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ANNUAL REPORT
OF THE
PUBLIC WORKS DEPARTMENT
OF THE
CITY OF BOSTON

FOR THE YEAR ENDING DECEMBER 31, 1964.



HON. JOHN F. COLLINS, *Mayor*
JAMES W. HALEY, *Commissioner of Public Works*
FREDERICK L. GARVIN, *Engineering Division Engineer*
CHARLES MARTELL, *Highway Division Engineer*
JOHN F. FLAHERTY, *Sanitary Division Engineer*
EDWARD G. A. POWERS, *Sewer Division Engineer*
EDWARD PINKUL, *Water Division Engineer*

PUBLIC WORKS DEPARTMENT

1964 ANNUAL REPORT

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PUBLIC WORKS DEPARTMENT

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BOSTON, January 2, 1965

HON. JOHN F. COLLINS,
Mayor of Boston.

DEAR MR. MAYOR:

In compliance with the provisions of Section 25 of Chapter 3 of the Revised Ordinances of 1961, I respectfully submit herewith the annual report of the Public Works Department and the Public Improvement Commission for the year ending December 31, 1964.

No function of municipal endeavor is so manifest to the tax payer and the visitor as Public Works. It involves the construction, maintenance and operation of an elaborate system of highways, sewerage, water distribution, and sanitation including the collection and disposal of solid wastes, and street cleaning. The expenditures to carry on this work amounted to \$27,917,263.00 in 1964.

ORGANIZATION

In 1960 a major reorganization of the department was undertaken involving the ratings and duties of over one half of all department personnel. These changes are now substantially completed allowing an overall reduction in personnel of over 20 percent. Much has

been accomplished; much remains to be done. Future progress will depend primarily on the city's ability to establish and carry out a higher calibre personnel management program particularly in recruitment training and supervision of employees. For years prior to 1960 the department has drifted along according to methods and practices laid down in the 19th century. The policy of the department is to set up a straight line, centralized, staff organization; a complete job classification with clearly designed duties for each position; on the job training for promotions; and school training of personnel including that on a college level.

PERSONNEL

As of December 31, 1964 there were 1,364 permanent employees in the department. This compares with 1,625 employees on December 31, 1960 and 2,441 employees on December 31, 1950. The problem of obtaining replacement employees, particularly in the engineering field, is acute and presents a serious problem. With the competition from industry, and the wage differential in State and City salaries we are unable to employ qualified engineers and engineering aides.

CENTRAL OFFICE

The Central Office is composed of three sections: an Administrative Branch in the charge of an Administrative Assistant, a Maintenance Branch in the charge of the Director of Transportation, and a Permit Branch in the charge of a Supervisor of Permits.

The Administrative Branch is the centralized unit for processing purchase supply requisitions, service orders, payrolls, personnel requisitions, for employment transfers, promotions, and terminations. Records and files are maintained and services to the Public Improvement Commission are supplied as required.

The Maintenance Branch provides for the custody, care and repair of departmental automotive equipment; supervision and maintenance of all department automotive equipment; the supervision and maintenance of departmental property; the operation of shops; and the

operation of a two-way radio station on a 24-hour basis. There were 484 automotive units in the Public Works Department, plus 23 trailers, transports, sewer rodders, etc. Approximately 10,000 repair jobs were performed. An inventory value at approximately \$50,000 is maintained. A closed circuit teletype system and base radio is maintained with ten stations, which link the various district yards and vehicles. New equipment in the amount of \$233,196.99 was acquired through budget appropriations; plus \$98,546.68 from snow appropriations; and \$7,750.00 from Civil Defense Loans for 10 two-way radios.

THE PERMIT BRANCH

The Permit Branch is the centralized unit for issuing departmental permits and receiving receipts for departmental fees and services. Cash receipts for permits for signs, street openings, licenses, sewer inspection fees, dump tickets, contract books, engineering inspection fees, and miscellaneous amounted to \$345,155.33. Committed accounts for rentals, hydrant use, towing, engineering reproductions and damage to property amounted to \$25,786.87. Deposit accounts for water deposits and street opening accounts amounted to \$597,047.33 with a grand total of \$967,987.53.

Receipts showed an overall increase of over 40 percent. Fewer licenses were issued in 1964 but due to an increase in fees there was an increased revenue. The Permit Branch is setting up a system of issuing projection permits via the Data Processing unit.

ENGINEERING DIVISION

This Division is composed of four sections as follows: Administration; Planning and Programming; Survey; and Design. Surveys, plans and specifications for public works were advertised involving street reconstruction in 164 streets and a length of 24.5 miles at an estimated cost of \$2,730,000; street reconstruction under Chapter 90 of the General Laws involving 7 streets and a length of 3.2 miles at an estimated cost of \$508,000; street construction under Chapter 393 of the Acts of 1906 involving 19 streets and a length of 1.7 miles at an estimated

cost of \$400,000; street construction in redevelopment areas involving 10 streets and a length of 0.7 miles at an estimated cost of \$244,000; sewerage works involving 10 contracts estimated to cost \$854,000; water works involving 5 contracts estimated to cost \$231,000; sewerage and water works in non-redevelopment areas involving 7 contracts estimated to cost \$516,300; sewerage and water works in redevelopment areas involving 2 contracts estimated at a cost of \$187,500; and miscellaneous contracts, 5 in number, estimated to cost \$508,000, for a grand total of \$5,670,800.

ADMINISTRATION

The Administration Section performs the duties of carrying out the functions of the division. These duties consist of the usual office procedures; preparing contract stencils, processing municipal lien certificates, processing and indexing plans, mimeographing work and preparing betterment assessment information.

Planning and Programming Section: The Planning and Programming Section prepared the highway, water and sewer programs for the Public Works Department. This section, with the support of the other sections of the Engineering Division, performed services as directed by the Public Improvement Commission. During the first six months of 1964, the Section Chief assisted the Division Engineer who served as the Public Improvement Commission Engineer. In this capacity he furnished professional advice relative to interpretation of plans, land taking, specific repairs, widenings and other improvements ordered by the Commission.

In connection with the various programs, this section maintained liaison with the Mass. Dept. of Public Works, City of Boston Traffic and Parking Dept., Fire Dept., Police Dept., Sewer, Water and Highway Divisions and all public utility companies.

Upon receipt of plans of the Boston Extension of the Mass. Turnpike, this section reviewed and/or coordinated the plans with other city departments and divisions and, where applicable, with the Boston Redevelopment Authority. Close liaison with the con-

sultants (Howard, Needles, Tammen and Bergendorf) for the Mass. Turnpike Authority was maintained throughout the year. The Planning and Programming Section assisted the Division Engineer in making recommendations concerning approval of the plans to the Commissioner of Public Works.

The Planning and Programming Section served as a coordinator between the City of Boston Public Works Department and the Boston Redevelopment Authority and its consultants on matters of mutual interest concerning the various redevelopment projects in the "New Boston".

Public Utility Companies plans for proposed construction in city streets were reviewed by this section and appropriate recommendations relative to approval were made to the Division Engineer.

Survey Section: This section made 47 surveys and plans for the laying out of 4.4 miles of public highways; 177 surveys and 216 plans for reconstruction of 41.0 miles of highways; four major surveys for reconstruction of an additional 1.2 miles of highways; 6 surveys and plans for discontinuance of 0.25 miles of highways; 40 surveys and plans for the taking of 3.78 miles of sewerage easements and betterment plans; 4 profiles for highway construction; 9 surveys and plans for minimum specification pavements, involving 0.97 miles; 6 surveys and plans for specific repairs and widenings (Chapter 90) involving 2.9 miles; marking line and grades; 11 surveys and plans for specific repairs; and surveys for engineering reports. In addition a topographic survey was made for the Library Department and one for the School Committee. Two surveys and plans were also made for school purposes.

Design Section: The Design Section, under the supervision of an Associate Engineer performed the following work:

Prepared all plans, estimates, specifications and contract forms relating to the design and construction of highway, bridge, sewer and water facilities, in accordance with departmental programs.

Prepared designs, plans and specifications required in connection with proposed structures and appurtenances to be constructed by the operating divisions of the department.

Designed grades, in connection with the construction and reconstructions of highways and sewers.

Checked all plot plans submitted to the Building Department, prior to the issuance of building permits, to determine if the same are approvable with regards to grades and availability of sewer and water facilities.

Checked proposed construction over existing sewers, to determine if same is structurally sound and approvable.

Made tracings of all survey plans, plots, street layout plans, easement plans, assessment plans, etc., prepared by the Survey Section.

Prepared and traced various maps, plans, charts, etc., required for general purposes in the operation of the department.

Made estimates and preliminary plans for the Public Improvement Commission, relating to proposed sewer, water and street betterments.

Checked plans and specifications of, and consulted with, various engineering firms regarding sewer, water and highway construction for the Government Center, Prudential Center, and the Washington Park Project.

The major accomplishments of the Design Section in 1964 consisted of completing the necessary designs, estimates, construction plans and specifications for 46 public works contracts which were advertised in 1964, involving street construction and reconstruction and sewer and water works installations.

Work related to the foregoing included:

Completion of 192 construction plans for highway projects.

Design of 70 sewer grades.

Layout and tracing for 60 water works installations.

Other work included:

Review of approximately 775 plot plans for the Building Department.

30 street grades designed.

27 tracings of street layout plans.

122 tracings of specific repairs, widenings and relocations.

20 tracings of sewer easement and assessment plans.

15 tracings of miscellaneous sidewalk and street assessment plans, discontinuances, and land plans.

41 approval plans reviewed and checked.

45 streets designed for catch basin locations.

Preparation of miscellaneous charts, maps and plans for other divisions and departments.

34 estimate reports furnished in connection with proposed sewerage works.

20 estimate reports furnished in connection with proposed street developments.

34 sewerage works reports of proposed construction sent to M.D.C.

Investigation of 8 major drainage areas:

Washington Park Redevelopment	Burton Street Area
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Spring Street Brook	Dorchester Brook
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Strong's Pond Area	South Bay
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Maywoods Brook	Myopia Brook
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Reviewed plans and layouts of sewerage and water works for 6 B.R.A. redevelopment areas.

Reviewed plans and layouts for various sections of the Mass. Turnpike.

Reproduction and Photographic Unit: This unit supplied blueprints, ozalid prints, autositives and photographs for the department and other departments. 26,780 photostats; 483 blueprints; 47,085 ozalids and 197 autositives were made. 4,201 photo negatives were made; 368 4" x 5" prints and 4,095 8" x 10" prints were produced.

HIGHWAY DIVISION

The functions of this Division are performed by four sections: Administration, Construction, Maintenance and Street Lighting.

The Administrative Section performed the routine clerical duties of the Division, including preparation and processing of correspondence, initiating supply and service requisitions and the preparation of contract payments.

The Construction Section supervised the construction and reconstruction of 149 streets at a contract price of \$2,431,595.15. In addition the construction or reconstruction of 54 streets, to be completed in 1965, was contracted for, at contract price of \$991,486.65. Chapter 90 projects involving 7 streets were completed at a contract price of \$479,998.75.

The Maintenance Section made repairs and flushed and cleaned 750 miles of streets, cleaned 3,645 catch basins; maintained and operated 7 drawbridges and 50 fixed bridges.

The Street Lighting Section supervised the installation of 927-3,500 lumen lamps; 255-7,000 lumen lamps; 98-11,000 lumen lamps and 102-20,000 lumen lamps. During the year there were approximately 240 gas lamps in the city and 12 were installed. Maintenance was provided for 97 police spotlights.

SNOW REMOVAL

Snow removal for the year 1964 accounted for an expenditure of \$1,030,791, which created a deficit of \$260,189.

A storm on January 13-14 deposited 9.2 inches of snow and one on January 28, deposited 4.5 inches. On February 16 a storm deposited 7.4 inches, followed by another storm on the 19th which added an additional 9.1 inches. The storm of the 16th was accompanied by sleet which further complicated the task of keeping the highways open and safe; and for periods traffic was snarled. March was the second least snowy month in nine years, but a sleet storm developed on March 10, which continued steadily for eleven hours and caused an accumulation of 2 inches. Maintaining traffic under these conditions was an expensive challenge.

In December a major ice storm developed on the 3rd and continued until the 6th. Streets and sidewalks were persistently very slippery. During the year department personnel spread 19,000 tons of salt and 3,500 tons of sand to keep the highways safe. A policy change will be noted, in that as far as possible, unmixed salt was used, during the year. Results were satisfactory.

A marked improvement in the parking situation was noted, due to the splendid cooperation of the Police Department and the Traffic and Parking Department. All night parking, however, will continue to be a major problem in snowplowing and removal operation. Since the majority of residences were constructed before the use of motor vehicles became widespread, it is only through the cooperation of the motor vehicle owner that

highways in Boston can be kept open to public travel during the winter season. Resort to towing will have to be maintained, but will be held to a minimum.

WATER SHORTAGE

An acute drought developed during the year. In March a deficiency of precipitation amounted to 0.74 inches, followed by 0.08 inches in April; 2.81 inches in May; 1.57 inches in June; 1.88 inches in August; 0.81 inches in September; 0.32 inches in October; and 1.75 inches in November for a departure from normal in these eight months of 9.96 inches. The other four months showed a surplus above normal of 3.53 inches for a net loss of 6.43 below normal. Total precipitation amounted to 36.41 inches.

The effect of this shortage was felt by the Metropolitan District Water Division in that the Quabbin Reservoir, on December 31, 1954 contained 299 billion gallons of water, which is 80 percent of the normal seventeen year average of 412 billion gallons. The thirty member cities used 85.886 billion gallons of water for the year ending June 30, 1964, and the non-member municipalities used an estimated 8.146 billion gallons for a total drain of 94.032 billion gallons. The supply of water is adequate for the district, but if the present trend of drought continues to the middle of May 1965, emergency measures may be required to augment inadequate supplies of non-members and wholesale use of water may be restricted.

The picture in the water distribution system is not as bright. During the summer months complaints were received of low water pressures in sections of West Roxbury and Hyde Park. Although May was the 5th driest in 146 years, July rainfall was about average, and the August precipitation was off by 50 percent, it should be remembered that we had the coldest August in 61 years which reduced water use. If the summer of 1965 is dry and hot, reductions in water pressures may be expected, and restrictions in water use may be required in Boston. It is intended to inaugurate an engineering study, and take remedial action by cleaning several large feeder mains and relining the same with cement linings.

SANITARY DIVISION

The Sanitary Division is charged with the responsibility of the collection and disposal of the solid wastes of the city. The work is carried out through the medium of three sections—Administrative, Collection and Disposal.

ADMINISTRATIVE SECTION

Program 1 — Administration

The activities of the Administrative Section comprised supervising the various functions and operations of the division, the preparing of all contracts, the processing of payments, the processing of reports, correspondence, violation notices and complaints (complaints were written, telephoned, and in person) and compilation of inspectors' reports and daily reports on the Collection and Disposal Section's performances, investigating and processing applications for permits for the transportation of refuse, the preparation of the budget, acted as liaison with Administrative Services Department and with Northeastern University on In-Service Training Programs for departmental personnel, and the supervision of the Snow Emergency Center.

COLLECTION SECTION

Program 2 — Refuse Collection Contracts

New refuse collection contracts were awarded to eight contractors in eleven districts effective April 1, 1964, as a result of competitive bidding. The yearly contract price for these contracts is \$2,403,841.80, an increase of \$258,433.00 or 12 percent over the 1961 bid prices for the contracts which expired on March 31, 1964. While efforts were made to keep the cost of this service to a minimum by reducing the number of collection districts from 13 to 11 by consolidating the Boston Downtown and Boston Uptown into one Boston Proper District and reducing the work week in that district from six to five days per week, and by combining the Roxbury and Parker Hill Fens Districts into one Roxbury District, a 12 percent increase in cost resulted from wage increases to the contractors personnel of 26 cents per hour going

from \$2.60 per hour in 1961 to \$2.86 per hour in 1964 or an increase of 10 percent, and including in the contracts for the first time the requirement that the contractors in the incinerator districts haul separately collected bulk refuse to the Gardner Street dump. A total of 236,341 tons of refuse was collected and disposed of during the year.

Program 3 — Alley Cleaning

An alley cleaning program was carried out in the South End and Lower Roxbury districts by providing daily cleaning of the alley heads and weekly cleaning of approximately six miles of alleys within this area. In December, we commenced using packer type trucks in this operation. Approximately 5,200 tons of refuse were removed during the year through this operation which has proven satisfactory as evidenced by the absence of complaints from this district.

Program 4 — Litter Baskets

The number of litter baskets on location was increased during the year from 685 to 936. Ninety-seven of the sidewalk type baskets are used in the Downtown District, and 839 pole type baskets are installed throughout the city in locations where there are accumulations of pedestrian litter. The number of sidewalk baskets were reduced from 301 to 97 and replaced with the smaller pole mounted baskets because of the tendency in some locations to use the sidewalk baskets for depositing household and commercial refuse. These baskets are emptied by the refuse collection contractors on Mondays except in the Boston Proper District when they are emptied on the regularly scheduled collection days, and are also emptied twice a week by three departmental night shift crews using packer type trucks; these activities provide approximately 155,000 servicings during the year. Six aluminum pole baskets with a locked bottom drop have been fabricated and installed in School Street and Beacon Street for a trial run early in 1965. It is planned to increase the number of litter baskets on location in 1965.

Program 5 — Market Cleaning

Under this program, the division provides two packer type trucks on Fridays and Saturdays servicing push cart peddlers and storekeepers in the Market area in the vicinity of Blackstone Street, removing approximately 2,060 tons of refuse during the year and depositing it at the South Bay Incinerator.

Program 6 — Abandoned Vehicles

The removal and disposal of abandoned vehicles from the streets and vacant lots throughout the city, taken over from the Police Department in June of 1963, was continued throughout the year. Two thousand eight hundred thirty-four vehicles were removed and disposed of, most of this work being done under a contract with the J & L Iron Company. The price for doing this work was reduced from \$8.00 to \$6.00 per car by providing the contractor with an operations area to the rear of the Public Works Garage on Albany Street. This contract work was supplemented by departmental labor force and equipment during the spring clean up season because of the exceptionally large number of abandoned vehicles occurring at that time.

Program 7 — Enforcement and Education

The squad of uniformed Sanitation Inspectors (formed in 1963) served 5,676 violation notices to property owners or householders observed violating sanitation laws, particularly in the manner of placing out refuse for collection. In only 31 cases was it necessary to request the Police to bring flagrant violators into court. This activity has resulted in the householders providing hundreds of new barrels in the areas in which this activity has been concentrated and reduced appreciably the amount of littering in the streets.

To supplement the work of the uniformed inspectors, and to obtain the cooperation of the residents, we conducted two anti-litter campaigns. An advertising agency was engaged to provide assistance and advice in public relations and to prepare the art work and assist in obtaining the cooperation of the various communi-

cations media. Two campaigns were conducted, one in the spring with the slogan, "Keep the New Boston Bright and Shiny" and the other in the fall with the slogan, "Help Keep Boston Clean." During these campaigns, signs were posted on the sides of all Public Works automotive equipment and decals placed on all the litter baskets. Car cards and posters were placed on MBTA equipment and subway stations, courtesy cards were placed in store windows, and posters were also placed on billboards. Some publicity was obtained from the newspapers; a radio jingle was used by radio stations in the Metropolitan Boston area; and four films were printed and used by the three local television stations during station breaks. In addition, signs warning of a \$50 fine for littering were printed and erected by the Traffic Commission in locations where there are large amounts of illegal littering. Advertising space and air time, estimated to have a value of \$128,000 per month, was contributed to the city, without charge, and the total cost of this campaign was \$9,345.

DISPOSAL SECTION

Program 8 — South Bay Incinerator

The South Bay Incinerator received and disposed of a total of 149,794 tons of refuse during the year from a population of approximately 464,000 people, or 66 per cent of the population of the city, at a cost of \$803,361 which represents a unit price of \$5.36 per ton of refuse burnt. This operating cost was \$180,000 more than in 1963 because of increased labor costs due to the necessity of reverting to a 20 shift week caused by shutting down furnaces in order to rebuild the bridge walls and the grates on the furnaces, and the necessity for hauling the residue to Gardner Street dump when nearby disposal areas were no longer available. As this plant gets older, the maintenance cost, particularly on refractories, will accelerate.

Maintenance work performed under the contract for repairs or alterations beyond the scope of the plant maintenance force included replacing the structural steel supporting the bridge walls and the furnace grates,

the steel work being redesigned to prevent future bridge wall deflections and collapse; realignment of the crane rails; replacement of all the hydraulic pumps; repairs to steam and water lines; mechanical repairs on the cranes; repairs to the heating system; installation of an electric hot water heater; reconditioning the traps, piping and expansion joints on the steam line to the hospital; repairs to ruptures on the exterior shell of the Ric-Wil steam main; and repiping the boiler feed water supply to provide emergency feed from either end of the building in case of water service failure at one end.

The regular maintenance force of the plant, in addition to routine maintenance, replaced 15 dumping grate operating hydraulic cylinders, which relocation of the cylinders, outside the furnaces was done to prevent the burning out of the packing and the loss of considerable amounts of hydraulic oil; performed minor refractory patching and repairs; worked rebuilding the grates by removing them from the furnace, taking out the worn parts and replacing with new parts, while the maintenance contractor was doing the structural steel work; rebuilt two of the crane buckets; and relocated one of the charging gate hydraulic cylinder operating mechanisms, which has proved successful in eliminating the loss of excessive amounts of hydraulic oil, and this alteration will be made on the remaining charging gates next year. Considerable assistance was rendered by the Water Division machine shop in machining parts for repairs or replacements in the plant equipment.

