... 5,686 69
$\$ 64,14624$

Built $6,130.49$ linear feet, 52 manholes, 27 catch-basins.
Hyde Park.Hyde Park avenue, from Metropolitan avenue toRiver street$\$ 3,01538$
Bradlee street, from 240 feet north of Collins) street to Thatcher street
Thatcher street from Bradlee street to Metro- politan avenue ..... 15,69714
Huntington arenue, from Thatcher street to Safford street
Lexington arenue, from Jefferson street to about156 feet northerly1,405 42
Loring street, from Foster street to Tyler street and outlet in Glenwood avenue ..... $2,782 \quad 52$
River street, from Hyde Park avenue to Central avenue ..... 5,224 79Roanoke road, from Kennebec street to about120 feet northwesterly1,273 69
\$29,398 94

Built $4,154.38$ linear feet, 23 manholes, 6 catch-basins.

## Roxbury.

Northampton street, from Fellows street to 95) feet south of Harison avenue
Fellows strect, from Northampton street to Orange street $\$ 10000$

Tremont street, at C'olumbus avenue, and eatchbasins and manholes in city proper, Roxbury and South Boston

1,533 00
Alley No. 450, from Dalton street to Alley No. 451

47322
South Huntington avenue, from Bynner street to Evergreen street

10541
Mechanic street, from Madison court to about 150 feet southerly

3,658 94
Brookline avenue, from Beacon street to Audubon road (Muddy river conduit)

52,682 65
Public Alley No. 909, from Hemenway street to Massachusetts avenue 11,496 86
Cummington street, from Commonwealth avenue to Boston \& Albany Railroad

6,661 22
Grosvenor place, from Cliff street to about 266 feet south and southwesterly

6,065 40
Hemenway street and Forsyth park
74946
Amory avenue, from Stony brook conduit to Amory street

4,638 33
$\$ 88,16449$
Built 3,626.83 linear feet, 17 manholes, 10 eatch-basins.

## City Proper.

Kneeland street, from Atlantic avenue to Washington street . . . . . . . \$1,182 21
Albany street, from Troy street to Oswego street, 2,292 86
Blackstone street, from Haymarket square to Clinton street

15,539 47
Clarendon street, Buckingham street, Trinity place, Stanhope street and Stuart street

9,813 54
Richmond street, from Commercial street to Hanover street

1,729 65
Beverly street, at Traverse street . . . 7061
Friend street, from Merrimac street to Dock square
$\underset{\text { street }}{\text { Market }}$ street, from Canal street to Portland $\}$ 2,278 13

Carried forward
$\$ 32,90647$
Brought forward $\$ 32,906$ ..... 47
Buckingham street, from Clarendon street to about 25 feet westerly ..... 4,354 99
Charles street, from Beacon street to Cambridge street ..... 1,363 12
Catch-basins and minor drains in Boston ..... 5,580 49
Oswego street, from Albany street to Harrison avenue ..... 14,861 11
Leverett street, from Green street to Causeway street ..... 1,996 32
Unity court, from Unity street to about 154 feet westerly and northerly ..... 2,902 39
Catch-basins, manholes and minor drains in Boston ..... 17,602 42
Berkeley street, from St. James avenue to Provi-dence street12,720 50
Bridge court and North Anderson street, from Parkman street to Cambridge street 8,898 09
\$103,185 ..... 90Built 3,439.64 linear feet, 14 manholes, 109 catch-basins.
Seferage Works Loan, 1920-21.Engineers' salaries, general\$97,923 25
Amount charged to construction of sewers ..... 23,803 00
\$121,726 25
Engineers' Expense.
Labor ..... $\$ 2,56203$
Teaming ..... 68238
Borings ..... 36800
Transportation ..... 2,251 51
Photographs ..... 33720
Supplies, etc. ..... 3,234 16
\$9,435 28
Pumfing Station and Moon Island Construction.
Advertising ..... $\$ 630$
Labor ..... 2,005 94
Contracts ..... 46,874 38
Materials ..... 18323
Balance, old contract 1912 ..... 12500
Tobin bronze ..... 4478
Wrought-iron rings ..... 29600

## Sundries.

Labor ..... \$3,277 60
Teaming ..... 19125
Resurfacing streets ..... 58009
Materials ..... 1,956 87
Advertising ..... 1330
Relocating water pipes ..... 29863
\$6,317 74
Court Executions and Awards on Account of LandTakings, Etc.
New England Dressed Beef Company, North Beacon street, Brighton ..... $\$ 300 \quad 00$
Sewerage Works.- Manholes.

| Location. | Built by | Number. | Labor. | Teaming. | Material | Totals. | Begun. | Finished. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| North Anderson street and Bridge court, City proper... | Day labor. | 1 | \$60 30 | \$38 50 | $\$ 9353$ | \$192 33 | Mar. 15 | Mar. 18 |
| Cohumbus avenue and Newton street, City proper | Day labor | 1 | 20000 | 3850 | 13031 | 36881 | Mar. 17 | Mar. 30 |
| Stratford street and Saville street, West Roxbury | Day labor | 1 | $2 \mathrm{S2} 70$ | 2350 | 9350 | 39970 | April 16 | April 22 |
| Wel)ster avenue, 190 feet from Hanover street, City proper. | Day labor | 1 | 11160 | 3300 | 7177 | 21637 | April 16 | April 22 |
| Florence street and Firth road, West Roxbury | Day labor | 1 | 39041 | 3650 | 5247 | 47941 | April 9 | April 20 |
| Chambers strect, at MeLe:m and Green streets, City proper. | Day labor | 2 | 28962 | 7150 | 15082 | 54194 | April 1 | April 15 |
| Chestnut avenue and IIoffman street, Roxbury. | Day labor | 1 | 12571 | 4875 | 5203 | 22649 | May 5 | May 13 |
| Polk street, hetween Bunker Hill street and Medford street, Charlestown. | Day labor | 1 | 11160 | 1600 | 6575 | 19335 | May 3 | May 8 |
| Prospect street, between Chelsea street and Tremont street, Charlestown. | Day labor. | 1 | 13020 | 1650 | 5713 | 20383 | May 11 | May 17 |
| Clarendonstreet, near Stanhope street, City proper.... | Day labor | 1 | 7300 | 4712 | 7772 | 19784 | May 14 | May 20 |
| La (irange street, between Washington street and Tremont street, City proper. | Day labor | 1 | 7560 | 3250 | 3520 | 14330 | May 19 | June 7 |
| Metropolitan avenue, at Washington strect, West Roxbury. | Day labor. | 1 | 13008 | 2200 | 5532 | 20740 | June 8 | June 12 |
| Baldwin street, 165 feet north of Main street, Charlestown. | Day labor | 1 | 10230 | 2925 | 2287 | 15442 | June 28 | July 2 |
| Austin street, at Seminary street, Charlestown. | Day labor. | 1 | 14880 | 1950 | 3057 | 19887 | July 28 | Aug. 4 |
| Commonwealth avenue, between St. Mary's street and Essex street, Brighton. | Daý labor.... | 1 | 13320 | 3525 | 7932 | 24777 | July 21 | July 28 |


| Cambridge street, under railroad bridge, Charlestown. . <br> Edwin street, between Devon street and Florida street, Dorehester. | $\begin{aligned} & \text { Day labor.... } \\ & \text { Day labor.... } \end{aligned}$ | 2 | 9360 9000 | $\begin{array}{ll} 65 & 00 \\ 29 \quad 25 \end{array}$ | $\begin{array}{r} 6291 \\ 180 \quad 24 \end{array}$ | $\left.\begin{array}{ll} 221 & 51 \\ 299 & 49 \end{array} \right\rvert\,$ | $\begin{array}{ll} \text { Aug. } & 25 \\ \text { May } & 19 \end{array}$ | $\begin{array}{ll} \text { Aug. } & 30 \\ \text { June } & 30 \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Summer street, at Fort Point channel, South Boston.... | Day labor... | 1 | 6000 | 3250 | 6560 | 15810 | Aug. 16 | Sept. 6 |
| Fremont strect, near Blue Lill avenue, Dorchester | Day lahor.... | 1 | 6904 | 1625 | 7159 | 15688 | Sept. 7 | Sept. 11 |
| Lehigh street, between Albany street and Broadway Bridge, City proper. | Day labor..... | 2 | 37962 | 8325 | 14360 | $606 \cdot 17$ | Aug. 27 | Sept. 14 |
| Sudbury square and Portland street, City proper...... | Day labor | 1 | 17971 | 3300 | 8817 | 30088 | Sept. 22 | Sept. 30 |
| River street and Hyde Park avenue, IIyde Park | Day labor.... | 1 | 14437 | 5225 | 9629 | 29291 | (ret. 13 | Oet. 16 |
| State street, at No. 205, City proper. | Day labor | 1 | 7251 | 1625 | 7370 | 16246 | Oct. 22 | Oct. 23 |
| Clark street and Commereial street, City proper | Day labo | 1 | 7180 | 1950 | 10025 | 19155 | ()et. 29 | Nov. 1 |
| Boylston street and Tremont street, City proper | Day labor.... | 1 | 3000 | 1000 | 4350 |  | Oct. 8 | Oct. 14 |
| Brattle strect, at Brattle square, City proper | Day labor | 1 | 27800 | 6988 | 18226 | 53014 | Nov. 20 | Dec. 2 |
| Clarkson street ami H:milton street, Dorchester | Day labor | 1 | 5476 | 975 | 2294 | 8745 | Nor. 10 | Nov. 12 |
| Dis street, opposite No. 100, Dorcheste | Day labo | 1 | 4658 | 650 | 7334 | 12642 | Nov. 8 | Nov. 9 |
| Fimore street and Cialena street, Roxbury | Day labor.... | 1 | 34938 | 6500 | 15448 | 56886 | Nov. 19 | Nov. 30 |
| Neponset avenue, at playground, Dorehester | Day labor | 1 | 2780 | 975 | 5356 | 9111 | Nov. 26 | Nov. 29 |
| Ivanhoe strect, 20 feet north of West Dedham strect, City proper. | Day labor | 1 | 10640 | 1950 | 6780 | 19370 | Dec. 2 | Dee. 7 |
| Monadnoek street, at l udley street, Dorehester. | Day labor | 1 | 11193 | 1625 | 80 20 | 20838 | Dec. 28 | Dec. 31 |
| Misceltaneous. |  |  |  |  | 63.25 | 738 |  |  |
| Paid in 1920, manhole built in 1919. |  |  |  | 2554 | 437 |  |  |  |
| Tot l s. |  | 35 | \$4,541 25 | \$1,0<7 79 | \$2,726 66 | \$8,3.55 70 |  |  |

New catch=basins Paid for February 1-1920, to January 31-1921. (Contract and Day Labor.)


| New catch-basins, 13 | Day labor. | 957 |  |  |  | 957 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | \$9 57 | \$632 31 |  | \$853 80 | \$1,495 68 |  | 3 | 1 |
| New catch-basins, West Roxbury. | Day labor |  | 21253 |  | 17193 | 38446 | Spring strect, near Centre street. | 1 |  |
| New catel-basins, West Roxbury... | Day labor |  | 59075 |  | 32792 | 81967 | Bellevue street, near March | 3 |  |
| New catch-basins, West Roxbury.. | Day labor |  | 25381 |  | 15633 | 41014 | Poplarstreet, at Beceh streel, | 1 |  |
| New catch-basins, West Roxbury... | Day labor |  | 44685 |  | 30451 | 75136 | Abbott street, at Recllands | 2 |  |
| New catch-basins, it est Roxbury | Day labor |  | 9407 |  | 9110 | 18517 | Centre strect at No. 710.... | 1 |  |
| New catch-basins, West Roxbury . | Day labor |  | 26047 |  | 22967 | 49014 | Boylston strect, near Lamar- | 2 |  |
| New catch-basins, West Roxbury | Day labor |  | 21962 |  | 17561 | 39523 | Burnettstreet, opposite coal | 1 |  |
| New eatch-basins, West Roxbury | Day labor |  | 23569 |  | 19421 | 42990 | Belgrade avenue, at Megiraw | 1 |  |
| New catch-basins, West Roxbury | Day labor |  | 41722 |  | 56143 | 97865 | Walk Hill street, near Can- | 2 |  |
| New eatch-basins, West Roxbury | Day labor |  | 72520 |  | 57893 | 1,304 13 | La terbury street. ${ }_{\text {Lrange }}$ street, between | 3 |  |
| New catch-basins, West Roxbury | Day labor |  | 26763 |  | 15500 | 42263 | Ashlind strect, near Rowe | 1 |  |
| New catch-basins, West Roxbury. | Day labor |  | 10236 |  | 15234 | 25470 | Centree street, between Forbes: | 1 |  |
| New catch-basins, West Roxbury | Day labor |  | 37710 |  | 23759 | 61469 | and Boylston streets. <br> Washington strcet, at ha- | 2 |  |
| New eateh-basins, West Roxbur | Day labor |  | 47978 |  | 50179 | 98157 | Centre street, atsouth sticet, | 2 |  |
| New catch-basins, West Roxbury.... | Day labor |  | 3,942 60 |  | 3,718 88 | 7,661 48 | Washington strect between Archdale road and Ashland street. | 13 | 14 |
| New catch-basins, West Roxbury | Day labor |  | 24832 |  | 7270 | 32102 | No. 130 Prince street. | 1 |  |
| New eatch-basins, West Roxbury. | Day labor. |  | 40888 |  | 20610 | 61498 | Connections, etc. |  |  |
|  |  |  | \$9,282 88 |  | \$7,836 04 | \$17,118 92 |  | 37 | 14 |
| New catch-basins, Dorchester. | Day labor | \$63 47 |  |  |  | 6347 |  |  |  |

Sewerage Works Loan.- Continued.


|  | 39 20 <br> 65 60 <br> $6 S \quad 10$  <br> 1,091 61 | . $\cdot$ | $\begin{array}{rrr}96 & 27 \\ 80 & 20 \\ 85 & 18 \\ 148 & 91\end{array}$ | $\begin{array}{rrr}135 & 47 \\ 145 & 80 \\ 153 & 28 \\ 1,240 & 52\end{array}$ | No. 1985 Washington street <br> Holborn street near Holborn park. <br> Dearborn street near schoolhouse. <br> Connections |  | 1 1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{array}{r} 8466 \quad 66 \\ 360 \quad 71 \end{array}$ | \$1,922 57 |  | \$1,148 03 | 83,53726 36071 |  |  | 10 |
|  | 3660 |  | 5894 | 9551 | Mercantile and Clinton strects. |  | 1 |
|  | 16364 |  | 15667 | 32031 | Columbus avenue and Newton street. |  | 1 |
|  | 56482 |  | 36427 | 92909 | Devonshire and Milk strects. |  | 2 |
|  | 33165 |  | 28168 | 61333 | Massachusetts avenue and Washington street. | 2 |  |
|  | 20895 |  | 12990 | 338 S5 | Faneuil Hall square. . . . . . . |  | 1 |
|  | 15140 |  | 183 S4 | 33524 | Tremont strect and Montgomery street. |  | 3 |
|  | 7660 |  | 10261 | 17921 | Stevens strcet. . . . . . . . . . . . |  | 1 |
|  | 24160 |  | 37150 | 61310 | La Grange street | 2 |  |
|  | 3180 |  | S6 63 | 11543 | Tremont street at National Theatre. |  | 1 |
|  | 29784 |  | $155 \cdot 16$ | 45330 | Harrison avenue at No. S49 and No. s65. | 2 |  |
|  | $103: 0$ |  | 12005 | 22325 | Causeway street at No. 239 |  | 1 |
|  | 25635 |  | 9030 | 34665 | Wiget strcet at No. 18 |  | 1 |
|  | 13443 |  | 4725 | 18168 | Allen strect and Kennard avenue. |  | 1 |
|  | 15020 |  | 17469 | 32489 | West Cedar street at No. 97 | 1 |  |
|  | 19301 |  | 10138 | $29+39$ | Warren avenue at No. 83. |  | 1 |
|  | 42251 |  | 60035 | 1,022 86 | Chambers street and Brighton street. | 1 | 4 |

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Day labor New catch-basine, Roxbury... New catch-baisns, Roxbury. New catch-basins, Roxbury. New catch-basins, Roxbury New catch-basins, City proper. New eateh-basins, City proper New catch-basins, City proper. New eatch-basins, City proper. New cateh-hasins, City proper New eatch-busins, City proper New catch-basins, City proper New eatcl-basins, City proper. New catch-basins, City proper New catch-basins, City proper. New catch-basins, City proper New catch-basins, City proper. New catch-basins, City proper New eateh-basins, City proper New eatch-basins, City proper. New eatch-basins, City proper New eatch-basins, City proper
Sewerage Works Loan.- Concluded.

| District. | Built by | $\begin{gathered} \text { Built in } \\ 1919 . \end{gathered}$ | Buili in 1920. |  |  | $\begin{aligned} & \text { Total } \\ & \text { Expendi- } \\ & \text { ture. } \end{aligned}$ | Location. |  | 碞 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Materials, etc. | Labor. | $\begin{gathered} \text { Con- } \\ \text { tractor. } \end{gathered}$ | Material <br> and <br> Teaming |  |  |  |  |
| New catch-basins, City proper. <br> New eatch-basins, City proper. | Day labor.. |  | 812360 | ........ | $\$ 15131$ | \$274 91 | Tremont street and Boylston street. |  | 1 |
|  | Day labor. |  | 13906 | $\ldots$ | 11487 | 25393 | Beacon street at No. 298... | .... | 1 |
|  | Day labor. |  | 14360 | ......... | 18045 | 32405 | Shawmut avenue and Worcester street. <br> North Market street at No. | 1 |  |
| New eatch-basins, City proper | Day labor |  | 16378 |  | 14490 | 30868 |  |  | 1 |
| New catch-basins. City proper | Day labor |  | 30985 |  | 11205 | 42190 | Commercial strect at No. 143 and No. 210 |  | - |
| New catch-basins, City proper | Day labor |  | 19276 |  | 14650 | 33926 | Stillman strcet at No. 35. |  | 1 |
| New catch-basins, City proper. | Day labor. |  | 4380 |  | 16969 | 21349 | Chester place.. |  | 1 |
| New eatch-basins, City proper | Day labor.. |  | 1,703 51 |  | 1,298 44 | 3,001 95 | Connections, inlets, etc.... | 9 |  |
|  |  | \$360 71 | 86,187 56 |  | \$5,343 73 | 811,892 00 |  |  | 25 |
| Grand totals. |  | \$1,193 38 | \$20,883 34 |  | 817,479 21 | 839,555 93 |  | 60 | 54 |

[^33]New Catch-basins Paid for February 1, 1920 to January 31, 1921 (Included in Other Sewer Construction).

| Distract. | Built bs | Contractor. | Expenditures. |  |  | Total. | Location. | 星 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Materials, etc. | Labor. | $\begin{aligned} & \text { Materials } \\ & \text { Teanding. } \end{aligned}$ |  |  |  |
| South Boston | Contract. | 81,334 99 | \$565 65 |  |  | 81,900 64 | Alger street |  |
| Charlestown | Contract | 29054 | 10263 |  |  | 39317 | Chelsea street |  |
| Brighton | Contract. | 62421 | 24187 |  |  | S660 08 | Falkland terrace |  |
| Briglton | Contract. | 2,412 32 | 94523 |  |  | 3,357 55 | Chestnut hill avenue and filenville | I |
| Brighton. | Contract | 75573 | 43118 |  |  | 1,1866 91 | Private land and Pableoek streect. | 5 |
| Brighton. | Contract. | 90739 | 503 so |  |  | 1,411 19 | Market strect | 5 |
| Brighton. | Contract | 1,448 20 | 74073 |  |  | 218893 | Cushmau road and Murdoek street |  |
| West Roxbury | Contract | 13358 | 0 so |  |  | 20438 | Malcolm street | 1 |
| West Roxbury | Day labor. |  |  | \$226 73 | 813849 | 36522 | Belgrade avenue and Beceh street | 1 |
| West Roskury | Contra | 1,44979 | 2,290 25 |  |  | 3,740 04 | Centre strect ${ }^{\prime}$ | ${ }^{6}$ |
| West Roxbur | Day labor.. |  |  | 15000 | 16625 | 31625 | Centre stre | 1 |
| West Roxlury | Contract | ${ }_{685} 25$ | 35903 |  |  | 1,044 28 | Hastings street. |  |
| West Roxbury | Cout | 34920 | 17686 |  |  | 52606 | Private land and Paine street |  |
| West Roxbury | Con | 2,518 75 | S67 77 |  |  | 3,3866 52 | South street, Lesher street and Arelddale | 11 |
| West Roxbury | Contr | 13,000 00 | 5,733 22 | 1,28157 |  | 20,014 79 | *Cateh-basins and minor draius in Bos- | tis |
| West Roxbury | Contract | ${ }^{1,1177} 06$ | 15902 |  |  | 1,636 | Castleton and $Z_{\text {amora }}^{\text {tan }}$ atreet | 7 |
| Dorchester | Contract | 42281 | 26952 |  |  | 69233 | Wilbur strcet. | 3 |
| Dorchester | Contract | 68 | 34844 |  |  | 94612 | Rockdale street | $\pm$ |
| Dorehester. | Contract | 64079 | 20040 |  |  | S41 19 | Havelock street | 4 |
| Dorchester | Cont | 3,311 00 | 1,635 75 |  |  | 4,946 75 | Catch-basins, manholes and surface | ${ }^{1} 15$ |
| Dorchester | Contract | 17747 | 525 |  |  | 22972 | Wollaston terrace. | 1 |
| Hyde Park | Contraet.... | 1,262 00 | 56778 |  |  | 1,829 78 | River street | ${ }^{6}$ |

New Catch-basins Paid for February 1, 1920, to January 31, 1921 (Included in Other Sewer Construction). - Concluded.

| Digtrict. | Built by | Contractor. | Expenditures. |  |  | Total. | Location. | 茄 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Materials, etc. | Laloor. | $\begin{gathered} \text { Materials } \\ \text { and } \\ \text { Teaming. } \end{gathered}$ |  |  |  |
| Roxbury | Contract. | \$344 63 | \$156 30 |  |  | 850093 | Mechanic street. | 2 |
| Roxbury. | Contract. | 52000 |  |  |  | 52000 | *Brookline avenue. | 4 |
| Roxbury. | Contract. | 21978 | 10090 |  |  | 32068 | Public Alley No. 909. | 1 |
| Roxbury | Contract. | 60773 | 17167 |  |  | 77940 | Cummington street. | 2 |
| Roxbury | Contract. | 25707 | 7455 |  |  | 33162 | Grosvenor place. | 1 |
| City proper. | Contract. | 57715 | 11200 |  |  | 68915 | Oswego street. | 4 |
| City proper. | Contract. | 4,362 63 | 1,217 86 |  |  | 5,580 49 | Catch-basin and minor drains in Boston, | 31 |
| City proper. | Contract. | 14,189 48 | 3,412 94 |  |  | 17,602 42 | Catch-basin and minor drains in Boston, | 72 |
| City proper. | Day labor. |  |  | \$100 00 | \$119 30 | 21930 | Levorett street. | 1 |
| City proper. | Contract. | 41310 | 11702 |  |  | 53012 | Berkeley street. | 1 |
|  |  | 851,960 33 | \$21,955 42 | \$1,758 30 | \$424 04 | 879,098 09 | - | 294 |

[^34]Separate Systems of Drainage.
Expenditures February 1, 1920, to January 31, 1921.

| Accounts. | Labor. | Teaming. | Matcrials. | Miscellaneous. | (1) $\begin{gathered}\text { Paid to } \\ \text { Contractors. }\end{gathered}$ | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sewer built. . . |  |  |  |  | \$14 22 | 81422 |

Old Harbor Improvement.
Expenditures Fcbruary 1, 1920, to January 31, 1921.

| Accounts. | Labor. | Teaming. | Materials. | Miscellaneous | Paid to Contractors | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sewer built | \$2,075 77 |  |  | $\$ 15965$ | 87,730 75 | \$9,966 17 |

## SEPARATE STSTEMS OF DRAINAGE EXPENDITURES 1920-1921.

West Roxbury.
Church street, between Centre street and Halford road (built in 1912)
$\$ 1422$

## OLD HARBOR IMPROVEMENT EXPENDITURES 1920-21.

South Boston.
K street, from 155 feet south of Columbia road to a point about 424 feet southerly
N street, from 90 feet south of Columbia road to
a point about 302 feet southeasterly
$\$ 9,96617$

Built 720 linear feet.

## SEWER SERVICE.

Cost of Maintaining all Horses in the Sewer Service from February 1, 1920, to January 31, 1921.

| Irems. |
| :---: |

Summary of Sewer Construction for Twelve Months ended January 31, 1921.

| Districts. | Built by the City by Contract or Day Labor. | Built by Private Parties. | Total Length. | Built. |
| :---: | :---: | :---: | :---: | :---: |
|  | Linear Feet. | Linear Feet. | Linear Feet. | Miles. |
| City proper | 1,933.38 | 12.00 | 1,945.38 | 0.368 |
| Roxbury.. | 3,558.83 |  | 3,558.83 | 0.674 0.393 |
| South Boston | $2,074.71$ 251.50 |  | $2,074.71$ 251.50 | 0.393 0.048 |
| Charlestown | 5940 |  | 59.40 | 0.011 |
| Brighton. | 15,719.34 |  | 15,719.34 | 2,978 |
| West Rorbury | 9,084.91 |  | 9,084.91 | 1.721 |
| Dorchester. | 4,510.43 |  | 4,510.43 | 0.853 |
| Hyde Park | 5,348.62 |  | 5,348.62 | 1.013 |
| Totals | 42,541.12 | 12.00 | 42,553. 12 | 8.059 |

Net Increase in Length of Sewers Between February 1, 1920, and


| Districte. | Length of hewers Built During the Twelve Months Ended January 31, 1921. | Length of Sewers Rebuilt or Abandoned 1) uring the Twelve Months linded January 31, 1921. | Net Increase for the Twelve Months Ended January 31, 1921. |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Linear Feet. | Linear Feet. | Linear Feet. | Miles. |
| City proper | 1,945.38 | 1,039.00 | 906.38 | 0.172 |
| Roxbury | 3,558.83 | 579.25 | 2,979.58 | 0.564 |
| South Boston | 2,074.71 |  | 2,07471 | 0.393 |
| East 13oston | 251.50 | 251.50 |  |  |
| Charlestown | 59.40 |  | 59.40 | 0.011 |
| Brighton | 15,719.34 | 708.60 | 15,010.74 | 2.843 |
| West Roxbury | 9,084.91 | 2,542.50 | 6,542.41 | 1.240 |
| Dorchester | 4,510.43 |  | 4,510.43 | 0.853 |
| Hyde Park. | 5,348.62 |  | 5,348.62 | 1.013 |
| Totals | 42,553.12 | 5,120.85 | 37,432.27 | 7.089 |
| Total Lengths of Sewers. <br> Common sewers and surface drains previous to January 31, 1920........... <br> Net increase of common sewers and surface drains, between February 1, 1920, and Jauary 31, 1921. |  |  |  | Miles. |
|  |  |  |  | 938.98 |
|  |  |  |  | 7.09 |
| Total common sewers and surface drains to January 31, 1921.......... <br> Intercepting sewers connecting with metropolitan system to January 31 , 1921 <br> Boston main drainage intercepting sewers to January 31, 1921. |  |  |  | 946.07 |
|  |  |  |  | * 6.81 |
|  |  |  |  | * 24.12 |
| Grand total of common and intercepting sewers to January 31, 1921... |  |  |  | 977.00 |
| Total mileage of streets containing sewerage works |  |  |  | 580.00 |

* No additions during 1920.

Summary of Sewer Construction for Five Years Previous to
February 1, 1921.

|  | 1916. | 1917. | 1918. | 1919. | 1920. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Linear Feet. | Linear Feet | $\begin{aligned} & \text { Linear } \\ & \text { Feet. } \end{aligned}$ | Linear Feet. | Linear Feet. |
| Built by the city by contract or day labor. | 91,421.56 | 80,828.46 | 31,764.84 | 57,105.04 | 42,541.12 |
| Private parties.............. | 11,113.54 | 4,155.90 | 5,406.00 | 387.20 | 12.00 |
| Totals. | 102,535.10 | 84,984.36 | 37,170.84 | 57,492.24 | 42,553.12 |

Schedule of Catch-Basins in Charge of Sewer Service, February 1, 1921.

| District. | $\begin{aligned} & \text { Number } \\ & \text { Built. } \end{aligned}$ | NumberRebuilt. | Catch-Basin Data, Year Ended January 31, 1921. |  | Total for Whole City in Charge of Sewer Service. |  | $\begin{gathered} \text { Grand Total } \\ \text { to } \\ \text { Fcbruary } \\ 1921 . \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{aligned} & \text { Number } \\ & \text { Abandoned } \\ & \text { or Renoved. } \end{aligned}$ | $\begin{gathered} \text { Net } \\ \text { Increase. } \end{gathered}$ | $\begin{gathered} \text { Previous } \\ \text { Report to } \\ \text { Febraary } 1, \\ \text { 1920. } \end{gathered}$ | Catch-basins Previously Listed |  |
| City Proper. | 97 |  | 76 | 21 | 3,168 |  | 3,189 |
| Roxbury.. | 75 |  | 60 | 15 | 2,778 |  | 2,793 |
| South Boston.. | 29 |  | 21 | 8 | 1,224 |  | 1,232 |
| East Boston.... |  |  |  |  | 871 | 6 | 877 |
| Charlestown. | 5 |  | 1 | 4 | 747 | ......... | 751 |
| Brighton... | 47 | 1 | 2 | 44 | 1,201 |  | 1,245* |
| West Roxbury . | 99 | 14 | 41 | 44 | 1,976 | 2 | 2,022 $\dagger$ |
| Dorchester.. | 49 |  |  | 49 | 3,421 |  | 3,470 |
| Hyde Park. | 7 |  |  | 7 | 354 |  | 361 |
| Totals. | 408 | 15 | 201 | 192 | 15,740 | 8 | \$15,940 |

Eqcipment of Pumping Stations.

## Calf Pasture Pumping Station.

One vertical beam and fly-wheel, triple expansion engine of the Leavitt type; cylinders $18 \frac{1}{2}$ inches, 33 inches and $52 \frac{3}{4}$ inches in diameter; two single-acting pump plungers, each 60 inches diameter and 120 -inch stroke; capacity $72,000,000$ gallons in twenty-four hours with 40 -foot lift.

Two vertical beam and fly-wheel compound engines of the Leavitt type; cylinders $25 \frac{1}{2}$ inches and 52 inches in diameter; two single-acting pump plungers, each 48 inches in diameter and 108-inch stroke; capacity of each engine $35,000,000$ gallons in twenty-four hours with 40 -foot lift.

Two steam turbine driven centrifugal pumps of the DeLaval type with a capacity of $56,000,000$ gallons each in twenty-four hours with 40 -foot lift.

Total horse power pumping engines, 2,050 .
Total horse power station, including auxiliaries, 2,200.

## Summer Strcet Pumping Station (Automatic).

Two submerged centrifugal pumps of the single stage, single bottom suction vertical type. Capacity of each pump, 3,000 gallons per minute against 13 -foot static head when running 675 revolutions per minute.

Motor for each pump is a 20 -brake horse power, 220 volts, 60 -cycle, 3 -phase vertical constant speed induction motor of the squirrel cage type.

## Union Park Street Pumping Station (Automatic).

One 24 -inch vertical submerged centrifugal pump, capacity 15,000 gallons per minute against static head of $13 \frac{1}{2}$ feet when running 233 revolutions per minute.

Three 36 -inch vertical submerged centrifugal pumps, capacity of each, 30,000 gallons per minute, against a static head of $13 \frac{1}{2}$ feet when running 194 revolutions per minute.

Motor for 24 -inch pump is one 75 -brake horse power, constant speed squirrel cage 3 -phase alternating current induction motor; synchronous speed of 240 revolutions per minute, full load speed of 233 revolutions per minute with alternating 3 -phase, 60 -cycle current at 440 volts.

Motors for the three 36 -inch pumps are each 150 -
brake horse power, with synchronous speed of 200 revolutions per minute, full load speed of 194 revolutions per minute; same description of motor and of current as for the 75 -brake horse power motor.

## Hyde Park Pumping Station (Automatic).

One 3-B Priestman Ejector, capacity of 100 gallons per minute against a static head of $12 \frac{1}{2}$ feet, with two gates, one inlet flap valve, one outlet check valve and one operating valve.

One Worthington $7 \frac{1}{2}$ horse power motor.

## Cost of Pumping.

Average cost per million foot-gallons for pumping; volume ( $38,463.835$ million gallons) by (times) lift 40.3 feet $=1,550,092.559$ million foot-gallons for the year.

Labor cost included in total is based upon the following force of forty-eight men:

One superintendent, one clerk, one storekeeper, one electrician, one carpenter, one blacksmith, two machinists, four laborers and four "engineers' watches," each including nine men. Cost of city water not included.

| Items. | Cost. | Cost per Million FootGallons. |
| :---: | :---: | :---: |
| Labor | \$70,443 20 | \$0 04544 |
| Coal. | 107,237 30 | 06918 |
| Oils and waste | 3,879 63 | 00250 |
| Rubber valves and packing | 1,667 77 | 00108 |
| Miscellaneous renewals and supplies. | 26,669 02 | 01721 |
| Totals. | \$209,596 92 | \$0 13541 |
| Labor at screens. | \$6,068 00 | \$0 00391 |

Table of Approximate Quantities, Lifts and Duties at Calf Pasture Pumping Station.


[^35]
## Recapitulation.

Total gallons pumps February 1, 1920 to
February 1, 1921
38,463,835,000
Daily average 105,380,000
Average dynamic head 40.3

Foot-gallons
Foot-gallons per 100 pounds coal 1,550,092,559,000

Foot-pounds per 100 pounds coal
8,505,100
Total coal for pumping (pounds) 71,900,000

Amount of Sludge Received and Removed from Deposit Semers from February 1, 1920, to January 31, 1921, Inclusive.
Sludge in sewers February 1, 1920
Received during the year
Total
Removed during the year
Sludge in sewers February, 1921
1,178 cubic yards.

| $\frac{2,508}{3,686}$ | " | " |
| ---: | :--- | :--- |
| $\frac{2,971}{715}$ | " | " |

Amount of Refuse Removed from Gatehouse from February 1, 1920, to January 31, 1921, Inclusive.

|  | Mosth. | Number <br> Cheeses.* | Weights. <br> (Pounds). |
| :---: | :---: | :---: | :---: |
|  | 1920. |  |  |
| February |  | 249 | 55,029 |
| March. |  | 245 | 54,145 |
| April. |  | 135 | 29,835 |
| May. |  | 174 | 38,454 |
| June. |  | 175 | 38,675 |
| July . |  | 219 | 48,399 |
| August. |  | 228 | 50,388 |
| September |  | 221 | 48,841 |
| October . |  | 250 | 55,250 |
| Novcmber. |  | 170 | 37,570 |
| Decembr. |  | 147 | 32,487 |
|  | 1921. |  |  |
| January. |  | 142 | 31,382 |
| Totals |  | 2,355 | +520,455 |

* Cheeses-Average, 221 pounds.
$\dagger 260+455-2000$ tons.


## SANITARY SERVICE.

## Financial Statement.

| Appropriation, maintenance | \$1,528,698 71 |
| :---: | :---: |
| Transferred from the appropriation for fuel, supplies, etc. | 11,000 00 |
|  | \$1,539,698 71 |
| Transferred to the appropriation for Sewer Service | 30,182 88 |
|  | $\$ 1,509,515$ <br> $1,50,102$ <br> 1 |
| Expented doring the year . . . . . |  |
| Unexpended balance transferred to city treasury | \$1,413 12 |

## Special Appropriation.

Land and Buildings, Sanitary and Street Cleaning Divisions, Dorchester.

| Transferred from various appropriations . . . | $\$ 13,50000$ |
| :--- | :--- | :--- |
| Execution of court paid to Boston Consolidated Cas Com- |  |
| pany for dlamages for land taken on South street, now |  |
| Victory road, Dorchester, for a site for a garbage plant. | $\boxed{\$ 13,50000}$ |

## Income.

Statement showing amount of cash and bills deposited with the City Collector from February 1, 1920, to January 31, 1921, and credited to general revenue.

| Tickets and bills for the remoral of ashes and waste | \$82,312 33 |
| :---: | :---: |
| Sale of manure | 1,6330 70 |
| Removal of dead horses | 22400 |
| Labor and materials | 32424 |
| Old material sold | $65 \times 00$ |
| Collection of refuse on account of default of contractor | 20,145 72 |
| Overpayment under Workingmen's Compensation Act | 40734 |
| Total | \$105,702 33 |

Amount Paid into the City Treasury During the
Year.

Removal of ashes and waste . . . . . . . $\$ 83,16430$
Sale of manure . . . . . . . . . . 1,63070
Sale of old material . . . . . . . 65800
Removal of dead horses . . . . . . . . 1900
Labor and materials . . . . . . 5103
Repayment of amount paid under Workingmen's Compensation Act, for injuries to employees

Total Cost of House Dirt, Waste, Rubbish and House Offal, 1920.
Salaries of division engineer, supervisor and medical inspector
$\$ 6,35857$
Office supplies and expenses, printing, stationcry, ete.

4,259 06
Ashes, waste and rubbish account . . . 1,008,222 10
House offal account . . . . . . 394,684 59
Annuities . . . . $\$ 30000$
Retired veterans' pensions . . 3,107 99
Retired laborers' pensions . . 14,117 72
17,525 71
Total
$\$ 1,431,05003$

## Construction Repairs and Horseshoeing Account.

| Expended for labor | . | $\$ 79,059$ | 59 |
| :--- | :--- | :--- | :--- | :--- |
| Expended for stock | . | 25,066 | 58 |

$\$ 1,535,17620$
Work Done for Other Services.

| Paving Service | \$6,788 63 |  |
| :---: | :---: | :---: |
| Sewer Service | 1,809 36 |  |
| Streèt Cleaning Service | 14,160 00 |  |
| Water Service | 4,315 50 |  |
| Total |  | 508,102 71 |

## Items of Expenditure for the Year 1920=21.



Construction and Repair Shops, 1920-21.
For work done and materials furnished for other services and for the Sanitary Service the different shops received and expended the following amounts:

|  | Stock and Labor. |  | Total. |
| :---: | :---: | :---: | :---: |
|  | Other Services. | Sanitary. |  |
| Wheclwright. | \$4,259 11 | \$14,538 00 | \$18,797 11 |
| Blacksmith | 9,256 00 | 17,708 14 | 26,964 14 |
| Paint | 5,675 00 | 9,920 76 | 15,595 76 |
| Harness. | 3,813 38 | 10,601 39 | 14,41477 |
| Horseshoeng --South End, | 2,210 00 | 5,140 87 | 7,350 87 |
| Horseshoeing - West End. | 1,350 00 | 2,361 37 | 3,711 37 |
| Horseshoeing - Roxbury ... | 51000 | 1,090 06 | 1,600 06 |
| Totals, stock and labor, | \$27,073 49 | 861,360 59 | \$88,434 08 |
| Foremen |  | \$2,042 29 |  |
| Clerk |  | 40788 |  |
| Stockkeeper |  | 1,443 47 |  |
| Express teamster | . . . | 1,210 46 |  |
| Allowed time, holidays |  | 5,489 94 |  |
| Allowed time, vacations | . | 2,585 43 |  |
| Medical attendance |  | 78279 |  |
| Electric power |  | 64736 |  |
| Auto truck |  | 1,055 27 |  |
| Incidentals |  | 2720 |  |
|  |  | 15,692 09 |  |
| Total cost, maintenance |  |  | \$104,126 17 |
| Income from other services |  |  | 27,073 49 |
| Net cost of shops |  |  | \$77,052 68 |

Detailed Accounts of Amounts Paid to the Sanitary Service During Year Ending January 31, 1921, by the Payment of Bills and Pay Rolls.
For repair and construction work . . . . $\$ 23,17580$
For horseshoeing
4,313 75
For hay, straw, grain and board and care of horses, $\quad 1,04000$
For feeder, stablemen and watent
1,040 00
For furnishing of prison vans and painting
4666

* $\$ 29,61621$

[^36]
## Horseshoeing by Services.

| Kinds and Styles. |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Plain shoes. | 5,153 | 3,395 | 479 | 361 | 439 | 143 | 0,973 |
| Bar shoes. | 270 | 221 | 23 | 108 | 41 | 13 | 676 |
| Rim shoes. |  | 27 |  |  | 2 |  | 29 |
| Leathers. | 4,435 | 2,943 | 203 | 1.59 | 201 | 74 | 8,045 |
| Resets. | 1,407 | 1,081 | 119 | 125 | 117 | 41 | 2,893 |
| Pads. | 62 | 309 | 97 | 34 | 36 | 51 | 592 |
| Springs. | 2 |  |  |  |  |  | 2 |

Cost of Horseshoeing.

|  | $\begin{aligned} & \text { Division } \\ & \text { Shops. } \end{aligned}$ | Outside Shops. |
| :---: | :---: | :---: |
| Stock. | \$2,961 05 | \$4,360 25 |
| Labor. | 5,631 25 |  |
| Totals. | \$8,592 30 | \$4,360 25 |

Amount Expended for the Collection and Disposal of Ashes, Garbage, Waste and Rubbish by Districts, $1920=21$.

| Dintricts. | $\begin{aligned} & \text { Popula- } \\ & \text { tion. } \end{aligned}$ | Ashes. |  | Garbage. |  | Waste and Rebibih. |  | Total Cost. | Total Costper Capita. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Cost. | Per Capita | Cost. | Per Capita | Cost. | Per Capita. |  |  |
| 1. Routh Boston | 70,377 | 874,228 18 | 81.0548 | \$25,332 15 | \$0.3599 | Sti03 60 | 800085 | \$100,16:3 33 | 81.4232 |
| 2. East 13oston | 63,662 | 30,753 05 | 0.4831 | 12,462 20 | 0.1957 |  |  | 43,215 25 | 0.6788 |
| 3. Charlestown | 34,604 | 41,186 77 | 1.1902 | 13,587 81 | 0.3926 |  |  | 54,774 58 | 1.5828 |
| 4. Brighton | 42,510 | 56,173 51 | 1.3214 | 4,482 39 | 0.1054 |  |  | 60,655 90 | 1.4206\% |
| 5. West Roxbury | 58,838 | $44,700 \quad 13$ | 0.7597 | 18,760 65 | 0.3188 | 1,306 00 | 0.0222 | 64,766 78 | 1.1007 |
| 6. Dorchester | 156,3:50 | 113,365 94 | 0.7251 | 74,541 79 | 0.4767 |  |  | 187,907 73 | 1. 2018 |
| 7. Roxbury | 124,352 | 173,838 72 | 1.3899 | 77,957 40 | 0.6269 | 2,952 25 | 0.0237 | 254,748 37 | 2.0405 |
| 8 and 9. South End and Baek Bay | 113,715 | 202,384 71 | 1.7797 | 66,75720 | 0.5871 | 38,049 39 | 0.3346 | 307.19130 | 2.7014 |
| 10. North and West Ends | 72,171 | 133,784 68 | 1.8535 | 24,006 43 | 0.3327 | 9,295 73 | 0.1289 | 167,086 84 | 2.3151 |
| 11. Hyde Park | 18,734 | 8,327 98 | 0.4445 | 3,861 70 | 0.2061 |  |  | 12,189 68 | ${ }^{-} 0.6506$ |
| Disposal station. |  | 74,595 51 |  | 72,934 87 |  | 2,676 55 |  | 150,206 93 |  |
| Totals | 755,313 | \$953,339 18 |  | 8394,684 59 |  | 854,882 92 |  | \$1,402,906 69 |  |

Force Employed on House Dirt and Ashes January 31， 1921.

| City Forcki | ¢ |  |  | 边 |  |  |  | ت1 $\stackrel{0}{0}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Inspectors． | 29 |  |  |  |  |  |  | 29 |
| Teamsters． | 92 | 22 | 1 | 9 | 6 | 19 | 2 | 156 |
| Helpers． | 102 | 44 | 10 | 14 | 9 | 43 | 4 | 226 |
| Dumpers． | 2 |  |  |  |  |  |  | 2 |
| Totals． | 225 | 66 | 16 | 23 | 15 | 62 | 6 | 413 |

Force Employed on House Offal January 31， 1921.

| City Force． | \％ | 淢 |  | 疗 | 年 | 号 | 兰 | E\％ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Inspectors | 10 |  |  |  |  |  |  | 10 |
| Teamsters． | 41 | 2 | 3 | 4 | 2 | 12 | 1 | 65 |
| Helpers． | 43 | 4 | 3 | 5 | 3 | 24 | 2 | 84 |
| Totals． | 94 | 6 | 6 | 9 | 5 | 36 | 3 | 159 |

Force Employed on Waste and Rubbish January 31， 1921.

| Ctry Force． | Number． |
| :---: | :---: |
| Inspeetors． | 1 |
| Teamsters． | 11 |
| Helpers． | 20 |
| Total． | 32 |