The work performed under a contract for providing refractory repairs included the rebuilding of five bridge walls, replacing a large section of the roof of the number 5 furnace and making numerous other repairs to refractories. Recent failures indicate the need for renewing the suspended arches in all six furnaces.

A 40' x 30' metal storage building was constructed in the space between the stacks in the rear of the plant and a storeroom with racks was completed so that parts and other supplies can be properly stored.

A considerable number of burnouts of crane motors was experienced and investigation indicates that failure resulted from malfunctioning of the collector shoes which are being redesigned to eliminate this problem.

No steam was transmitted to the hospital because all the steam that could be generated burning rubbish was required to operate the turbine driven induced draft fans which must be used when the fly ash collectors are in operation. To eliminate this demand would require motorization of 18 pieces of steam driven equipment at a cost of \$100,000. At a meeting with hospital authorities concerning this problem, it was decided, instead of a study by a consulting engineer, to make another effort on our own to determine the ability of the incinerator to meet an appreciable part of the hospital steam demand, and the resulting savings in the cost of fuel oil at the hospital in order to arrive at a decision as to the advisability of motorizing the incinerator steam driven equipment or to abandon any future attempts to transmit steam to the hospital. Due to the amount of work required to rehabilitate the steam main, full scale transmission of steam did not commence until near the end of the year and will be continued into 1965 in order to accumulate the required data.

A heating and ventilating engineer was engaged to prepare plans and specifications for alterations to and additions to the ventilating system at the incinerator in order to eliminate or substantially reduce smoke and dust which have caused poor working conditions and a health hazard to personnel in parts of the plant. Preliminary plans were submitted and approved in November, and the final plans and specifications will be ready in January, 1965.

In July, the available dumping area for incinerator residue in a part of the Reserve Channel was exhausted and a contract was entered into for the transportation of residue from the plant yard to the Gardner Street dump, to be used as a part of the dump cover. Approximately 22,000 tons of residue was hauled during the last 5 months of the year at a cost of \$0.97 per ton.

Program 9 — Gardner Street Dump

The Gardner Street dump was operated as in former years as an open fill with earth or incinerator residue cover for the disposal of 338,824 cubic yards or 69,847 tons of rubbish from Area 2. Cover material at this site, above the ground water table, has been exhausted and consequently we had to purchase 22,300 cubic

yards of cover material which was used up at the end of July. Starting in August, and for the balance of the year, incinerator residue, hauled under contract, was used for cover material at this site.

In January, we were requested by the State Department of Public Health to prepare plans to operate the Gardner Street disposal site as a Sanitary Land Fill, and subsequently we engaged the services of Camp, Dresser & McKee to prepare a Manual of Operation for the Gardner Street Sanitary Land Fill. This manual was approved by the State Department of Public Health and it is planned to commence operating a Sanitary Land Fill as soon as the necessary equipment and funds for cover material are available. This will increase the operating costs at this site by approximately \$100,000 annually. The cost of operation for 1964 was \$81,873, and the income from dumping fees at this site was \$9,580 from licensed private collectors and \$17,029 was deducted from the payments to city contractors for the disposal of commercial refuse collected in Area 2, but outside of their contract districts, for a total income for the year of \$26,609. A municipal incinerator should be constructed at this site as soon as possible in order to conserve the remaining dumping area for the disposal of incinerator residue and material not suitable for incineration. Unless the Commonwealth provides disposal sites for the aforementioned materials, the disposal of residue and non-burnables will soon become acute and very costly to the city.

Program 10 — Saugus Dump Rental

The disposal of refuse from the East Boston district was continued during the year at the privately owned Saugus dump. The last renewal contract with the M. DeMatteo Construction Company, at a cost of \$2,000 per month expired on March 31, 1964, and a new contract was entered into with the same company at a price of \$2,500 per month with renewal options for a second and a third year with increasing monthly prices. This is the only site readily available for the disposal of East Boston rubbish, and due to the actions of the State Department of Natural Resources in restricting an area of marsh for the disposal of refuse at this site,

and the desire of the State Department of Public Health that the operation be conducted as a Sanitary Land Fill, will accelerate the cost of disposal at this site considerably over the next few years. Approximately 65,500 cubic yards or 13,100 tons were disposed of during the year at a cost of \$30,375.

Program 11 — Garbage Disposal

The garbage transfer stations at Victory Road, Dorchester, and Gardner Street, West Roxbury, were continued in operation throughout the year for disposal of garbage collected in several of the city districts. The city exercised its option and renewed contracts commencing April 1, 1964, with Kristoff Brothers for removing 10,800 cubic yards, or 3,600 tons of garbage delivered to the Victory Road transfer station, and with Kennedy Brothers for removing 15,618 cubic yards, or 5,206 tons of garbage delivered to the Gardner Street transfer station. There was no change in the weekly contract prices and the annual cost for each contract amounted to \$13,100. Due to the statute requiring cooking of garbage before feeding to hogs, and the steadily declining number of piggeries in the State, the problem of garbage disposal becomes more acute each year and another method of disposal will have to be found in the very near future. However, for the present this is the least costly arrangement that can be made for garbage disposal.

PERSONNEL IN-SERVICE TRAINING PROGRAM

The Administrative Section of the Sanitary Division acted as liaison between the department and Northeastern University in the preparation of contracts for providing In-Service Training for departmental personnel and in making arrangements for establishing the courses and selecting personnel to attend the same, and also acted as liaison between the department and the Administrative Services Department Training Coordinator in the arrangement of courses and the selection of personnel in programs set up by that office.

During 1964, the department contracted with Northeastern University to make a "Survey of the Educational

and Training Need of Technicians, Supervisors and Managerial Employees of the Department", conducted in three phases; (1) an examination and evaluation of the structures and functioning of the entire department; (2) a study and evaluation of the need for a continuing program of on-the-job and/or off-the-job education and training, and (3) submission of recommendations concerning suggested changes in the department structure and an outline of the scope, content, plan of operation and cost of conducting a program of education and training. A complete report was submitted including job descriptions, duties and requirements, for all key supervisory personnel of the department.

Pursuant to the above study, arrangements were made for courses to be conducted by Northeastern University on the "Fundamentals of Public Works Construction", and on "Management of Automotive Equipment Maintenance", both to be started early in 1965.

In cooperation with the Training Coordinator, Administrative Services Department, 15 engineering employees from various divisions of the department were enrolled in a five-year course leading to a Degree of Associate in Civil Engineering at Lowell Technological Institute, and several clerical employees attended stenographic and typing courses conducted at South Boston High School.

SNOW REMOVAL

The Snow Emergency Center continued in its fourth year of operation at the Civil Defense office located in the Fire Headquarters building during the snow season under the direction of Division Engineer and Deputy Commissioner, John F. Flaherty, as chairman. This unit is supervised by the Administrative Section of the Sanitary Division. The coordinating table of the center has representatives of several departments, as well as the utility companies. This center processed hundreds of calls from the general public to the agency or department involved during the storms which occurred in 1964. The center, in addition to the department representa-

tives, also has a unique communications system consisting of short-wave radios to Public Works, Traffic and Fire Headquarters, and a direct "hot line" to the Public Works Department Snow Headquarters, Mayor's Office, MBTA and each Police station, and a teletypewriter to each Public Works district yard and snow headquarters. The center is called into operation at the onset of any snowfall with a skeleton force. As the storm forecast predicts heavier snowfall, additional personnel and table representatives are activated to operate the center in assisting the general public. The Emergency Center handles all press, radio and television releases during all snowstorms, keeping the public informed on all storm activities. The center was activated during the Bellflower Street fire and is organized to function as a communications center during any type of natural disaster.

SEWER DIVISION

The Sewer Division is responsible for the construction replacement, maintenance and repair of the city's sanitary sewers, surface drains, catch basins and various appurtenances, and the operation and maintenance of pumping stations and a disposal plant.

The division is organized in three sections—Administrative, Construction and Maintenance.

The Administrative Section is responsible for preparing budgetary requests; maintenance of time records; preparing, purchasing, and service orders and receiving notices; handling correspondence, processing estimates on contract work; keeping records; and adjusting sewer use accounts.

The Construction Section is responsible for the engineering and inspection of the sewerage works program, from field layout through to final inspection and acceptance. During the year expenditures from the sewer loan amounted to \$1,050,568, and \$423,464, unliquidated encumbrances.

In connection with the building of the War Memorial Auditorium it was necessary to relocate the West Side intercepting sewer, which flows southerly, and a large main sewer which was laid in the same trench

with the intercepting sewer and above the interceptor. Hydraulic characteristics were such that the main sewer had to flow northerly at this locus. Flows in both sewers had to be maintained during construction, creating quite an engineering problem. A contract to do this work was approved in May and work was completed in January, 1965, without curtailing service.

The Maintenance Section is responsible for the operation of the sewerage and surface drainage system comprising 1,347.16 miles of common sewers and surface drains, and 30.93 miles of intercepting sewers; pumping stations at the Calf Pasture, Union Park Street, Symphony Station, Summer Street and Sullivan Square; and a disposal plant at Moon Island. The total pumpage at the Calf Pasture station amounted to 42,765 million gallons for the year or an annual daily average of 117.16 million gallons, at a cost of \$6.47 per million gallons. The sewer maintenance expenditures for 1964 amounted to \$795,889.

Sewage from Boston Proper, South Boston, parts of Roxbury, Dorchester, and West Roxbury outlets through the Calf Pasture—Moon Island Disposal Plant. Sewage from East Boston and Charlestown flows into the metropolitan system for discharge at Deer Island, and sewage from Brighton, Hyde Park, and parts of Roxbury, Dorchester, and West Roxbury flows into the metropolitan system and is discharged at Nut Island. A small portion of Dorchester and Milton in the metropolitan sewage area, lying at an elevation too low to drain into the metropolitan high level sewer, is discharged into the Boston main drainage system, for which disposal in 1960 the Metropolitan District Commission paid the city \$32,601.45.

WATER DIVISION

The Water Division has the care, control and maintenance of the distributing mains supplying the potable water to the city. The source of supply is the Metropolitan District Commission, which agency supplies the city at the city line. Although the law requires that the pressure be sufficient to distribute by gravity, there were

approximately 100 residences in Hyde Park, that required the use of a small city pump, during peak loads in the summer season. This situation will be eliminated in 1965, by a connection to the extra high service. The Water Division also supplies water to the two high pressure pumping stations operated by the Fire Department, for protection of the central business section of the city.

The Water Division is composed of four sections—Administration, Construction, Maintenance and Revenue.

The Administrative Section handled, prepared and processed correspondence; initiated requisitions and supply orders; prepared contract payments and maintained records.

The Construction Section supervised the relaying of 1.33 miles of mains from 4 inches to 16 inches in diameter; the extension of 3.99 miles of new mains; and 43 hydrants.

The Maintenance Section is responsible for the operation and maintenance of the water distributing system comprising 1,040.79 miles ranging in size from 2 inches to 48 inches in diameter; 18.64 miles of high pressure fire service pipes and including gates, valves, hydrants, and other appurtenances.

This section provided for the repair of main pipes, service pipes, hydrants and gates; and furnished emergency service on a 24-hour basis, seven days a week. The city labor was augmented by contract personnel in excavating and backfilling trenches.

The section operates a maintenance shop, including machine, plumbing and meter units.

The Revenue Section performs all the work involved in operating a utility business with 97,000 customers. The work involved includes the processing of old and new accounts; reading of meters; computing bills; adjusting errors in billing; and processing abatements. As the sewer use charge is based on the water supplied the user, this section processes sewer use abatements based on adjusted water use. Technical sewer abatements are made by the Sewer Division.

The contract with the Pitometer Associates to survey the water waste in area No. 2 is 49 percent completed. This survey has disclosed leakage totalling 1,428,000 gallons per day since its inception. The Metropolitan water assessment in 1964, based on water use of 44,298,697 gallons in 1963, amounted to \$5,315-843.64 and water revenue amounted to \$10,386,105. A surplus of \$579,241 resulted from water operations.

FISCAL

Total expenditures in 1964 for Public Works amounted to \$27,917,263, of which \$5,315,843 represents water assessments and \$1,589,574 represents sewer assessments paid to the Metropolitan District Commission. The water assessment was \$182,876 higher than 1963; and the sewer assessment \$162,640 more than 1963.

The general policy of prudence in the expenditures of taxpayers' money was continued during the year, resulting in an unencumbered balance of \$4,471,330.

Appended hereto is the report submitted by the Public Improvement Commission and statistical data relative to the activities of the various divisions.

Respectfully submitted,

JAMES W. HALEY,
Commissioner of Public Works.

ANNUAL REPORT
OF THE
PUBLIC IMPROVEMENT COMMISSION
FOR THE YEAR ENDING
DECEMBER 31, 1964

January 4, 1965.

HON. JOHN F. COLLINS,
Mayor of Boston

Through the Commissioner of Public Works

DEAR MR. MAYOR:

In accordance with the provisions of Section 24, Chapter 3, of the Revised City Ordinances of 1947, the following report of the Public Improvement Commission for the year ending December 31, 1964, is respectfully submitted.

STREET PROGRAM

During the period covered by this report, three hundred one (301) highway improvements were ordered by the Public Improvement Commission, including the laying out of thirty-two (32) new highways, the construction of fifty-eight (58) new sidewalks, the widening and relocation of one hundred nine (109) public ways, the making of specific repairs in eighty-four (84) existing streets, the discontinuance of sixteen (16) streets, and the relocation and revision of grade of two (2) streets.

LAYOUTS WITH CONSTRUCTION

The following streets were ordered laid out and constructed as public ways during the year 1964:

Boxford terrace, West Roxbury, from Park street approximately 200 feet southwesterly. Length, 200 feet. Estimated cost, \$8,557. Estimated benefit, \$4,277.70.

Camelot court, Brighton (formerly Colon street), from Gordon street to Warren street. Length, 710 feet.

Charlame place, Roxbury, from Ottawa street approximately 160 feet southerly. Length, 160 feet.

Charlame street, Roxbury, (formerly Ottawa street), from Laurel street approximately 590 feet easterly and approximately 220 feet northerly of Catawba street. Length, 810 feet.

David road, West Roxbury, from Moss Hill road approximately 520 feet southwesterly. Length, 520 feet. Estimated cost, \$16,182. Estimated benefit, \$8,091.

Earnshaw street, West Roxbury, from Miami avenue approximately 186 feet southeasterly. Length, 186 feet.

Elm Lawn, Dorchester, from Centre street approximately 250 feet northerly. Length, 250 feet.

Gerrish street, Brighton, from Brooks street approximately 520 feet northwesterly. Length, 520 feet. Estimated cost, \$19,900. Estimated benefit, \$9,949.98.

Gerrish street, Brighton, from a point approximately 520 feet northwest of Brooks street, and approximately 300 feet northwesterly. Length, 300 feet. Estimated cost, \$12,381. Estimated benefit, \$6,190.51.

Glenciff road, West Roxbury, from a point approximately 580 feet southeasterly of Poplar street to Dale street. Length, 755 feet. Estimated cost, \$20,990. Estimated benefit, \$10,495.

Holly road, West Roxbury, from Jewett street approximately 330 feet southeasterly. Length, 330 feet. Estimated cost, \$15,150. Estimated benefit, \$7,575.

Humboldt court, Roxbury, from Humboldt avenue approximately 215 feet easterly and northerly. Length, 215 feet.

Laurel street, Roxbury, from a point approximately 375 feet south of Dale street to Humboldt avenue. Length, 480 feet.

Manion road, Hyde Park, from Westminster street to Safford street. Length, 475 feet. Estimated cost, \$20,000. Estimated benefit, \$9,999.97.

Manley street, Dorchester, from Victory road to Newkirk street. Length, 290 feet. Estimated cost, \$9,343. Estimated benefit, \$4,671.50.

Mt. Washington avenue, Boston Proper, from Granite street to A street. Length, 330 feet.

McDonald avenue, Brighton, from Everett street to Speedway avenue. Length, 470 feet. Estimated cost, \$20,000. Estimated benefit, \$10,000.

Newkirk street, Dorchester, from Neponset avenue to approximately 75 feet east of Manley street. Length, 275 feet. Estimated cost, \$7,859. Estimated benefit, \$3,550.37.

Norris road, Hyde Park, from Metropolitan avenue approximately 376 feet westerly. Length, 376 feet. Estimated cost, \$18,434. Estimated benefit, \$7,911.

North Charlame court, Roxbury, from Ottawa street approximately 120 feet northerly. Length, 120 feet.

North Charlame terrace, Roxbury, from Ottawa street approximately 120 feet northerly. Length, 120 feet.

Providence street, Hyde Park, from Washington street to Metropolitan avenue. Length, 2,481 feet. Estimated cost, \$54,314. Estimated benefit, \$27,160.47.

Rockwood terrace, West Roxbury, from Rockwood street approximately 480 feet easterly and southerly. Length, 480 feet. Estimated cost, \$20,000. Estimated benefit, \$9,999.

Searle road, West Roxbury, from Maplewood street approximately 180 feet northeasterly. Length, 180 feet. Estimated cost, \$7,765. Estimated benefit, \$3,882.50.

South Charlame court, Roxbury, from Ottawa street approximately 165 feet southerly. Length, 165 feet.

South Charlame terrace, Roxbury, from Ottawa street approximately 172 feet southerly. Length, 172 feet.

Trilling Way, South Boston, from Northern avenue approximately 300 feet southwesterly. Length, 300 feet. Estimated cost, \$19,200. Estimated benefit, \$9,520.

Violet street, Dorchester, from Delhi street to Crossman street. Length, 300 feet. Estimated cost, \$35,147. Estimated benefit, \$17,573.50.

William Cardinal O'Connell Way, Boston Proper, from Staniford street approximately 330 feet westerly.

Willow avenue, Hyde Park, from Providence street to Hyde Park avenue. Length 350 feet.

LAYOUTS WITHOUT CONSTRUCTION

Carlson road, Hyde Park, from the Boston-Milton line approximately 70 feet southwesterly. Length, 70 feet.

Granite street, South Boston (formerly Richards street), from Granite street to A street. Length, 260 feet.

WIDENINGS AND RELOCATIONS

Adams street, Dorchester, at the northeasterly corner of Fellsway street.

Alabama street, Dorchester, at the northwesterly and southwesterly corners of Currier street.

Alban street, Dorchester, at the southwesterly corner of Welles avenue; and the northeasterly and northwesterly corners of Ashmont street.

Ashland street, Dorchester, at the northwesterly corner of Ashland street; and the southwesterly, northeasterly and southeasterly corner of Elm street.

Aspinwall road, Dorchester, at the northwesterly, northeasterly and southeasterly corner of Whitfield street; and the southeasterly corner of Hopedill street.

Beach street, Dorchester, 100 feet north of Park street; and 270 feet north of Park street.

Beaver street, Hyde Park, at the northeasterly and southeasterly corners of Reservation road; and the southeasterly and southwesterly corners of Cleveland street.

Bernard street, Dorchester, at the northeasterly and southeasterly corners of Tonset street.

Bigelow street, Brighton, at the northeasterly corner of Faneuil street; and the northeasterly corner of Perthshire road.

Birch street, West Roxbury, at the northeasterly and northwesterly corners of Penfield street; and the northeasterly, northwesterly, southeasterly and southwesterly corners of Albano street.

Blanche street, Dorchester, at the northwesterly and northeasterly corners of Victory road; and the southwesterly and southeasterly corners of Green Hill street.

Bower street, Roxbury, from Warren street to Humboldt avenue.

Bowman street, Dorchester, at the southeasterly corner of Blackwell street; and the northeasterly corner of Chickatawbut street.

Boylston street, Boston Proper, from Dalton street approximately 420 feet easterly.

Brentwood street, Brighton, at the southeasterly and southwesterly corners of Athol street.

Browning avenue, Dorchester, at the southerly corner of Bernard street.

Carol avenue, Brighton, at the northwesterly corner of Allston street.

Carroll street, West Roxbury, at the northerly and westerly corners of Vermont street; northerly, westerly, easterly and southerly corners of Keith street; northerly, westerly and easterly corners of Lasell street; and the easterly and southerly corners of Glenham street.

Caspian Way, Dorchester, at the southeasterly corner of Savin Hill avenue.

Castlegate road, Dorchester, at the northeasterly corner of Normandy street.

Chesterfield street, Hyde Park, at the southeasterly and southwesterly corners of Readville street.

Child street, Hyde Park, at the northeasterly corner of Reservation road; and the southwesterly and southeasterly corners of Cleveland street.

Condor street, East Boston, at the westerly corner of Glendon street; and the easterly corner of East Eagle street, southerly side.

Corona street, Dorchester, at the northeasterly corner of Bowdoin street.

Cowing street, West Roxbury, at the northwesterly corner of Alleyne street.

Cowing street, West Roxbury, at the northerly and westerly corners of Washington street; and the easterly and southerly corners of Partridge street.

D street, South Boston, at the northeasterly corner of West Seventh street; southwesterly corner of Gold street; and the northwesterly corner of Athens street.

Dahlgren street, Dorchester, at the northeasterly and northwesterly corners of Corona street.