Amount of House Dirt and Ashes Removed．

| Yeara． | Loads． | $\begin{aligned} & \text { Cubic } \\ & \text { Yards. } \end{aligned}$ | Tons． |
| :---: | :---: | :---: | :---: |
| 1916. | 238，261 | 795，862 | 324，313 |
| 1917. | 231，999 | 796，633 | 324，384 |
| 1918. | 217，823 | 776，645 | 316，482 |
| 1919 | 22S，095 | 836，730 | 340，960 |
| 1920 | 238，646 | 891，042 | 363，097 |

Amount of House Offal Removed.

| Years. | Loads. | Cubic <br> Yards. | Tons. |
| :---: | :---: | :---: | :---: |
| 1916. | 48,329 | 118,770 | 70,075 |
| 1917. | 40,729 | 102,449 | 60,744 |
| 1918. | 39,494 | 96,317 | 56,836 |
| 1919. | 38,054 | 92,042 | 54,300 |
| 1920 | 40,881 | 100,865 | 59,507 |

Amount of Waste and Rubbish Removed.

| Years. | Loads. |  | Cubic Yards. | Tons. |
| :---: | :---: | :---: | :---: | :---: |
|  | Paper <br> Carts. | Market <br> Wagons. |  |  |
| 1916. | 4,302 | 7,031 | 79,909 | 10,744 |
| 1917. | 3,242 | 4,888 | 68,047 | 8,014 |
| 1918. | 3,186 | 4,823 | 64,221 | 7,546 |
| 1919 | 3,263 | 3,739 | 54,429 | 6,396 |
| 1920. | 3,794 | 2,717 | 47,949 | 5,641 |

Number of Loads of Material Collected from February 1, 1916, to January 27, 1921.

| Years. | Ashes. | Offal. | Rubbish. | Total Loads. | Tons. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1916. | 238,261 | 48,329 | 11,333 | 297,923 | 405,132 |
| 1917 | 231,999 | 40,729 | 9,073 | 281,801 | 393,132 |
| 1918 | 217,823 | 39,494 | 8,009 | 265,326 | 380,864 |
| 1919 | 228,095 | 38,034 | 7,002 | 273,151 | 401,656 |
| 1920. | 238,646 | 40,881 | 6,511 | 286,038 | 428,245 |

## Capacity of the Carts and Wagons Used by Sanitary Service, 1920.

|  | Pounds. | Cubic Feet. |
| :---: | :---: | :---: |
| Single ash carts. | 2,038 | 67.5 |
| Double ash carts (city). | 4,075 | 135 |
| Double ash carts (contractor) | 4,075 | 135 |
| Paper carts.. | 1,400 | 146 |
| Paper wagons | 2,200 | 219 |
| Single offal wagons.. | 2,260 | 54 |
| Double offal wagons | 4,130 | 94 |
| Auto.... | 8,150 | 270 |

Collected by Contract.

| Dibtricts. | Ashes. |  |  |  | Offal. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Double Loads. | Auto <br> Loads. | Cubic <br> Yards. | Tons. | Double Loads. | Auto. | Cubic Yards. | Tons. |
| East Boston. | 10,433 | ..... | 48,314 | 19,688 | 1,217 |  | 4,816 | 2,841 |
| Brighton. | 12,300 |  | 56,856 | 23,181 | 1,368 | 162 | 5,975 | 3,525 |
| West Roxbury. | 7,144 | 830 | 39,264 | 16,000 | 1,874 | 188 | 4,113 | 2,426 |
| Dorchester. | 21,974 | 6,247 | 164,640 | 67,090 | 6,426 | 643 | 25,769 | 15,203 |
| Hyde Park. | 2,725 | 1,062 | 19,307 | 7,867 | 636 |  | 2,353 | 1,388 |
| Totals. | 54,573 | 8,139 | 328,411 | 133,826 | 11,421 | 992 | 43,026 | 25,383 |

Summary.

| Material. | Cubic Yards. | Tons. |
| :---: | :---: | :---: |
| Ashes.. | 328,411 | 133,526 |
| Offal. . | 43,026 | 23,383 |

Loads and Tonnage of Material Collected, by Districts.

| Chass of Refuee. |  |  |  |  |  |  | $$ |  |  |  <br> $=$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| House dirt and ashes: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Loads | 21,662 | 10,433 | 14,015 | 12,300 | 14,196 | 28,221 | 39,431 | 56,628 | 37,973 | 3,787 |  | 238.646 | S91,042 |
| Tons. | 24,852 | 19,688 | 14,278 | 23,181 | 23,789 | 67,090 | 63,453 | 69,308 | 49,591 | 7,867 | 363,097 |  |  |
| Offal: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Loads. | 3,710 | 1,217 | 1,537 | 1,530 | 1,962 | 7,068 | 8,380 | 11,116 | 3,725 | 636 |  | 40,881 | 100,865 |
| Tons. | 4,378 | 2,841 | 1,813 | 3,525 | 2,426 | 15,203 | 10,421 | 13,116 | 4,396 | 1,388 | 59,507 |  |  |
| Waste and rubhish: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Loads. | 203 |  |  |  |  |  | 823 | 4,539 | 946 |  |  | 6,511 | 47,949 |
| Tons. | 161 |  |  |  |  |  | 658 | 3,782 | 1,040 |  | 5,641 |  |  |
| Totals $\left\{\begin{array}{l}\text { l }\end{array}\right.$ | 25,575 | 11,650 | 15,552 | 13,830 | 16,158 | 35,289 | 48,634 | 72,283 | 42,644 | 4,423 | 428,245 | 286,038 | 1,039,856 |
|  | 29,391 | 22,529 | 16,091 | 26,706 | 26,215 | 82,293 | 74,532 | 86,206 | 55,027 | 9,255 |  |  |  |

Final Disposition of all Material, in Loads and Tons (2,000 Pounds), Collection by the Sanitary Service, February 1, 1920, to January 27, 1921.

| ('lasm of lieftak. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| House dirt and ashes | 204,155 296,361 | $\begin{aligned} & 34,491 \\ & 66,736 \end{aligned}$ | 23S,646 | 363.097 |
| Offal. | 35,536 49,327 | 5,345 10,180 | 40,881 | 59,507 |
| Waste and rubbish | $\begin{gathered} 6,511 \\ 5,641 \end{gathered}$ |  | 6,511 | 5,641 |
| Thoads. | 246,202 | 39,836 | 286,03S |  |
| (Tons. | 351,329 | 76,916 |  | 428,245 |

Note.-First item, loads. Second item, tons.
Cost of Collection and Disposal of Refuse by Contract in the City of Boston for the Year 1920-21.


Cost of Collection and Disposal of Refuse by Day Labor Force in the City of Boston for the Year ending January 31, 1921.


[^37]Number of Carts，Wagons and Sleds Used by the Sanitary Service for the Collection of House Dirt and Ashes，Waste and

| Districte． | Ash Carts． |  |  | Offal Whoong． |  |  |  | Paper． |  | $\frac{\stackrel{n}{\vec{e}}}{\substack{\dot{e}}}$ | \％ | Contractors． |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | woon． |  |  | iron． |  | wood． |  |  |  |  |  |  |
|  | $\stackrel{\circ}{\tilde{y}}$ | $\begin{aligned} & \text { 曾 } \\ & \text { 曹 } \end{aligned}$ | － |  | $\begin{aligned} & \stackrel{\circ}{\#} \\ & \stackrel{\rightharpoonup}{\circ} \\ & \hline \end{aligned}$ | $\begin{aligned} & \stackrel{\ddot{W}}{\underline{W}} \\ & \text { 菏 } \end{aligned}$ | $\begin{aligned} & \stackrel{\circ}{\partial} \\ & \stackrel{\rightharpoonup}{\partial} \\ & \stackrel{y}{\circ} \end{aligned}$ |  |  |  |  |  |
| 1．South Boston <br> 3．Charlestown <br> 7．Roxbury <br> 8．South End Shop $\qquad$ $\qquad$ $\qquad$ $\qquad$ 10．North and West Ends． <br> 8 and 9．South End． $\qquad$ | 1 | $\begin{aligned} & 16 \\ & 12 \\ & 40 \\ & 30 \\ & 37 \\ & 45 \end{aligned}$ |  | 63158168 | 1 <br> 9 <br> 1 | 1 |  | 1 | 1 | 16 |  |  |
|  |  |  |  |  |  |  |  |  |  | 9 |  |  |
|  |  |  | 7 |  |  | 5 | 4 | 2 | 1 | 35 | 9 |  |
|  |  |  |  |  |  |  | 2 | 2 | 5 |  |  |  |
|  |  |  |  |  |  | 1 | 4 | 6 | 10 | 24 | 2 |  |
|  |  |  |  |  |  |  |  |  | 2 | 5 |  |  |
| Total number used by Sanitary Service． | 1 | 180 | 7 | 56 | 11 | 7 | 10 | 11 | 19 | 89 | 11 |  |
| 2．Wast Boston．． |  |  | 4 |  |  |  |  |  |  |  |  | East Boston Contracting Co． |
| 2．East Boston． |  |  |  |  |  |  | 3 |  |  |  |  | H．Cannon． |
| 4．Brighton．． |  |  | 9 |  |  |  |  |  |  |  |  | Me．aurtry Brothers． |
| 4．Brighton．． |  |  |  |  |  |  | 3 |  |  |  |  | W．Griffin． |
| 5．West Roxbury． |  |  | 6 |  |  |  |  |  |  |  |  | J．J．Moore． |
| 5．West Roxbury．． |  |  |  |  |  |  | 4 |  |  |  |  | M．H．Loonie． |
| 6．Dorchester． | 2 |  | 16 |  |  |  |  |  |  |  |  | W．J．Hunt． |
| 6．Dorchester． |  |  |  |  | 11 |  |  |  |  |  |  | T．H．Gorman． |
| 11．Hyde Park． |  |  |  |  |  |  | 2 |  |  |  |  | G．R．Tate． |
| 11．Hyde Park． |  |  | 2 |  |  |  |  |  |  |  |  | M．MeGinuess． |
| Totals． | 3 | 180 | 44 | 58 | 22 | 7 | 22 | 11 | 19 | 89 | 11 |  |



## SEWER AND SANITARY DIVISION - STREET CLEANING AND OILING SERVICE.

## Item of Expenditure for Y'ear 1920. <br> Street Cleaming Service.

General administration
Salary of division engincer (in part), $\quad \$ 1,48667$
Salary of supervisor (in part) . . 1,431 00
Salary of medical inspector . . 79497
Salary of veterinarian . . . 1,258 33
Printing . . . . . . 1,48006
Stationery . . . . . . 32310
Telephone . . . . . 70623
Postage . . . . . 13886
Office items and incidentals . . 37485
Automobile repairs and maintenance

4,189 09
Annuity, chapter 569, Acts of 1898, 50833
Pensions, retired veterans
3,711 97
Pensions, retired laborers
8,134 74
General expenses other than general administration
Wages of stablemen . . . . $\$ 44,04194$
Wages of yardmen 5,525 26
Wages of watchmen 5,950 75
Wages of foremen's drivers 50500
Wages of yard clerk and messenger, 2,461 98
Hay and straw 30,725 42
Grain 34,32702
Gas 3540
Electric light . . . . 31703
Veterinary services and medicines

68713
Horseshoeing . . . . 7,089 42
Harnesses, new and repairs . . 3,639 83
Wagon and carriage repairs . . 98249
Stables and yards, rent of . . 2,662 59
Stables and yards, supplies . . 3,007 01
Stables and yards, building repairs, 1,945 48
Fuel
59539
Removing dead horse
7500
Care of horses
44850
$\$ 24,53820$

Brought forward
Automobile repairs and maintenance

Operating expenses
District foremen, salaries of
Inspectors, wages of, on paved streets, crossings, snow work, patrolling, gutters, etc.
Laborers, wages of, on paved streets, crossings, snow work, patrolling, gutters, etc.
$\$ 145,08264 \$ 173,30481$
3,683 97

Hired autos and teams on paved streets, gutters, crossings, snow work, patrol, etc.
Electric car flushers
Holiday pay allowed
Vacations
Pay and . . 15,07115
Dumps, rent of . . . . 25715
Snow licenses (part cost) . . . 50000
Cart repairs
Water cart repairs . . . . 1,711 14
Tool repairs . . . . . 73642
Vehicle supplies . . . . 43362
Sweeping machines . . . . 1,789 39
Push carts and barrels . . . 1,093 16
Hoes, shovels, picks, etc. . . 2,661 28
Snow plows
Snow tractors (new)
Flushing machines
Push brooms, team brooms, handles, etc.
Machine brooms . . . . 4,803 75
Calcide
Sand
Sand machines, barrels, etc.
Elgin street sweeping machines, new, and repairs
Flushing hose
Paint
Miscellaneous
Refuse boxes
Food and carfares
Automobile repairs and maintenance
$\$ 20,165 \quad 22$

37,804 30

339,762 30
$63,89 \pm 25$

43,864 41
5,220 00 47,454 94

7,963 81 26938
3,400 00 26238

3,187 00
13675 90758
46502
8,551 64
43382 5369 7533 36454 1,191 90

623,52924 19,399 18
3,071 15

202

1,644 74

Street Wratering and Oiling Branch.

General administration
Salary of division engineer (in part), $\$ 18000$
Salary of supervisor (in part) . $\quad 31412$
Salary of general foreman
Telephone . . . . . 4120
Carfare
Execution of court . . . . 1,000 00
Advertising
Stationery . . . . . 7092
Printing . . . . . . 32489
Postage
Proportionate share of supervisor's automobile
Proportionate share of division engincer's automobile $\dot{\text { a }}$.
Automobile repairs and maintenance

1,877 17

1590
2720 3048

64614
$\$ 4,891 \quad 79$

27342
9035

General expenses other than general administration
Wages of stablemen, watchmen and yardmen $\$ 15213$
Veterinary services and medicine . 419
Hay, straw and grain . . . 20624
Horseshoeing 3318
Yard and stable, building repairs 2057
Yard and stable, furnishings : 7826
Yard and stable, light and fuel . $\quad 900$
Yard and stable, rent : . 1231
Wagons and carriage repairs . 2335
Automobile repairs and maintetenance

32078
Operating expenses . . . . . . 181,01140
Chief inspector
$\$ 1,45349$
Inspectors:
Water distribution . . . 6,940 64
Oil . . . . . . 19803
Sanitary Service . . . . 5,906 83
Labor:
Sanitary Service . . . . 14550
Water . . . . . . 51791
Calcide . . . . . . 5450
Oil . . . . . . . 44062
Sanding
26000
Holiday and allowed time
26107
Carricd forward . . . . $\$ 16,178 \quad 59 \quad \$ 186,76320$

Brought forward
Vacation
Hired teams, water distribution
Car sprinkler, water distribution
Road oil
Standpipes, repairs and maintenance
Tools and tool repairs
Water cart repairs
Electric hydrant repairs and maintenance
Bicycles, new, and repairs
2,266 23
Rent car siding
Gasolene
Auto oils, grease, etc.
4801
10000
1,121 82

Total

## DISTRIBUTION OF EXPENDITURES.

| Removing snow | \$76,632 74 |  |
| :---: | :---: | :---: |
| Snow work on crossings and gutters, | 20,170 30 |  |
| Flushing streets |  | 51,252 96 |
| Street patrolling by teams | \$28,216 48 |  |
| Cleaning of subway passage | 1,591 08 |  |
| Street patrolling by push carts | 149,60+ 17 |  |
| Collection of refuse boxes | 6,534 54 |  |
| Cleaning of paved streets | \$262,688 99 |  |
| Cleaning of macadam gutters | 65,908 59 |  |
| Cleaning of public alleys | 4,851 75 |  |
|  |  | 333,449 33 |
| Sanding of slippery streets |  | 4,329 95 |
| Work performed for Sanitary Service |  | 125,052 50 |
| Total expenditures, Street Cleaning Branch, |  | \$796,8 |
| Oiling of public streets and ways |  | 90,283 49 |
| Watering of public streets and ways |  | 90,427 38 |
| Sanitary Service |  | 6,052 33 |
| Total |  | \$983,597 |

Summary.

| Items. | Street Cleaning Branch. |  |  | Street Oiling and Watering Branch. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1918-19. | 1919-20. | 1920-21. | 1918-19. | 1919-20. | 1920-2t. |
| Labor | 8450,061 95 | \$527, 27717 | S60S,491 42 | \$16,684 62 | \$20,567 53 | \$19,887 03 |
| Teaming. | 26,371 88 | 47,339 31 | 49,084 41 | 45,35764 | 53,912 03 | 73,209 57 |
| Supplies and repairs. | 126,99* 61 | 123,602 40 | 139,258 22 | S0,167 87 | 47,674 82 | 93,666 60 |
| Totals. | 3603,428 44 | S698,818 8s | \$796,534 05 | \$142,210 13 | \$122,154 38 | \$156,763 20 |

## Cost of Snow Work and Volume Removed.

| Districts. | Snow Work and Gutters. | Snow <br> Removial. | Total ${ }_{*}$ Cost. | $\begin{gathered} \text { Single } \\ \text { Louds } \\ \text { Semowed. } \\ \dagger \\ \dagger \end{gathered}$ | $\begin{gathered} \text { Cubie } \\ \text { Y: } \because \text { rdg } \\ \text { Removed. } \end{gathered}$ | Cost per Cubic Yard Removed. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| South Boston. | \$1,506 23 | \$1,442 23 | S2,915 46 | 503 | 1,509 | \$0 955 |
| East Boston. | S81 81 | 89511 | 1,776 95 | 275 | 825 | 1085 |
| Charlestown | 80396 | 1,088 05 | 1,892 04 | 426 | 1,278 | 0851 |
| Dorchester. | 74875 | 92937 | 1,678 12 | 363 | 1,089 | 0853 |
| Roxbury | 3,113 0s | 94704 | 4,06012 | 520 | 1,560 | $0 \times 67$ |
| Uptown. | ¢97 93 |  | 89793 |  |  |  |
| Downtown. | 1,117 41 | 25,973 87 | 27,091 2- | 11,779 | 35,337 | 0735 |
| Back Bay. | 13129 | 2,457 98 | 2,589 27 | 1,521 | 4,563 | 0538 |
| North and West Ends | 50390 | 19,503 09 | 20,006 99 | 12,320 | 36,960 | 0527 |
| Patrol System. | 10,465 91 | 23,395 94 | 33, 561 Ss | 14, SS 2 | 44,646 | 0524 |
| Totals. | \$20,170 30 | 576,632 74 | \$96, $50304{ }^{\prime}$ | 42,589 | 127,767 |  |
| Average. |  |  |  |  |  | \$0 599 |

* Includes Sundays, paid time and one half; holidays, double time.
$\dagger$ Street Cleaning loads, 3 cubic yards each.

Snow Summary.

| Items. | Cost of Inspection. Labor and Teaming. | Cost of all Other Charges. | Total Cost. | Amount of Syow Removed. |  | Cost per Load. | Cost per Cubic Yard. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Loads. | Cubic Yards. |  |  |
| Snow removal. | 8.5.5,515 03 | 817,71171 | \$73,232 74 | 42,5s! | 127,767 | \$1799 | \$0 521 |
| guiters........... | 15,729 38 | 1,440 92 | 20,170 30 |  |  |  |  |
| Totals. | \$74,24741 | \$19,155 63 | \$93,403 0! |  |  |  |  |

[^38]
Cost of Maintaining Horses on a Basis of 365 Days per Year.

| Districts. | Sotth Boston. |  | East Boston. |  | Charlestown. |  | Dorchester. |  | Roxbury. |  | South Stable. |  | West Stable. |  | Total. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Average Numher of Horses helt | 15.8 |  | 10.97 |  | 11.46 |  | 13.2 |  | 16.03 |  | 66.8 |  | 29.75 |  |  |  |
| ltems. | Total ('ost per year. |  | Total <br> Cost per Year. |  | $\begin{gathered} \text { Total } \\ \text { Cost per } \\ \text { Year. } \end{gathered}$ |  | Total Cost per Year. |  | Total Cost per lear. |  | Total <br> Cost per lear. |  | Total Cost per year. |  | Total <br> Cost per Year. |  |
| Labor | \$4,295 00 | so 7441 | \$2,330 90 | \$0 5821 | 83,368 09 | S0 0053 | 84,326 00 | \$0 5978 | 84,47625 | 807476 | 814,252 45 | s0 5845 | 87.63561 | 807031 | 840,684 33 | 80 6795 |
| or Hay and grain | 5,518 56 | 0907 i | 3,634 0t | 0907 i; | 5,291 11 | 12652 | 4,313 23 | 08952 | 6,43128 | 10991 | 27,751 96 | 11594 | 12,591 05 | 11594 | 65,531 27 | 10945 |
| Fuel | 9200 | 00159 |  |  | 13866 | 00331 | 18305 | 00379 | 8395 | 00113 |  |  |  |  | 49766 | 00083 |
| Light | 16; 01 | 002 s 1 | 6193 | 00154 | 3540 | 00084 | 4534 | 00094 | 17752 | 00303 |  |  |  |  | 48420 | 0008 |
| Rent and taxes | 57500 | 00996 | 1,267 12 | 03164 |  |  | 15000 | 00311 |  |  |  |  |  |  | 1,992 12 | 00332 |
| Yard and stable repairs, | 10777 | 00186 |  |  | 1800 | 00043 |  |  | 3868 | 00661 | 18232 | 0007 |  |  | 69497 | 00116 |
| Yard and stable furnishings | 14734 | 0025.5 | 19774 | 00493 | 5156 | 00123 | 3470 | 0 0074 | 25242 | 00431 | 1,003 41 | 00411 | 17371 | 00427 | 2,160 S8 | 036 |
| Veterinary serviees and medieine. | 10275 | 0017 | 9000 | 00224 | 12814 | 00306 | 28102 | 0058 | 12131 | 0 0207 | 1.27\% is | 00524 | 39715 | $0036 \%$ | 2,398 10 | 004 |
| Horseshoeing and clipping | 79525 | 01377 | 68550 | 01712 | S14 25 | 01947 | 59650 | 0 123s | 1,144 25 | 01955 | 3,404 50 | 01396 | 1.63575 | 01506 | 9,0:6 00 | 01515 |
| Totals | \$11,797 68' | \$2 043 | 88,267 25 | \$2064 | 89,845 21 | \$2 3541 | 89,929 S4 | \$2 0609 | \$13,073 S | 82 234 | 847,572 44 | \$1 9634 | \$22,733 30 | ミ2 0933 | 3123,519 58 | S2 063 |

Oiling of Macadam Streets.
Showing Cost of Labor, Teaming, Oil, Etc., Including Supervision.