Dana avenue, Hyde Park, at the northeasterly, northwesterly, southwesterly and southeasterly corners of Loring street; and the northeasterly and northwesterly corners of Washington street.

Dartmouth street, Boston Proper, from St. James avenue to Boylston street.

Ditson street, Dorchester, at the southeasterly and southwesterly corners of Charles street.

Dorchester avenue, Dorchester, at the southwesterly corner of Mayfield street.

East street, Dorchester, at the northeasterly corner of Winter street.

East Cottage street, Dorchester, at the southerly corner of Dawes street.

Elbert street, Roxbury, from Humboldt avenue to Hazelwood street.

Ellet street, Dorchester, at the northeasterly and southeasterly corners of Adams street; and the southwesterly corner of Dorchester avenue.

Ellington street, Dorchester, at the southeasterly corner of Erie street.

Everdean street, Dorchester, at the southeasterly corner of Ashland street; northerly and southerly corners of Blanche street; northeasterly and southeasterly corners of Green Hill street; and the northeasterly corner of Victory road.

Everett street, Dorchester, at the westerly corner of Elm street.

Forsyth street, Roxbury, at the northeasterly corner of Huntington avenue.

Garnet road, West Roxbury, at the easterly and southerly corners of Farmington road; and the westerly corner of Weld street.

Glenham street, West Roxbury, at the northerly, southerly and easterly corners of Atlantis street; and the easterly, southerly and southeasterly corners of Perham street.

Gordon street, Brighton, at the northwesterly and southwesterly corners of Ridgemont street.

Granite avenue, Dorchester, at the northwesterly and southwesterly corners of Beaufield street; and the northeasterly and northwesterly corners of Milton street.

Greycliff road, Brighton, 600 feet northeasterly of Commonwealth avenue; and the northwesterly and southwesterly corners of Foster street.

Hallowell street, Dorchester, at the northwesterly and southwesterly corners of Newcastle street.

Hancock street, Dorchester, at the southwesterly and southeasterly corners of High street.

Harwich street, Boston Proper, from Yarmouth street to Truro street.

Haydn street, West Roxbury, at the northerly corner of Washington street; and the easterly corner of Nikisch avenue.

Hayes road, West Roxbury, at the easterly and southerly corners of Birch street; northerly and easterly corners of Filomena road; and the northwesterly and southwesterly corners of Washington street.

Hazelwood street, Roxbury, from Townsend street to Munroe street.

Hazelwood street, Roxbury, at the northeasterly corner of Townsend street; and the southeasterly corner of Munroe street.

Hobson street, Brighton, at the northeasterly corner of Faneuil street; northeasterly and southeasterly corners of Bothwell road; northeasterly and southeasterly corners of Newcastle road; northeasterly and southeasterly corners of Donnybrook road; and the southeasterly and southwesterly corners of Hobart street.

Humboldt avenue, Roxbury, from Walnut avenue to Townsend street.

Intervale street, Roxbury, at the southwesterly and north-easterly corners of Normandy street; northeasterly and northwesterly corners of Fernboro street; northwesterly and north-easterly corners of Intervale terrace; easterly corner of Coleus park; and the northwesterly and northeasterly corners of Magnolia street.

Iola street, Dorchester, at the southeasterly corner of Talbot avenue.

King street, Dorchester, at the northeasterly corner of Adams street; southeasterly corner of Daly street; and the northeasterly and northwesterly corners of Elmdale street.

Lawrence avenue, Dorchester, at the southeasterly corner of Normandy street; southwesterly and southeasterly corners of Fernboro street; southwesterly corner of Coleus park; and the southwesterly corner of Magnolia street.

Leniston road, West Roxbury, at the southwesterly corner of Walworth street.

Lorraine street, West Roxbury, at the northeasterly and northwesterly corners of Colberg avenue.

Malta street, Hyde Park, at the southwesterly corner of River street.

Marden avenue, Dorchester, at the northwesterly corner of Willowwood street.

Melbourne street, Dorchester, at the northeasterly and northwesterly corners of Welles avenue; northwesterly and southwesterly corners of Brent street; and the southwesterly corner of Centre street.

Monson street, Dorchester, at the northeasterly and southeasterly corners of Sturbridge street; and the northwesterly corner of Caddy road.

Montvale street, West Roxbury, at the southwesterly corner of Colberg avenue.

Mt. Bowdoin terrace, Dorchester, at the southeasterly and southwesterly corners of Eldon street; and the northeasterly and northwesterly corners of Mallon road.

Mt. Everett street, Dorchester, at Hamilton street.

Munroe street, Roxbury, over a portion of Hazelwood street from a point approximately 35 feet east of Hazelwood street, approximately 215 feet, westerly.

Nahant avenue, Dorchester, at the southeasterly corner of Adams street.

Narragansett street, Dorchester, at the northwesterly corner of Minot street; and the southwesterly corner of Chickatawbut street.

Nikisch avenue, West Roxbury, at the southerly corner of Mendelssohn street; and the westerly and southerly corners of Beech street.

Normandy street, Dorchester, at the northwesterly corner of Seaver street.

Norway park, Hyde Park, at the northwesterly and northeasterly corners of Summit street; and the southeasterly corner of Warren avenue.

Norwell street, Dorchester, at the northwesterly, southeasterly and southwesterly corners of Wheatland avenue; and the northwesterly corner of Talbot avenue.

Ocean street, Dorchester, at the northeasterly corner of Ashmont street; southwesterly and southeasterly corners of Welles avenue; and the northerly and southerly corners of Mellen street.

Opera place, Roxbury, at the northeasterly corner of St. Stephen street.

Opera place, Roxbury, from Huntington avenue to St. Stephen street.

Parish street, Dorchester, from Winter street to dead end.

Park street, Dorchester, at the northeasterly and southeasterly corners of Norwell street; northeasterly and southeasterly corners of Millet street; northwesterly and southwesterly corners of Spencer street; northeasterly corner of Thane street; southeasterly corner of Whitfield street; northwesterly and northeasterly corners of Merlin street; and the northwesterly corner of Elwyn road.

Pasadena road, Dorchester, at the southeasterly corner of Blue Hill avenue; southwesterly corner of Normandy street; and the southwesterly corner of Columbia road.

Pleasant street, Dorchester, at the southwesterly corner of Sawyer avenue; southerly corner of Thornley street; and the southerly corner of Whitby terrace.

Poplar street, West Roxbury, at the northwesterly corner of Washington street.

Radcliffe street, Dorchester, at the southeasterly corner of Vassar street.

Robeson street, West Roxbury, at the northerly and southerly corners of Forest Hills street; and the northerly corner of Sigourney street.

Rogers Park avenue, Brighton, at the southeasterly corner of Lake street; southwesterly and southeasterly corners of Willoughby street; and the southeasterly corner of Foster street.

Ronan street, Dorchester, at the northeasterly and south-easterly corners of Bellevue street.

Roslin street, Dorchester, at the northerly and southerly corners of Ocean street; northeasterly and northwesterly corners of Harley street; southeasterly and southwesterly corners of Montague street; northeasterly and northwesterly corners of Grace street; and the northerly side at a bend of 90 feet east of Grace street.

Roxana street, Hyde Park, at the southwesterly corner of Charles street.

St. Alphonsus street, Roxbury, from Tremont street approximately 150 feet southwesterly.

St. James avenue, Boston Proper, from a point approximately 40 feet east of Trinity place to Dartmouth street.

Shafter street, Dorchester, at the southwesterly corner of Vassar street.

South street, West Roxbury, at the southwesterly corner of Washington street.

Southwick street, Dorchester, at the northeasterly and south-easterly corners of Neponset avenue; northwesterly and north-easterly corners of Salina road; and the northwesterly and southwesterly corners of Freeport street.

Spencer street, Brighton, at the northeasterly and south-easterly corners of Athelwold street.

Standard street, Dorchester, at the northeasterly and northwesterly corners of River street; and the northeasterly and southeasterly corners of Menton street.

Staniford street, Boston Proper, from Cambridge street to Merrimac street.

Stanley street, Dorchester, at the northeasterly and northwesterly corners of Bellevue street.

Supple road, Dorchester, at the northeasterly and northwesterly corners of Normandy street.

Symmes street, West Roxbury, at the westerly corner of Fairview street.

Tarleton road, West Roxbury, at the northerly corner of Chesbrough road; southerly corner of Temple street; and the northerly and westerly corners of Sanborn avenue.

Tiverton road, Dorchester, at the southeasterly corner of Lorna road; southwesterly and southeasterly corners of Stow road; and the southwesterly corner of Glenhill road.

Tolman street, Dorchester, at the southeasterly corner of Neponset avenue; and the northeasterly corner of Bloomington street.

Train street, Dorchester, at the northeasterly and southeasterly corners of Thelma road; northeasterly and southeasterly corners of Agawam street; northeasterly, northwesterly and southwesterly corners of King street; northwesterly and southwesterly corners of Rosemont street; northeasterly and southeasterly corners of North Munroe terrace; northeasterly and southeasterly corners of Boutwell street; southwesterly corner of Westglow street; and the northwesterly corner of Rosselerin road.

Trinity place, Boston Proper, from Boylston street to St. James avenue.

West street, Hyde Park, at the northwesterly, northeasterly, southeasterly and southwesterly corners of Davison street; northwesterly and southwesterly corners of Pierce street; and 110 feet northwesterly at the corner of Davison street.

West Milton street, Hyde Park, at the northwesterly and northeasterly corners of Ernest street; northwesterly and northeasterly corners of Vallaro road; and the southwesterly and southeasterly corners of Roberts place.

Wheatland street, Dorchester, at the southeasterly corner of Whitfield street; southwesterly corner of Spencer street; and the southeasterly corner of Millet street.

Wilkinson park, Dorchester, at the northeasterly corner of East street.

Winslow street, Hyde Park, at the southeasterly and southwesterly corners of Child street; and the northwesterly and southwesterly corners of River street.

SPECIFIC REPAIRS

Adams Street, Dorchester, at Milton street, Gallivan Boulevard and Cedar Grove Cemetery.

Albion street, Hyde Park, at northwest and southwest Beacon street (Incr. curb radii).

Albion street, Hyde Park, from Highland street to Beacon street (Sw increase).

Arlington street, Hyde Park, at Metropolitan avenue.

Ashland street, Dorchester, northeasterly Park street.

Aspinwall road, Dorchester, at southwest Hopestill street.

Beach street, Dorchester, westerly side at bend approx. 300 feet northeast Park street.

Belgrade avenue, West Roxbury, at Centre street.

Belgrade avenue, West Roxbury, at Birch street.

Bigelow street, Brighton, at various locations from Faneuil street, to Brooks street.

Bigelow street, Brighton, at Perthshire road, Hardwick street, and Brooks street.

Boylston street, Boston, on the southerly side from Massachusetts avenue to Dartmouth street.

Carol avenue, Brighton, at Commonwealth avenue.

Castlegate road, Dorchester, at Blue Hill avenue.

Chelsea street and Chestnut street, Charlestown, elimination of traffic divisional island at their intersection.

Child street, Hyde Park, at Reservation road.

Colbert street, West Roxbury, at southerly corner of Rhoda street.

Columbia road, Dorchester, at northeast and northwest Seaver street.

Columbine street, Dorchester, at southeast Blue Hill avenue.

Condor street, East Boston, from Brooks street.

Condor street, East Boston, at Meridian street, Brooks street, Putnam street, East Eagle street, Glendon street.

Corey street, West Roxbury, installation of traffic island at Weld street.

Corey street, West Roxbury, increasing curb radii at both corners of Henshaw terrace and bend at southerly side opposite Ruskin street.

Corona street, Dorchester, at Bowdoin street and Geneva avenue.

D street, South Boston, increasing the curb radii.

Dartmouth street, Boston, installation of traffic island, from St. James avenue to Boylston street.

East Cottage street, Dorchester, southerly Sumner street, westerly Chase street.

East Cottage street, Dorchester, at Pleasant street, installation of traffic divisional islands.

Ellet street, Dorchester, at Dorchester avenue.

Ellington street, Dorchester, northerly, southerly, and westerly Erie street.

Everett street, Dorchester, southwesterly Mill street, southerly Elm street.

Garden street, Brighton, at Cambridge and North Beacon streets.

Gerald road, Brighton, at Commonwealth avenue.

Glenham street, West Roxbury, increasing curb radii at bend on southerly side approx. 100 feet southwest of Perham street and at westerly corner of Atlantic street.

Granite street, South Boston, various locations between Baldwin street and Mt. Washington avenue.

Greycliff road, Brighton, at Commonwealth avenue and Gerald road.

Hancock street, Dorchester, at Francis G. Kane square.

Hancock street, Dorchester, easterly High street, approximately 50 feet to Dorchester avenue.

Hobson street, Brighton, at Faneuil street.

Huntington avenue, Roxbury, at Longwood avenue (wid. MBTA reservation).

Hyde Park avenue, Hyde Park, at Parkson street and Millstone road.

Intervale street, Dorchester, easterly and southerly Blue Hill avenue, northwesterly Coleus Park, northerly and westerly Columbia road.

Iola street, Dorchester, at northeast and northwest Tonset street and southwest Talbot avenue.

King street, Dorchester, at southeast Adams street and southwest Daly street.

Lawrence avenue, Dorchester, southerly Blue Hill avenue, westerly Normandy street, easterly Mascoma street.

Lawrence avenue, Dorchester, Blue Hill avenue to Magnolia street.

March avenue, West Roxbury, from Bellevue street to Park street.

Marden avenue, Dorchester, southerly Willowwood street.

Marden avenue, Dorchester, southerly at bends approximately 75 feet and 100 feet west Willowwood street.

Malta street, Hyde Park, at River street and Edgewater Drive.

Melbourne street, Dorchester, at southeast Centre street.

Midvale road, West Roxbury, increasing curb radii at both corners of Maple street.

Mill street, Dorchester, westerly Victory road, northwesterly and southwesterly Ashland street, southwesterly Everett street.

Monson street, Dorchester, at northwest and southwest Temple street.

Montvale street, West Roxbury, increasing curb radii at northerly corner of Colberg avenue and northerly, easterly and westerly corners of Iona street.

Nahant avenue, Dorchester, at southwest Newhall street.

Normandy street, Dorchester, at Columbia road and Seaver street.

Norwell street, Dorchester, at southwest Park street.

Parish street, Dorchester, reduction in sidewalk on northerly side from Winter street to dead end.

Park street, Dorchester, southwesterly Millet and Whitfield street.

Pleasant street, Dorchester, 2 corners Roach street, southerly Thornby street, 2 corners Hesston terrace southerly Pearl street, 2 corners Victoria street, Mayfield street, Trescott,

Willis, Taft, Howe streets, southerly Morrill, Hinckley, East Cottage streets, 2 corners Downer avenue, northerly Mayfield street.

Pleasant street, Dorchester, sidewalk included between Greenmount street and Roach street from southerly Savin Hill avenue to approximately 50 feet northerly, Hesston terrace to Whitby terrace.

Pleasant street, Dorchester, approximately 50 feet south Sawyer avenue approximately 50 feet north Sawyer avenue, approximately 100 feet North Victoria to Victoria street, Victoria street to Mayfield street, Mayfield street to Taft street, Hinckley street to Willis street, Willis street to East Cottage street, Taft street to Howes street, Howes street to East Cottage street.

Raymond street, Brighton, at Everett street.

Remington street, Dorchester, at both corners of Nixon street.

Reservation road, Hyde Park, at Hyde Park avenue.

Reservation road, Hyde Park, at Business street.

Roslin street, Dorchester, on southerly side at bend approximately 35 feet easterly of Montague street.

St. Alphonsus street, Roxbury, at Milton street, Gallivan Boulevard and Cedar Grove Cemetery.

Sanderson place, Brighton, at southeast and southwest corners of Faneuil street.

Seaver street, Dorchester, at Normandy street.

Supple road, Dorchester, Blue Hill avenue.

Supple road, Dorchester, at Normandy street.

Symmes street, West Roxbury, increasing curb radii at northerly corner of Fairview street and easterly corner of Walter street.

Tarleton road, West Roxbury, increasing curb radii at westerly corner of Temple street.

Tiverton road, Dorchester, easterly Owen street.

Train street, Dorchester, northeast and northwest Westglow street, southeast South Munroe terrace and southeast King street.

Washington street, West Roxbury, at South street, installation of traffic island.

Welland road, West Roxbury, increasing curb radii at both corners of Sanborn avenue and Temple street.

West street, Hyde Park, 110 feet northwest of Davison street.

Westcott street, Dorchester, at Talbot avenue.

West Milton street and Milton street, Hyde Park, installation of traffic divisional islands.

West Milton street, Hyde Park, increasing the curb radii.

Wheatland avenue, Dorchester, at northeast Millet street.

SIDEWALKS

In connection with the recently enacted Chapter 245 of the Acts of 1958, the Public Improvement Commission ordered the installation of artificial stone sidewalks on the following streets:

Alabama street, Dorchester, from Currier street to Monterey avenue.

Albion street, Hyde Park, from Highland street to Beacon street.

Arlington street, Hyde Park, from River street to Pierce street.

Ashland street, Dorchester, from Park street to Everdean street.

Aspinwall road, Dorchester, from Washington street to Talbot avenue.

Bayswater street, East Boston, from Annavoy street to Nancia street.

Beach street, Dorchester, from Park street to Freeport street.

Bernard street, Dorchester, from Talbot avenue to a point approximately 110 feet north of Tonset street.

Blanche street, Dorchester, from Victory road to Green Hill street.

Bonad road, West Roxbury, from Highland street to Beacon street.

Carroll street, West Roxbury, from Vermont street to Glenham street.

Charlesview street, Brighton, at various locations from Bigelow street to Brooks street.

Chesterfield street, Hyde Park, from Neponset Valley Parkway to Readville street.

Child street, Hyde Park, from Reservation road to Cleveland street.

Clare avenue, West Roxbury, from American Legion Highway (Meacham street) approximately 190 feet northerly.

Columbia road, South Boston, northerly between Covington street and G street.

Columbia road, South Boston, adjacent to No. 1360.

Corey street, West Roxbury, from Centre street to the Newton Boundary Line.

Cowing street, West Roxbury, from Washington street to Partridge street.

Dana avenue, Hyde Park, from Truman Highway to Washington street.

Ellet street, Dorchester, at various locations from Adams street to Dorchester avenue.

Everdean street, Dorchester, from Ashland street to Victory road.

Everett street, Dorchester, from Park street to Mill street.

Fern street, Brighton, from Franklin street to Holton street.
Glenham street, West Roxbury, from Veterans of Foreign Wars Parkway to La Grange street.

Gordon street, Brighton, at various locations from North Beacon street to Colon street.

Hallowell street, Dorchester, from Cummins Highway to beyond Newcastle street.

Hyde Park avenue, Hyde Park, from Wolcott square southerly to Millstone street.

Iola street, Dorchester, from Talbot avenue to Tonset street.

King street, Dorchester, from Dorchester avenue to Train street.

Lincoln street, Dorchester, on the southerly side at Dorchester avenue.

Lorraine street, West Roxbury, from Colberg avenue to Iona street.

Malta street, Hyde Park, from River street to Edgewater Drive.

Marden avenue, Dorchester, from Willowwood street approximately 275 feet westerly to dead end.

Mill street, Dorchester, from Victory road to Freeport street.

Monson street, Dorchester, from Temple street to Sturbridge street.

Mt. Hood road, Brighton, at various locations from Commonwealth avenue to Carey road.

Nahant avenue, Dorchester, from Adams street to Newhall street.

Narragansett street, Dorchester, from Minot street to Chickatawbut street.

Norway Park, Hyde Park, from Warren avenue to Summit street.

Ocean street, Dorchester, from Ashmont street to Welles avenue.

Parish street, Dorchester, southerly Winter street to dead end.

Park street, Dorchester, from Norwell street to Washington street.

Poplar street, West Roxbury, from Beech street approximately 800 feet southwestly.

Radcliffe street, Dorchester, from Harvard street to Vassar street.

Remington street, Dorchester, from Centre street to Nixon street.

Robeson street, West Roxbury, from Forest Hills street to Sigourney street.

Roslin street, Dorchester, from Washington street to Ocean street.

Roxana street, Hyde Park, from River street to Sunnyside street.

Seaver street, Dorchester, northeasterly side from Normandy street to Columbia road.

Southwick street, Dorchester, from Freeport street to Neponset avenue.

Tarleton road, West Roxbury, from Temple street to Cheshbrough road.

Temple street, Dorchester, from River street to Manchester street.

Tiverton road, Dorchester, from Lorna road to Glenhill road.

Train street, Dorchester, from Ashmont street to Victory road.

Walbridge street, Brighton, from Commonwealth avenue to the Brookline Town Line.

West street, Hyde Park, from River street to Pierce street.

Winslow street, Hyde Park, from River street to Child street.

DISCONTINUANCES

Allen street, Boston Proper, portion of Allen street, southerly side approximately 341 feet east of Charles street, approximately 355 feet easterly.

Baldwin street, South Boston, from Granite street to A street.

Centre street, West Roxbury, on the easterly side from Northdale road approximately 120 feet southerly.

Centre street, West Roxbury, on the easterly side from a point approximately 400 feet north of Stimson street to approximately 400 feet northerly.

Comins terrace, Roxbury, from Bower street approximately 160 feet southerly.

Gerald street, Roxbury, from George street to Howard street.

Granite street, South Boston, between Richards street and Baldwin street.

Hanover street, Boston Proper, on the easterly side between Harris and Clark streets.

Huntington avenue, Boston Proper, from Boylston street to Dartmouth street.

Jay street, South Boston, from East Fourth street approximately 165 feet southerly.

Laurel street, Roxbury, approximately 375 feet south of Dale street, to Humboldt avenue.

Munroe street, Roxbury, from Humboldt avenue approximately 245 feet easterly.

Ottawa street, Roxbury, approximately 590 feet east of Laurel street.

School street, Boston Proper, from a point approximately 12 feet southwesterly on Washington street, approximately 7 feet southwesterly, and from a point approximately 21 feet southwesterly of Washington street, approximately 7 feet southwesterly.

Staniford street, Boston Proper, easterly side at various locations between Cambridge street and Merrimac street.

Washington street, Boston Proper, from a point approximately 4 feet northeasterly of School street, approximately 7 feet northeasterly and from a point approximately 18 feet northeasterly of School street, approximately 7 feet northeasterly.

RELOCATION AND REVISION OF GRADE

Cambria street, Boston Proper, Dalton street, approximately 200 feet westerly.

Scotia street, Boston Proper, Dalton street, approximately 200 feet westerly.

STREET NAME CHANGE

Ashley street, East Boston (formerly Fr. Toma street), Breed street to Boardman street.

SLOPE EASEMENT

Dalton street, Boston Proper, between Cambria street and Belvidere street.

DISCONTINUANCE OF SLOPE EASEMENTS

Dalton street, Boston Proper, between Cambria street and Belvidere street.

Poplar street, West Roxbury, on the easterly side from Maynard street approximately 335 feet northerly.

ABANDONMENT OF ORDER

Supple road, Dorchester, widening and construction at the northeasterly and northwesterly corners of Normandy street.

Trilling Way, South Boston, laying out and construction from Northern avenue approximately 300 feet southwesterly.

LAND DAMAGES

On new street construction 88 claims were filed for damage to property resulting from land takings or changes in grades. On these claims, this Commission awarded damages in the amount of \$29,677.20.

SEWER PROGRAM

During the year 1964 the construction of 3.32 miles of sanitary sewer, 3.81 miles of storm sewer, 89 catch basins, and 1 drop inlet were ordered at a total estimated cost of \$548,811.60.

The following sewer easement was ordered discontinued:

PRIVATE LAND, West Roxbury, from Gardner Street to the former line of Morrison Street.

Sewerage works were ordered as follows:

SEWERAGE WORKS ORDERED

STREET	Sanitary Sewer (Linear Feet)	Surface Drain (Linear Feet)	Catch Basins	Drop Inlets	Cost	Estimated Benefit
Boston Proper						
Oliver street.....				1	\$400 00	
Brighton						
Chestnut Hill avenue....	515	502			18,800 00	\$8,000 00
Hardwick terrace.....	115	110			3,600 00	None
Western avenue.....	490				18,250 00	13,687 52
Dorchester						
Ashland street.....	80	81			2,200 00	925 00
Evandale terrace.....	300	295	2		7,770 00	None
Itasca street.....		1,200	6		15,000 00	None
Paula road.....		135			4,020 00	2,865 00
Tennis road.....	215	171	2		7,600 00	None
Hyde Park						
Beechmont street.....	220	215	4		8,570 00	None
Collins street.....	190	170			4,100 00	1,700 00
Dedham street.....	50				13,000 00	None
*Edson terrace.....	90	97			3,180 00	1,492 52
*Prospect circle.....	180	180	2		4,400 00	2,325 00
*Ralston road.....	307	307	3		7,900 00	3,750 00
*Sierra road.....	973	980	6		29,200 00	None
*Vallaro road.....	120	127			4,590 00	None
*Yuletide road and He- bron street.....	200	222			6,065 00	None
Roxbury						
Crestwood park.....	522	541	4		10,250 00	None
Humboldt avenue.....	290	310			12,720 00	None
St. Alphonsus street....	475	558	7		14,400 00	None
Townsend street.....	222	188	2		1,920 00	None
Tremont street.....	70				1,600 00	None
West Roxbury						
*Blueview Circle.....	340	345	2		8,820 00	5,220 05
*Blueview road.....	645	644	4		17,196 00	9,579 92
Boylston street.....	1,539	1,221			48,625 00	None
*Cataumet street.....	190	207	2		4,700 00	2,287 50
*Cedarcrest Circle.....	515	550	3		17,320 00	8,512 64
*Cedarcrest road.....	385	395	2		8,600 00	4,803 75
*Eldon street.....	73	73			2,600 00	1,462 50
Fernwood road.....	100	120			4,000 00	None
*Furbush road.....	240	245			6,615 00	3,468 78
George Wright Golf Course.....	7,463	7,647	32		171,480 00	128,610 00
La Grange street.....	35	29			880 60	660 45
Maple street.....		1,875			46,800 00	None
*New Haven street.....	220	220	6		7,640 00	2,310 00
*Schubert street.....	175	179			4,000 00	3,225 00

*Easements Taken

ASSESSMENTS

During the year 1964, the Highway Division of the Public Works Department sent notice of completion of nine (9) streets at a total cost of \$254,358.91. On this work the Public Improvement Commission levied assessments in the amount of \$85,914.44.

During the same period the Sewer Division of the Public Works Department reported the completion of construction of sanitary sewerage in eight (8) streets at a cost of \$39,311.86, on which the Public Improvement Commission levied assessments in the amount of \$18,815.65.

With the abolishment of sewer entrance fees by the Supreme Court in 1951, the Public Improvement Commission was empowered to assess parcels of land within a seasonable time after connections were made to sewer from estates that had never paid an assessment for the original improvement. The following is a list of streets in which connections were made:

STREET	DISTRICT	ASSESSMENT
Baker street.....	West Roxbury.....	\$60 00
Belle avenue.....	West Roxbury.....	840 00
Buckingham street.....	Hyde Park.....	660 00
Burroughs street.....	West Roxbury.....	62 45
Cambridge street.....	Brighton.....	194 27
Cambridge street.....	Brighton.....	169 30
Columbia road.....	South Boston.....	93 00
Concord street.....	Charlestown.....	50 00
Dana avenue.....	Hyde Park.....	150 00
Dorchester street.....	South Boston.....	100 00
Fresno street.....	West Roxbury.....	90 00
Gardner street.....	West Roxbury.....	184 00
Garfield avenue.....	West Roxbury.....	82 00
Glenellen road.....	West Roxbury.....	180 00
Hackensack terrace.....	West Roxbury.....	1,290 00
Lasell street.....	West Roxbury.....	53 75
Manning street.....	West Roxbury.....	52 50
Maple street.....	West Roxbury.....	194 40
Miami avenue.....	West Roxbury.....	45 86
Myer street.....	West Roxbury.....	75 00
Orlando street.....	Dorchester.....	160 00
Pelton street.....	West Roxbury.....	128 00
Ralston road.....	Hyde Park.....	192 00
Regina road, Alpha road.....	Dorchester.....	293 85
South street.....	West Roxbury.....	260 00

STREET	DISTRICT	ASSESSMENT
Sparrow street.....	West Roxbury.....	\$67 23
Stimson street.....	West Roxbury.....	172 00
V.F.W. Parkway.....	West Roxbury.....	308 50
Vallaro road.....	West Roxbury.....	210 65
Warren avenue.....	Hyde Park.....	53 76
Washington street.....	Dorchester.....	84 86
Willow court.....	Dorchester.....	975 00
		<u>\$9,080 11</u>

During the year 1964, the Highway Division of the Public Works Department sent notice of completion of sidewalks in thirty-six (36) streets at a total cost of \$461,038.09. On this the Public Improvement Commission levied assessments of \$113,595.17.

STREET ASSESSMENTS

STREET	District	Cost	Assessment
Bradlee street.....	Hyde Park	\$62,504 46	\$19,297 00
Buckingham street.....	Hyde Park	12,708 90	5,109 00
Coffey street.....	Dorchester	17,417 00	4,259 28
Itasca street.....	Dorchester	44,668 26	12,454 20
Kiernan road.....	West Roxbury	19,108 55	5,887 48
Messinger street.....	Dorchester	20,604 46	6,941 51
Northdale road.....	West Roxbury	43,015 91	17,735 98
Soldiers Field place.....	Brighton	30,948 32	13,056 99
Webb park.....	South Boston	3,383 05	1,173 00
Totals.....		\$254,358 91	\$85,914 44

SEWER ASSESSMENTS

STREET	District	Cost	Assessment
Beaver street.....	Hyde Park	\$10,438 30	\$2,500 00
Beechmont street.....	Hyde Park	4,291 10	2,142 00
Glenmore street.....	Dorchester	2,962 40	2,400 00
Itasca street.....	Dorchester	7,365 00	5,021 60
Parker street.....	Hyde Park	2,092 79	1,693 79
Red Pine street.....	Hyde Park	6,854 71	2,919 15
Stoughton Street place.....	Dorchester	3,639 38	1,400 00
Westminster street.....	Hyde Park	1,568 18	739 11
Totals.....		\$39,211 86	\$18,815 65

SIDEWALK ASSESSMENTS

STREET	District	Cost	Assessments
Albion street.....	Hyde Park.....	\$10,618 93	\$2,301 00
Arlington street.....	Brighton.....	1,504 26	1,269 20
Arthur street.....	Brighton.....	1,702 04	955 50
Ashland street.....	Dorchester.....	8,500 20	2,775 00
Bagnal street.....	Brighton.....	4,418 41	832 53
Beach street.....	Dorchester.....	11,878 40	4,543 00
Blanche street.....	Dorchester.....	2,486 20	1,206 00
Bonad road.....	West Roxbury....	8,328 51	1,085 00
Call street.....	West Roxbury....	2,583 28	1,260 48
Clifford street.....	Hyde Park.....	9,319 03	2,304 80
Clive street.....	West Roxbury....	236 60	264 50
Colbert street.....	West Roxbury....	6,896 12	2,095 75
East Seventh street.....	South Boston....	746 10	250 00
Eliot street.....	West Roxbury....	4,659 54	1,769 90
Fern street.....	Brighton.....	1,124 58	457 00
Franklin street.....	Brighton.....	17,255 81	7,732 80
Herrick street.....	Brighton.....	3,735 74	1,692 49
Hillock street.....	West Roxbury....	7,164 45	3,341 96
Homer street.....	East Boston....	8,045 85	2,640 19
Homewood road.....	West Roxbury....	4,557 30	1,535 99
Huntington avenue.....	Hyde Park.....	36,642 54	16,099 00
Lamson street.....	East Boston....	1,391 40	541 99
Lexington avenue.....	Hyde Park.....	18,574 50	9,265 35
Lincoln street.....	Dorchester.....	685 86	400 00
Mill street.....	Dorchester.....	16,489 85	5,210 00
Monastery road.....	Brighton.....	893 20	438 00
Murdock street.....	Brighton.....	16,719 77	10,278 33
Pond Circle.....	West Roxbury....	10,380 13	5,171 37
Ravenna road.....	West Roxbury....	9,975 44	3,229 00
Robeson street.....	West Roxbury....	15,769 68	5,835 00
Rockmere street.....	Dorchester.....	4,267 71	1,365 00
Sagamore street.....	Dorchester.....	3,181 42	922 50
Strathmore road.....	Brighton.....	6,903 58	2,943 00
Union street.....	Brighton.....	5,006 73	2,794 34
Winslow street.....	Hyde Park.....	6,481 23	2,261 00
Wordsworth street.....	East Boston....	1,919 95	6,528 20
Totals.....	.....	\$461,038 09	\$113,595 17

LAND DAMAGES

During the period of this report 177 petitions for public utilities were approved for the placing and maintaining of poles for the support of wires.

Also, 86 petitions were approved for miscellaneous installations or uses of the public highways of the City of Boston, as follows:

STREET	Petitioner	Nature of Petition
Albion street, Hyde Park	Worcester Gas Light Company	Underground gas main
Am. Legion H'way, West Roxbury	Boston Gas Company	Underground gas main
Badger road, Hyde Park	Worcester Gas Light Company	Underground gas main
Bennington street, East Boston	Boston Gas Company	Underground gas main
Bennington street, East Boston	Boston Gas Company	Underground gas main
Bennington street, East Boston	Noddle Isle Liquors	Illuminated sign
Bennington street, East Boston	Ben Havre Liquors	Illuminated sign
Berkeley street, Boston Proper	First Church of Boston	Steps, etc.
Berkeley street, Boston Proper	Boston Edison Company	Conduit
Binney street, Roxbury	N. E. Deaconess Hospital	Tunnel
Blossom street, Boston Proper	Boston Edison Company	Conduit
Blossom street, Boston Proper	Boston Edison Company	Conduit
Blossom street, Boston Proper	Boston Gas Company	Underground gas main
Blue Hill avenue, Dorchester	Dorchester Savings Bank	Illuminated signs
Blue Hill avenue, etc., Dorchester	Boston Gas Company	Underground gas main
Boylston street, Boston Proper	Boston Edison Company	Conduit
Boylston street, West Roxbury	Boston Gas Company	Underground gas main
Boylston street, Boston Proper	Hotel Touraine	Illuminated sign
Bowdoin street, Dorchester	Boston Gas Company	Underground gas main
Bradlee street, Hyde Park	Worcester Gas Light Company	Underground gas main
Brayton road, Brighton	Boston Gas Company	Underground gas main
Brighton avenue, Brighton	Northeast Realty Corporation	Marquee
Broadway, Boston Proper	Nile Restaurant	Illuminated sign
Cambria street, etc., Boston Proper	Cambria Scotia Company	Foundation piles
Cambria street, Boston Proper	Cambria Scotia Company	Gas separator manhole
Cambridge street, Boston Proper	Boston Edison Company	Conduit
Cambridge street, Boston Proper	Boston Edison Company	Conduit
Carver street, Boston Proper	Reid Hotel	Awning
Cataumet street, West Roxbury	Boston Gas Company	Underground gas main
Coleman street, Dorchester	Boston Gas Company	Underground gas main
Columbus avenue, Roxbury	Boston Gas Company	Underground gas main
Columbus avenue, Boston Proper	Galvin's Luncheon	Awning

STREET	Petitioner	Nature of Petition
Columbus avenue, Roxbury	Boston Gas Company	Underground gas main
Commonwealth avenue, Boston Proper	Boston University	Underground steam main
Commonwealth avenue, Brighton	Boston Gas Company	Underground gas main
Crestwood park, Roxbury	Boston Gas Company	Underground gas main
Dalton street, Boston Proper	Boston Gas Company	Underground gas main
Devonshire street, Boston Proper	Boston Edison Company	Conduit
Devonshire street, etc., Boston Proper	Boston Edison Company	Fuel oil lines
Dorchester street, South Boston	J & J Liquor Company	Illuminated sign
East First street, etc., Boston Proper	Boston Edison Company	Fuel oil lines
Fawndale road, West Roxbury	Boston Gas Company	Underground gas main
Freeman avenue, etc., West Roxbury	Boston Gas Company	Underground gas main
Gordon avenue, Hyde Park	Worcester Gas Light Company	Underground gas main
High street, Boston Proper	Boston Edison Company	Conduit
High street, Boston Proper	Boston Edison Company	Conduit
Humboldt avenue, Roxbury	Boston Gas Company	Underground gas main
Huntington avenue, Boston Proper	Boston Edison Company	Conduit
Hyde Park avenue, Hyde Park	Worcester Gas Light Company	Underground gas main
Iola street, Dorchester	Boston Gas Company	Underground gas main
Jacob street, Dorchester	Boston Gas Company	Underground gas main
Jeffries street, etc., East Boston	Boston Gas Company	Underground gas main
Kingsland road, West Roxbury	Boston Gas Company	Underground gas main
La Grange street, Boston Proper	Edward's Restaurant	Illuminated arrow
Lehigh street, Boston Proper	Boston Gas Company	Wooden standard pole
Lourdes avenue, West Roxbury	Boston Gas Company	Underground gas main
Lucerne street, Dorchester	Boston Gas Company	Underground gas main
Manning street, West Roxbury	Boston Gas Company	Underground gas main
Maple Terrace Ext., West Roxbury	Alex. Hamilton Homes	Open for public travel
Milk street, Boston Proper	Boston Edison Company	Conduit
Newbury street, Boston Proper	Boston Edison Company	Conduit
Newbury street, Boston Proper	Boston Edison Company	Conduit
Newbury street, Boston Proper	Boston Edison Company	Conduit
Newmarket square, Roxbury	Boston Gas Company	Underground gas main
Nikisch avenue, etc., West Roxbury	Boston Gas Company	Underground gas main
Parkman street, Boston Proper	Mass. Gen. Hospital	Underground steam main
Pilgrim road, Roxbury	N. E. Deconess Hospital	Tunnel
Prospect street, Hyde Park	Worcester Gas Light Company	Underground gas main
Public Alley, Boston Proper	Boston Edison Company	Conduit
Reservation road, Hyde Park	Worcester Gas Light Company	Underground gas main
Ritchie street, Roxbury	Boston Gas Company	Underground gas main
Robken road West Roxbury	Boston Gas Company	Underground gas main

Street	Petitioner	Nature of Petition
Roxbury street, Roxbury	C & O Insurance Company	Illuminated sign
Russett road, West Roxbury	Boston Gas Company	Underground gas main
Safford street, Hyde Park	Worcester Gas Light Company	Underground gas main
Seymour street, West Roxbury	Boston Gas Company	Underground gas main
Shawmut avenue, Boston Proper	S. E. Glass Company	Plain sign
Somerset street, Boston Proper	Boston Edison Company	Conduit
Stuart street, Boston Proper	Four Corners Lounge, Inc.	Canopy
Summer street, Boston Proper	Berenson Liquor Mart	Illuminated sign
Townsend street, Roxbury	Boston Gas Company	Underground gas main
Tremont street, Boston Proper	Waldorf Lunch	3 illuminated signs
Tremont street, Boston Proper	Waldorf Lunch	Plain sign
Warren street, Roxbury	Al's Factory Outlet	Awning
Woodland road, West Roxbury	Boston Gas Company	Underground gas main

PRIVATE WAYS

During the year 1964, permission was given to prepare for public travel the following private ways:

Blueview Circle, West Roxbury, from Blueview road approximately 330 feet southerly.

Blueview road, West Roxbury, from Woodley avenue to Boundary road.

Brandywyne Drive, East Boston, from Saratoga street to Saratoga street.

Brandywyne terrace, East Boston, from Brandywyne Drive approximately 290 feet westerly.

Cataumet street, West Roxbury, from a point approximately 270 feet northeast of Pond street approximately 200 feet northeasterly.

Coleman street, Hyde Park, from a point approximately 341 feet northeast of Cleveland street approximately 140 feet northeasterly.

Cedarcrest Circle, West Roxbury, from Cedarcrest road approximately 540 feet easterly.

Cedarcrest road, West Roxbury, from Woodley avenue approximately 340 feet southeasterly.

Crest street, West Roxbury, from a point approximately 340 feet southwest of Houston street approximately 140 feet southwestly.

Delore Circle, West Roxbury, from Seymour street approximately 150 feet northeasterly.

Edson terrace, Hyde Park, from Edson street approximately 90 feet northwesterly.

Genevieve Way, Dorchester, from Adams street approximately 485 feet northerly and easterly.

Hardwick terrace, Brighton, from Hardwick street approximately 109 feet northeasterly.

Hutchinson street, Dorchester, from Brookvale street approximately 139 feet southeasterly.

Kovey road, Hyde Park, from Raldne road approximately 1,087 feet northeasterly and southeasterly,

Manning street, West Roxbury, from a point approximately 186 feet northeast of Gilman street approximately 229 feet northeasterly and easterly.

Mansen road, Hyde Park, from Kovey road approximately 796 feet northerly, westerly and northwesterly.

New Haven street, West Roxbury, from a point approximately 166 feet northeast of Stimson street approximately 110 feet northeasterly.

Palermo street, East Boston, from Leverett avenue to Palermo avenue and from Lawn avenue to Swan avenue.

Pleasant Valley Circle, West Roxbury, from West Roxbury Parkway approximately 450 feet easterly.

Prospect Circle, Hyde Park, from Prospect street approximately 190 feet southeasterly.

Ralston road, Hyde Park, from Greenfield road to Raleigh road.

Schubert street, West Roxbury, from Washington street approximately 200 feet northwesterly.

Sierra road, Hyde Park, from a point approximately 200 feet north of Neponset Valley Parkway approximately 918 feet northerly and northwesterly to Wolcott street.

Starbird avenue, West Roxbury, from Byrd avenue approximately 300 feet northeasterly.

Summit Circle, Hyde Park, from Summit street approximately 190 feet southeasterly.

Thompson street, Hyde Park, from a point approximately 913 feet southwest of Franklin street approximately 62 feet southwestly.

Thorn street, Hyde Park, from River street approximately 260 feet northeasterly.

During the same period, permission was given to open for public travel the following private ways:

Bradlee court, Hyde Park, from Bradlee street approximately 235 feet easterly.

Bradlee Lane, Hyde Park, from Bradlee street approximately 235 feet easterly.

Bradlee park, Hyde Park, from Bradlee street approximately 235 feet easterly.

Crosstown avenue, West Roxbury, from Vogel street approximately 240 feet easterly.

Cypress terrace, West Roxbury, from Cypress street approximately 290 feet southerly.