| District, |  |  |  | Dates of Oiling. |  | Cobt perCubicYard. | Total Cost. | $\begin{gathered} \text { Callons } \\ \text { Esed. } \end{gathered}$ | $\begin{gathered} \text { Gallens } \\ \text { per } \\ \text { Square } \\ \text { Yard. } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | First. | Last. |  |  |  |  |
| South Boston | 386,715 | 21.97 | 149,869 | May 28 | Sept. 20 | \$0 0457 | \$6,856 44 | 35,820 | . 239 |
| East Boston. | 468,877 | 26.64 | 304,850 | June 3 | Sept. 23 | 0208 | 6,357 52 | 35,774 | .1173 |
| Charlestown. | 159,219 | 9.04 | 102,993 | June 3 | Sept. 16 | 0269 | 2,771 19 | 17,520 | . 173 |
| Brighton. | 725,566 | 41.22 | 199,517 | June 1 | Sept. 25 | 0337 | 6,736 56 | 35,370 | . 1772 |
| West Roxbury | 1,396,282 | 79.33 | 330,520 | June 1 | Sept. 29 | 0337 | 11,164 62 | 60,738 | . 1837 |
| Dorchester. | 1,753,111 | 99.61 | 406,936 | June 2 | Oct. 5 | 0388 | 15,838 50 | 87,514 | . 215 |
| Roxbury | 1,020,542 | 57.99 | 516,397 | May 27 | Sept. 28 | 0261 | 13,480 76 | 73,375 | . 142 |
| South End, Back Bay and part | 370,203 | 21.07 | 203,594 | May 27 | Sept. 20 | 0383 | 7,815 36 | 41,576 | . 2042 |
| Hyde Park. | 368,213 | 20.92 | 227,513 | June 1 | Sept. 21 | 0378 | 8,624 01 | 46,602 | . 2083 |
| Totals. | 6,648,728 | 377.79 | 2,442,189 |  |  |  | \$79,644 96 | 434,589 |  |
| Averases. |  |  |  |  |  | \$0 0326 |  |  | . 1779 |

Area Watered 1920.
Showing Area Watered, Total Cost and Cost per Square Yard.

| District. | $\begin{aligned} & \text { Tota! } \\ & \text { Square } \\ & \text { Yards. } \end{aligned}$ | Equivalent Mileage 30-foot Roadway. | Dates of Watering |  | Auto DaysWorked. (Hired.) | $\begin{gathered} \text { Cart } \\ \text { Ways } \\ \text { Worked. } \end{gathered}$ | $\begin{gathered} \text { Total } \\ \text { Toost } \end{gathered}$ | $\begin{gathered} \text { Cost } \\ \text { per Suare } \\ \text { Fard. } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | First. | Last. |  |  |  |  |
| South Boston. | 496,087 | 25.186 | April 18 | Nor. 21 | 26 | 560! | \$9,733 62 | \$0 019 |
| East Boston. | 192,828 | 10.956 | Apr. 20 | Nov. |  | 23.4 | 2,663 47 | 014 |
| Charlestown. | 275,954 | 15.679 | Apr. 18 | Oct. 27 |  | $3 \mathrm{t}_{2}$ | 4,330 46 | 015 |
| Brighton. | 148,240 | 8.422 | Apr. 19 | Nov. 21 |  | 4493 | 6,135 29 | 041 |
| West Roxbury | 187,570 | 10.657 | Apr. 11 | Nor. 21 |  | $513 \frac{1}{2}$ | 8,531 93 | 046 |
| Dorchester | 247,295 | 14.05 | Apr. 19 | Nor. 21 | 263 | 560? | 7,916 12 | 032 |
| Roxbury. | 282,544 | 16.053 | Apr. 16 | Nov. 21 |  | S20. | 13,2089 95 | 017 |
| South End and part of Roxbury. | 636,710 | 36.125 | Apr. 18 | Nor. 21 |  | $511 \%$ | 11,921 67 | 019 |
| City Proper | 545,720 | 31.006 | Apr. 16 | Nov. 20 | 598 |  | 2,1745 24 | 039 |
| Hyde Park. | 82,400 | 4.113 | Apr. 18 | Nor. 21 |  | 329 | 4,016 74 | 049 |
| Totals | 3,095,348 | 175.247 |  |  | 6514 | 4,345 $\frac{1}{1}$ | 890,283 49 |  |
| Average. |  |  |  |  |  |  |  | \$0 029 |

Oil Bought During 1920.

|  | Gallons. | Cost. |
| :---: | :---: | :---: |
| American Oil Products Company * |  | \$9,638 53 |
| M. E. Lemery Company $\dagger$ |  | 1,000 00 |
| Alden Spears Sons Company | 94,664 | 15,619 59 |
| Mace Moulton, Jr., Inc. | 339,925 | 58,277 82 |
| Totals. | 434,589 | \$84,535 94 |

* Oil bought and used in 1919 , payment withheld untıl 1920.
$\dagger$ Execution of Court. Oil bought and used in 1917 but not paid for.
Net cost of oil bought and used in 1920, \$73,897.41.
Automobile Expenditures for 1920.

|  |  |  | $\stackrel{5}{8}$ |  | For | Remex's A | utos |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\frac{3}{y_{0}^{2}}$ | 边 | 边 | $\begin{gathered} \text { East } \\ \text { Boston. } \end{gathered}$ | Charlestown. | $\begin{aligned} & \text { Dor- } \\ & \text { chester } \end{aligned}$ | Roxbury. | $\begin{aligned} & \text { Patrol } \\ & \text { System } \end{aligned}$ | or. | 5206 | (old). |  |  |  |
| Purchase |  |  |  |  | \$526 00 | 85.100 | \$49600 |  | *85333 33 |  |  | 87.45000 | 83,100 00 |  |
| Repistration | \$10 00 |  | 81000 | 81000 | 1000 | 1000 | 1000 | $\$ 1000$ |  |  | 8200 | 200 |  |  |
| Chauffers' licenses. |  |  |  | 100 | 00 | 20 |  |  |  |  |  |  |  |  |
| Storage | 18000 | \$67 50 |  |  |  |  |  |  | 6000 | \$100 00 |  |  |  |  |
| Supplies | 49 6i | 200 | 2323 | 1516 | 9 \% 0 | 1000 | 536 | 165\% | 23 2! | 54. |  | 5,56 |  |  |
| Gasolene and oils | 589 15 |  | 14091 | 15536 | 148 68 | 1592.5 | 1945 | 477 | 47 | 25071 | 16.31 | 117 92 |  | \$1914.5 |
| Tubes, tires, eases, new | 44837 | 2095 | 15380 | 1662 |  | 1576 | 25191 | 15368 | 13985 | 44957 |  |  |  |  |
| Tubes, tires, cases, repairs | 2145 |  |  | 1 \% | 1100 | 95.5 | 965 |  |  |  |  |  |  |  |
| Engine and body repairs, | 1.117 0.3 |  | 11 : 81 | 79 \% |  | 4941 | 17326 | 19724 | 2447 | 3525 | 68.816 | 2500 |  |  |
| Freight. |  |  |  |  |  |  |  |  |  |  |  | $1+626$ |  |  |
| Towing. | 1000 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Chauffeur | 86400 |  |  |  |  |  |  |  | 51301 |  |  |  |  |  |
| Total | 83,289 66 | \$90 4.5 | \$550 10 | \$279 +1 * | *8.07 18 | *3826 97 | * 31.14103 | 38.34 | \% $31.51 \times$ | \$1.150 32 | 84, | *3,.746 it | *s3.400 0 | \$19145 |

[^39]
## APPENDIX E.

## REPORT OF THE DIVISION ENGINEER OF THE WATER DIVISION.

February 1, 1921.
To the Commissioner of Public Works:
I respectfully submit the following report of the operations, income and expenditure of the Water Division for the past year.

For the third successive year there has been practically no development of new territory and but little building construction; consequently the work of this division has been principally confined to the maintenance and improvement of the existing system with a comparatively small amount of extension of mains, largely to afford sprinkler and fire pipe service.

Relaying to improve fire protection and relaying in advance of permanent street construction account for most of the pipe laid during the year. These two classes of work are of vital importance and will be a continued cause for expenditure in the future.

Some of the more important work done was as follows:
On account of the development of the state property on the South Boston Flats, 892 linear feet of 30 -inch pipe, laid in Danby and D streets in 1897, were abandoned and relaid in Claflin and C streets; in the same connection, 2,178 linear feet of 12 -inch pipe were laid in D, Claflin and Bullock streets.

Twenty-six hundred linear feet of 16 -inch pipe were laid in Poplar, Florence and Ashland streets, West Roxbury. This line, when completed, will connect the distribution systems of Dorchester and West Roxbury and will form a valuable crosstown supply.

Relaying for improvement of fire protection was carried out in the city proper, Brighton, West Roxbury, Dorchester and Hyde Park districts, the new mains laid replacing pipes thirty to sixty years old.

Waste surveys of Charlestown and the Brighton high service area were completed by the Pitometer Company
of New York, and a similar survey is now in progress in South Boston and the South End. The contract cost of the Charlestown survey was $\$ 3,800$ and resulted in a permanent annual reduction in Boston's share of the metroplitan water assessment of $\$ 3,436$. The contract cost of the Brighton survey was $\$ 2,500$ and resulted in a yearly saving of $\$ 733$.

The following contracts for cleaning mains were carried out by the National Water Main Cleaning Company of New York:

Nine thousand five hundred thirty-two linear feet of 12 -inch and 16 -inch mains were cleaned in South Boston and in Pearl street, City Proper.

Fourteen thousand five hundred linear feet of 6 -inch and 8 -inch mains were cleaned in Jamaica Plain.

A large amount of regulating work was done in different streets in advance of permanent paving, notably in Centre and Washington streets, West Roxbury; in the first-named street, 500 linear feet of 24 -inch main were raised in place, 1,600 linear feet of 12 -inch main were relaid, replacing old pipe, and a large number of hydrants and services were regulated. This class of work constitutes one of the severe demands upon the resources of the maintenance force of the Water Division.

The regular work of the Distribution Branch, consisting of repairing leaks, establishing fire and service pipes, freeing stoppages, shutting off and letting on water, repaving, etc., taxed the resources of the branch to the utmost.

The standpipe at Orient Heights was cleaned and painted and the wooden house inclosing it was also painted and repaired.

The pipe bridge over the New York, New Haven \& Hartford Railroad was repaired, cleaned and painted.

The pipe bridge on Berkeley street was repaired.
During the reconstruction of Warren Bridge the 30inch, 20 -inch and 16 -inch mains located on it are being regulated. These pipes of late years have given a great deal of trouble, owing to the unsafe condition of the timbers supporting them.

A notable advance has been made in the substitution of a post hydrant of compression type for our regulat type, which has always opened with the pressure. The particular advantage of the new type is that when broken off the possibility of free flow through the hydrant is practically eliminated, as the foot valve which opens
against the pressure will usually either entirely stop, or at the worst, partially stop the flow of water.

The work of the Meter Branch is rapidly increasing as the number of meters in the service multiplies. Approximately 3, 300 new meters have been set, 8,300 have been changed and reset and 6,900 have been repaired during the year.

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

Respectfully submitted,

F. A. McInnes, Division Engineer.

## WATER DIVISION, 1920-21.

## FINANCIAL STATEMENT.

## Receipts.

Sales of water ..... \$3,364,937 04
Elevator, fire, motor, stand pipes and repairs ..... 21,626 36
Service pipes and repairs ..... 18,921 85
Sales of old materials ..... 10,593 18
Fees for summonses ..... 4,285 55
Labor,materials, etc., for miscellaneous work ..... 4,154 92
Interest on bank d posits ..... 94486
Board of horses ..... 91375
Shutting off and letting on water for monpayment ..... 85020
Damages to automobiles ..... 54533
Relocation of hydrants and pipe ..... 46928
Damages to hydrants ..... 40432
Sales of merchandise ..... 29169
Raising gate boxes ..... 11907
Rent of conduit, Congress street ..... 10000
Rent of high pressure yard ..... 9000
Sale of booth ..... 9000
Testing meters ..... 8381
Sale of old tires ..... 6250
Damages to wagons ..... 3356
Filling water tanks ..... 848
Total receipts from all sources ..... $\$ 3,429,53575$
Transferred to City Loan account to pay Hyde Park water debt ..... $\$ 16,00000$
Transferred to credit of Collecting Depart-nmet . . . . . . . . . 33,570 54Transferred to City Loan account to paygeneral city debt193,958 26
243,528 80$\$ 3,186,00695$
Expenditures.
Current expenses and extensions ..... \$1,253,166 33
Interest on water loans ..... 45,874 33
Refunded water rates ..... 1,041 38
Metropolitan water assessment ..... 1,885,924 91
Total expenditures ..... \$3,186,006 95

Details of expenditures under appropriation for current expenses and extensions for the fiscal year ending January 31, 1921:

| Extension. |  |  |  |
| :---: | :---: | :---: | :---: |
| Construction of new mains . |  |  |  |
| Replacement of old mains . | $\cdots$. | $\begin{array}{r} \$ 101,59476 \\ 119,22595 \end{array}$ |  |
| New hydrants | $\cdots$ | 19,42967 |  |
| Total extension |  |  | \$226,250 38 |
| Maintenance. |  |  |  |
| Office and Engineering Branch: |  |  |  |
| Salaries and wages . | \$49,734 16 |  |  |
| Printing, stationery and postage |  |  |  |
| Miscellaneous . . . . | 1,87930 619 |  |  |
| Income Branch: $\$ 30,06130$ |  |  |  |
| Salaries and wages | \$121,328 08 |  |  |
| Printing, stationery and post- | 1,791 75 |  |  |
|  | 4,838 71 |  |  |
| Miscellaneous | 95019 |  |  |
| Distribution Branch: |  |  |  |
| Salaries and wages | \$29,133 85 |  |  |
| Traveling expenses | 40725 |  |  |
| Printing, stationery and postage |  |  |  |
| Miscellaneous . . . . | 1,52357 1,59681 |  |  |
| Meter Branch: $\quad 32,06148$ |  |  |  |
| Salaries and wages | \$15,069 16 |  |  |
| Traveling expenses | -10748 |  |  |
| New meters and setting | 19,259 05 |  |  |
| Meters, repairing, resetting, testing, etc. | 19,211 10 |  |  |
| Printing, stationery and post- age |  |  |  |
| Shops . | 74270 16,760 |  |  |
| Investigations | 1,084 09 |  |  |
| Holiday, | 4,235 96 |  |  |
| Laborers' vacations | 1,442 13 |  |  |
| Miscellaneous | S45 81 |  |  |
| Waste Prevention Branch: 88,75750 |  |  |  |
| Salaries and wages | \$8,940 \$8 |  |  |
| Traveling expenses | -38735 |  |  |
| Printing, stationery and post- |  |  |  |
| Miscellaneous | $7130$ |  |  |
| Inspection of castings |  | 9,457 63 |  |
| Damages . . |  |  |  |
| Carried forward |  | 345,358 29 | 226,250 38 |


| Brought forward | \$345,358 29 \$226,250 38 |
| :---: | :---: |
| Yards . | $54,634.46$ |
| Shops | 22,075 95 |
| Stables: |  |
| Labor . . . . $\$ 10,48438$ |  |
| Hay and grain . . . . 8,523 35 |  |
| Vehicle repairs . . . 3,12510 |  |
| Horseshocing : . . . 1,287 48 |  |
| Veterinary services and sup- plics 53827 |  |
| Board of horses . . . 45555 |  |
| Harness repairs . . . . 22747 |  |
| Building repairs . . . 15364 |  |
| Light . . . . . . 6877 |  |
| Coal . . . . . . 5275 |  |
| Miscellaneous . . . . 15148 |  |
|  | 25,068 24 |
| Tools and repairs | 16,143 58 |
| Main pipe relocation | 30,938 58 |
| Main pipe repairs . | 70,330 11 |
| Service pipes, new | 26,551 93 |
| Service pipes, changes in size and location | 8,932 18 |
| Service pipes, repairs | 71,918 46 |
| Hydrant changes in style and location | 24,562 58 |
| Hydrant repairs . | 40,398 89 |
| Water posts, new | 11283 |
| Water posts, changes in location | 24341 |
| Water posts, repairs | 1,218 45 |
| Fountains, new | 19863 |
| Fountains, changes in style and location | 35943 |
| Fountains, repairs | 4,341 09 |
| Fountains, furnishing ice | 1,004 62 |
| Holiday Investigations | 38,213 23 |
| Investigations ${ }_{\text {Shutting off and letting on water }}$ | 1,77435 22,19414 |
| Shutting off and letting on water | 22,19414 2,62126 |
| Work on account of Office and Engineers' |  |
| Branch (by Distribution Branch). . . | 37723 |
| Work on account of Income Branch (by Distribution Branch) | 97181 |
| Work on account of Meter Branch (by Distribution Branch) | 96016 |
| Work on account of Waste Prevention Branch (by Distribution Branch) | 6,682 64 |
| Work on account of new meters (by Distribution Branch) | 2,392 96 |
| Work on account of meter repairs (by Distribution Branch) | 7,450 99 |
| Launch "Water Crest, " repairs and supplies | 2,044 40 |
| Pensions paid Civil War veterans . . | 6,517 01 |
| Pensions paid retired laborers | 19.46459 |
| Vacations allowed laborers, mechanics, etc. | 15,120 40 |
| Compensation allowed injured employees | 1,457 72 |
| Emergency service | 28,565 48 |
| Harbor service | 5784 |
| Taxes | 25280 |
| Medical inspector | 50000 |
| Bridge Service | 13193 |
| Breed's Island tower | 2.24876 |
| Pitomer waste surveys | 9,133 33 |
| Carried forward | \$913,524 94 \$226,250 38 |

Brought forward . . . . . . $\$ 913.52494 \$ 226,25038$
East Boston reservoir . . . . . . 19600
Garage . . . . . . . . 3,62812
Automobiles . . . . . . . . 31,600 80
Total maintenance
Merchandise sold
$\$ 5,471 \quad 13$
Stock consigned to junk
74221
Stock purchased
6,213 34
313,483 64
\$1,494,897 22
Less stock used and disposed of . . . . . . 241,73089
Total expenditures from appropriation for Current Expenses, etc
\$1,253,166 33
Comparative Table of Receipts and Expenditures. Receipts.

|  | 1912-13. | 1913-14. | 1914-15. | 1915-16. | 1916-17. | 1917-18. | 1918-19. | 1919-20. | 1920-21. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sales of witer | 82,906,569 76 | 82,917,210 sm | 82,923,719 0.1 | 82,859,70792 | 83,037,974 66 | 82,472,467 9 | 82,994,922 73 | 83,24,542 57 | 83,364,937 04 |
| Other reeripts. | 75,674 +4, | 81,3s9) w | (0,922 86 | 81,977 77 | 71,374 38 | 79.2238 | 50,529 5 | [4,111331 | 64.99471 |
| Trausfers ly C City Iuditor | 82, 30.2412 .5 | 83,034,600 36 | 82,993,641 9.5 | \$2.914,6is.5 69 | 83,109,399 21 | $\begin{array}{r} 82,993,09164 \\ \quad * 1,42639 \end{array}$ | 83,069,652 31 | 83,299,6033 90 |  |
|  | $82.9 \times 294$ | S3,03:31,600 36 | \$2,993,611 93 | \$2,944,685) 69 | \$3,109,349 21 | 82,950,915 0.3 | 83,019,452 31 | 83,29x, 61338 | 83, 219.33 .37 |
| Balame, berinuing of year Babane, cmi of yar . . | $\left.\begin{array}{\|c\|} 864,521 \\ 97 \\ 271,540 \\ \\ \hline \end{array} \right\rvert\,$ | $\begin{array}{r} 8271,5 \times 0.51 \\ 310,81949 \end{array}$ | $\begin{array}{r} 8310, \times 19+9 \\ +154,5702.4 \end{array}$ | $\begin{array}{r} 8154,47024 \\ +135,01440 \end{array}$ | $\begin{aligned} & 813,3,01+40 \\ & \dagger 87,1: 1 ; 19 \end{aligned}$ | $\begin{gathered} 857,14619 \\ +25,09731 \end{gathered}$ | $\begin{aligned} & 82.0,0 \times 7: 31 \\ & +3,+47 \times: 3 \end{aligned}$ | + 83,47 $\times 3$ |  |
| Tram ferred to (ollerting Department |  |  |  | 24,500 06, | 2-,77: 00 | .264 14 | 26,16.5 sis | 30,317 11 | 33,5\%0 |
| Transferred to city loan aceount |  | 17,000 00 | 355,450 26 | 259,01670 | 407, 心23 sti | 16,000 00 | 121,2639 9\% | 3940,095 22 | 209,953 26 |
| Tranfered to appropriation for service mains and relay ing main |  | 200,00000 | 200,000 0ij |  |  | 33,000 013 | 30,000 00) |  |  |
|  | E.rpenditures. |  |  |  |  |  |  |  |  |
|  | 1912-13. | 1913-14. | 191.15. | 1915-16. | 1916-17. | 1917-18. | 1918-19. | 1919-20. | $1920-21$. |
| Current expensise <br> Service amb rem ine main | $\pm \$ 935000200$ | $\begin{array}{r} 8 \times 99,33549 \\ 8,94540 \end{array}$ | $\begin{gathered} 8 \times 9,170 \\ 12 \times, 5 \times 4 \\ 146 \end{gathered}$ | $\begin{array}{r} 8901,135 ; 19 \\ 49,275, \end{array}$ |  | $\begin{array}{r} 81,015,513 \\ 97,05,050 \end{array}$ | $\begin{array}{r} 81,0 \pi 5,42 \\ 51,5994 \end{array}$ | \$1,010,034 32 3.1ヶі ※3 | 81,2:3.16:6i 33 |
| Metropulitan water asmensment | 1,792, 123 $\times 3$ | 1,842,127 10.5 | 1,676,03\% 11 | 1,6i5,004; 29 | 1,669, +3, 79 | 1,252,004 76 | 1,711,00) 8 \% | 1, 40.5,101 0: | 1.505,924 91 |
| Interest. | 137, 57.537 | 148,673 4n | 94,64.5 02 | 91,259 29 | 87, 46, 6 \% 5 ) | N0,494 20 | 71,26\% 00 | ${ }^{13,162}$ 73 | 45,574 33 |
| Refumbed water rates. | 2, 6in 02 | 1,275 ! 7 | 9333131 | $734 \times 8$ | (i2) 33 | 61120 | 96299 | 1.339 - | 1,041:38 |
|  | 82,767,751 4 | $82,915,36141$ | \$2,794,340 94 | $82,710,594 \times 3$ | \$2,723,61! 5, | 82,975,712 77 | 82,929,602 10 |  | 83,1N6,006 93 |

## COST OF CONSTRUCTION AND CONDITION OF WATER DEBT.

| Cost of construction to February 1, 1921 |
| :---: |
| Cost of construction to February 1, 1920 |


$*$ Increase during the year $. \quad . \quad . \quad . \quad . \quad$| $\$ 18,223,55893$ |
| ---: |
| $18,063,41164$ |
| $\$ 160,14729$ |