Leverett avenue, East Boston, from Bennington street to approximately 280 feet southeasterly.

Maple terrace extension, West Roxbury, from a point approximately 215 feet northeast of Maple terrace approximately 95 feet northeasterly.

Milton terrace, Hyde Park, from Milton avenue approximately 345 feet northeasterly.

Orlando street, Dorchester, from Monterey avenue approximately 370 feet southwesterly.

Partridge street, West Roxbury, from Maplewood street to Sparrow street.

Raldne road, Hyde Park, from Stonehill road to Turtle Pond Parkway.

Rockwood terrace, West Roxbury, from Rockwood street approximately 480 feet easterly and southerly.

Running Brook road, West Roxbury, from Westmoor road approximately 1,270 feet northerly and southeasterly to Woodley avenue.

Silvia court, Hyde Park, from Raldne road approximately 300 feet westerly.

Westmoor road, West Roxbury, from Running Brook road approximately 340 feet southeasterly.

SUMMARY

In addition to the normal volume of Boston street and sewer improvements, this Commission worked closely with the agencies concerned with the New Boston such as Boston Redevelopment Authority, Massachusetts Turnpike Authority, Massachusetts Department of Public Works, other City departments, Prudential Center, and other private developments.

For example, the first phase of the WASHINGTON PARK DEVELOPMENT resulted in the discontinuance of certain streets in that area, the layout of new public streets, and the widening of existing public streets, such as Humboldt Avenue, Charlame Street, Bower Street, etc.

The new design for COPLEY SQUARE required this Commission's action for the discontinuance of that portion of Huntington Avenue and the widening and specific repairs in adjacent streets.

Although only minor changes were made in the GOVERNMENT CENTER AREA, much preliminary planning for the new street pattern in this area was under discussion during the year.

At the PRUDENTIAL CENTER, minor improvements were made this year in the surrounding area to improve the traffic pattern in anticipation of the new Turnpike and in an attempt to coordinate with the proposed Christian Science Church new complex which, as yet, has not been made public.

Other private developments required this Commission's attention and action during the year, most important of which were for the proposed addition to the Gillette Company in South Boston and high-rise apartment houses in downtown Boston.

Interestingly enough, in the midst of Boston's renaissance, there were two major restoration projects aimed at retaining Boston's old charm and flavor; namely, the "Old Corner Book Store" at Washington and School Streets, and the original Bulfinch-designed St. Stephen's Church on Hanover Street. Both projects required the discontinuance of portions of the public highway.

The new ZONING CODE which went into effect on December 30, 1964, resulted in a "rush" of sewer and water petitions from developers who were anxious to obtain approval before the deadline date. This, of course, increased the clerical and engineering workload.

Another major change in the law — amendments to Chapter 79 of the General Laws — became effective on November 1, 1964. These amendments resulted in several changes in our procedure on Eminent Domain, most important of which is the necessity of determining amount of damages *prior* to the recording of a taking in the Suffolk Registry of Deeds.

The year 1964 brought about many public improvements in the City of Boston including those projects already under way, those started during the year, or contemplated for the coming year. This Commission is already geared to meet future improvements contemplated for next year in the Government Center street complex, Christian Science new complex, completion of the Turnpike ramps, Washington Park and West End Developments, Copley Square redesign, and the Water-front project.

JAMES W. HALEY, *Chairman*,
THOMAS F. CARTY,
JAMES J. SULLIVAN, JR.

Michael J. Corrao,
Executive Secretary

APPENDIX A

GENERAL ORDERS

APPENDIX B

CENTRAL OFFICE

DEPARTMENTAL PERSONNEL

TABLE 1 — Grade and Number of Employees

TABLE 2 — Number Actually Employed

TABLE 3 — Appointments, Transfers, Deaths, etc.

LOAN ORDERS — OUTSTANDING DEBT

TABLE 1 — Public Ways

TABLE 2 — Sewerage Works

TABLE 3 — Bridges

AUTOMOTIVE EQUIPMENT

TABLE 1 — List as of December 31, 1964

TABLE 2 — Added or Ordered in 1964

PERMITS

TABLE 1 — Permits Issued and Cash Receipts

The records of the department show that there are now 1,450 positions in the several divisions, and of that number 1,364 permanent employees were on the January 2, 1965, payrolls.

APPENDIX B

TABLE 1
GRADE AND NUMBER OF EMPLOYEES

TITLE	Central Office	Maintenance Branch, Central Office	Highway	Sanitary	Sewer	Engineering	Water	Total
Administrative assistant	2	—	—	—	—	—	—	2
Assistant civil engineer	—	—	10	—	5	14	1	30
Assistant drawtender	—	—	35	—	—	—	—	35
Assistant sewer pumping station operator . . .	—	—	—	—	4	—	—	4
Assistant superintendent	—	—	1	—	—	—	1	2
Assistant supervisor	—	—	1	—	—	—	—	1
Associate civil engineer	—	—	2	—	2	2	1	7
Cashier and weigh clerk	—	—	—	1	—	—	—	1
Chief communication equipment operator . . .	—	1	—	—	—	—	—	1
Chief electrician	—	—	1	—	—	—	—	1
Chief inspector	—	—	1	—	—	—	—	1
Chief sewer pumping station operator	—	—	—	—	1	—	—	1
Chief water meter reader	—	—	—	—	—	—	1	1
Clerk	—	—	—	—	—	—	2	2
Clerk and stenographer	—	—	—	1	—	—	—	1
Clerk and typist	—	—	—	1	—	1	3	5
Commissioner of Public Works	1	—	—	—	—	—	—	1
Communication equipment operator	—	3	—	—	—	—	—	3
Constable	1	—	—	—	—	—	—	1
Crane operator	—	—	—	11	—	—	—	11
Director of Transportation	—	1	—	—	—	—	—	1
District foreman	—	—	—	—	—	—	1	1
Division engineer	—	—	1	1	1	1	1	5
Drawtender	—	—	4	—	—	—	—	4
Electrician	—	—	1	1	—	—	—	2
Electrician-operator	—	—	—	—	2	—	—	2
Exec. secretary (PIC)	1	—	—	—	—	—	—	1
First assistant drawtender	—	—	17	—	—	—	—	17

TABLE 1
GRADE AND NUMBER OF EMPLOYEES — Continued

TITLE	Central Office	Maintenance Branch, Central Office	Highway	Sanitary	Sewer	Engineering	Water	Total
Garage attendant.....	—	4	—	—	—	—	—	4
Garage foreman.....	—	3	—	—	—	—	1	4
General foreman.....	—	2	—	—	—	—	—	2
Head account clerk.....	—	—	—	—	—	—	1	1
Head administrative clerk.....	1	1	1	1	—	1	—	5
Head clerk.....	2	—	1	—	1	—	3	7
Head clerk and secretary.....	1	—	—	—	—	—	—	1
Head permit investigator.....	1	—	—	—	—	—	—	1
Head photostat operator.....	—	—	—	—	—	1	—	1
Heavy motor equipment operator.....	—	2	64	12	1	—	16	95
Heavy motor equipment repairman.....	—	8	—	—	—	—	—	8
Inspector.....	—	—	70	34	11	—	17	132
Investigator.....	4	—	—	—	—	—	—	4
Junior civil engineer.....	—	—	3	—	—	6	1	10
Junior engineering aid.....	—	—	6	—	—	1	1	8
Laborer.....	—	—	300	26	15	—	32	373
Laborer (incinerator).....	—	—	—	22	—	—	—	22
Maintenance mechanic (blacksmith).....	—	4	—	—	—	—	—	4
Maintenance mechanic (bricklayer).....	—	—	—	—	—	—	1	1
Maintenance mechanic (carpenter).....	—	4	6	—	—	—	—	10
Maintenance mechanic (machinist).....	—	—	3	—	—	—	11	14
Maintenance mechanic (mason).....	—	—	—	—	1	—	—	1
Maintenance mechanic (millwright).....	—	—	—	2	2	—	—	4
Maintenance mechanic (painter).....	—	2	1	—	—	—	—	3
Maintenance mechanic (plumber).....	—	—	—	—	—	—	15	15
Maintenance mechanic (sheet metal worker).....	—	1	—	—	—	—	—	1
Maintenance mechanic (welder).....	—	4	—	—	—	—	—	4
Maintenance mechanic foreman (carpenter).....	—	1	—	—	—	—	—	1
Maintenance mechanic foreman (machinist).....	—	—	—	—	—	—	1	1
Maintenance mechanic foreman (millwright).....	—	—	—	1	—	—	—	1
Maintenance mechanic foreman (welder).....	—	1	—	—	—	—	—	1
Maintenance mechanic helper.....	—	7	—	—	—	—	8	15
Maintenance foreman.....	—	—	5	—	4	—	—	9
Maintenance man.....	—	13	—	2	—	—	—	15

TABLE 1
GRADE AND NUMBER OF EMPLOYEES — Continued

TITLE	Central Office	Maintenance Branch, Central Office	Highway	Sanitary	Sewer	Engineering	Water	Total
Motor equipment operator.....	—	1	61	8	10	—	5	85
Motor equipment repair foreman.....	—	4	—	—	—	—	—	4
Motor equipment repairman.....	—	13	—	—	—	—	—	13
Pavers.....	—	—	14	—	—	—	—	14
Personnel assistant.....	1	—	—	—	—	—	—	1
Photographer.....	—	—	—	—	—	1	—	1
Principal account clerk.....	5	1	1	1	—	—	4	12
Principal civil engineer.....	—	—	—	2	1	3	—	6
Principal clerk.....	—	—	—	1	1	—	6	8
Principal clerk and stenographer.....	—	—	1	—	—	—	—	1
Principal clerk and typist.....	4	1	1	—	—	1	3	10
Principal electrical engineer.....	—	—	1	—	—	—	—	1
Principal photostat operator.....	—	—	—	—	—	1	—	1
Principal storekeeper.....	—	1	—	—	—	—	1	2
Sanitation foreman.....	—	—	—	1	—	—	—	1
Senior account clerk.....	1	—	—	—	—	—	2	3
Senior accounting machine operator.....	—	—	—	—	—	—	1	1
Senior administrative assistant.....	1	—	—	—	—	—	—	1
Senior cashier.....	1	—	—	—	—	—	—	1
Senior civil engineer.....	—	—	2	—	2	1	—	5
Senior clerk.....	—	—	—	—	—	—	5	5
Senior clerk and stenographer.....	1	—	2	1	—	—	2	6
Senior clerk and typist.....	4	1	2	—	1	—	2	10
Senior engineering aid.....	—	—	5	—	2	4	—	11
Senior personnel officer.....	1	—	—	—	—	—	—	1
Senior storekeeper.....	—	1	—	—	—	—	—	1
Sewer cleaner.....	—	—	—	—	6	—	—	6
Sewer gateman.....	—	—	—	—	8	—	—	8
Sewer pumping station operator.....	—	—	—	—	4	—	—	4
Sewer service repairman.....	—	—	—	—	3	—	—	3
Sign painter and letterer.....	—	1	—	—	—	—	—	1
Special heavy motor equipment operator....	—	1	5	4	3	—	2	15
Special water meter reader.....	—	—	—	—	—	—	4	4
Steam fireman.....	—	—	—	1	5	—	—	6

TABLE 1
GRADE AND NUMBER OF EMPLOYEES — Concluded

TITLE	Central Office	Maintenance Branch, Central Office	Highway	Sanitary	Sewer	Engineering	Water	Total
Steam fireman (incinerator).....	—	—	—	5	—	—	—	5
Stoker.....	—	—	—	22	—	—	—	22
Storekeeper.....	—	—	1	—	—	—	1	2
Superintendent.....	—	1	2	2	1	—	1	7
Supervisor.....	1	2	13	6	1	—	6	29
Water meter reader.....	—	—	—	—	—	—	20	20
Water meter repairman.....	—	—	—	—	—	—	11	11
Water service maintenance man.....	—	—	—	—	—	—	21	21
Water service repairman.....	—	—	—	—	—	—	25	25
Working foreman.....	—	1	2	10	7	—	18	38
Yard clerk.....	—	—	—	3	1	—	5	9
Yardmaster.....	—	—	—	—	—	—	1	1
Total.....	34	91	647	183	106	38	265	1,364

TABLE 2
NUMBER OF EMPLOYEES ACTUALLY EMPLOYED JANUARY 1, 1964 AND JANUARY 1, 1965

	Central Office	Highway	Sanitary	Sewer	Engineering	Water	Total
January 1, 1964	134	646	184	107	36	273	1,380
January 1, 1965	125	647	183	106	38	265	1,364

Total Eligible Force

January 1, 1964	125	685	200	122	60	288	1,480
January 1, 1965	120	680	190	120	60	280	1,450

OUTSTANDING BONDED DEBT

TABLE 1

PUBLIC WAYS—CONSTRUCTION OF

Outside Debt Limit	Issued	Series Due	Amount
1½S.....	1954	10/1/64	\$200,000
2¼S.....	1955	4/1/65	400,000
3S.....	1956	11/1/62-66	300,000
3S.....	1957	5/1/67	400,000
5S.....	1957	5/1/67	200,000
5S.....	1958	10/1/68	500,000
4S.....	1959	11/1/69	900,000
3½S.....	1960	11/1/70	1,400,000
3S.....	1961	11/1/71	1,250,000
2¾S.....	1962	4/1/72	1,530,000
3¼S.....	1963	4/1/73	800,000
3¼S.....	1963	4/1/73	1,700,000
Total.....	.....	.....	\$9,580,000

TABLE 2
SEWERAGE WORKS

Inside Debt Limit	Issued	Series Due	Amount
3 $\frac{1}{4}$ S.....	1934	11/1/64	\$25,000
3S.....	1937	9/1/67	15,000
2 $\frac{3}{4}$ S.....	1937	12/1/67	20,000
2 $\frac{3}{4}$ S.....	1938	6/1/68	80,000
1 $\frac{3}{4}$ S.....	1939	8/1/69	24,000
1 $\frac{3}{4}$ S.....	1940	7/15/70	16,000
2S.....	1941	12/15/71	48,000
2S.....	1942	12/1/72	90,000
1 $\frac{1}{2}$ S.....	1943	12/1/73	100,000
1 $\frac{1}{4}$ S.....	1944	8/1/74	68,000
1 $\frac{1}{4}$ S.....	1945	12/1/75	156,000
1 $\frac{1}{4}$ S.....	1946	7/1/76	260,000
1 $\frac{3}{4}$ S.....	1947	5/1/77	440,000
2S.....	1948	12/1/78	75,000
2 $\frac{1}{4}$ S.....	1949	12/1/79	430,000
1 $\frac{1}{2}$ S.....	1949	11/1/79	240,000
1 $\frac{3}{4}$ S.....	1950	6/1/80	290,000
1 $\frac{3}{4}$ S.....	1951	10/1/71	200,000
Total. ....	.....	.....	\$2,577,000

TABLE 2
SEWERAGE WORKS, CONTINUED

Outside Debt Limit	Issued	Series Due	Amount
2½S.....	1952	10/1/72	\$225,000
2¼S.....	1953	10/1/73	500,000
2S.....	1955	3/1/75	300,000
2½S.....	1955	10/1/75	300,000
3½S.....	1957	5/1/77	350,000
3½S.....	1957	10/1/77	350,000
3¾S.....	1960	11/1/79	400,000
3½S.....	1960	11/1/80	425,000
3S.....	1961	11/1/81	350,000
3S.....	1962	11/1/82	485,000
3¼S.....	1963	11/1/83	500,000
Total.....			\$4,285,000

APPOINTMENTS, TRANSFERS, RESIGNATIONS, RETIREMENTS, DEATHS, ETC., OF
EMPLOYEES

Appointed	Reinstated	Transferred from Other Departments	Transferred from Other Services	January 1, 1965	Services 1964-1965	January 1, 1964	Resigned	Discharged	Transferred to Other Services	Transferred to Other Departments	Retired	Died
3	—	1	3	125	Central Office.....	134	—	4	3	1	8	—
64	—	2	1	647	Highway.....	646	8	7	2	7	31	11
15	2	—	2	183	Sanitary.....	184	3	4	1	1	8	3
10	1	—	1	106	Sewer.....	107	—	1	2	1	5	4
3	1	—	1	38	Engineering.....	36	1	—	1	—	—	1
12	2	4	1	265	Water.....	273	4	3	1	1	12	6
107	6	7	9	1,364	Totals.....	1,380	16	19	10	11	64	25

OUTSTANDING DEBT

The bonded debt for public ways construction amounted to \$9,580,000 and for sewerage works inside the debt limit \$2,577,000 and outside the debt limit \$4,285,000 for a total of \$6,862,000. Bridge debt, reconstruction and repair \$140,000; construction inside debt limit \$180,000 and outside debt limit \$3,720,000 for a total of \$4,040,000.

TABLE 3
BRIDGES—RECONSTRUCTION AND REPAIR

Inside Debt Limit	Issued	Series Due	Amount
		6/1/70	\$140,000
Bridges, Construction of			
Inside Debt Limit	Issued	Series Due	Amount
1½S.....		12/1/65	\$18,000
Outside Debt Limit	Issued	Series Due	Amount
2S.....	1952	4/1/72	\$225,000
2½S.....	1952	10/1/72	135,000
2¾S.....	1953	4/1/73	305,000
2¼S.....	1954	4/1/74	760,000
2S.....	1955	4/1/75	300,000
2¼S.....	1955	10/1/75	300,000
3S.....	1956	11/1/76	520,000
3½S.....	1957	5/1/77	140,000
3¾S.....	1957	10/1/77	350,000
3¼S.....	1959	11/1/79	400,000
3S.....	1962	11/1/82	285,000
Total.....			\$3,720,000

TABLE 1

AUTOMOTIVE EQUIPMENT

The Maintenance Branch is concerned with the repairs and maintenance of the automotive equipment of the Public Works Department, which consisted of the following on December 31, 1964:

Passenger Cars	84
Snow-Fighting Trucks	
Walter Snow Fighters	10
F.W.D.Trucks	3
Oshkosh	3
Trucks — Ford Model	
E-160	6
F-250 and 350	26
F-500	7
F-600	17
F-750	28
F-800	1
F-850	65
C-850	4
C-950	9
C-1100	18
Miscellaneous Trucks	
Chevrolet	12
International	4
Dodge	4
Willy's	1
Diamond T	1
Ford Pick-ups	10
Truckster	
Cushman	1
Bulldozer	
Caterpillar	3
Tractor-Ford C-1100	1
Mechanical Street Sweepers	
Wayne	20
Elgin	10
Tennont	2

Compressors										
Worthington Trailers	.	.	.	.	.	.	.	.	.	14
Truck Mounted	.	.	.	.	.	.	.	.	.	3
Front End Loaders										
Trojan	.	.	.	.	.	.	.	.	.	11
Haugh	.	.	.	.	.	.	.	.	.	15
Michigan	.	.	.	.	.	.	.	.	.	4
Roller										
Galion	.	.	.	.	.	.	.	.	.	2
Mobile Cranes										
Unit Crane	.	.	.	.	.	.	.	.	.	1
International (5 ton)	.	.	.	.	.	.	.	.	.	1
F-850	.	.	.	.	.	.	.	.	.	4
Flusher Tanks										
Robinson	.	.	.	.	.	.	.	.	.	10
Entyre	.	.	.	.	.	.	.	.	.	3
Sand Spreaders										
Jet	.	.	.	.	.	.	.	.	.	10
Baughman	.	.	.	.	.	.	.	.	.	6
Fox	.	.	.	.	.	.	.	.	.	32
Wrecker										
Ford C-1100	.	.	.	.	.	.	.	.	.	1
Ford F-600 with derrick	.	.	.	.	.	.	.	.	.	1
Ford-850 with derrick	.	.	.	.	.	.	.	.	.	1
Ford Aerial Ladder Trucks	.	.	.	.	.	.	.	.	.	1
Ford One-Ton Utility	.	.	.	.	.	.	.	.	.	1
International 5-Ton Dumps	.	.	.	.	.	.	.	.	.	10
International 2-Ton Lumber	.	.	.	.	.	.	.	.	.	1
Chevrolet 1½-Ton C.B.C.	.	.	.	.	.	.	.	.	.	1
Thermal Snow Melter	.	.	.	.	.	.	.	.	.	1
										<hr/>
										484

Plus twenty-three (23) Trailers, Transports, Sewer Rodders, etc.

TABLE 2

NEW EQUIPMENT PURCHASED FROM 1964 APPROPRIATIONS

10 International Dump Trucks	.	.	.	.	\$49,500	00
10 Dump Bodies	.	.	.	.	11,830	36
1 F-350	.	.	.	.	5,682	00
14 Falcon Station Wagons	.	.	.	.	24,682	00
1 C-1100 Dump Truck	.	.	.	.	7,601	00
4 Dual Control Sweepers	.	.	.	.	50,691	48

2 Trojan Front End Loaders	\$25,138 96
4 2,000 gal. Flusher Tanks	17,197 04
1 D-7 Tractor	35,280 00
6 Chrysler Industrial Motors for Wayne Sweepers	1,800 90
1 Roto Power Set (10 ton)	171 00
1 6-12 Volt Battery Charger	129 50
17 Fire Extinguishers	861 32
1 Wisconsin Motor	428 35
6 Heavy Duty Slow Marquette Chargers	446 88
3 Push Frame Assemblies	705 60
2 Frink Plow Models 430	1,050 60
	<hr/>
	\$233,196 99

NEW EQUIPMENT FROM SNOW APPROPRIATIONS

10-Two-way Plows	\$11,103 40
10 Hopper Type Sand Spreaders	26,597 60
1 Snow Melter	38,078 44
4 Auger Type Sand Spreaders	13,267 24
10-One Way Plows	9,500 00
	<hr/>
	\$98,546 68

CIVIL DEFENSE LOANS

10-Two Way Radios	\$7,750 00
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The Central Office—Maintenance Branch, after a thorough investigation and inspection of various sites in New England during snow conditions, recommended the purchase of the Thermal Model 75 Mobile Snow Melter, rated seventy-five (75) tons per hour melting capacity.