Outstanding loans February 1, 1920, at $3 \frac{1}{2}$ per cent
Outstanding loans February 1,1920 , at
$\dot{4}$ per cent . . . . . . . . 816,35000
$\$ 821,35000$ per cent . . . . . . .
Outstanding loans February 1, 1921, at $3^{\frac{1}{2}}$
per cent per cent . . . . . . .
utstanding loans February 1, 1921, at $3 \frac{1}{2}$
per cent . .

$$
\$ 5,000 \quad 00
$$

Outstanding loans February 1, 1921, at 4 per cent

$$
\$ 5,000 \quad 00
$$per cent

$$
741,350 \quad 00
$$

Decrease during the year
$\$ 75,00000$


| Net Water Debt February 1, 1920 |  | \$336,000 00 |
| :---: | :---: | :---: |
| Gross Water Debt February 1, 1921 | . $\$ 1,060,35000$ |  |
| Less Sinking Fund February 1, 1921 | 746,350 00 |  |
| Net Water Debt February 1, 1921 |  | 314,000 00 |
| Decrease during the year |  | \$22,000 00 |


| Stock on hand February 1, 1921 |
| :---: |
| Stock on hand February 1, 1920 |$\quad . \quad$| $\$ 423,09600$ |
| ---: |
| 323,37098 |



[^40]

The East Boston reservoir was transferred to the custody of the Park and Recreation Department April 5, 1920, and its cost is therefore eliminated from the above table. (See order of City Council, approved March 23, 1920.)

| Dept No. | Description. | Price. | Registration, Licenses, Numbers. | Tires and Tubes. New and Repairs | $\left\lvert\, \begin{gathered} \text { Ciasolene, } \\ \text { Oils, Greases, } \\ \text { etc. } \end{gathered}\right.$ | Storage. | Repairs and Supplies, ete. | Chauffeurs' W゙ages. | lleat and Light. | Totals. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 83 | Truck emeryeney serviee. |  | $\$ 200$ | \$44851 | 855053 |  | 811825 | \$1,131 00 |  | \$5,550 29 |
| 96 | Truck, general work |  | 200 | 51850 | 61000 |  | 30765 | 1,377 00 |  | 2,515 18 |
| 98 | Truck, shutoff gang ${ }^{1}$. |  |  | 51.51 | 11112 |  | 16.5 5.5 |  |  | 32 S 18 |
| 99 | Truck, spare |  | 650 | $2: 391$ | 15200 | \$3600 | 51052 |  |  | 7.5893 |
| 100 | Roadster, engineer in charge |  | 1000 | 2129 t | 25990 |  | 74831 | 1,37/ 00 |  | 2,605 15 |
| 103 | Rumabout, foreman Dorchester disirict ${ }^{2}$. |  | 100 | 1121 | 5632 |  | 126 09 |  |  | 22462 |
| 101 | Truck, general work ${ }^{3}$. . . . . . . . . . . . . |  | 200 | 2602 | 13910 |  | S107 |  |  | 24919 |
| 105 | Runabout, foreman Brighton district ${ }^{1}$ |  |  | 1514 | 5766 | S1 00 | 11112 |  |  | 27092 |
| 10s | Truck, shutof gang |  | 200 | 5548 | 30213 |  | 32472 | 1,377 00 |  | 2.06133 |
| 109 | Runalout, foreman West Roxbury district ${ }^{5}$. |  | 100 | 8082 | 7527 | 10900 | 12362 |  |  | 3 ss 71 |
| 110 | Roadster, superintendent distribution branch. |  | 1200 | so 13 | 8.5 57 |  | 21949 |  |  | 39719 |
| 111 | Truck, Dorchester district. |  | 200 | 2.5090 | 32610 | 200 | 23033 | 1,377 00 |  | 2.15963 |
| 112 | Truck, meter hranch ${ }^{6}$ |  |  |  |  |  | 1394 |  |  | 1304 |
| 113 | Truek, general work ${ }^{7}$. |  |  | 106 | 20 |  | 6529 |  |  | 0050 |
| $11 \pm$ | Truck, meter branch 8 |  | 200 | 5491 | 106 is |  | $2 \mathrm{t1} 20$ |  |  | 40489 |
| 116 | Truck, general work |  | 200 | 4681 | 2:37 30 |  | 3.5063 | 1,377 00 |  | 2,01:374 |
| 117 | Runabout, gencral forem:n ${ }^{9}$ |  | 200 | 5283 | 25300 |  | 22105 |  |  | 55894 |
| 11 S | Truck, Myde Park district |  | 400 |  | 3150 | 12000 | 6 82 |  |  | 16232 |
| 119 | Runabout, engineer meter branch ${ }^{10} . .$. |  |  | 6276 | $185 \cdot 13$ |  | 2722 |  |  | 27541 |
| 120 | Truck, meter branch ${ }^{11}$. |  |  |  | 72.5 |  | 3348 |  |  | $40 \quad 3$ |
| 121 | Truck, general work. |  | 200 | 43943 | 38003 |  | 49901 | 1,377 00 |  | 2,697 47 |
| 122 | Truck, plumbers |  | 400 | 10897 | 24138 |  | 35520 |  |  | 71255 |
| 125 | Roadster, division engincer |  | 1000 | 15032 | 14251 | 24825 | 42616 |  |  | 97724 |
| 126 | Truck, West Roxbury district. |  | 200 | 7226 | 17702 |  | 40471 |  |  | 65599 |
| 128 | 'Touring ear, engineer, District No. 1... |  | 1700 | 11306 | 24876 |  | 24091 |  |  | 61973 |
| 129 | Truck, East Boston district. . |  | 400 |  | 11455 |  | 5589 |  |  | 17444 |

Income Branch.

## Assessments, Abatements and Collections, 1905, to January 31, 1921.

| $\begin{gathered} \text { Account of } \\ \text { IEAR. } \end{gathered}$ | Amount <br> Assessed. | Amount <br> Abated. | Amount Collected. | Balance. |
| :---: | :---: | :---: | :---: | :---: |
| 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 | 41,251 26 | 2,943,402 48 | \$17,118 13 |
| 1913. | 3,004,331 52 | 37,213 39 | 2,954,183 62 | 12,934 51 |
| 1914. | 3,034,885 83 | 23,521 74 | 2,970,232 82 | 41,131 27 |
| 1915 | 2,960,797 45 | 15,084 24 | 2,902,946 96 | 42,766 25 |
| 1916. | 3,130,539 2S | 15,829 03 | 3,057,500 88 | 57,209 37 |
| 1917. | 3,120,801 86 | 18,728 42 | 3,034,236 75 | 67,836 69 |
| 1918. | 3,359,586 55 | 96,188 68 | 3,184,713 06 | 78,684 81 |
| 1919. | 3,209,945 71 | 24,042 97 | 3,080,396 98 | 105,505 76 |
| 1920. | 3,458,267 39 | 47,673 95 | 2,994,454 64 | 416,138 80 |
| 1921 | 404,741 61 | 75115 | 72,340 70 | 33164976 |

Elevator, Motor and Fire Service.

| Elevator servies installed. | 2 |
| :---: | :---: |
| Elevator services abandoned | 1 |
| Total number of elevator services January 31, 1921 | 514 |
| Fire services installed. | 96 |
| Total number of fire services January 31, 1921. | 1,728 |
| Total number of motor services January. | 96 |
| Number of motor services metered. | 20 |

Water Turned Off and On.

| For repairs. | 6,020 |
| :---: | :---: |
| For vacancy. | 1,548 |
| For waste. | 10 |
| For non-payment of rates | 1,777 |
| Turned on for first time. | 359 |

## Meter Branch.

Table No. 1.-Statement of Work During the Year.

| Make. |  |  | (blavied. |  | 苞 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\Xi$ | $\ddot{B}$ |  |  |  |  |
| Hersey Disc. | 1,155 | 35 | 2.850 | 4,205 | 312 | 3,841 | 406 | 311 |
| Worthington disc.. | 1,194 | 8 | 2,964 | 1,689 | 80 | 1,945 | 334 | 18.4 |
| Crown. | 37 | 5 | 167 | 249 | 21 | 184 | 25 | 38 |
| American. | 6 | 2 | 129 | 210 | 15 | 125 | 14 | 22 |
| Hersey rotary . | 8 | 1 | 142 | 150 | 15 | 147 | 29 | 9 |
| Nash. | 11 | 1 | 95 | 145 | 7 | 101 | 12 | 3 |
| Lambert. | 17 | 1 | 79 | 100 | 12 | 97 | 9 | 8 |
| Trident. | 6 |  | 28 | 34 | 5 | 31 | 6 | 2 |
| Keystone | 1 |  | 28 | 35 | 3 | 25 | 20 | 3 |
| Empire. | 21 |  | 16 | 17 | 2 | 13 | 4 |  |
| Worthington. |  | 1 |  | 12 | 2 | 9 |  |  |
| Hersey detector.. |  |  |  |  |  |  |  | 23 |
| King. | 846 | 3 | 773 | 447 | 22 | 369 | 137 | 55 |
| Hersey compound | 1 |  | 2 |  |  |  |  |  |
| Totals. | 3,303 | 57 | 7,293 | 7,293 | 496 | 6,887 | 996 | 658 |

Table No. II. Meters in Stock, February 1, 1921.

| Make. | Diameter in Inches. |  |  |  |  |  |  |  | Totals. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\frac{8}{8}$ | 3 | 1 | 119 | 2 | 3 | 4 | 6 |  |
| Hersey disc. | 326 | 24 | 6 | 6 | 1 | 2 | 2 |  | 367 |
| Worthington disc. | 100 | 2 |  |  | 1 |  |  |  | 103 |
| Crown | 350 | 82 | 52 | 21 | 9 | 10 | 3 | 2 | 529 |
| American. | 33 | 7 |  |  | . |  |  | $\ldots$ | 40 |
| Hersey rotary . | 166 | 65 | 23 | 18 | 7 |  |  |  | 279 |
| Nash. | 48 | 4 | 6 | 1 |  | 2 |  | $\ldots$ | 61 |
| Lambert | 39 | 2 |  | 1 |  |  |  |  | 42 |
| Trident. | 19 |  | 1 |  |  | . |  |  | 20 |
| Keystone. | 48 | 2 | 1 |  |  |  |  |  | 49 |
| Empirc. | 48 | 1 | 2 |  |  |  |  |  | 51 |
| King. | 318 | 49 | 56 | 11 | 2 |  |  |  | 436 |
| Gem. |  |  |  |  | 2 | 4 | 1 | 1 | 8 |
| Totals. | 1493 | 238 | 147 | 58 | 22 | 18 | 6 | 3 | 1,985 |

Table No. III.
Meters in Service February 1, 1921.

| Make. | Diameter in Inches. |  |  |  |  |  |  |  |  |  |  |  | Totals. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\frac{5}{8}$ | ${ }^{3}$ | 1 | 14 | 112 | 2 | 3 | 4 | 6 | 8 | 10 | 12 |  |
| Hersey disc. | 43,028 | 2,570 | 1,456 | 1 | 700 | 259 | 109 | 38 | 1 |  |  |  | 48,462 |
| Hersey rotary | 242 | 298 | 224 |  | 168 | 158 | 63 | 13 | 14 |  |  |  | 1,180 |
| Hersey detector. |  |  |  |  |  |  | 3 | 16 | 23. | 12 | 4 | 2 | 60 |
| Crown. | 653 | 406 | 323 |  | 193 | 180 | 77 | 54 | 10 |  |  |  | 1,896 |
| Nash. | 419 | 231 | 128 |  | 40 | 37 | 2 |  |  |  |  |  | 857 |
| Lambert.. | 304 | 108 | 72 |  | 13 | 19 |  | 4 |  |  |  |  | 520 |
| Trident... | 171 | 4 | 3 |  | 4 | 5 | 10 |  | 1 |  |  | . | 198 |
| Worthington. |  | 12 | 23 |  | 3 | 8 | 2 |  |  |  |  |  | 48 |
| Worthington dise | 9,168 | 41 | 24 |  | 12 | 47 | 9 |  |  |  |  |  | 9,301 |
| Keystone. | 150 | 80 | 22 |  | 2 | 2 | 9 |  | 2 |  |  |  | 267 |
| Metropolitan. |  | 13 |  |  |  |  |  |  |  |  |  |  | 14 |
| American. | 220 | 483 |  |  |  |  |  |  |  |  |  |  | 703 |
| Worthington turb |  |  |  |  |  |  |  | 1 |  |  |  |  | 1 |
| Empire. | 121 | $\xlongequal{2}$ | 3 |  | 6 |  |  |  |  |  |  |  | 132 |
| Gem. |  |  |  |  |  | 1 |  | 5 | 8 |  |  |  | 14 |
| Standard. | 6 |  |  |  |  |  |  |  |  |  |  |  | 6 |
| B. W. W.. |  | 1 |  |  |  |  |  |  |  |  |  |  | 1 |
| Thomson. | 6 | 2 |  |  |  |  |  |  |  |  |  |  | 8 |
| Union. | 2 | 1 |  |  |  |  |  |  |  |  |  |  | 3 |
| Gamon.. | 1 |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Hersey compound |  |  |  |  |  |  |  |  | 4 |  |  |  | 4 |
| King. | 3,340 | 67 | 205 |  | 37 | 40 |  |  |  |  |  |  | 3,689 |
| Totals. | 57,831 | 4,619 | 2,484 | 1 | 1,178 | 756 | 284 | 131 | 63 | 12 | 4 | 2 | 67,365 |

Table No. IV.
Meters Purchased.

| Make. | Diameter in Inches. |  |  |  |  |  |  | Totals. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 5 | 1 | 12 $\frac{1}{2}$ | 2 | 3 | 4 | 6 |  |
| Hersey disc. |  |  |  |  | $\ldots$ | 3 | $\ldots$ | 3 |
| Worthington disc. | 5,000 | 25 | 52 | 66 | 18 | $\ldots$ |  | 5,161 |
| Hersey compound. |  |  | . | $\ldots$ | $\ldots$ | $\ldots$ | 1 | 1 |
| King. | 500 | $\ldots$ | $\ldots$ |  |  |  |  | 500 |
| Totals. | 5,500 | 25 | 52 | 66 | 18 | 3 | 1 | 5,665 |

Table No. V.
Meters Condemned.

| Make. | Dinmeter in lnches. |  |  |  |  |  | Totals. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | - 3 | 1 | $1!$ | 2 | 3 | 4 |  |
| Nash. |  |  | 2 | 1 |  |  | 3 |
| Lambert. | 1 |  |  | ... | . |  | 1 |
| Hersey rotary. | 1 |  | 1 |  |  | 2 | 4 |
| Crown. | 2 s | 2 | 1 | 1 | 1 | 1 | 16 |
| Worthington. |  | 4 | 1 | 1 | 1 | . | 7 |
| Hersey disc |  |  | 1 | 1 | 1 |  | 3 |
| Totals. | 210 | 6 | 6 | 4 | 3 | 3 | 34 |

Table No. VI.
Meters Repaired in Service.

| - MLake. |  |  |  |  | 它 |  | ¢ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Hersey disc. | 2 |  | 117 | 1S8 |  | 4 | 311 |
| Worthington disc. | 7 | 3 | 114 | 59 | 1 | $\ldots$ | 154 |
| Crown. | 1 |  | 29 | 4 | 1 | 3 | 38 |
| American. | 3 |  | 16 | 3 |  |  | 22 |
| Hersey rotary.. | 5 | . |  | 4 |  |  | 9 |
| Nash. | 3 |  |  |  |  |  | 3 |
| Lambert. |  | 2 |  |  | 1 | 5 | 8 |
| Trident. | 1 |  |  | 1 |  |  | 2 |
| Keystone. | 2 |  |  | 1 |  |  | 3 |
| Hersey detector. |  | 19 |  |  |  | 4 | 23 |
| King. | 3 | 4 | 15 | 30 | 1 | 2 | 55 |
| Totals. | 27 | 2 S | 291 | 200 | 4 | 18 | 658 |

Table No. VII.
Meter Changes.

| Make. | Meters In. |  |  |  |  |  |  |  |  | Meters Out. |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Diameter in Inches. |  |  |  |  |  |  |  |  | Dismeter in Inches. |  |  |  |  |  |  |  |  |
|  | \% | 7 | 1 | ${ }^{1 \frac{1}{2}}$ | 2 | 3 | 4 | 6 | Totals. | $\frac{5}{8}$ | 1 | 1 | $1 \frac{1}{3}$ | 2 | 3 | 4 | 6 | Totals. |
| Hersey dise. | 2,358 | 309 | 116 | 36 | 23 | 22 | 6 |  | 2,870 | 3,631 | 315 | 151 | 47 | 26 | 29 | 6 |  | 4,205 |
| Hersey rotary. | 27 | 54 | 22 | 18 | 16 | 2 | 2 | 1 | 142 | 42 | 41 | 38 | 11 | 16 | 1 | 1 |  | 150 |
| Crown | 33 | 44 | 29 | 18 | 25 | 10 | 6 | 2 | 167 | 71 | 54 | 47 | 34 | 31 | 10 | 7 | 5 | 249 |
| Nash. | 44 | 31 | 17 | 1 | 1 | 1 |  |  | 95 | 76 | 36 | 25 | 4 | 4 | .. |  | . | 145 |
| Lambert. | 52 | 15 | S | 1 | 3 |  |  | . | 79 | 61 | 23 | 11 | 1 | 4 |  |  | . | 100 |
| Trident. | 24 | 2 |  |  | 1 | 1 |  |  | 28 | 30 | 2 |  |  | 1 | 1 |  |  | 34 |
| Worthington. |  |  |  |  |  |  |  |  |  |  |  | 6 | 3 | 3 |  |  |  | 12 |
| Wortlington dise. | 2,897 | 6 | 16 | 15 | 26 | 4 |  |  | 2,964 | 1,677 | 3 | 1 |  | 7 | 1 |  |  | 1,689 |
| Keystone. | 16 | 10 | 2 |  |  |  |  |  | 28 | 18 | 14 | 2 | $\ldots$ | 1 | $\ldots$ | . | . | 35 |
| American. | 54 | 75 |  |  |  |  |  |  | 129 | 138 | 72 |  |  |  |  |  | . | 210 |
| Empire. | 16 |  |  |  |  |  |  |  | 16 | 16 |  |  | 1 |  |  |  |  | 17 |
| King. | 571 | 45 | 131 | 14 | .$^{12}$ |  |  |  | 773 | 352 | 14 | 61 | 8 | 12 |  |  |  | 447 |
| Hersey compound... |  |  |  |  |  | . |  | 2 | 2 |  |  |  |  |  |  |  |  |  |
| Totals.. | 6,032 | 591 | 341 | 103 | 107 | 40 | 14 | 5 | 7,293 | 6,112 | 574 | 342 | 99 | 105 | 42 | 14 | 5 | 7,293 |

Table No. Vill.
Causes for Meters Chanued.

Table No. IX.
Meters Applied.


## Waste Prevention Branch. <br> The following tables give in detail the operations of this branch during the past year.

Table 1.
Waste Prevention.

| Premises examined. | 12,410 |
| :---: | :---: |
| Special investigation | 326 |
| Waste reports. | 2,109 |
| Re-examinations | 1,710 |
| Found repaired. | 1,400 |
| Not repaired. | 310 |

Table 11.
Defective Fixtures and Waste.

| Tank fixture leaking. | 960 |
| :---: | :---: |
| Faucets leaking. | 1,104 |
| Pipes inside leaking | 139 |
| Pipes outside leaking. | 85 |
| Metered premises leaking. | 524 |
| Gates leaking | 10 |
| Hydrants leaking. | 15 |
| Wilful waste. | 6 |
| Fountains leaking. | 8 |

## Distribution Branch.

Showing Length of Water Pipes and Connections Owned and Operated by the Public Worlis Depantment, Water Dirision (Water Service) and Number of l'alves in Same January 31, 1921.

|  | Diameter in lnches. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Totals. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 48 | 42 | 40 | 36 | 30 | 24 | 20 | 16 | 14 | 12 | 10 | 8 | 6 | 4 | 3 | 2 |  |
| Length owned and operated January 31, 1920 (feet). | 10,607 | 15,683 | 16,0>1 | 37,132 | 93,218 | 79,147 | 87,126 | 266,900 | 5,0 41 | 1,454,59.3 | 100,974 | 831,017 | 1,212,78.1 | 102,92. | 7,022 | -,791 | 4,629,073 |
| Gate values in same. . . . . . . . . . | 10,60 | - 4 | 8 | 18 | 59 | 67 | 7 7 |  |  | 3,613 | 1,344 | $\underline{2,755}$ | 3, ¢2 | ti03 |  |  | 13,0.0 |
| Air valves in same. | 13 | 3 | 7 3 | 27 | 103 | 48 | 41 | 51 |  | 3i- | ${ }_{41}^{1}$ | $10^{4}$ | 11 |  |  |  | ${ }_{6}^{3} 6.39$ |
| Blow-offs in same... ${ }^{\text {a }}$. | 1 | 4 | 3 | 8 | 3.5 | 21 | 46 | 61 |  | 15\% | 41 | 107 | 11. | 5 \% |  | 1 | 6fi3 |
| Length laid and relaid during year 1920-21................. |  |  |  |  | 1,0* 0 |  | 127 | 3,5.54 |  | 14,916 | 12, 169 |  |  |  |  |  | 10,375 |
| Gate valves in same. . . . . . . . . |  |  |  |  |  |  | $\cdots$ | 15 |  | 67 | 3.5 | 42 |  | 3 |  |  | 171 |
| Air valves in same. . . . . . . . . Blow-offs in same. |  |  | 1 |  | , |  | 1 | 2 |  |  |  |  |  |  |  |  | $\checkmark$ |
| Length abandoned during vear $1920-21$ |  |  |  |  | 1,075 | 69 | 787 | 500 |  | 1,931 | 2038 | 2,719 | 18,510 | 2,49. |  |  | 29,012 |
| Gate values in same. |  |  |  |  | 1 | 1 | 4 | , |  | 3 | 1 | - 9 |  | 9 |  |  | ¢ |
| Air valves in same. |  |  |  |  | 1 |  | 1 |  |  |  |  |  |  |  |  |  | 2 |
| Blow-offs in same.. |  |  |  |  | 2 |  |  | 1 |  | 1 | 1 | 2 |  | 1 |  |  | 8 |
| Length owned and operated January 21, 1921 (feet). | 10,607 | 1.5,683 | 16,0<1 | 37,132 | 93,223 | 79,090 | Mi, 4163 | 269,9.7 | 5,011 | 1,469.540 | 112930 | -31,991 | 1,193,717 | $1(0), 10-1$ | 7,02? | 5,79 | 4,ti39.109 |
| Gate valves in same........... | - | - 4 | S | 18 | 5! | 6ici | 73 | 610 | 19 | 3,676 | 1,35 | 2.818 | 3,773 | 5:7 | 1.5 | 12 | 13,13.5 |
| Air valves in same. | 13 | 3 | 8 | 27 | 106 | 45 | 41 | 54 |  | 37 | 1 | $\pm$ | 1 |  |  |  | 34.7 |
| Blow-offs in same. | 1 | 4 | 3 | 8 | 3.7 | 21 | 46 | 63 |  | 152 | 43 | 10. | 119 | 35 | 6 | 1 | 661 |

Table No. II.
Statement of Hydrant Blow-O.f and Reservoir Pipes.