This machine has performed very satisfactorily, and has been a decided improvement in the snow removal field.

PERMIT BRANCH—1964

PERMITS AND LICENSES ISSUED

Signs	6,975
Permits—Openings and Occupation	9,925
Licenses	225
Sewer Inspection Fees	556
Dump Tickets	9,580
	<hr/>
Total	27,261

PERMITS

TABLE 1

CASH RECEIPTS

Permits — Signs	\$80,748 49
Permits — Openings and Occupation	73,807 99
Licenses — Storage and Sale of Merchandise	26,574 00
Sewer Inspection Fees	13,900 00
Dump Tickets	9,580 00
Contract Books	1,548 00
Engineering and Inspection Fees — Street Opening Account	115,991 17
Miscellaneous	23,005 68
Total	<u>\$345,155 33</u>

COMMITTED ACCOUNTS

Rental — City Property Under Control Public Works Department	\$15,941 00
Water Used Through City Hydrants — Water Division	2,795 60
Towing — Storage — Damage to Property—Maintenance Branch	911 74
Engineering Reproductions — Engineering Division	174 00
Damage to Property — Water Division	5,755 02
Damage to Property — Highway Division	209 51
Total	<u>\$25,786 87</u>

DEPOSIT ACCOUNTS

Water Deposits	\$127,841 80
Street Opening Account (Drain, Water, etc.)	114,844 10
Street Opening Account Special (Public Service Corps.)	354,361 43
Total	<u>\$597,047 33</u>
Grand Total	<u>\$967,989 53</u>

APPENDIX C

ENGINEERING DIVISION

TABLE 1 — Reproductions

TABLE 2 — Survey and Plans

TABLE 3 — Contracts Advertised

TABLE 1
REPRODUCTIONS

The Engineering Records Section is responsible for the operation of the Reproduction and Photographic Unit. This Unit furnished blue prints, ozalid prints, autositives and photographs required by the Public Works Department and all other City Departments.

Reproduction Unit Statistics

DEPARTMENT	Photostats	Blueprints	Ozalids	Auto Positives	Card Stock
Administrative Services.....	866	.....	957		
Assessing.....	1,048	.....	2,641	24	
Auditing.....	84				
Building.....	1,538	.....	2,273		
City Clerk.....	492	.....	364		
City Council.....	1,374	.....	724		
Civil Defense.....	188				
Collecting.....	166	.....	184	36	
Election.....	392				
Finance Commission.....	28				
Fire.....	426	.....	193		
Law.....	548	.....	87		
Mayor's Office.....	1,672	.....	1,245		
Park.....	166	.....	347		
Penal.....	234	.....	848		
Planning Board.....	1,194	.....	462		
Public Buildings.....	86	.....	174		
Public Works:					
Engineering Division.....	5,492	483	17,851	137	46
Central Office.....	1,682	.....	6,178		
Highway Division.....	238	.....	981		
Permit Section.....	322	.....	385		
Sanitary Division.....	148	.....	266		
Sewer Division.....	1,442	.....	1,744		
Street Lighting.....	128	.....	494		
Water Division.....	864	.....	2,447		
Real Property.....	1,568	.....	2,684		
Registry.....	2,436				
School Buildings.....	132	.....	469		
School Committee.....	34				
Traffic and Parking.....	976	.....	2,791		
Treasury.....	128				
Veterans' Services.....	196				
White Fund.....	492	.....	296		
Totals.....	26,780	483	47,085	197	46

Photographic Unit Statistics

Unit	Negatives	4 x 5 Prints	8 x 10 Prints
Public Works:			
Central Office	390	.....	390
Engineering Division	468	.....	468
Highway Division	1,400	.....	1,580
Sanitary Division	740	102	740
Sewer Division	603	.....	603
Water Division	138	80	138
Miscellaneous	462	286	176
Total	4,201	368	4,095

TABLE 2

SURVEY SECTION WORK

Following is a report of the major works accomplished by the Survey Section.

Forty-seven (47) surveys and plans were made for laying-out of 4.4 miles of public highways as follows:

<i>District</i>	<i>Length in Feet</i>
BOSTON PROPER	
Wesley place	100
BRIGHTON	
Colon street	681
Everett street	150
Gerrish street	440
McDonald avenue	350
Rushmore street	375
DORCHESTER	
Delhi street	1,100
Desmond street	250
Manley street	270
Newkirk street	260
Prairie street	750
Stone terrace	220
Violet street	927
Washington street	100
HYDE PARK	
Carlson Circle	372
Chesterfield street	800
Cromwell street	300
Edgewater Drive	500
Fleet street	240
Lawton terrace	220
Norris road	500
Pleasant street	250
Providence street	175
Willow avenue	376
ROXBURY	
Copenger street	200
SOUTH BOSTON	
Richards street	240
Trilling Way	375
Mt. Washington avenue	330

<i>District</i>	<i>Length in Feet</i>
WEST ROXBURY	
Atherton street	500
Belle avenue	3,444
Brown terrace	350
David road	445
Earnshaw street	186
Ellswood street	726
Ethel street	500
Fawndale road	1,300
Fessenden street	200
Glenclyff road	600
Lillie Way	350
Macullar road	400
Manning street	210
Maplewood street	1,231
Maria Lane	400
Partridge street	610
Salman street	521
St. Theresa avenue	1,000
Searle road	350

One hundred and seventy-seven (177) surveys and two hundred and sixteen (216) plans for reconstruction of highways were made as follows: (41.0 miles)

<i>District</i>	<i>Length in Feet</i>
BOSTON PROPER	
Branch street	480
Wesley Place	259
West Cedar street	3,200
West Newton street	3,240
BRIGHTON	
Arlington street	2,246
Englewood avenue	1,630
Eulita terrace	276
Everett street	4,604
Franklin street	2,296
Hobson street	1,034
Kinross avenue	613
Mapleton street	1,149
Murdock street	2,041
Nonantum street	2,500
Priscilla road	492
Raymond street	1,200
Riverview road	1,170
Sanderson place	358
Wallingford road	1,272

<i>District</i>	<i>Length in Feet</i>
CHARLESTOWN	
Allston street	648
Beachman street	645
Cedar street	416
Green street	1,247
Hancock street	217
Lawnwood place	233
Ludlow place	229
School street	1,053
Sullivan street	962
Trenton street	430
DORCHESTER	
Alabama street	1,866
Ashland street	1,005
Aspinwall road	1,830
Beach street	1,600
Bernard street	8,245
Bellevue street	1,500
Blanche street	740
Bowman street	550
Castlegate road	460
Charles street	530
Chelmsford street	850
Clayton street	1,550
Columbine street	242
Corona street	1,000
DeWolfe street	380
Ellet street	420
Ellington street	1,330
Everdean street	1,380
Everett street	640
Evergreen street	847
Flint street	450
Florida street	1,265
Glenway street	1,161
Granite avenue	1,700
Green Hill street	435
Hallowell street	980
Holiday street	600
King street	2,850
Lawrence avenue	1,270
Lucerne street	795
Marden avenue	278
Melbourne street	867
Mill street	1,680
Monson street	520
Montague street	621
Mount Bowdoin terrace	900

<i>District</i>	<i>Length in Feet</i>
Nahant street	1,037
Narragansett street	253
Normandy street	1,790
Norwell street	953
Oakley street	830
Ocean street	1,315
Parkman street	1,200
Pasadena road	800
Remington street	197
Roslin road	987
Seaver street	1,230
Southwick street	340
Spencer street	2,200
Standard street	1,200
Stanwood street	1,800
Supple road	1,000
Tiverton street	520
Tolman street	880
Tuttle street	1,163
Verdun street	500
Westcott street	750
Westview street	500
Wheatland avenue	1,536

EAST BOSTON

Breed street	1,184
Brooks street	2,765
Cottage street	271
Curtis street	404
Everett street	2,529
Ford street	332
Frankfort street	300
Horace street	600
Jeffries street	450
Lillian street	232
Marginal street	2,797
Marion street	2,485
Maverick street	4,595
New street	471
Paris street	3,576
Porter street	500
Putnam street	2,195
Saratoga street	2,803
Shawsheen street	535
Teragram street	468
Trident street	228
West Eagle street	1,062
White street	2,108
Winthrop street	163

<i>District</i>	<i>Length in Feet</i>
HYDE PARK	
Arlington street	2,592
Beaver street	1,950
Chesterfield street	480
Child street	1,990
Collins street	736
Damon street	551
Gordon avenue	1,884
Malta street	480
Neponset avenue	2,151
Norway park	730
Pine street	550
Pleasantview street	1,970
Radcliffe road	1,281
Reservation road	2,500
Roxana street	379
West street	5,953
Winslow street	450
ROXBURY	
Bragdon street	510
Clearway street	751
Edgewood street	1,077
Ernst street	326
Gardner street	314
Hillside street	3,067
Irwin street	314
Magazine street	2,100
Miles street	277
Shattuck street	1,450
SOUTH BOSTON	
C street	2,701
East Third street	4,434
Sleeper street	1,050
WEST ROXBURY	
Angell street	900
Birch street	1,950
Bonair road	689
Bowditch road	772
Brook Farm road	1,160
Carroll street	1,196
Chilcott place	478
Corey street	7,281
Cowing street	566
Dresden street	389
Edgemere road	1,776
Garnet street	1,950

<i>District</i>	<i>Length in Feet</i>
WEST ROXBURY	
Hager street	240
Halifax street	971
Hayes street	546
Holbrook street	897
Haydn street	615
Leniston street	575
Lorraine street	846
Louder's Lane	1,672
Macullar road	431
Midvale street	620
Montvale street	1,059
Myrtle street	1,060
Neponset avenue	1,018
Nikisch avenue	800
Paine street	1,351
Pond View avenue	693
Rockview street	1,621
Willowdean avenue	600

Four (4) major surveys were made for the reconstruction program (1.2) miles.

HYDE PARK	
Reservation road	2,500
Pleasantview street	1,970

WEST ROXBURY	
Brook Faim road	1,160

BRIGHTON	
Kinross road	613

Six (6) surveys and plans were made for discontinuances of 0.25 miles of Public Highways as follows:

BOSTON PROPER	
Hanover street	100
Huntington avenue	380
Washington and School streets	150

SOUTH BOSTON	
Baldwin street	240
Granite street	170
Jay street	250

<i>District</i>	<i>Length in Feet</i>
BRIGHTON	
Lake Shore road (sewer)	760
Undine road (sewer)	140
WEST ROXBURY	
Morrison street (sewer)	475
Forty (40) surveys and plans were made for the taking of (3.78 miles) of easements for sewerage and assessment purposes as follows:	
BOSTON PROPER	
Compton street (utility)	400
BRIGHTON	
Chestnut Hill avenue (assessment)	520
Euston road (assessment)	530
Hardwick terrace	120
Lake Shore road	1,780
Lake Shore terrace	240
Undine road (private land)	81
Western avenue (assessment)	820
HYDE PARK	
Collins street	250
Draper street	170
Edgemere road	200
Edson terrace	100
Prospect Circle	200
Ralston road	350
Sierra road	1,200
Summit Circle	190
Thorn street	360
Vallaro road	110
Yuletide road	250
Hyde Park (R.R. land) (water easement)	4,880
West Boundary road (water easement)	200
WEST ROXBURY	
Belle avenue	700
Cataumet street	200
Carol Circle	450
Cedarcrest Lane	250
Cedarcrest road	1,260
Cedarcrest terrace	240
Clarendon park	450

<i>District</i>	<i>Length in Feet</i>
Cowing street	440
Crest street	570
Crosstown avenue	300
Delore Circle	160
Eldon street	100
Franclaire street	510
Mann street	120
Manning street	220
Metropolitan Circle	170
New Haven street	275
Ridgecrest Drive	600
Schubert street	250

Four (4) profiles for highway construction were made as follows: (1.2 miles)

HYDE PARK

Reservation road	2,500
Pleasantview street	1,970

WEST ROXBURY

Brook Farm road	1,160
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BRIGHTON

Kinross road	613
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Nine (9) surveys and plans were made for minimum pavements (0.97 miles) as follows:

DORCHESTER

Orlando street	300
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HYDE PARK

Edson street	400
Garrity terrace	300
Milton terrace	400

WEST ROXBURY

Partridge street	300
Running Brook road	1,600
Westmoor Circle	100
Westmoor road	1,420
Westmoor terrace	330

Six (6) surveys and plans were made for specific repairs and widenings (Chapter 90) as follows: (2.9 miles)

<i>District</i>	<i>Length in Feet</i>
BRIGHTON	
Lake street	4,700
DORCHESTER	
Adams street	1,350
HYDE PARK	
West Milton street	2,800
SOUTH BOSTON	
East Broadway	900
L street	800
WEST ROXBURY	
Corey street	4,500

Request for marking line and grade for the following streets:

BOSTON PROPER	
Aberdeen street	150
Berkeley street	75
Boylston street	1,600
Dalton street	600
Franklin street	100
Newbury street	200
Opera place	300
Somerset street	150
Staniford street	200
BRIGHTON	
Mapleton street	1,149
DORCHESTER	
Bernard street	300
HYDE PARK	
Albano street	400
Birchcroft road	100
Meacham street	250

<i>District</i>	<i>Length in Feet</i>
ROXBURY	
Crestwood park	600
Longwood avenue	200
Massachusetts avenue	200
St. Alphonsus street	250
Warren street	5,257
Washington street	443
SOUTH BOSTON	
Columbia road	100
WEST ROXBURY	
Charme avenue	600
Clarendon park	300
David road	100
Mossbank footway	270
Tafthill terrace	100
Tarleton street	250
West Boundary road	600

Approximately eleven (11) takings and twenty-six (26) specific repairs were made in connection with Chapter 90 surveys and reconstruction surveys.

Personnel of the survey section were assigned to snow removal operation including supervision, inspection and auditing of hired equipment accounts.

Surveys for engineering reports one hundred and fifty (150) approximately 30 miles.

Points for construction requested (1.1 mile)

DORCHESTER	
Norfolk street	3,800
ROXBURY	
Crestwood park	600
WEST ROXBURY	
March avenue	488
Robeson street	1,000

Office representatives summoned by the Law Department to appear at Suffolk, Middlesex and Plymouth County Court House Hearings.

Ten (10) plans were made for Law Department action cases in various parts of the city.

TOPOGRAPHIC SURVEYS

*District**Length
in Feet*

BOSTON PROPER

Blagden Street (Public Library)

DORCHESTER

Cushing School

EMINENT DOMAIN TAKINGS (Survey & Plans)

DORCHESTER

Bradshaw Street (school)

Charles Street (school)

CROSS SECTIONS for Sewerage Purposes

HYDE PARK

Dedham Street (private land) 620

Thompson Street 1,500

CHARLESTOWN

Mt. Vernon Street 150

Walker Street 175

ROXBURY

Amory Street 326

WEST ROXBURY

Cedarcrest Road & Circle 800

Hawthorne Road 523

Northdale Road (Private Land) 2,300

DESIGN SECTION
TABLE 3

1964 CONTRACTS ADVERTISED

CONTRACT	District	Length (Feet)	*Estimated Cost	Date of Bid Opening
Construction of and Water Works in:			**Bid Price	
Beech street	8	498	\$40,854 00	2/13/64
Beechmont street	8	1,254	53,142 00	2/13/64
and Construction of:				
Goff street	6	604	\$24,908 00	2/13/64
Lesueur road	8	180	8,254 00	2/13/64
Maida terrace	8	224	11,585 00	2/13/64
New Park avenue	6	397	18,074 00	2/13/64
Ralwood road	8	326	12,837 00	2/13/64
Ranley road	8	376	16,926 00	2/13/64
Highway			\$186,580 00	
Water			6,250 00	
			*\$192,830 00	
			**171,725 40	

Contract	District	Length (Feet)	*Estimated Cost **Bid Price	Date of Bid Opening
Reconstruction of:				
Bellevue street .	3	810	\$11,096 00	5/14/64
Browning avenue .	3	804	8,116 00	5/14/64
Castlegate road .	3	449	10,075 00	5/14/64
Charles street .	3	503	10,841 00	5/14/64
Corona street .	3	1,001	18,081 00	5/14/64
East street .	3	1,106	12,934 00	5/14/64
Ellet street .	3	443	9,660 00	5/14/64
Everett avenue .	3	500	9,156 00	5/14/64
Holiday street .	3	1,011	16,325 00	5/14/64
Mt. Bowdoin terrace	3	882	10,222 00	5/14/64
Mt. Everett street .	3	754	11,497 00	5/14/64
Normandy street .	3	1,271	14,312 00	5/14/64
Oakley street .	3	843	14,215 00	5/14/64
Pasadena road .	3	809	16,163 00	5/14/64
Radcliffe street .	3	1,034	12,819 00	5/14/64
Seaver street .	3	651	12,127 00	5/14/64
Shafter street .	3	751	12,503 00	5/14/64
Spencer street .	3	809	13,037 00	5/14/64
Sudan street .	3	1,106	16,385 00	5/14/64
Supple road .	3	440	8,997 00	5/14/64
Westcott street .	3	713	12,256 00	5/14/64
			*\$260,817 00	
			**233,874 80	
Construction of and Water Works in:				
Beechmont Footway .	8	260	\$7,556 00	5/26/64
Edgeway terrace .	8	1,170	32,991 00	5/26/64
			Highway \$40,547 00	
			Water 6,250 00	
			*\$46,797 00	
			**\$56,216 85	

[illegible]

Contract	District	Length (Feet)	*Estimated Cost	**Bid Price	Date of Bid Opening
Reconstruction of:					
Alban street .	7	1,358	\$36,763 00		7/16/64
Blackwell street .	7	355	3,916 00		7/16/64
Bowman street .	7	557	6,883 00		7/16/64
Chelmsford street	7	898	14,329 00		7/16/64
Clayton street .	7	376	6,761 00		7/16/64
Granite avenue .	7	810	12,721 00		7/16/64
King street .	7	2,136	34,589 00		7/16/64
Melbourne street	7	867	16,597 00		7/16/64
Nahant avenue .	7	1,039	23,742 00		7/16/64
Narragansett street	7	253	7,190 00		7/16/64
Ocean street .	7	1,315	25,140 00		7/16/64
Remington street	7	197	4,522 00		7/16/64
Roslin street .	7	987	23,481 00		7/16/64
Tolman street .	7	946	15,874 00		7/16/64
Train street .	7	2,558	68,362 00		7/16/64
Verdun street .	7	508	10,336 00		7/16/64
			<hr/>		
			*\$311,206 00		
			**\$272,763 00		
Reconstruction of:					
Angell street .	7	882	\$13,271 00		7/23/64
Aspinwall road .	7	927	23,713 00		7/23/64
Bernard street .	7	330	6,309 00		7/23/64
Columbine street	7	242	6,086 00		7/23/64
Flint street .	7	408	12,135 00		7/23/64
Hallowell street .	7	980	18,094 00		7/23/64
Iola street .	7	354	9,920 00		7/23/64

Lucerne street	7	795	8,650 00	7/23/64
Monson street	7	537	11,336 00	7/23/64
Norwell street	7	953	26,562 00	7/23/64
Standard street	7	1,253	25,345 00	7/23/64
Tiverton road	7	512	23,329 00	7/23/64
Wheatland avenue	7	1,536	28,497 00	7/23/64

*\$213,247 00

**\$192,039 40

Reconstruction of:

American Legion Highway				
Arlington street	8	250	\$24,674 00	8/20/64
Beaver street	8	445	15,360 00	8/20/64
Chesterfield street	8	655	4,194 00	8/20/64
Child street	8	493	13,657 00	8/20/64
Hyde Park avenue	8	724	18,842 00	8/20/64
Malta street	8	1,220	25,913 00	8/20/64
Norway Park	8	480	13,756 00	8/20/64
Pine street	8	744	29,241 00	8/20/64
Roxana street	8	614	10,813 00	8/20/64
West street	8	379	10,958 00	8/20/64
Winslow street	8	559	21,841 00	8/20/64
	8	432	10,902 00	8/20/64

*\$200,151 00

**\$177,541 10

Reconstruction of:

Forsyth street	10	320	\$8,379 00	8/27/64
Opera place	10	235	13,772 00	8/27/64

*\$22,151 00

**\$21,829 50

Contract	District	Length (Feet)	*Estimated Cost	**Bid Price	Date of Bid Opening
Reconstruction of:					
Condor street	9	880	\$30,343 00		9/3/64
North square	1	243	19,025 00		9/3/64
<hr/>					
			*\$49,368 00		
			**\$57,867 50		
Reconstruction of:					
Birch street	6	1,723	\$22,429 00		9/17/64
Bonair street	6	414	7,883 00		9/17/64
Carroll street	6	1,040	28,331 00		9/17/64
Cowing street	6	764	21,135 00		9/17/64
Garnet road	6	1,166	13,916 00		9/17/64
Glenham street	6	1,271	30,593 00		9/17/64
Haydn street	6	615	16,139 00		9/17/64
Hayes road	6	546	14,356 00		9/17/64
Leniston street	6	575	16,625 00		9/17/64
Lorraine street	6	846	19,598 00		9/17/64
Midvale road	6	620	15,561 00		9/17/64
Montvale street	6	1,059	20,829 00		8/17/64
Nikisch avenue	6	809	18,405 00		9/17/64
Symmes street	6	782	19,143 00		9/17/64
Tarleton road	6	519	15,872 00		9/17/64
Welland road	6	243	6,349 00		9/17/64
Willowdean avenue	6	631	11,255 00		9/17/64
<hr/>					
			*\$298,419 00		
			**\$271,558 65		

Construction of and street lighting in:

Longwood avenue	10	130	\$14,140 00	10/1/64
St. Alphonsus street	10	1,360	75,310 00	10/1/64

Highway \$89,450 00
Lighting 10,000 00

*\$99,450 00
**\$96,687 00

Construction of:

David road	2	590	\$22,608 00	10/15/64
Evandale terrace	3	285	10,561 00	10/15/64
Holly road	2	326	14,141 00	10/15/64
Manchester street	7	570	20,342 00	10/15/64
Manion road	8	422	17,566 00	10/15/64
Manley street	7	300	11,919 00	10/15/64
Newkirk street	7	273	10,000 00	10/15/64
Trilling way	5	319	8,639 00	10/15/64

*\$125,776 00
**\$121,408 45

Construction of:

Ring road and sidewalks adjacent to Auditorium	1	320		10/15/64
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*\$35,000 00
**\$32,590 00

Contract	District	Length (Feet)	*Estimated Cost **Bid Price	Date of Bid Opening
Reconstruction of and Street Lighting in:				
Allston street	1	648	\$11,529 00	10/29/64
Beacham street	1	645	9,596 00	10/29/64
Belvidere street	1	1,526	53,984 00	10/29/64
Branch street	1	501	5,661 00	10/29/64
C street	5	2,701	39,820 00	10/29/64
Cedar street	1	416	7,815 00	10/29/64
Clearway street	1	751	8,470 00	10/29/64
Dorrance street	1	620	11,934 00	10/29/64
East Third street	5	517	9,645 00	10/29/64
East Third street	1	1,547	32,630 00	10/29/64
Green street	1	855	11,700 00	10/29/64
Hancock street	1	217	4,143 00	10/29/64
Lawwood place	1	233	4,037 00	10/29/64
Ludlow street	1	229	3,480 00	10/29/64
Myrtle street	1	1,482	22,260 00	10/29/64
Pembroke street	1	731	14,290 00	10/29/64
School street	1	754	13,953 00	10/29/64
Sleeper street	5	1,093	12,480 00	10/29/64
Sullivan street	1	962	28,610 00	10/29/64
Trenton street	1	430	11,624 00	10/29/64
Tuttle street	3	1,163	16,968 00	10/29/64
Wesley place	1	147	2,884 00	10/29/64
West Cedar street	1	768	13,100 00	10/29/64
Highway			\$350,613 00	
Lighting			40,000 00	
			**\$390,613 00	
			**\$381,403 00	

Construction of and Installation of New Street Lighting and Fire Alarm Systems in:

Charlame place	10	164
Charlame street	10	846
Laurel street (relocation)	10	238
North Charlame street	10	126
North Charlame terrace	10	126
South Charlame court	10	168
South Charlame terrace	10	176

*\$96,060 60
**\$101,695 00

Reconstruction of:

Breed street	9	239
Brooks street	9	2,600
Cottage street	9	271
Curtis street	9	404
Decatur street	9	389
Ford street	9	332
Frankfort street	9	300
Lillian street	9	232
Marion street	9	220
Maverick street	9	1,027
Paris street	9	748
Porter street	9	286
Saratoga street	9	2,803
Seaver street	9	261
Shawsheen road	9	416
Tersagram street	9	468
West Eagle street	9	827
White street	9	348

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*\$307,370 00
**\$289,328 70

Contract	District	Length (Feet)	*Estimated Cost **Bid Price	Date of Bid Opening
Reconstruction of:				
Binney street	10	873	\$13,940 00	1/27/65
Bowditch road	2	772	9,245 00	1/27/65
Braddon street	10	1,138	26,230 00	1/27/65
Chilcott place	2	478	7,116 00	1/27/65
Clifford street	10	1,171	18,047 00	1/27/65
Dresden street	2	389	5,057 00	1/27/65
Edgewood street	10	1,104	23,030 00	1/27/65
Ernst street	10	326	6,495 00	1/27/65
Gardner street	10	314	7,959 00	1/27/65
Goldsmith street	2	198	2,466 00	1/27/65
Halifax street	2	971	18,225 00	1/27/65
Halleck street	10	475	8,674 00	1/27/65
Hillside street	10	3,067	58,616 00	1/27/65
Irwin avenue	10	314	3,630 00	1/27/65
Miles street	10	277	5,090 00	1/27/65
Mt. Hope street	2	979	20,020 00	1/27/65
Myrtle street	2	1,083	28,205 00	1/27/65
Neponset avenue	2	1,018	30,098 00	1/27/65
Pond View avenue	2	693	10,930 00	1/27/65
Rockview street	2	1,621	35,482 00	1/27/65
			<hr/>	
			*\$338,555 00	
			**\$313,698 10	

Contract	District	Description	**Bid Price	Date of Bid Opening
Sewerage Works in:				
St. Alphonsus street .	10	545-foot sewer, 562-foot surf. drain, 5 sewer MH's and 3 S.D. MH's	\$15,404 00	2/13/64
Tremont street .	10			
Dalton street .	1	670-foot sewer, 5 sewer MH's and 150-foot water pipe	\$373,300 00	2/13/64
Hancock street .	3	900-foot sewer, 2620-foot surf. drain, 5 sewer MH's and 13 S.D. MH's	\$80,920 00	2/21/64
Pleasant street .	3			
Savin Hill avenue .	3			
Chestnut Hill avenue .	4	1000-foot sewer, 500-foot surf. drain, 6 sewer MH's		
Western avenue .	4	3 S.D. MH's and 2 CB's	\$38,795 00	4/16/64
Wiltshire road .	4			
Readville street .	8	3200-foot surf. drain, 12 S.D. MH's, 10 CB's and 2 DI's		
Knight street .	8			
Private land .	8		\$88,645 00	7/08/64
Ashland street .	7	1500-foot sewer, 1510-foot surf. drain, 13 sewer MH's, 6 S.D. MH's and 13 CB's		
Cataumet street .	2			
Dedham street .	8			
Delore Circle .	6			
Evandale terrace .	3			
Fernwood road .	8			
Hillis road .	6			
New Haven street .	6			
Yuletide road .	8		\$52,580 00	7/16/64
Boylston street .	2	1540-foot sewer, 1220-foot surf. drain, 8 sewer MH's, 6 S.D. MH's and 1 CB	\$77,059 00	7/30/64
First Village Outlet in G. Wright Golf Course and Private Land	6	275-foot sewer, 250-foot surf. drain, 1 sewer MH and 3 S.D. MH's	\$19,294 00	10/01/64
Hawthorne street .	6	875-foot sewer, 1070-foot surf. drain, 1 sewer MH and 7 S.D. MH's	\$45,084 00	11/05/64
Maple street .	6			
Dalton street .	1	140-foot sewer	\$37,823 00	12/17/64

Contract Sewerage & Water Works in:	District	Description	**Bid Price	Date of Bid Opening
Blue Ledge Drive	6	Sewerage—5,400-foot sewer, 5,760-foot surf. drain, 27 sewer MH's, 20 S.D. MH's and 34 CB's.		
Blue Ledge terrace	6	Water—5,400-foot main, 200-foot hydrant pipe, 25 gates and 13 hydrants.		
Highecrest road	6		\$244,946 50	3/19/64
Highecrest terrace	6			
June street	6	Sewerage—1,900-foot sewer, 1,940-foot surf. drain, 12 sewer MH's, 10 S.D. MH's and 11 CB's.		
Blueview Circle	6	Water—1390-foot main, 40-foot hydrant pipe, 8 gates and 4 hydrants.	\$89,830 00	5/14/64
Blueview road	6			
Cedarcrest Circle	6			
Cedarcrest road	6			
Manning street	2	Sewerage—970-foot sewer, 1,150-foot surf. drain, 7 sewer MH's, 6 S.D. MH's and 4 CB's.		
Pleasant Valley Circle	6	Water—1,650-foot main and 7 gates.	\$47,415 70	8/13/64
Lawn avenue	9			
Palermo street	9			
Charlame street	10	Sewerage—1490-foot sewer, 1500-foot surf. drain, 9 sewer MH's, 8 S.D. MH's and 10 CB's.		
Relocated Laurel street	10	Water—1,490-foot main, 70-foot hydrant pipe, 12 gates and 5 hydrants.		
Humboldt avenue	10			
Sherman street	10			
Bower street	10			
Itasca street	7	Sewerage—175-foot sewer, 1,140-foot surf. drain, 1 sewer MH, 5 S.D. MH's and 8 CB's.	\$85,486 50	9/17/64
Schubert street	6	Water—1,030-foot main, 10-foot hydrant pipe, 3 gates and 1 hydrant.		
Eldon street	6			
Hutchinson street	7			
Soldiers Field road	4		\$32,734 00	9/24/64
Furbush road	6	Sewerage—240-foot sewer, 245-foot surf. drain, 1 sewer MH, 1 S.D. MH and 2 CB's.		
Thorn street	8	Water—475-foot main.	\$11,531 00	10/15/64

Edson terrace	8	Sewerage—1,200-foot sewer, 1,250-foot surf. drain, 10 sewer MH's, 6 S.D. MH's and 6 CB's.	
Genevieve Way	7	Water—1,090-foot main, 20-foot hydrant pipe, 5 gates and 2 hydrants.	
Ralston road	8		
Brucewood street	6		
Mt. Vernon street	6		
Prospect Circle	8	\$40,806 00	11/19/64
Bower street	10	Sewerage—980-foot sewer, 1,350-foot surf. drain, 7 sewer MH's, 9 S.D. MH's and 19 CB's.	
Humboldt avenue	10		
Elbert street	10		
Hazelwood street	10	Water—3,150-foot main, 190-foot hydrant pipe, 21 gates and 11 hydrants.	
Munroe street	10	\$103,015 00	11/27/64
Humboldt court	10		
Cowing street	6	Sewerage—910-foot sewer, 900-foot surf. drain, 6 MH's, 4 S.D. MH's and 4 CB's.	
Frandaire Drive	6	Water—650-foot main, 25-foot hydrant pipe, 4 gates and 2 hydrants.	12/29/64
Water Works in:			
East Second street	5	6,150-foot main, 25 gates and 14 hydrants.	
East Third street	5		
East Sixth street	5		
Harley street	7		
Middle street	5		
Tuttle street	3		
Woodward street	5	\$97,975 00	4/16/64
Gardner street	6	2,390-foot main, 8 gates and 4 hydrants.	
Gardner street dump	6	\$22,340 00	6/ 4/64
Cataumet street	2		
Delhi street	7		
Delore Circle	6	1,350-foot main, 2 gates and 1 hydrant.	

Contract	District	Description	**Bid Price	Date of Bid Opening
Water Works in:				
Hillis road	8		\$14,822 00	7/16/64
Imbaro road	8			
New Haven street	6			
Vine street	6			
La Grange street	6			
Byron road	6			
Private land	6			
		1,335-foot main, 3 gates and 2 hydrants.		
			\$17,445 00	7/23/64
Alwin street	8			
Dedham Parkway	8			
Stony Brook Reservation	6 & 8			
Private Land	6 & 8			
		4,550-foot main, 60-foot hydrant pipe, 16 gates and 6 hydrants.	\$78,515 00	10/09/64
Miscellaneous Contracts:				
Dalton Street Bridge	10	Bridge and Approaches.	\$345,975 00	3/19/64
Crestwood park	10	Street Lighting System.	\$4,805 90	5/28/64
George Wright Golf Course	6 & 8	Loam and Sodding.	\$12,521 50	9/ 3/64
Burbank street	10			
Ederly road	10			
Hemenway street	10			
Norway street	10			
Stoneholm street	10			
Whipple street	10		\$15,360 00	10/ 1/64
Boston Common	1	Street Lighting System.	\$15,100 00	10/22/64

APPENDIX D

HIGHWAY DIVISION

Table 1 — Work Done by Contract

Table 2 — Street Construction Work

Table 3 — Highway Maintenance Work

Table 4 — Street Lighting

Table 5 — Expenditures for Tidewater Bridges

Table 6 — Waterborne Traffic Through Drawbridge

Table 7 — Expenditures on Inland Bridges

Table 8 — Bridge Maintenance Work

TABLE I
WORK DONE BY CONTRACT IN 1964

ITEM	QUANTITY
Excavation (earth and service)	58,029 cubic yards
Excavation (rock)	719 cubic yards
Bank gravel	71,244 tons
Crushed stone for edgestone	3,522 tons
Base removed (existing)	9,371 square yards
Pavement removed (existing)	55,009 square yards
New straight edgestone	41,527 lineal feet
New circular edgestone	17,409 lineal feet
New edgestone corners 2-foot radius	736 each
Edgestone reset and relocated	89,732 lineal feet
Edgestone hauled	7,346 lineal feet
Macadam base	12,816 tons
OA asphalt	124,369 gallons
Concrete base class "B" for roadway	3,335 cubic yards
Concrete base (backing up sidewalk)	168 cubic yards
Bituminous concrete base (roadway)	31,924 tons
Bituminous concrete base (patching)	108,952 square feet
Bituminous concrete top (roadway)	25,832 tons
Bituminous concrete top (patching)	108,952 square feet
Bituminous concrete base (sidewalk)	91 tons
Bituminous concrete top (sidewalk)	503 tons
Artificial stone sidewalks	1,270,265 square feet
Artificial stone sidewalks (patching)	246,551 square feet
Artificial stone driveways	176,893 square feet
Loam (square yards)	1,318 square yards
Loam (cubic yards)	1,075 cubic yards
Covers	3,022 each
Catch basins or manholes rebuilt	193 each
Catch basins or drop inlets built	158 each
Sign posts (street)	639 each
Parking meters reset	9 each
Stone bounds	47 each
Minor drain	1,556 lineal feet
Bituminous concrete (roadway) area	340,820 square yards

TABLE 2
STREET CONSTRUCTION WORK

The following is a summarized record of the highway improvement work done by the Department in 1964:

Number of streets constructed or reconstructed under Chapter 393, Acts of 1906, as most recently amended 149

STREET CONSTRUCTION WORK

Washington Park Redevelopment	\$160,235 00
Bridge Loan	246,820 00
Sidewalk Loan	96,250 00
Chapter 782	637,119 00
Chapter 822	788,264 00
Public Ways Loan	1,762,434 00
Total	\$3,691,122 00

BRIDGE

Bridge Loan	\$240,820 00
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CHAPTER 90 PROJECTS COMPLETED IN 1964

STREET	LIMITS	CONTRACT AMOUNT
Congress street	Fort Point Channel to beyond Stillings street . . .	\$37,251 00
Street	Dorchester avenue to West First street	96,743 00
Quincy street	Columbia road to Bowdoin street	53,446 50
Savin Hill avenue	Treadway road to Southeast Expressway and Savin Hill court to Old Colony terrace	53,292 50
Broadway and	Washington street to Park square, Isabella street to	
Arlington street	Boylston street	40,714 75
Norfolk street	Babson street to Talbot avenue	198,551 00
		\$479,998 75

TABLE 3

HIGHWAY MAINTENANCE WORK

Bituminous roadway repairs . . .	3,903	square yards
Bituminous sidewalk repairs . . .	4,079	square yards
Bituminous driveway repairs . . .	108	square yards
Granite block roadway repairs . . .	305	square yards
Macadam roadway repairs . . .	1,609	square yards
Stone wall repairs . . .	2,719	cubic feet
Brick sidewalk repairs . . .	1,324	square feet
Artificial stone sidewalk relaid . . .	47,033	square feet
Straight granite edgestone reset . . .	980	lineal feet
Circular granite edgestone reset . . .	74	lineal feet
Corners (2-foot) granite edgestone reset . . .	7	units
Corners (2-foot) granite edgestone set . . .	6	units
Pre-cast concrete curbing reset . . .	140	lineal feet
Chain-link fence repairs . . .	192	lineal feet
Loam spaces replaced . . .	10	square yards
Water boxes reset . . .	26	units
Catch basin remodeled . . .	1	unit
Guttermouths reset . . .	3	units
Police signal box relocated . . .	1	unit
Erected iron posts for barricade . . .	9	units
Excavated for and set gas lamps (North square) . . .	5	units
Bituminous roadway and sidewalk repairs (temporary) . . .	130,127	square yards
Concrete curbing repaired . . .	1,060	feet
Brick sidewalk repaired . . .	215	square yards
Debris removed from streets . . .	139,319	cubic yards
Salt and sand spread . . .	36,277	tons
Snow removal . . .	201,233	cubic yards
Calcium chloride used . . .	20	tons
Catch basins cleaned . . .	3,645	

TABLE 4
STREET LIGHTING

MERCURY VAPOR LIGHTING PROJECTS — 1964

In 1964 orders were issued for the installation of 3,500 lumen lamps and the replacement of old lighting units on the following streets:

Acacia road, West Roxbury	2
Alberta street, West Roxbury	4
Alvarado avenue, Hyde Park	3
Alward road, West Roxbury	4
Andover road, West Roxbury	3
Andria road, Hyde Park	2
Annafran street, Hyde Park and West Roxbury	7
Ansonia road, West Roxbury	7
Arbroth street, Dorchester	3
Arlington street, Hyde Park	2
Atkins street, Brighton	5
Baker place, West Roxbury	3
Baxter street, South Boston	8
Belfort street, Dorchester	5
Belmore terrace, West Roxbury	2
Bellaire road, West Roxbury	6
Bertson avenue, West Roxbury	5
Bird street, Dorchester	10
Birch street, West Roxbury	16
Blackwell street, Dorchester	4
Blake street, Hyde Park	19
Bonair street, West Roxbury	6
Bowditch road, West Roxbury	6
Bowman street, Dorchester	4
Brahms street, West Roxbury	5
Bragdon street, Roxbury	7
Brook Farm road, West Roxbury	26
Brownson terrace, West Roxbury	4
Burard street, West Roxbury	3
Burnham place, South Boston	1
Carroll street, West Roxbury	8
Castleton street, West Roxbury	6
Caton street, Hyde Park	5
Cerdan avenue, West Roxbury	13
Cerina road, West Roxbury	2
Chapin avenue, West Roxbury	7
Chestnut square, West Roxbury	3
Chilcott place, West Roxbury	5
Clare avenue, Hyde Park and West Roxbury	23
Claymont terrace, Dorchester	4
Colby road, West Roxbury	3

Collins street, Hyde Park	4
Columbine street, Dorchester	2
Coniston road, West Roxbury	6
Conrad street, Dorchester	1
Corey terrace, West Roxbury	2
Cowing street, West Roxbury	12
Cromwell road, Hyde Park	2
Crown street, Hyde Park	2
Cypress street, West Roxbury	4
Damon street, Hyde Park	4
Decatur street, East Boston	2
Delford street, West Roxbury	2
De Soto road, West Roxbury	11
Dixfield street, South Boston	2
Dresden street, West Roxbury	3
Dwinell street, West Roxbury	9
Elgin street, West Roxbury	5
Ellet street, Dorchester	3
Elwell road, West Roxbury	2
Eulita terrace, Brighton	2
Evandale terrace, Dorchester	2
Fairlane road, West Roxbury	1
Fairview avenue, Hyde Park	8
Fort Avenue terrace, Roxbury	2
Frankfort street, East Boston	12
Garnet road, West Roxbury	11
Glenley terrace, Brighton	4
Gerald road, Brighton	4
Glenham street, West Roxbury	10
Goff street, Hyde Park	5
Goldsmith street, West Roxbury	4
Gove street, East Boston	12
Gould street, West Roxbury	10
Greycliff road, Brighton	5
Griggs street, Brighton	2
Hackensack court, West Roxbury	2
Hallet-Davis street, Dorchester	3
Hallowell street, Dorchester	7
Haydn street, West Roxbury	5
Hayes road, West Roxbury	5
Hemman street, West Roxbury	6
Highland Park avenue, Roxbury	4
Highland Park street, Roxbury	2
Hobson street, Brighton	7
Horace street, East Boston	10
Hunnewell avenue, Brighton	8
Jacqueline road, West Roxbury	2
Jeffries street, East Boston	5
Kevin road, Dorchester	2
Laban Pratt road, Dorchester	3