Table No. III.
Total Number of IIydrants in System Junwery 31, 1921.

|  | 㐌 |  |  |  |  | - |  |  |  | ¢ | + |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| City Proper (public) <br> " (private). | $\begin{array}{r} 500 \\ 4 \end{array}$ | 42 |  |  | 2.5 |  |  |  |  | 67 39 | 1,525 58 |
| Roxbury (public) <br> " (private) | $\begin{array}{r} 379 \\ 2 \end{array}$ | 63 1 | $50 \%$ 3 |  | 3 |  |  |  |  | 16 | 1,473 18 |
| West Roxbury (public) <br> " (private) | 54 | 184 | 523 | 850 16 | 5 |  |  |  |  | 18 | 1,634 17 |
| Brighton (public) <br> " (private) | 41 | 62 | 298 | 477 8 |  |  |  |  |  | 14 | 892 10 |
| Dorchester (public) <br> " (private) | 228 |  | 720 8 | 1,142 |  |  |  |  |  | 22 4 | 2,287 14 |
| South Boston (public) <br> * (private) | 115 3 | 24 |  | 223 15 | 1 |  |  |  |  | 18 | 664 |
| East Boston (public) <br> " (private) | $\begin{array}{r} 38 \\ 8 \end{array}$ |  |  | 205 |  |  |  |  |  | 6 25 | 508 43 |
| Charlestown (public) | 98 | 41 | 163 | 47 |  |  |  |  |  | 2 | 351 |
| (private) | 13 | 1 |  | 37 |  |  |  |  |  | 5 | 56 |
| Hyde Park (public) |  |  |  | 259 | $3$ | 7 | 145 | 1 |  |  | 445 |
| " (private) |  |  |  |  |  | 13 | 55 |  |  |  | 72 |
| Deer Island (private |  |  | 1 | 20 |  |  |  |  |  |  | 21 |
| Long Island (private) |  |  |  | 6 |  |  |  |  |  |  | 6 |
| Thompson's Island (private) |  |  |  | 2 |  |  |  |  |  |  | 2 |
| Gallop's Island (private) |  |  |  | 3. |  |  |  |  |  | 1 | 4 |
| Rainsford Island (private) |  |  |  | 3 |  |  |  |  |  | 1 | 4 |
| Quincy . |  |  |  | 9 |  |  |  |  |  |  | 9 |
| Total number (public). | 1,453 | 604 | 3,432 | 3,931 | 43 | 7 |  | 1 |  | 163 | 9,779 |
| Total number (private and suburban) | 30 | 4 | 21 | 137 |  | 13 | 55 |  | 4 | 115 | 379 |

Table No. IV.
Total Number and Aggregate Length of Service Pipes of Various Sizes Connected with System, January 31, 1921.

| Sipe. | Total Number. | Aggregate Length in Linear Feet. |
| :---: | :---: | :---: |
| $\frac{1}{2}$-inch. . | 6,921 | 158,416 |
| ${ }_{8}^{5}$-inch. | S5,007 | 2,372,794 |
| 3 -inch. | 3,486 | 119,707 |
| 1 -inch. | 5,446 | 195,952 |
| $1 \frac{1}{6}$-inch. | 515 | 15,682 |
| $1 \frac{1}{2}$-inch. | 1,567 | 47,984 |
| 2 -inch. | 2,160 | 67,476 |
| $2 \frac{1}{2}$-inch. | 12 | 267 |
| 3 -inch. | 944 | 27,420 |
| 4 -inch | 2,383 | 72,073 |
| 6 -inch. | 187 | 22,980 |
| 8 -inch. | 57 | 4,059 |
| 10-inch. | 11 | 1,648 |
| 12-inch. | 17 | 3,558 |
| 16-inch.. | 5 | 448 |
| Totals.... | 108,718 | 3,110,410 |

## Table No. V.

Fountains in Serrice Jamuary 31, 1921.


Folistain Dracriftion.
B. In lieate fountain for heats onls. Contimon- fow of water during year
D. Indiate fountain for man and beast. Intomatio fixtures for buth.
G. Indi ate- fommain forman and heast. Heqiene bubhle fistureforman. Ciontintuus flow of water for man and beast all the rear
H. Indicate fountain for man only. Water of ordinary temperature. Hygienic buble fi tures controlled by self-chowing encks. In service lurine wam weather.
I. Indirete - tales on water pots, herimats and fonntain- for wateriner hores.
J. In licate- fombtins for man only, Cold water. Iryiene bubble fixtures controlled by - olf-clo-ing rocks. In service during wame weatler.
K. Indi atos fountan for man and leest, fitted with automatio fixture controlled by self-l win!e coeks. Bubble fisture for man in wimm weather. Continuons flow for heast. all the ear.
L. Indicate fomntain for man and trea-t, bubble fixtire for man amd tap fitted for the purpose of tilling pails to water liorsen. Continuons flow for leats all the year
M. Indic:ate- fountain for least onds, fitted with tape for the purpore of filling pails to waterhor-es. Continums flow for beants all the year.

## Table No. VI. <br> Maintenance of Main Pipe.

| Natike of Work. | Number. of Jobs. | Total Cost. |
| :---: | :---: | :---: |
| Box tops renewed | 42 | \$383 29 |
| Cleaning main pipes (by contractors) | 32 | 1,007 48 |
| Dead heads blown off | 131 | 36562 |
| Gates leaking at packing. | 66 | 39642 |
| Gates inspected, located, oiled, salted, tested, ete. | 5,784 | 3,823 67 |
| Gate locations marked. | 9,295 | 1,957 35 |
| Gates repaired. | 53 | 1,851 51 |
| Gate boxes cleaned out. | 491 | 16603 |
| Gate box covers (74) and frames (78) replaced | 152 | 1,301 75 |
| Gate boxes renewed | 436 | 10,285 79 |
| Gate boxes raised and lowered. | 683 | 6,683 25 |
| Leaking joints repaired. | 124 | 3,532 51 |
| Leaks due to settlements and other causes. | 27 | 2,896 61 |
| Repairs on bridges (on pipes, boxes, etc.) | 29 | 2,179 06 |
| Repaving (including contractor's miscellaneous jobs) | 207 | 2,470 88 |
| Miscellaneous jobs. | 21 | 54732 |
| Totals. | 17,655 | \$39,848 54 |

Table No. Vill.
Hydrants E'stablished and Ibandoned.


Table No. Vill.
Hydrant Repairs.

| Cacse of Trouble. | Number of Jobs. | Net Cost. |
| :---: | :---: | :---: |
| Boxes raised,lowered, reset, repaired and renewed. | 685 | \$8,442 02 |
| Barrels changed, relocated, reset and repaired. | 2,258 | 4,058 56 |
| Frost | 457 | 49739 |
| Gates defective | 3 | 4969 |
| Paint worn off | 2,306 | 42205 |
| Contractors, corporations, other departments and divisions. | 181 | 61437 |
| Street construction and repairs | 114 | 2,64850 |
| Repaving on aceount of repairs | 243 | 2,072 66 |
| Traffic | 140 | 1,195 61 |
| Hydrants inspected, oiled, cleaned, pumped and wasted | 79,156 | 19,375 04 |
| Salt delivered to Fire Department, 3,092 sacks |  | 4,341 20 |
|  | 85,546 | 843,717 09 |

Statement of Service Pipes Laid and Abandoned.


Table No. X.
Cost of New Service Pipes Laid.

| Size. | Number. | Length in Feet. | Material. | Labor, Teaming, ete. | Repaving. | Blasting. | Total Cost. | Average Cost per Serviec. | Average <br> Cost per Linear Foot. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $f$-inch | 149 | 3,05.5 | \$2,080 91 | \$3,114 98 | \$.171 5.5 | \$54500 | \$6,212 4. | \$4179 | \$175 |
| ?-inch | 35 | 1,018 | 75766 | 1,1.85 61 | 17659 | 11200 | 2,231 86 | 5873 | 219 |
| 1-inch. | 6 | 127 | 12985 | 100 71 | 13.50 |  | 25006 | 4168 | 197 |
| 1t-inch. | 7 | 240 | 22720. | 9374 | 14310 |  | 46.404 | 6915 | 192 |
| $1 \frac{1}{3}$-inch. | 6 | 148 | 20465 | 13910 |  |  | 31375 | $57 \quad 29$ | 232 |
| 2-inch. | 12 | 299 | 57696 | 29033 | 4500 |  | 91229 | 7602 | 305 |
| 3 -inch. | 3 | 4 | 21989 | 191 OS |  |  | 41097 | 11699 | 642 |
| 4-inch. | 90 | 1,33i | 7,574 69 | $4,638 \mathrm{st}$ | 1,536 21 |  | 13,749 77 | 15277 | 1028 |
| 6 -inch | 3 | 7 S | 21975 | 11295 |  |  | 33270 | 11090 | 427 |
| 8-inch. | 1 | 7 | 9538 | 6267 |  |  | 15805 | 15805 | 2258 |
| 16-inch. | 4 | 392 |  |  |  |  |  |  |  |
| Totals. | 319 | 7,265 | \$12,086 94 | \$9,936 04 | \$2,385 95 | \$657 00 | \$25,065 93 |  |  |

Table No. XI.
Cost of Service Pipes Abandoned and Plugged.


Table No. Xll.
Cost of Laying New Services, Excavating and Baclifilling Done by Applicant.

| Size. | Number. | Length in Feet. | Material. | Labor. | Teaming. | Total Cost. | Average Cost per Servicc. | Average Cost per Linear Foot. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| f-inch. | 14 | 198 | \$130 37 | 84465 | \$27 74 | \$202 76 | \$14 48 | \$1 02 |
| ${ }^{4}$-inch. | 3 | 25 | 2820 | 663 | 227 | 3710 | 1237 | 148 |
| 1-inch. | 2 | 41 | 2904 | 640 | 496 | 4040 | 2020 | 99 |
| 2 -inch | 1 | 21 | 3384 | 450 | 352 | 4186 | 4186 | 199 |
| 3 -inch. | 4 | 68 | 32654 | S7 63 | 1970 | 43387 | 10 S 47 | 638 |
| 4-inch. | 7 | 113 | 71473 | 16776 | 375 s | 92007 | 13144 | 814 |
| Totals | 31 | 466 | \$1,262 72 | \$317 57 | \$95 77 | \$1,676 06 |  |  |

Table No. Xlll.
Cost of Service Pipes, Replacing Others.


| Cause of Trouble. | Number of Jobs. | Net Cost. |
| :---: | :---: | :---: |
| Boxes established, repaired, regulated and renewed. | 115 | 81,090 14 |
| Cocks established, repaired and regulated. | 124 | 1,893 48 |
| Gates defective. | 14 | 32989 |
| Electrolysis, ashes and rats. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . | 14 | 45103 |
| Defective pipes and settlement. | 1,167 | 23,443 67 |
| Pipes regulated. | 3 | 13415 |
| Repairs on account of contractors, eorporations, other departments and divisions. | 144 | 1,526 16 |
| Frost............................................................ | 91 | 1,039 38 |
| Traffic. | 16 | 12664 |
| Repaved on aceount of repairs. | 742 | 10,004 14 |
| Rust, dirt and fish. | 1,157 | 5,159 37 |
| Street repairs. | 600 | 4,86854 |
| Uprights established, renewed, repaired, reloeated and regulated | 6,108 | 3,155 47 |
| Off and on. | 6,498 | 12,407 39 |
| Investigations.. | 970 | 4,263 22 |
|  | 17,763 | \$69,892 67 |

Table No. XV.
Fountain Repairs.

| Cacses. | Number of Jobs. | Cost. |
| :---: | :---: | :---: |
| Defective paving | 1 | \$1461 |
| Boxes raised to grade. | 4 | 104 S6 |
| Frozen | 1 | 321 |
| Relocated. | 4 | 80322 |
| General overhauling . | 4 | 42333 |
| Hit by autos. | 7 | 21059 |
| Hit by teams. | 31 | 30194 |
| Defective cocks | 6 | 3124 |
| Defective drains. | 26 | 13455 |
| Defeetive boxes. | 16 | 68581 |
| Defective covers | 5 | 5552 |
| Faucets broken. | 14 | 5963 |
| New top. | 1 | 2730 |
| Hood loose. | 1 | 276 |
| Leaks. | 68 | $425 \quad 24$ |
| Grating broken. | 1 | 231 |
| Cleaning cooler | 1 | 1087 |
| Totals. | 191 | \$3,297 05 |

Table No. XVI.
Fountains Established and Abandoned.

| STYLE. | Established. |  |  |
| :---: | :--- | :--- | :--- |
| J. | South strect, near Keyes strect, West Rosbury. | Abandoned. |  |
| J. | Ramsey strect, at Dudley strect, Dorchester. | J. | Dudley street, at Columbia road, Roxbury. |

Table No. XVII. New Fountains E'stablished.


## Table XVII.

Water Posts Established and Abandoned.

| Established, |
| :---: |
| Curve street, opposite Hudson street, city proper <br> Bowdoin avenue, near Bowdoin strect, Dorchester <br> Centre street, 25 feet north of Central strect, West Roxbury. |
|  |  |
|  |  |
|  |

Albany street, at Curve street, city proper.
Jamaicaway, near Huntington avenuc, Roxbury.
Riverway, between Longwood avenue and Bellevue street, Roxbury.

Fenway, at Westland avenue, Roxbury.
1682 Centre street, West Roxbury.
Walter street, at Arnold Arboretum, West Roxbury.
Commonwealth avenue, at Chiswick road, Brighton.
Commonwealth avenue, at Sutherland road, Brighton
Commonwealth avenue, at Foster strect, Brighton.
Chestnut Hill Reservoir Park, Brighton.
Commonwealth avenue, at Lake strect, Brighton.
Hyde Park avenue, near Everett street, Hyde Park.
Washington street, at Gaylord strect, Dorchester.

|  | Cost of Material. | Labor. Teaming. Paving, etc. | Total <br> Direct Cust. | Credit ritock Returned. | Net Direct Cost. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cost of established and abandoned water posts. | \$135 21 | \$334 68 | 8469 89 | \$317 38 | \$152 51 |

Table No. XIX.
Water Post Repairs.

| Causes. | Number of Jobs. | Cost. |
| :---: | :---: | :---: |
| Renewed decayed boxes. | 12 | \$222 72 |
| Boxes raised to grade. | 10 | 8054 |
| New brick chambers | 1 | 6113 |
| Renewed defective frames and covers | 2 | 2196 |
| Shut off and let on. | 84 | 13729 |
| Relocated. | 4 | 9627 |
| Defective paving. | 11 | 15022 |
| Leaks caused by defective cocks. | 39 | 54801 |
| Leaks caused by defective valves. | 2 | 575 |
| Hit by teams. | 2 | 381 |
| Posts broken. | 1 | 2913 |
| Renewed broken arms. | 7 | 8496 |
| Defective stand pipes. | 5 | 7434 |
| Frozen. | 1 | 225 |
| Cleaned. | 2 | 1314 |
| Totals. | 183 | \$1,531 52 |

Table No. XX.
Meters Set for Meter Branch.

| Number Set. |  | Size. | Cost of Material. | Cost of Labor. Teaming and Car Fare. | Total Cost. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Outside. | Inside. |  |  |  |  |
|  | 3 | ${ }_{8}^{5}$-inch. | $\$ 130$ | 8765 | \$8 95 |
| 48. |  | $\frac{5}{8}$-inch | 12337 | 51569 | 93906 |
| 8. |  | ${ }_{8}^{3}$-inch | 7649 | 7332 | 14981 |
| 8. |  | 1 -incl | $8 \pm 93$ | 8393 | 16880 |
| 2. |  | $1 \frac{1}{2}$-inch. | 2094 | 2262 | 4356 |
| 7. |  | 2 -inch | 8866 | 7415 | 16281 |
|  | 1 | 2 -inch | 1087 | 1181 | 2268 |
| 2. |  | 3-minch . | 2505 | 3934 | 6439 |
| 3. |  | 4 -inch. | 8787 | 27011 | 35798 |
| 78. | 4 |  | \$ $\$ 1348$ | \$1,098 62 | *\$1,918 10 |

[^41]Table No. XXI.
Meters Repaircl for Meter Branch.

| Cacses. | Jobs. | Cost. |
| :---: | :---: | :---: |
| Defective boxes | 183 | \$2,864 43 |
| Boxes raised to grade. | Sf | 42981 |
| New brick chambers. | 14 | 1,141 73 |
| Defective frames and covers. | 25 | $19+37$ |
| Meters leaking | 55 | 14719 |
| Meters frozen. | 21 | 6359 |
| Meters relocated | 12 | 40.51 |
| Meters reset | 242 | 41861 |
| Meters taken out. | 35 | 7491 |
| Meters changed | 777 | 1,274 4.5 |
| Meters tested. | 15 | 1833 |
| Meters cleaned. | 14 | 6043 |
| Defective paring. | 120 | 77420 |
| Totals | 1,602 | 87,567 58 |

Table No. XXII.
Machine Shop.
Stock Manufactured from the Rough.

| lind. | Number. | Labor. | $\begin{gathered} 40 \\ \text { Per Cent } \\ \text { Addcd. } \end{gathered}$ | Stock. | Cost Each. | Total Cost. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ordinary post, No. 2.................... | 46 | \$14 46 | \$20 24 | \$40 14 | \$60 38 | \$2,777 48 |
| Batchelder \& Finneran No. 1........... | 23 | 2981 | 4173 | 5640 | 9813 | 2,256 99 |
| Batchelder \& Finneran, No. 2. | 30 | 3066 | 4292 | 5403 | 9695 | 2,908 50 |
| 4-inch gates. | 48 | 771 | 1079 | 1170 | 2249 | 1,079 52 |
| 8-inch gates. | 118 | 974 | 1364 | 2053 | 3417 | 4,032 06 |
| 8 -inch gates. | 23 | 1059 | 1483 | 3179 | 4662 | 1,072 26 |
| 10-inch gates. | 3 | 1450 | 2038 | 4791 | 6829 | 20487 |
| 12 -inch gates. | 10 | 1662 | 2327 | 6141 | 8468 | 84680 |
| 16-inch gates. | 7 | 3373 | 4722 | 9232 | 13954 | 97678 |
| $\boldsymbol{f}$-inch sidewalk cocks. | 354 | 79 | 111 | 114 | 225 | 79650 |
| a-inch sidewalk cocks. | 15 | 92 | 129 | 138 | 267 | 4005 |
| 1-inch sidewalk cocks. | 27 | 110 | 154 | 162 | 316 | 8532 |
| f-inch corporation cocks............... | 914 | 62 | 87 | 40 | 127 | 1,160 78 |
| f-inch corporation cocks. | 87 | 92 | 129 | 63 | 192 | 16704 |
| 1-inch corporation cocks. | 115 | 107 | 150 | 107 | 257 | 29555 |
| 11-inch corporation cocks.............. | 24 | 120 | 168 | 167 | 335 | 8040 |
| 12-inch corporation cocks.............. | 93 | 130 | 182 | 219 | 401 | 37293 |
| f-inch coupling nuts. . . . . . . . . . . . . . . | 1,344 | 06 | OS | 06 | 14 | 18816 |
| s-inch coupling nuts. | 504 | 10 | 14 | 11 | 25 | 12600 |
| 1 -inch coupling nuts. | 229 | 13 | 18 | 17 | 35 | 8015 |
| $1 \frac{1}{3}$-inch coupling nuts. | 27 | 15 | 21 | 36 | 57 | 1539 |
| 2 -inch coupling nuts. | 41 | 16 | 22 | 49 | 71 | 2911 |
| f-inch coupling tubes. . . . . . . . . . . . . . . | 2,927 | 06 | 08 | 04 | 12 | 35124 |
| a-inch coupling tubes. | 738 | 10 | 14 | 10 | 24 | 17712 |
| 1-inch coupling tubes. . . . . . . . . . . . . . . | 261 | 12 | 17 | 14 | 31 | 8091 |
| $\boldsymbol{f}$-inch male couplings. | 333 | 10 | 14 | 11 | 25 | 8325 |
| 2 -inch male couplings. | 52 | 25 | 35 | 69 | 104 | 5408 |
| 13 -inch bent couplings. | 53 | 42 | 59 | 113 | 172 | 9116 |
| 2 -inch bent couplings. | 25 | 46 | 64 | 155 | 219 | 5475 |
| 13-inch combination couplings.. | 50 | 40 | 56 | 90 | 146 | 7300 |
| 2-inch combination couplings | 17 | 44 | 62 | 127 | 1 S 9 | 3213 |
| f-inch meter nipples. | 80 | 08 | 11 | 19 | 30 | 2400 |
| 2 -inch meter nipples. | 180 | 28 | 39 | 55 | 94 | 16920 |
| ${ }^{8}$-inch solder nipples. | 200 | 12 | 17 | 11 | 28 | 5600 |
| 1-inch iron plugs. | 22 | 22 | 31 | 06 | 37 | 814 |
| Installing bushings in sidewalk uprights. . | 971 | 11 | 15 | 100 | 115 | 1,116 65 |
| Hydrant wastes. | 472 | 32 | 45 | 36 | 81 | 38232 |
| Anti-freezing cocks..................... . . | 100 | 69 | 97 | 128 | 225 | 22500 |
| Totals. |  |  |  |  |  | \$22,571 59 |

Table No. XXIII. Machine Shop.
Stock Repaired and Miscellaneous Work.

|  | Number. | Total Cost. |
| :---: | :---: | :---: |
| 4-inch gates. | 3 | 85.87 |
| 6 -inch gates. | 13 | 3983 |
| 12-inch gates. | 2 | 946 |
| 16-inch gates. | 1 | 1102 |
| Lowry hydrants. | 27 | 17862 |
| Ordinary post hydrants. | 79 | 78841 |
| Made 100 is -inch bonnet keys for high pressure hydrants. | 100 | 1650 |
| Stock consigned to junk (labor only). |  | 1543 |
| Accommodation work for other services. |  | 1136 |
| Made one new jack.. |  | 630 |
| Total. |  | \$1,082 80 |

Table No. XXIV.
Blacksmith Shop.
Sharpened 5,380 picks, 654 bars and 1,742 chisels . . . $\$ 1,35990$
Made 675 various kinds of tools
55502
Installed new power hammer in blacksmith shop, 710 Albany street

54666
Repaired 5 various kinds of tools . . . . . . . 3088
Four wagons repaired . . . . . . . . 2479
Made gate extension for Southampton street . . . . 879
Sharpened 25 drills for the Transit Commission . . . . 430
Repairs in stable, 710 Albany street . . . . . . 310
\$2,533 44

Table No. XXV.
Carpenter Shop.
Stock Manufactured.

|  | Number. | Total Cost. |
| :---: | :---: | :---: |
| Boston Lowry hydrant boxes at $\$ 11.82$. | 42 | \$495 60 |
| Lowry hydrant boxes at \$9.03. | 37 | 33411 |
| Meter hoxes at $\$ 7.87$ | 40 | 31480 |
| Small gate boxes at $\$ 7.55$ | 30 | 22650 |
| Post hydrant boxes at $\$ 9.8$ | 12 | 11856 |
| Large gate boxes at \$9.25. | 10 | 9250 |
| Deacon meter boxes at 89.25 | 4 | 3700 |
| loston hydrant boxes at \$8.37. | 6 | 5028 |
| Pieces for raising small gate boxes at $\$ 0.16$ per inch | 2,734 | 43744 |
| Pieces for raising Lowry hydrant boxes at $\$ 0.16$ per inch. | 1,739 | 27824 |
| Pieces for raising metcr boxes at $\$ 0.16$ per inch......... | 1,457 | 23312 |
| Pieces for raising large gate boses at $\$ 0.16$ per inch | 176 | 2806 |
| Tops for small gate boxes at $\$ 0.97$ | 65 | 6305 |
| Tops for Lowry hydrant boxes at \$1.21 | 38 | 4598 |
| Tons for post hydrant boxes at \$1.21 | 22 | 2662 |
| Tops for large gate boxes at \$1.09. | 10 | 1090 |
| Tops for Boston hydrant boxes at \$1.09 | 3 | ${ }^{3} 27$ |
| Made wooden horses. | 29 | 2835 |
| Made shelves for Meter Department. | 3,832 | 26269 |
| Totals. |  | 83,087 07 |

## Table No. XXVI.

## Carpenter Shop.

Alterations in Income Branch, City Hall Annex . . . \$1,011 03
Repaired 479 tools . . . . . 44580
General repairs in meter shop, 710 Albany street . . . 38172
Various repairs around yard, 710 Albany street . . . . 35782
Repairs in machine shop, 710 Albany street . . . . 32381
Repairs in auto repair shop, 710 Albany street . . . . 3358
Repairs in auto annex, 710 Albany street . . . . . 32246
Enlarging garage in Dorchester yard . . . . . . 29930
General repairs in Brighton yard . . . . . . . 19803
Repairs on Orient Heights standpipe . . . . . . 18818
General repairs in stable, 710 Albany street . . . . 17127
Repairs on harbor service boat, Water Crest . . . 13605
Boarded windows of Old West Roxbury pumping station opp.
Metropolitan avenue
Built staging for painter, Congress street bridge. . . . 11688
Repairs in garage, 710 Albany street . . . . . . 9876
General repairs in Dorchester yard . . . . . . 8791
Fitted up office, West Roxbury yard . . . . . . 8076
Made 65 tools . . . . . 7240
General repairs in plumbing shop, 710 Albany street. . . 4074
Twelve wagon repairs 3877
Repairs in office, 710 Albany street . . . . . 2241
Repaired door for high pressure fire service . . . . 1977
Repairs in blue print room . . . . . . . 1723
Made truck for building department, City Hall . . . . 1615
Repaired letter press for the Central Office . . . . 973
Made filing box for Water Service office, City Hall Annex . 868
Boxed pattern for shipping to foundry (for Engineer Branch) 1430
Repaired wheel guard on Beacon street bridge . . . . 253
Total
Table No. XXVII.
Plumbing Shop.
Installed hot water boiler in auto repair slop, 710 Albany street S41.5 10
New plumbing fixtures in West Roxbury yard ..... $31:$ 15
Repaired 174 tools ..... 1949
Accommodation work for other serviees ..... 1s9 3
Installed hot water boiler in machine shop, 710 Albany street ..... $13: 379$
Installed hot water boiler in meter room, 710 Albany street ..... 11909
Repairs on Orient Heights standpipe10s s. 7
Repaired 311 umps ..... 7! 43
Repairs in machine shop, 710 Allmany street ..... (65) 67
Connected hot water tank in plumbing shop, 710 Albany street ..... 5183Relined sink in Blue Print room, City Hall5019
Various repairs around yard, 710 Albany street ..... 40 sis
Made 3 new tools Tade 3 new tools ..... 2770
Repairs in stable, 710 Albany strect ..... 1447
Repairs in office, 710 Albany street ..... 1627
$\$ 1,>1595$
Table No. XVIII
Miscellaneous.
Waste survey by the Pitometer Company in the CharlestowndistrictWaste survey by the Pitometer Company in the South BostondistrictWaste survey by the Pitometer Company in part of the SouthEnd district
Waste survey by the Pitometer Company in the BrightondistrictForty-one hundred and twenty-four inspections of patch paving,
Accommodation work for private persons and corporationsCompleted thawing outfitAccommodation work for other services and departmentsInstalled heating apparatus in building. 710 Albany street$\$ 4,957 \quad 13$
3,766 97
3,125 72
3,12.5 722,586 32
1,003 4879402
87587
53508
Fifteen Deacon meter boxes renewed at various locations ..... 40221
General repairs and work done in auto repair shop, 710 Albany street ..... 14979
Repairs in meter department, 710 Albany street ..... 12892
Finished wiring building, 710 Albany street ..... 10649
Repairs on Orient Heights Standpipe ..... 8053
Repairs in machine shop, 710 Albany strect ..... 9607
Repairs on tools ..... 21172
Concealing telephone wires in Income Branch, City Hall An- nex ..... 8050
Repairs in blacksmith shop, 710 Albany strect ..... 7427
Repairs in engine room, 710 Albany street ..... 8969
Delivering water to contractors, corporations and other scrvices, ..... 6401Froze post hydrant for experimental purposes
Miscellancous work ..... 5198 ..... 5571
Repairs in stable, 710 Albany street ..... 5246
General repairs and work done in garage, 710 Albany street
Repairs in carpenter shop, 710 Albany street ..... 4352
Melted lead pipe pieces into pig lead ..... 4020
Wiring Dorchester garage ..... 3430
Filling up chambers at abandoned East Boston reservoir ..... 3:3 87
Installed hot water jacket in Brighton yard ..... 2425
Various repairs around yard, 710 Albany street ..... 6526
Repairs in office, 710 Albany street ..... 1445
Installed telcphone in emergency room, 710 Albany street ..... 1459
Repaired lights in Charlestown yard ..... 544
Cost of Extension of Main Pipe.

| Sthemet. | Location. | District. | 会 | Fect. | $\begin{aligned} & \text { Cost of } \\ & \text { Depart- } \\ & \text { nient } \\ & \text { Material, } \\ & \text { etc. } \end{aligned}$ | Cost of Labor. | Cost of Inspection. | Total Cost. | Remarks. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mckenna terrace. | At Centre street. | West Roxbury: | 4 | 26 | \$7390 | 872 50 | 81 | S12- 68 |  |
| Bird place | From Centre street | West Roxbury. | 4 | 36 | 7159 | 6300 | 256 | 13715 | l'ublic, under construction. |
|  | Totals |  |  | (i) | \$14.5 4! | \$115 50 | \$3 84 | S264 S: |  |
| Melvinside terrace | From Deer street | Dorehester. | 6 | 26 | \$34 14 | \$29 00 |  | \$63 14 | Pubtic, macadam. |
| 'Thorndike street. | From Commonwealth avenue | Brighton. | 6 |  | 25.) 13 | 16875 | 8 34 | $432 \mathrm{S2}$ | Public, dirt. |
|  | Totals. |  |  | 154 | \$289 27 | \$197 75 | \$8 94 | \$495 96 |  |
| Bunker llill street | Jackson and Ferrin street | Charlestown. | s | 382 | \$1,078 17 | 873142 | 8.5110 | 81,860 69, | Public, granite block, gravel base. |
| Currier street. | Alabama and Kennchee streets. | Dorchester. | 8 | 61 | 10869 | $240 \quad 83$ | 2044 | 369 96 | Private, dirt. |
| Arbutus street. | Lucerne and Ashton streets | Dorehester. | 8 | 304 | 719 2! | 50241 | 2427 | 1,245 97 | Public, dirt. |
| Hastings street. | Centre and Corey streets | West Roxbury: | 8 | 185 | (i33 60 | 34550 | 1278 | 99188 | Public, under construction. |
| Augustus avenue. | Metropolitan avenue and Whitford street. | West Roxbury. | 8 | 76 | 20.565 | 22725 |  | 4329 | Private, dirt. Connection between 8 and 12. |
| New Belgrade avenue. | At Beech street. | West Roxlury: | 8 | 7 | 4621 | 11019 | 511 | 16151 | Public, maeadam. |
| Wachusett street. | Bhridge and North streets | West Roxbury. | 8 | 216 | 54419 | 25633 | 1278 | 81330 | Public, dirt. |
| Willow street. | Weld and Dunlar stree | West Roxbury. | s | 100 | 19725 | 25703 | $12 \mathrm{7S}$ | 46706 | Public, dirt. |
| Bradeen street. | From Washington strect. | West Roxbury. | 8 | 58 | 28070 | 24503 | 8 94, | 53467 | Private, dirt. |
| Wright road. | From North avenue | West Roxbury. | 8 | 85 | 16159 | 12050 | 511 | 28720 | Private, dirt. |
| Mendelssohn strect. | From Nikisch avenue. | West Roxbury. | 8 | 50 | 26270 | 9488 |  | 357 5s | Private, dirt. |

54120 Private, dirt.



| From Wrashington street | West Roxbury |
| :---: | :---: |
| Bellevue avenue and Emmions road, | West Roxbury. |
| Murdoek and Dustin strects | Brighton. |
| 1Iobart and Brookdaie strects | Brighton. |
| From Water street | IIyde Park. |
| Totals. |  |
| From Currier street | Dorchester. |
| From Pelton street | West loxbury |
| From Wexhington street | West Roxbury. |
| From Washington street | West lioxbury. |
| From Wrashington street | West Roxbury. |
| Centre and Lagrange streets. | West Roxbury. |
| From Babeock street | Brighton. |
| Monastery and Euston roads | Rrigliton. |
| South of No. 59 | Brighton. |
| Totals. |  |
| At Richinoml s | City Proper. |
| Between lianover and North strects. | City Proper. |
| South street and Itlantic arenue. | City Proper. |
| North and Fulton strects | City Proper. |
| Tremont and Carver streets | City Proper. |
| Union Park and (irotonstrects. | City Proper |


Cost of Extension of Main Pipe.-Concluded.

| Street. | Lacation. | District. |  | Fect. | $\begin{aligned} & \text { Cost of } \\ & \text { Depart- } \\ & \text { ment } \\ & \text { Material, } \\ & \text { etc. } \end{aligned}$ | Cost of babor. | C'ost of <br> Insper tion. | $\begin{aligned} & \text { Tot:el } \\ & \text { Cost. } \end{aligned}$ | Remarks. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Kinceland street | South and Mlbany streets. | City Proper. | 12 | 338 | \$1,370 71 | \$660 86 | \$2300 | \$3,0.54 5 | l'ublic !ranite, hlock, gravel base. |
| Claflin street. | C and D streets | South Boston. | 12 | 5.52 | 2,284 92 | 1,163 20 | 3:3 2: | $3,4 \times 131$ | Private, dirt. |
| D strect. | Damby and Fargo streets | South Boston. | 12 | 654 | 2,647 84 | 1,357 6.5 | 63 sm | 4,06937 | Private, dirt. |
| Bulloch street | Claflin and Fargo streets. | South Boston. | 12 | 635 | 2,712 62 | 1,97993 | 5110 | 4.713 6; | Private, under construction |
| Bulloch strect | D streets. <br> Claflin and Fargo streets and C and | Soutl Boston. | 12 | 326 | 1,385 15 | 6.517 | 2236 | 2,0.99 2 s | Private, under construction. |
| Alger strect. | From Dorchester avenue | South Boston. | 12 | 462 | 1,830 1.1 | 58012 | 1780 | $2,1371.5$ | Public, dirt. |
| Summer street | D) and ('streets | South Boston | 12 | 490 | 2,16259 | 98270 | $36 \cdot 1$ | 3,18170 | Public, granite block, gravel base. |
| Wood avenue | Oikland and seminole streets | Dorchester. | 12 | 259 | 98.566 | 71460 | 4599 | 1,716 2.5 | Public, macarlam. |
| Pelton street | At West Roxbury Parkway. | West Roxbury: | 12 | 20 | 34820 | 2600 | 320 | 37.40 | Public, State Road, tat macadam, |
| Centre strect | Merlin and Weld streets | West lioxbury: | 12 | 756 | 3,112 45 | 6.481 | 13256 | 3,920 12 | Publie, macadim. |
| Tyler street. | Loring and Washington streets | 1tyde Park. | 12 | 433 | 1,550 31 | 72025 | 2044 | 2,29106 | Pubilic, macadam |
|  | Totals |  |  | 7,297 | \$30,485 92 | \$14,595 15 | \$697 55 | 815,275 62 |  |
| Berkeley street | Stuart and Boylston streets. | City Proper | 16 | 668 | 83,410 11 | \$2,410 93 |  | S5,551 01 | Publie, granite block, gravel base. |
| Lake strcet. | At Commonwealth avenue. | 13righton. | 16 | 50 | 26322 | 15200 |  | 41522 | Publie, macadan |
|  | Total |  |  | 718 | \$3,673 33 | \$2,592 93 |  | 86,266; 26 |  |
| Claflin street | D and C strects | South Boston. | 30 | 532 | \$4,732 87 | \$2,504 09 | 88112 | 87,31808 | Private, dirt. |
| C street. | Danby and Clafin streets | South Boston. | 30 | 349 | 3,779 37 | 2,483 20 | 4216 | 6,304 73 | Public, granite block, gravel base |
|  | Totals |  |  | 881 | \$8,512 24 | \$4,987 29 | \$123 2S | \$13,622 81 |  |

Public Works Department.
Cost of Replacement of Main Pipe.

| Street. | I.ocation. | Distriet. | - | Feet. | Cost of Department Material, etc. | Cost of Labor. | Cost of Inspeetion. | Total Cost. |  | Remarks. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Kennard avenue.. | Poplar and Sllen streets. | City Proper. | 6 | 222 | \$4ヤ+21 | \$337 32 | \$10 20 | 853.300 | 4 | Public, asplalt |
| Easton avenue | From 1)ana avenue | Hyde Park. | 6 | 610 | 90993 | 78.30 | 2011 | 1,717 67 | 4 | Private, natad:nm. |
| ILilton street. | W-est and Arlington street | Ityde Park. | 6 | 550 | 61315 | 663369 | 39 66 | 1,30750 | 4 | Publie, macadam. |
|  | Totals |  |  | 1,382 | \$2,007 29 | \$1,785 61 | 86132 | 83, 5.76 22 |  |  |
| Acton street | Washington and Bradford strects, | City Proper. | 8 | 258 | \$1,042 67 | S2S6; 9:3 | 82108 | \$1.3.30 65 | ${ }^{6}$ | Public, :sphtait |
| Laconia street. | Washington street and Harrison avenue. | City Proper. | 8 | 336 | 1,15s 20 | $420 \%$ | 33664 | 1,432 62 | 6 | Public, asphalt. |
| Grotonstreet. . . . . . . . | Washington street and Nhawmut avenue. | City Proper. | 8 | 324. | 1,230 37 | 34434 | 1022 | $1.5 \bigcirc+93$ | 6 | Public, asphalt. |
| Chambers street. | Cambridge and Green streets | City Proper. | $\delta$ | 533 | 1,293 13 | 9818 | $56: 1$ | 2,333119 | 6 | Public, pranite hork. gravel have. |
| Bachelder street. | At Marshfield street | Roxbury. | 8 | 38 | 13875 | 5920 | 128 | 19923 | (i) | Public, macadam. |
| Dilworth strect | Northampt on and Camden streets, | Roxbury | 8 | 339 | 933392 | 97401 | 2300 | 1.930 ! 96 | fi | Publie, macad:mm. |
| Opposite 1.5 Boylston street. |  | West Roxbury. | 8 | 4 | 763 | . 40 | [ 11 | 1514 | S\&I | P'ublie, macadam. |
| Burr street | From Boylston street | West Roxbury | 8 | 24 | 8290 | 3240 | $25 t$ | 117 | ${ }^{6}$ | l'ublic, macadam. |
| Clive street. | From Boylston street | West Roxbury. | 8 | $29)$ | 12.17 | $435: 3$ | $2 i t ;$ | 17080 | 6 | Publie, macad:m. |
| Dresden street | From Boylston street | West Roxbury | 8 | 24 | 8767 | 3187 | $2.5 i$ | $126 \quad 11$ | G | Public, macad:m. |
| Danforth street.. | At Bnylston street. | West Roxbury. | 8 | 13 | 12309 | 175 | (i) | 1412 s | 6 | Public, macadam. |
| Sy camore street. | At Ashland street | West Roxbury: | 8 | 36 | $294 \quad 27$ | S100 | 192 | 37719 | 6 | Public, macadam. |
| Sheldon street. | At Ashland street | West Roxbury. | 8 | 36 | 28140 | 7997 | 320 | 3645 | 6 | Public, maendam. |
| Walter street | Centre and Bussey streets | West Roxhury. | S | 560 | 1,180 15 | 97513 | 370.5 | 2,19533 | 6 | Public, macadam rock. |

Cost of Replacement of Main Pipe-Concluded.


6 Publie, granite block, gravel base.
6 Public, eobble stone top on asphalt.
Publie, macadam.
Pubtic, macadam.
Public，macadan．

6 Public，macadan，rock，
4 Public，macadam．
6 l＇ublic，macadam．
8 Public，rock，maradam． 6 Public，rock，maradam． 8 Public，maeadam．
 4，123 53

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City Proper．
City Proper． Roxbury．
Roxbury．
Roxbury． Roxbury．
West Roxbury．
Hyde Park．
Hyde Park．



Riverdale and Athol streets．．
Tyler street and Glenwood place
Merrimae and Washington streets， At Groton strect．
Charles and Chambers streets．．． Audubon roal and Audubon road， North
Peterborough street．
and
south side of
Norfolk avenue and Clifton street， Lamartine strect and Chestnut avenue． From River street．．．．．．．．．．．．．．．．
Hyde Park avenue and Hilton
street．
Totals．
Waslington and Florence streets， Poplar and Ashland streets．．．．． Florence street and 100 feet east Florenewn avenue．
of 13 rown Totals．

| Riverdale street．．． | Western avenue and Raymond street． |
| :---: | :---: |
| Raymond street． | Riverdale and Athol streets． |
| Englewood avenue | At Chestnut Hill avenue． |
| Vineland strect． | At Market street． |
| Washington strect． | Tyler street and Glenwood place Totals． |
| Friend street． | Merrimae and Waslington streets， |
| Washington strect． | It Groton street |
| Poplar street． | Charles and Chambers streets |
| Peterborough street． | Audubon roal and Audubon road， |
| Jersey strect． | North and south side of Peterborough street． |
| Marshfield street | Norfolk avenue and Clifton street， |
| Audubon roal． | At Brookline avenue． |
| Boylston strect． | Lamartine strect and Chestnut avenue． |
| Tileston street． | From River street． |
| West street． | Hyde Park avenue and Hilton street． |
|  | Total： |
| Poplar street． | Wishington and Florenee streets， |
| Florence street | Poplar and Ashland streets |
| Ashland street | Florence street and 100 feet east of 13 rown avenue． |
|  | Totals |
| Private land． | From Condor and Brooks streets， |

Cost of Relocation of Main Pipe.

| Street. | Loeation. | District. | 践 | Feet. | $\begin{gathered} \text { Cost of } \\ \text { Demart } \\ \text { Dent- } \\ \text { Material, } \\ \text { etc. } \end{gathered}$ | $\begin{aligned} & \text { Cost of } \\ & \text { Labor. } \end{aligned}$ | $\begin{aligned} & \text { Cost of } \\ & \text { Inspec- } \\ & \text { tion. } \end{aligned}$ | $\begin{aligned} & \text { Total } \\ & \text { Cost. } \end{aligned}$ |  | Remarks. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Creek square. | From Blackstone street. | City Proper. | 6 | 22 | S61103 | 8736.3 |  | 8134 6is |  | Public, granite block. |
| North Anderson strect, | At Bridge court | City Proper. | 6 | 11 | 4276 | 2005 |  | 62 | 6 | P'ublic, macadam. |
|  | Totals |  |  | 33 | \$103 79 | 89370 |  | 819749 |  |  |
| Mt. Vernon street | Centre street and Chapin avenue, | West Roxbury | 10 | 218 | \$623 47 | \$301 52 | \$17 8: | 81,445 8 s |  | Public, macalam. |
| St. James avenue. | Berkeley and Clarendou streets... | City Proper. | 2 | 193 | 8464 | 5661 |  | 141 | 12 | Public, macalan. |
| Centre street. | Willow and Maple streets....... | West Roxbury | 12 | 440 | 1,479 49 | 1,322 82 | 587 | 2,461 0* | 12 | l'ublic, under construction. |
| Centre street. | Mit Vernon and La Grange streets, | West Roxbury | 12 | 787 | 2,68046 | 1,178 65 | 2010 | 3,879 21 | 12 | Public, rock, under construction |
| Cambridge street... | Linden and Lincoln streets, over railroad bridge. | Brighton. | 12 | 159 | 17895 | 23738 |  | 41633 |  | Public, over Boston \& Albany Railroad bridge. |
|  | Totals. |  |  | 1,759 | \$1,423 54 | 82,795 46 | \$78 87 | 87,297 87 |  |  |
| Broadway | At Washington strect | City Proper. | 16 | 15 | \$10764 | 811175 |  | $\begin{array}{r} 821939 \\ 2.032 \end{array}$ |  | Public, granite block, gravel base. Public. under construction |
| Centre street. | La Grange and Mt. Vernon streets, | West Roxbury | 20 | 440 | 31615 | 1,665 97 | 85046 | 2,032 58 | 20 | Public. under construction. |

Average Monthly Heights, in Feet, Above Boston City Base to Which Water Rose at Different Stations.

| 1920. | Routhern High Service. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Northern Hifi Service. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | City Ha III. |  | Eagine llonse No. 24. (2untor and Warren Streets. Roxbury. |  | $\begin{aligned} & \text { Dusine House } \\ & \text { No. } 20, \text { Walnut } \\ & \text { Strent. } \\ & \text { Neponset. } \end{aligned}$ | Engine House No. 19, Norfolk street. Miattapart. |  | $\begin{aligned} & \text { Engine House } \\ & \text { No. 2s, } \\ & \text { Crntre, near } \\ & \text { Creen Strept, } \\ & \text { Tanaica Platin. } \end{aligned}$ |  | Engine House No, 30. <br> Centro, near Bellevile sitreet. Werst Roxbury. |  | Engne Honse No. 45 . <br> Washington and Poplar sitrefte. Roslindale. |  | Engine House No. 29. <br> Chestnut Hill <br> Avemue, <br> Brighton. |  | Engine House <br> No. 48 , <br> Winthrop Street and Harvard Avenue, Hyde Park. |  | Water Service Yard, Eagle Street, East Boston. |  | Engine House No. 32 , <br> Bunker Hill street. Charlestown. |  |
|  | 3 a . m. | 9 ta m. | 3 a. m. | 9 a.m. | 3a. m. ${ }^{\text {a a a m, m }}$ | 3 ta m. | , 9 a . m. | $3 \mathrm{a} . \mathrm{m}$. | $9 \mathrm{a} . \mathrm{m}$. | $3 \mathrm{a} . \mathrm{m}$. | $9 \mathrm{a} . \mathrm{m}$. | 3 a. in. | 9a. m. | $3 \mathrm{a} . \mathrm{m}$. | 91. m. | $3 \mathrm{a} . \mathrm{m}$. | 4 a.m. | $3 \mathrm{a} . \mathrm{m}$. | $9 \mathrm{a} . \mathrm{m}$. | 3 a m. | 9 ar m. |
| January. | 24.5 | 231 | 235 | 22.5 | 235020 | 228 | 219 | 237 | 227 | 247 | 235 | 242 | 235 | 253 | 246 | 247 | 233 |  |  | 161 | 155 |
| February | 245 | 233 | 239 | 226 | 2365 | 230 | 221 | 235 | 228 | 250 | 239 | 243 | 236 | 253 | 247 | 245 | 237 |  |  | 161 | 156 |
| March. | 247 | 232 | 240 | 226 | 24024 | 231 | 219 | 235 | 229 | 250 | 239 | 24.5 | 237 | 247 | 244 | 248 | 235 |  |  | 163 | 157 |
| April. | 248 | 233 | 242 | 225 | $213 \quad 297$ | 234 | 221 | 237 | $22 \times$ | 251 | 239 | $24 i$ | 237 | 25.5 | 246 | 249 | 237 | 154 | 149 | 162 | 156 |
| May. | -4" | 232 | 244 | 220 | 243 225 | 233 | 221 | 23) | 2291 | 250 | $23: 4$ | 245 | 237 | 250 | 243 | 240 | 235 | 154 | 148 | 163 | 15.5 |
| June | 245 | 233 | 242 | 22 | 240 , 225 | 235 | 219 | 236 | $22 \times$ | $24!$ | 235 | 24.5 | 236 | 250 | 243 | 246 | 238 | 155 | 149 | 164 | 157 |
| July .... | 247 | 231 | $2+2$ | 295 | 239 224 | 232 | 219 | 23 | 22) | 250 | 23s | 24.5 | 236 | 254 | 244 | 247 | 237 | 150 | 149 | 164 | 15 s |
| August. | 247 | 232 | 242 | 22.4 | 2371226 | 233 | 215 | 239 | 233 | 24. | 238 | 244 | 237 | 251 | 246 | 248 | 237 | 156 | 150 | 166 | 159 |
| September | 247 | 230 | 242 | 227 | 241 206 | 236 | 225 | 233 | 226 | 245 | 237 | $\underline{24}$ | 236 | 2.54 | 245 | 24.8 | 236 | 156 | 170 | 166 | 159 |
| Detuber.. | 247 | 230 | 241 | -230 | 2!9 - 2-4 | 229 | 22.5 | 234 | 227 | 246 | 237 | 24.5 | 235 | 2415 | 245 | 249 | 236 | 156 | 150 | 166 | 159 |
| November. | 247 | 232 | 24. | 297 | 240 -26 | 297 | 205 | 231 | 231 | 2.51 | 231 | 246 | 238 | 2.51 | 246 | 249 | 236 | 155 | 149 | 165 | 159 |
| December.... | 247 | 232 | 243 | 23 | 240 , 225 | 23.5 | 226 | 235 | 227 | 250 | 234 | 245 | 238 | 2.51 | 249 | 245 | 237 | 154 | 148 | 165 | 159 |

Average Monthly Heights, in Feet, Above Boston City Base in Which Water Rose at Different Stations.

| 1920. | Low Femtice. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Chertnut Hill Pumpingstation Brighton. |  | Engine IIonse Nor 34 , Westerndivenue. Brighton. |  | $\begin{aligned} & \text { Bostoni } \\ & \text { Commaun } \end{aligned}$ |  | Engine thouse Salemstreet, City Proper. |  | $\begin{gathered} \text { Endine House } \\ \text { Nu } \quad \text { E. } \\ \text { Eity Sreet, } \\ \text { City Proper. } \end{gathered}$ |  | Engine House No, $3 \leq$, Congrese and Farnsworth Strcets. South Buston |  | Engine House Nu. Fourth and $)$ strexts. Simth Buston. |  | Wiater Service Fard, 710 Albany Street, South End. |  | Water Service Yard. Gibsun Street, Dormester. |  |
|  | 3 a. m. | 9 B . mi. | 3 arm . | (1) A. m | 3 a m. | 9 at. m. | $3 \mathrm{t} . \mathrm{m}$ | $9 \mathrm{a} . \mathrm{m}$. | $3 \mathrm{a} . \mathrm{m}$. | 9 ta m. | $3 \mathrm{ta} . \mathrm{m}$. | 9 at m. | $3 \mathrm{a} . \mathrm{m}$. | 4, 11.10. | $3 \mathrm{3} . \mathrm{m}$. | 9 п. п. | 3 a m. | $9 \mathrm{a} . \mathrm{m}$. |
| Jamary | 152 | 166 | 144 | 144 | 144 | 142 |  |  | 14 | 139 | 144 | 136 | 138 | 130 | 146 | 146 | 147 | 134 |
| February | 153 | 166 | 143 | 142 | 111 | 137 | 155 | 150 | 1:3 | 139 | 143 | 139 | 140 | 135 | 14+i | 141 | 145 | 138 |
| March. | 153 | 16 F | 146 | 145 | 143 | 139 | 157 | 1.53 | 140 | 140 | 147 | 142 | 148 | 139 | 149 | 146 | 149 | 140 |
| April | 152 | 167 | 150 | $1: 0$ | 146 | 142 | 146 | 151 | $1: 1$ | 14i | 15 I | 146 | 151 | 143 | 153 | 149 | 151 | 143 |
| May... | 153 | 166 | 150 | 152 | 148 | $1 \dagger 0$ | 161 | 153 | 1: 2 | 143 | 151 | 143 | 152 | $1+1$ | 152 | 144 | 152 | 110 |
| June. | 1.53 | 167 | 150 | 150 | 117 | 142 | 161 | 154 | 1:0 | 145 | 150 | 145 | 150 | 143 | 152 | 147 | 145 | 138 |
| July... | 153 | 167 | 149 | 147 | 147 | 140 | 160 | 151 | 1. 31 | 111 | 151 | 142 | 150 | 111 | 151 | 146 | 149 | 142 |
| August | 153 | 166 | 149 | 147 | 147 | 141 | - |  | 1. 30 | 112 | 151 | 113 | 150 | 142 | 152 | 147 | 150 | 141 |
| September. . | 153 | 167 | 151 | 149 | 149 | 144 |  |  | 1. 30 | 143 | 150 | 1.12 | 150 | 141 | 151 | 147 | 150 | 141 |
| Ortober | 153 | 167 | 148 | 145 | 149 | 143 |  |  | 130 | 14.5 | 15. | 143 | 148 | 135 | 152 | 148 | 149 | 141 |
| November... | 152 | 167 | 150 | 147 | 150 | 115 |  |  | 151 | 145 | 151 | 1.46 | 151 | 142 | 152 | 149 | 149 | 142 |
| Decetnber... | 153 | 167 | 150) | 149 | 149 | 146 |  |  | 131 | 116 | 150 | 146 | 150 | 144 | 150 | 145 | 149 | 140 |

## 

## For the Flscal Year Exding Jandary 31, 1921. Consumpros.

Estimated population supplied
Total consumption for the year 1920
Passed through meters for the year 1920
Percentage of consumption metered
Daily average consumption for the year 1920
Gallons per day to each consumer
7.). 810
:34,415,5,5l,000) gallons.
$17,456,25,5,250$ gallons.
50.7
$94,297,100$ gallons.
12.) gallons.

## Distribution.

Mains.
Kind of pipe. Cast iron.
Sizes: 4 -inch to 4 -inch.
Extended miles: 2.73.
Sizes, enlarged miles: 4. 42.
Total miles now in use: S78.67.
Public hydrants added: 38.
Public hydrants now in use: 9,779.
Stop gates added: 8 5.
Stop gates now in use: 13,135.
Number of blow-offs: 664.
Range of pressure in main: 30 to 90 pounds.
Table Showing Daily Consumption of Water in the City of Boston, Number of Services, Percentage of Services Metered, and Decrcase in Daily Per C'apita Consumption Since the Meter Law of 1907 Became Effective.

| Year. | Number of Services in Boston. |  | $\begin{aligned} & \text { Percentaue of Serv- } \\ & \text { iees Metered. } \end{aligned}$ |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1908. | 94,960 | 5,3ヘ0 | 5.7 | $64: 3,810$ | $98,379,300$ | 153 | 973,320 | 125,441,000 | 129 |
| 1909 | 96,132 | 12,045 | 12.5 | 659,110 | 91,029,900 | 143 | 997,-60 | 119,119,100 | 119 |
| 1910 | 93,480 | 1S,467 | 19.7 | 674,400 | \$7,316,700 | 130 | 1,02.2,230 | 112,092,100 | 110 |
| 1911 | 95,035 | $2.5,206$ | 26.5 | 655,520 | A.5,511,500 | $12 \cdot 1$ | 1,016,630 | 109,904, 900 | 105 |
| 1912 | 99,700 | * 34.545 | 34.8 | 718,900 | 90,037,500 | 125 | 1,0.06,490 | 116,230,700 | 107 |
| 1913 | 101,100 | 41,16s | 407 | 735,098 | 79,390,600 | 10 s | 1,104,263 | 103, 517,700 | 94 |
| 1914 | 102,449 | 48,091 | 469 | 717,830 | $\wedge 1,575,500$ | 109 | 1,131,1>0 | 107,036,100 | 94 |
| 1915 | 103,980 | 54.458 | 52.3 | + 74.5 .580 | 77,65.51,500 | 114 | 1,160,750 | 101,411,500 | 88 |
| 1916 | 105,386 | 60,129 | -7. | 746,130) | $80,358.800$ | 10 s | 1,171,000 | 106i,337,800 | 90 |
| 1917 | 105,352 | 633,071 | 89.9 | 716.600 | S2, 173,200 | 110 | 1,1\1,240 | 110,032,300 | 93 |
| 1918 | 105.158 | (i3, 1n7 | 59 9 | 717.530 | 91,433 4,000 | 127 | 1,191,14) | 124,615,000 | 109 |
| 1919 | 104,56S | 11,07\% | 59.0 | -17, 5 - 50 | $\therefore 9,9653,400$ | 120 | 1,201,230 | 120.5\%3.500 | 100 |
| 1920 | 105,715 | 67,392 | 62. 11 | $\dagger-51,210$ | 91,297, 909 | 125 | 1,213,130 | 127,265,500 | 105 |

* 2,562 services and 1,510 meters acquired by annexation of Hyde l'ark
$\dagger$ Ietual Censua.


## HIGH PRESSURE FIRE SERVICE.

Five thousand nine hundred linear feet of 12 -inch, 16 -inch and 20 -inch mains were laid during the year in extension of the existing system.

The necessary leases for space and agreements for power have been entered into with the Boston Elevated Railway Company and the Edison Electric Illuminating Company for the establishment of two pumping stations, one at Lincoln Power Station of the Boston Elevated Railway Company, corner Battery and Commerical streets and one at the Third Station Property of the Edison Electric Illuminating Company on Atlantic avenue opposite Pearl street.

A contract has been made with the Westinghouse Electric and Manufacturing Company for furnishing and installing the following equipment:

At Lincoln Power Station.- Two steam turbinedriven, 3 -stage centrifugal pumps with a capacity of 3,000 gallons per minute each at 300 pounds pressure, and a capacity of 4,550 gallons per minute at 200 pounds pressure.

At Edison Station, Atlantic Avenue.- Two motordriven, 4 -stage centrifugal pumps with a capacity of 3,000 gallons per minute at 300 pounds pressure and a capacity of 4,350 gallons per minute at 200 pounds pressure.

Work is now in progress on this contract which includes complete pumping units with the necessary suction and discharge pipes for each station.

The suction and discharge mains from the Distribution System in Atlantic avenue and Commercial street to the two pumping stations are now being laid.

Financial Statement for the Year Ending January 31, 1921.



Mechanies . 2750
Foreman . 767
Total pay roll . . . $\$ 11, \mathrm{~N}_{2} 6$-2

| Construction of distribution sys- |
| :---: |
| tem . . . . . . . . . . . |
| 606 |

Water pipes and castings. . 6,31110
Paving . . . . . . $3,2,5007$
Traveling expenses . . . 37241
Printing . . . . . 12087
Professional services . . . 01 12
Tools and repairs, hardware and
small supplies . . . . . $3: 3$
Telephones . . . . . 0991
Advertising . . . . . 2700
Stationery . . . . . 246 s
Meals . . . . . . 20 00
Teaming, freight, etc. . . . 10 j0
Electric lighting . . . . 900
Engineers' supplies . . 7 ، 0
Fuel . . . . . . 605
Total expenditures, 1920-21 . . . 99,502 68
Total expenditures to January 31, 1921 . . . . . 1,020,980 62
Unexpended balance January 31, 1921 . . . . . $\$ 279,01938$

## APPENDIX F.

## REPORT OF THF BOSTON AND CAMBRIDGE BRIDGE COMMISSION.

Boston, February 1, 1921.
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, 1921.

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 connecting Boston and Cambridge: Anderson, Brookline Street, Cambridge, Harvard, Prison Point, River Street and Western Avenue to Cambridge.

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, 1921, was $\$ 26,783.42$.

Brookline Street Bridge (Over Charles River at Cottage Farm).
A contract with W. S. Rendle was approved on September 10, 1920, for placing some piles in order to make the bridge safe temporarily. The work was completed November 10, 1920.

On this same bridge a contract was awarded to John B. Dolan, approved November 5, 1920, for repairs to the flooring of the bridge.

Some yellow pine underplank was placed over the tracks of the Boston \& Albany Railroad in place of the rotted plank and a wood block flooring was laid on top.

Patching was done on various other parts of the bridge in order to make the bridge safe for travel. This work was completed on December 16, 1920.

Marvard Bridge.
The draw span of this bridge was sheathed twice and considerable repairs made to the underplanking. Extensive sidewalk repairs have been made to this bridge.

> Prison Point Bridge.

This bridge was sheathed once and repairs made to the underplanking and stringers.

## River Street Bridge and Western Avenue Bridge Over Charles River.

These bridges were each sheathed once and some rotten underplank in each bridge was replaced.

Respectfully submitted,<br>Thomas F. Sullivan, Commissioner for the City of Boston.

Expenditures for the Year $1920=21$ ．
（Being the Porlion Paid by the City of Boslon－Which is One Half－of the Total Expendiures．）

\begin{tabular}{|c|c|c|}
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Monthly Summary of Draw Openings - Boston and Cambridge Bridges, February 1, 1920, to January 31, 1921.

Annual Summary of Draw Openings, Boston and Cambridge Bridges, February 1, 1920, to January 31, 1921,


## DOCUMENT NUMBERS OF ANNUAL REPORTS OF THE PUBLIC WORKS DEPARTMENT.

| Name of Documest. | $\begin{aligned} & \text { For } \\ & \text { lear. } \end{aligned}$ | $\begin{aligned} & \text { l'ub. } \\ & \text { l'ear. } \end{aligned}$ | No. of $\operatorname{Dox}$ |
| :---: | :---: | :---: | :---: |
| Annual report. | 1911 | 1912 | 29 |
| Annual report. | 1912 | 1913 | 29 |
| Annual report | 1913 | 1914 | 26 |
| Annual report. | 1914 | 1915 | 26 |
| Annual report | 1915 | 1916 | 26 |
| Annual report | 1916 | 1917 | 26 |
| Annual report | 1917 | 1918 | 26 |
| Annual report | 1915 | 1919 | 26 |
| Annual report | 1919 | 1920 | 26 |
| Annual report. | 1920 | 1921 | 22 |



3999906315961


[^0]:    * Paid by Bridge servise and included in that appropriation.

[^1]:    * Does not include loan authorized but not issued $\$ 80,000$.
    $\dagger \$ 500,000$ not issued.

[^2]:    * Loan authorized but not issued, $\$ 90,000$.

[^3]:    ${ }^{2}$ Agreement made July 21, 1914, that prices for gas lamps outside of contract be as follows: Triple burner lamps, per annum, \$45, fire alarm signal lamps, S21
    4 Contracts may be terminated on April i, i919, if City Council votes and Mayor approves. 1 oent the price is so reduced below so cents per al.
    s Lighting rates for the electric lamps are as shown on next page.

[^4]:    *These walks are guaranted by a surety eompany bond for five (5) years from date of eompletion, and were laid on various publie streets where the enntractor
    had agreements with the abutters. The price twelve (12) cents per square foot is equivalent to the expense to the city of one half the cost of a brick sidewalk.

[^5]:    ${ }^{1}$ Advertised and awarded to lowest bidder.

[^6]:    ${ }^{1}$ Advertised and awarded to lowest bidder.

[^7]:    ${ }^{2}$ Not advertised

[^8]:    Asphalt decreased 0.13 mile or 1,494 square yards.
    Granite block increased 0.02 mile or 618 square yards.
    Wood block decreased 0.00 mile or 959 square yards.
    Bitulithic decreased 0.05 mile or 504 square yards.
    Topeka increased 0.21 mile or 1,370 square yards.
    Macadam increased 0.03 mile or decreased 1,504 square yards.
    Gravel decreased 0.00 mile or increased 40 square yards.
    Not graded decreased 0.01 mile or increased 1,863 square yards.
    Brick decreascd 0.01 mile or increased 73 square yards.
    Cobble increased 0.00 mile or 38 square yards.
    Concrete increased 0.00 mile or 11 square vards.

[^9]:    *Twenty-six of these men were on the eligible list February 1, 1920.

[^10]:    * For detail of expenditures see Appendix F.

[^11]:    * Drawless channelway; clear headroom of 12 feet above basin level (about elevation 8.0).
    $\dagger$ Drawless ehannelway; clear headroom of 28 feet above basin level.

[^12]:    * Drawless channelway; clear headroom of 12 feet above basin level (about elevation 8.0).

[^13]:    * Definition of Boston city" base: "Buston eity base is a datum plane 15 feet above the average height of the sill of the Charlestown dry doek." (Page 552, report of Committee on Charles River Dam, 1903.)
    $\dagger$ John R. Freeman, eivil engineer, in report to Committee on Charles River Dam, 1903, pp. $562,563,570$.

[^14]:    * Authorized but not issued, $\$ 500,000$.

[^15]:    * Done in connection with Congreve. Hastings and Walk Hill streets.

[^16]:    * Done in connection with Neponset avenue and Olney street.

[^17]:    * \$245. 19 of this amount charged to Street Improvementa.

[^18]:    *Amount paid out of Street Improvements, $\$ 1,110.93$; Paving Service, $\$ 441$. $\dagger$ Done in connection with Brooks street.
    $\ddagger$ Done in connection with Ashmont street and Olney street.

[^19]:    * Done in connection with Washington street. (Beach-lineeland streets.)

[^20]:    Smith strent. from Huntington arenue to St. Alphonsus street. Length, 584 linear feet. Area, 1.774 square vards. Edgestone reset, asphalt parement laid, brick sidewalks relaid. (Unfinished work from 1919.)
    Engineering . . . . . . . . $\$ 3365$
    Inspection . . . . . . . . 3068
    Carried forward
    $\$ 6436$

[^21]:    * Done in connection with Green street.

[^22]:    * Of this amount $\$ 1,516.55$ charged to appropriation for reconstructing and repairing streets by contract.

[^23]:    * Done in connection with Belgrade avenue and Centre street. $\dagger$ Done in connection with Beech street and Centre street.

[^24]:    * $\$ 49,511.97$ of this amount charged to the appropriation for Hyde Park arenue, widening.

[^25]:    * See, alou, Highways, Making of.

[^26]:    *Sce, also, Schedule A. † See Street Improvements. $\ddagger$ See Highways, Making of.

[^27]:    *See Spccial Appropriation Belgrade avenue extension and Beeeh street widening.

[^28]:    * By resurfacing is meant entire area of street exeavated and resurfaced with not less than four inches of new material,
    + By patching is meant scattered areas of depressions, ete., which are filled with new material from a depth of one half inch up, and in some cases blan-
    ket coated with bituminous binder.
    $\stackrel{+}{\$} \$ 96,306.09$ charged to maintenance; $\$ 193,329.88$ charged to street improvements.
    | $\$ 186,992.91$ charged to maintenance; $\$ 81,47.90$ charged to street improvenents.

[^29]:    * Single load, 1 cubic yard. † Double load, 2 cubic yards.
    $\ddagger$ Auto truck load, 6 cubic yards.

[^30]:    * Ioads vary from three (3) to ten (10) cubic yards.
    $\dagger$ Includes engineering, $83,257.74$, inspection, $89,603.44$, and incidentals, 8989.46

[^31]:    Castlegate road (Roxbury).

[^32]:    * Weighing.

[^33]:    * No work by contract.

[^34]:    Amount Paid.

    | $\$ 39,555$ |
    | ---: |
    | 793 |
    | 9,098 |
    | 09 |

    $\frac{79,09809}{\$ 118,65402}$
    $\$ 118,65402$
    

[^35]:    *From yearly quantity.

[^36]:    * Includes bill paid by the County of Suffolk for stock and labor, $\$ 2,491.69$; I rinting Department, $\$ 10.05^{\circ}$; Stone's Express, $\$ 40.98$.

[^37]:    

[^38]:    * Cost of snow tractor bought for $\$ 3,400$ not included.

[^39]:    * Includes price !aid for new machines

[^40]:    * The actual increase in the cost of construction was $\$ 226,250.38$, but on account of the transfer of the East Boston reservoir, its cest, $£ 66,103.09$, is deducted, making a net increas of $\$ 160,147.29$.

[^41]:    * Above is exclusive of cost of meters.