Langley road, Brighton	7
Lantern Lane, West Roxbury	2
Ledgedale road, West Roxbury	2
Leniston street, West Roxbury	5
Lennoco road, West Roxbury	2
Lillian street, East Boston	2
Linwood street, Roxbury	6
Liszt street, West Roxbury	5
Logan street, Roxbury	3
Louder's Lane, West Roxbury	14
Lubec street, East Boston	5
Lyall street, West Roxbury	10
Malcolm road, West Roxbury	12
Malta street, Dorchester	4
Massasoit street, Hyde Park	7
Mattakeeset street, Hyde Park	5
Metropolitan avenue, Hyde Park	3
Midvale road, West Roxbury	5
Milton terrace, Hyde Park	2
Moraine street, West Roxbury	12
Monponset street, Hyde Park	5
Morley street, Roxbury	2
Mossdale road, West Roxbury	10
Mt. Hood road, Brighton	4
Mt. Pleasant street, Hyde Park	3
Myrtle street, West Roxbury	9
Nahant street, Dorchester	8
Narragansett street, Dorchester	2
New Haven street, West Roxbury	2
Nikisch avenue, West Roxbury	6
Norfolk street, Roxbury	5
Normandy street, Dorchester	9
Norway park, Hyde Park	5
Ocean street, Dorchester	13
Oldfields road, West Roxbury	5
Paine street, West Roxbury	12
Parkson street, Hyde Park	4
Pasadena road, Dorchester	6
Paulman Circle, West Roxbury	2
Peverell street, Dorchester	4
Pinewood street, Hyde Park	4
Pleasant View street, Hyde Park	10
Pond Circle, West Roxbury	6
Pond View avenue, West Roxbury	5
President road, West Roxbury	3
Queen street, Dorchester	2
Remington street, Dorchester	1
Ridge street, West Roxbury	7
River Street terrace, Hyde Park	3
Roanoke road, Hyde Park	5

Rockledge street, Roxbury	3
Rockview street, West Roxbury	16
Roseglen road, Hyde Park	2
Rosecliff street, West Roxbury	5
Rosemont street, Dorchester	6
Roxana street, Hyde Park	3
Safford street, Brighton	3
Salcombe street, Dorchester	6
Salina road, Dorchester	4
Sherrin street, Hyde Park	10
Soldiers Field place, Brighton	3
South Munroe terrace, Dorchester	6
Southwick street, Dorchester	2
Spring Garden street, Dorchester	7
Sudan street, Dorchester	8
Suncrest road, Hyde Park	3
Supple road, Dorchester	8
Sumner street, Dorchester	12
Swallow street, South Boston	4
Tarleton road, West Roxbury	4
Teragram street, East Boston	4
Thornton street, Roxbury	21
Tiverton road, Dorchester	3
Tolman street, Dorchester	4
Verdun street, Dorchester	4
Violet street, Dorchester	5
Wade street, Brighton	5
Walnut street, Hyde Park	9
Wedgewood road, West Roxbury	2
West Sixth street, South Boston	12
Whitcomb avenue, West Roxbury	19
Whitford street, West Roxbury	17
Welland road, West Roxbury	2
Winslow street, Hyde Park	4
Wilder street, Dorchester	4

In 1964 orders were issued for the installation of 7,000 lumen lamps and the replacement of old lighting units on the following streets:

Allston street, Brighton	2
Alvah Kittredge park, Roxbury	1
Arlington street, Hyde Park	16
Cedar street, Roxbury	23
Clifford street, Roxbury	9
Edgerly road, Roxbury	6
Harvard avenue, Hyde Park	13
Highland street, Hyde Park	27
Neponset avenue, West Roxbury	20
Norway street, Boston	6

Pope's Hill street, Dorchester	4
Reservation road, Hyde Park	22
Standard street, Dorchester	9
Stoneholm street, Roxbury	3
Train street, Dorchester	20
Vermont street, West Roxbury	31
Wallingford road, Brighton	15
Woodrow avenue, Dorchester	28

In 1964 orders were issued for the installation of 11,000 lumen lamps and the replacement of old lighting units on the following streets:

East Cottage street, Dorchester	6
Foster street, Brighton	18
Waldemar avenue, East Boston	21
West Milton street, Hyde Park	21
Wood avenue, Hyde Park	32

In 1964 orders were issued for the installation of 20,000 lumen lamps and the replacement of old lighting units on the following streets:

Arlington street, Boston	12
Bennington street, East Boston	40
Berkeley street, Boston	3
Broadway, Boston	15
Clarendon street, Boston	2
Congress street, Boston	8
Hemenway street, Boston	22

GAS LAMP PROGRAM — 1964

During the year 1964 there were approximately 240 gas lamps maintained by the City of Boston. There were 12 gas lamps installed for the year 1964.

MAINTENANCE OF POLICE SPOTLIGHTS

The maintenance of 97 police spotlights continued for the year 1964. There were no new installations for the year 1964.

TABLE 5
DETAILS OF EXPENDITURES OF TIDEWATER BRIDGES FOR THE YEAR
1964

BRIDGE	Draw- tenders' Salaries	Mechanics' Wages	Material	Repair Bills	Supplies, Utilities, Etc.	Total
Chelsea Street.....	\$60,724 22	\$1,246 90	\$24 33	—	\$713 32	\$62,708 77
Congress Street.....	20,237 06	602 20	9 70	—	878 42	21,727 38
Malden Bridge.....	66,389 53	4,940 40	110 51	—	1,026 45	72,466 89
Andrew P. McArdle....	70,107 87	966 90	428 13	—	1,679 59	73,182 49
Northern Avenue.....	81,842 18	13,285 40	2,378 73	\$931 93	2,814 26	101,252 50
Summer Street (Fort Point Channel).....	23,198 71	3,373 60	168 89	977 78	—	27,718 98
Summer Street (L St.) (Reserved Channel)..	42,854 20	8,100 70	430 46	—	842 63	52,227 99
Totals.....	\$365,353 77	\$32,516 10	\$3,550 75	\$1,909 71	\$7,954 67	\$411,295 00

TABLE 6
WATERBORNE TRAFFIC THROUGH DRAWBRIDGES, 1964

BRIDGE	Steamers	Tugs	Barges	Pleasure Craft	All Others	Total Vessels	Total Cargoes	Total Openings
Chelsea Street	485	4,611	1,362	—	78	6,536	939	3,058
Congress Street	—	—	—	—	—	—	—	—
Andrew P. McArdle	686	6,040	1,401	2	386	8,515	901	3,606
Malden	42	2,243	1,218	2,007	386	5,896	742	3,795
Northern Avenue	—	439	73	4	381	897	148	533
Summer Street (Fort Point Channel)	—	—	—	—	—	—	—	—
Summer Street (Reserved Channel) (L Street)	—	2	2	164	1	169	—	152
Totals	1,213	13,335	4,056	2,177	1,232	22,013	2,730	11,144

TABLE 7
EXPENDITURES ON INLAND BRIDGES
IN 1964

LABOR	MATERIALS	TOTAL
\$43,978 80	\$4,815 81	\$48,749 61

The above figures represent total cost of maintenance repairs on inland bridges, namely footbridges over railroads, etc., using our department yard employees, materials and supplies.

TABLE 8
WORK DONE BY BRIDGE SECTION CITY FORCES
BRIDGE MAINTENANCE WORK IN 1964

Central Avenue	— The stringers and decking of $\frac{1}{2}$ the roadway were renewed.
Fairmount Avenue	— Made major repairs to the sidewalk and roadway wearing surfaces.
L Street	— Over Reserved Channel (Summer Street): replaced broken shive wheel and supporting timbers.
Malden	— Did considerable welding of roadway grill work.
Northern Avenue	— Replaced large area of worn asphalt planking with 2 x 8 hard pine planking.
Summer Street	— Over Fort Point Channel: replaced worn decking and sheathing on $\frac{1}{2}$ downstream and $\frac{1}{2}$ upstream draw leafs.

Replaced worn roadway and sidewalk planking on the various bridges throughout the city.

APPENDIX E

SANITARY DIVISION

Table 1—Payments to Refuse Collection Contractors

Table 2—Payments for Rental of Dumps

Table 3—Removal of Garbage

Table 4—Payments for Removal of Incinerator Residue

Table 5—Payments for Removal of Rejected Material

Table 6—Payments for Removal of Derelict Automobiles

Table 7—Expenditures

Table 8—Operating Costs

Table 9—Unit Costs

TABLE 1

PAYMENTS TO REFUSE COLLECTION CONTRACTORS, FIRST THREE MONTHS — JANUARY, FEBRUARY, MARCH

DISTRICT	Contractor	Total 3 Months, Payments*
1A Charlestown.....	Jeffries Disposal Corporation.....	\$12,842 80
1B Downtown.....	James A. Freaney, Inc.....	42,311 64
1C Uptown.....	United Contracting Company, Inc., of Boston	34,883 57
2 Jamaica Plain.....	Ryan, Coady Company.....	40,168 74
3 Dorchester (N).....	Dooley Bros., Inc.....	71,209 35
4 Brighton.....	J. F. Ryan, Inc.....	59,822 60
5 South Boston.....	Joseph Amara & Sons, Inc.....	21,297 12
6 West Roxbury.....	F. J. Cavaliere & Co.....	51,748 56
7 Dorchester (S).....	Coleman Bros., Corporation	73,562 83
8 Hyde Park.....	Howard Disposal Corporation.....	24,863 35
9 East Boston.....	Jeffries Disposal Corporation.....	25,179 80
10A Parker Hill-Fens.....	Dooley Bros., Inc.....	29,847 75
10B Roxbury.....	United Contracting Company, Inc., of Boston.....	46,603 90
Total 3 months.....	.....	\$534,342 01

* Including extra labor costs.

PAYMENTS TO REFUSE COLLECTION CONTRACTORS, LAST NINE MONTHS — APRIL 1 TO DECEMBER 31, INCLUSIVE

DISTRICT	Contractor	Total 9 Months, Payments
1A Charlestown.....	Banco Corporation.....	\$49,983 00
1B Boston Proper.....	James A. Freaney, Inc.....	240,615 40
Jamaica Plain.....	Joseph Amara & Sons, Inc.....	144,960 40
3 Dorchester (North).....	Jeffries Disposal Corporation.....	241,473 80
4 Brighton.....	J. F. Ryan, Inc.....	199,522 20
5 South Boston.....	United Contracting Company, Inc., of Boston.....	90,607 20
6 West Roxbury.....	M. & C. Corporation.....	191,160 00
7 Dorchester (South).....	United Contracting Company, Inc., of Boston.....	252,338 20
8 Hyde Park.....	Jeffries Disposal Corporation.....	116,979 00
9 East Boston.....	Banco Corporation.....	95,535 20
10 Roxbury.....	Dooley Bros., Inc.....	180,677 60
Last 9 months total.....	.....	\$1,803,852 00
First 3 months total.....	.....	\$534,342 01
Collection grand total.....	.....	\$2,338,194 01

TABLE 2 — PAYMENTS FOR RENTAL OF DUMPS

	3 MONTHS	9 MONTHS
Saugus.....		
Emergency Dumping.....	\$6,000	\$22,500
		\$28,500
		1,875
Total.....		\$30,375

M. DeMatteo Construction Company.....

TABLE 3 — REMOVAL OF GARBAGE

	3 MONTHS	9 MONTHS
Transfer Station		
Victory Road.....	\$3,250	\$9,850
Gardner Street.....	\$3,250	\$9,850
		\$13,100
Total.....		\$26,200

Kristoff Brothers.....

Kennedy Brothers.....

TABLE 4 — PAYMENTS FOR REMOVAL OF INCINERATOR RESIDUE

Manning Motor Trans., Inc.....	\$22,790
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TABLE 5 — PAYMENTS FOR REMOVAL OF REJECTED MATERIAL

James A. Freaney, Inc.....	\$4,980
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TABLE 6 — REMOVAL OF DERELICT AUTOMOBILES

J & L Iron Company.....	\$11,854
Grand total.....	\$2,434,393

TABLE 7
SUMMARY OF PAYMENT

EXPENDITURES IN 1964:

Payments to refuse collection contractors .	\$2,338,194 00	
Payments for rental of Saugus dump . . .	30,375 00	
Payments for removal of garbage . . .	26,200 00	
Payments for disposal of rejected material .	4,980 00	
Payments for removal of derelict automobiles	11,854 00	
Payments for removal of incinerator residue	22,790 00	
<hr/>		
Total collection and disposal contract payments		\$2,434,393 00
Payroll totals were as follows:		
Administrative and general services . . .	\$65,059 00	
Collection section	397,767 00	
Disposal section	558,490 00	
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Total payrolls	\$1,021,316 00	
Overtime payrolls	140,856 00	
Total Sanitary Division payrolls		1,162,172 00
Incinerator operation and maintenance costs (other than labor)		142,500 00
Payments on other contracts		21,659 00
Supplies and materials (other than incinerator)		33,442 00
Miscellaneous (advertising, rental of equipment, etc.) . .		12,229 00
<hr/>		
Grand total expenditures		\$3,806,395 00

TABLE 8
1964 OPERATING COSTS—SANITARY DIVISION

ADMINISTRATIVE SECTION		\$35,936 00
COLLECTION SECTION:		
Collection contracts	\$2,338,194 00	
Supervision	149,788 00	
Inspectors telephone calls	137 00	
Advertisements in newspapers	3,200 00	
Supplies and materials	3,180 00	
Rejected refuse	4,980 00	
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	\$2,499,479 00	
Alley cleaning	116,180 00	
Litter baskets	60,426 00	
Market cleaning	21,735 00	
Abandoned cars	19,450 00	
Education and enforcement	111,380 00	
<hr/>		
Collection Section total		2,828,650 00
DISPOSAL SECTION		
Incinerator	\$803,361 00	
Gardner street dump	81,873 00	
Garbage disposal	26,200 00	
Saugus dump	30,375 00	
<hr/>		
Disposal Section total		941,809 00
<hr/>		
Grand total		\$3,806,395 00

TABLE 9
1964 UNIT COSTS

(1)	Administrative		
	\$35,936		Less than 1 percent of total cost
(2)	Collection Contracts		
	\$2,499,479		
	236,341 tons a year	\$10 58	ton
(3)	Alley Cleaning		
	\$116,180		
	5,200 tons a year	\$22 33	ton
(4)	Litter Baskets		
	\$60,426		
	936 baskets	\$64 55	basket
	155,000 servicings	\$0 39	service
(5)	Market Cleaning		
	\$21,735		
	2,060 tons a year	\$10 55	ton
(6)	Abandoned Vehicles		
	\$19,450		
	2,834 cars	\$6 86	car
(7)	Education and Enforcement		
	\$111,380		Less than 3 percent of total cost
(8)	Incinerator		
	\$803,361		
	149,794 tons a year	\$5 36	ton
(9)	Gardner Street Dump		
	\$81,873		
	69,847 tons a year	\$1 17	ton
	338,824 cubic yards a year	\$0 24	cubic yard
(10)	Saugus Dump Rental		
	\$30,375		
	13,100 tons a year	\$2 32	ton
	65,493 cubic yards a year	\$0 46	cubic yard
(11)	Garbage Disposal		
	\$26,200		
	8,806 tons a year	\$2 98	ton
	26,418 cubic yards a year	\$0 99	cubic yard

APPENDIX F

SEWER DIVISION

Table 1—Expenditures Non-Revenue Sewerage Works

Table 2—Summary of Sewer Construction

Table 3—Five-Year Summary

Table 4—Length of Sewers

Table 5—Catch-Basin Statistics

Table 6—Maintenance Statistics

Table 7—Calf Pasture Pumping Station Statistics

TABLE 1

SEWER DIVISION, P.W.D.

SEWERAGE WORKS NON-REVENUE—EXPENDITURES
FOR 1964

Office and engineers' salaries	\$167,360 81
Land damages	450 00
Miscellaneous bills	17,991 84
Service orders	10,585 90
Contracts	852,628 67
Total expenditures	\$1,049,017 22

TABLE 2

SUMMARY OF SEWER CONSTRUCTION

DISTRICT	Built by City Either by Contract or Day Labor	Built by Private Parties	Shared by City and Government	Total Lengths Built	
	<i>Linear Feet</i>	<i>Linear Feet</i>	<i>Linear Feet</i>	<i>Linear Feet</i>	<i>Miles</i>
City Proper.....	622.00	456.00	.....	1,118.00	0.215
Roxbury.....	3,798.40	.....	.....	3,798.40	0.720
South Boston.....	.....	.....	.....	.....	.....
East Boston.....	12.00	.....	.....	12.00	0.002
Charlestown.....	.....	.....	.....	.....	.....
Brighton.....	1,489.40	466.40	.....	1,955.80	0.372
West Roxbury.....	23,740.00	624.40	.....	24,364.40	4.622
Dorchester.....	5,948.60	846.40	.....	6,795.00	1.287
Hyde Park.....	4,163.10	356.00	.....	4,519.10	0.857
Totals.....	39,813.50	2,749.20	.....	42,562.70	8.075

TABLE 3

Summary of Sewer Construction for Five Years Previous to January 1, 1965

	1960	1961	1962	1963	1964
	<i>Linear Feet</i>	<i>Linear Feet</i>	<i>Linear Feet</i>	<i>Linear Feet</i>	<i>Linear Feet</i>
Built by city—by contract or day labor.....	6,408	13,694.37	26,557.27	14,206.85	39,813.50
Built by private parties.....	735	2,876.85	3,937.56	2,428.97	2,749.20
Shared by city and government .....	.....	7,904.30	.....	2,430.00	.....
Totals.....	7,143	24,475.52	30,494.83	19,056.82	42,562 70

TABLE 4
TOTAL LENGTH OF SEWERS

	Miles
Common sewers and surface drains built previous to January 1, 1964	1,347.160
Common sewers and surface drains built between January 1 and December 31, 1964	8.075
	<hr/>
Common sewers and surface drains built ending December 31, 1964	1,355.235
Abandoned sewers ending December 31, 1964	0.630
	<hr/>
	1,354.605
City of Boston intercepting sewers connecting with Metropolitan sewers to December 31, 1964	0.0
City of Boston main drainage intercepting sewers to December 1, 1964	0.0
	<hr/>
Grand total	1,354.605

TABLE 5
CATCH BASINS IN CHARGE OF SEWER DIVISION

DISTRICTS	Catch Basins for Twelve Months Ending December 31, 1964			Total for Whole City in Charge of Sewer Division	
	Number Built or Rebuilt	Number Abandoned or Removed	Net Increase	Previous Report thru December 31, 1963	Grand Total to December 31, 1964
City Proper	5	0	5	3,798	3,803
Roxbury	19	0	19	3,592	3,611
South Boston	0	0	0	1,522	1,522
East Boston	0	0	0	1,237	1,237
Charlestown	0	0	0	871	871
Brighton	2	0	2	2,156	2,158
West Roxbury	66	0	66	4,790	4,856
Dorchester	4	0	4	5,804	5,808
Hyde Park	15	0	15	1,581	1,596
Totals	111	0	111	25,351	25,462

TABLE 6
MAINTENANCE STATISTICS

	1964	1963	1962
Complaints received and investigated.....	6,480	3,235	2,891
Catch basins and manholes freed and/or repaired.....	308	1,042	2,403
Sewers repaired.....	29	34	36
Sewers cleaned (miles).....	1.9	2.13	13.4
House drains constructed/repaired.....	700	499	445
Municipal liens reported to Collector.....	5,461	5,202	4,903

TABLE 7
CALF PASTURE STATISTICS

	1964	1963	1962
Sewage pumped.....	42,765 MG	43,529 MG	63,276 MG
Sewage pumped average flow.....	117.16 MG	119.26 MG	173 MG
Pumping cost per MG.....	\$6.47	\$5.28	\$2.93

TABLE 2
SEWERAGE WORKS CONTRACTS, 1964

LOCATION	Started	Finished	Contractor	Length in Feet	Character	Amount Expended in 1964
Broadway, Boston.....	9-23-1963	4-3-1964	E. Carriere	69.00	12" pipe sewer.....	\$7,424 09
Moore street, East Boston.....						
Beaver street, Hyde Park.....	11-04-1963	5-05-1964	A. Musto	330.50	10" pipe sewer.....	10,390 20
Stoughton street, Dorchester.....				504.20	10" pipe surface drain.....	
				98.50	10" minor drain.....	
					3 manholes	
Beechmont street, Hyde Park.....	11-26-1963	1-23-1964	R. A. Buccella & Sons	106.00	10" minor drain.....	269 88
Edgeway terrace, Hyde Park.....						
Crestwood park, Roxbury.....	3-16-1964	5-19-1964	Mystic Construction Company Inc.	1,029.61	10" pipe sewer.....	38,890 53
Humboldt avenue, Roxbury.....				513.53	10" pipe surface drain.....	
Townsend street, Roxbury.....				496.34	12" pipe surface drain.....	
					13 manholes	
					6 catch basins	
				70.00	10" minor drains	
St. Alphonsus street, Roxbury.....	4-02-1964	4-24-1964	R. A. Buccella & Sons	474.90	10" pipe sewer.....	14,873 99
Tremont street, Roxbury.....						
				74.30	12" pipe surface drain	
				77.80	15" surface drain	
				482.90	24" pipe surface drain	
					6 manholes	
					2 catch basins	
				27.00	10" minor drain	
Hancock street, Dorchester.....	4-14-1964	5-22-1964	R. A. Buccella & Sons	627.80	12" pipe sewer.....	78,854 40
Pleasant street, Dorchester.....				67.40	10" pipe sewer	
Savin Hill avenue, Dorchester.....				687.70	12" pipe surface drain..	
				1,599.70	18" and 12" pipe surface drain.	
				543.00	24" and 12" pipe surface drain	
				372.00	6" minor drain	
				126.00	10" minor drain	
					19 manholes	

SEWERAGE WORKS CONTRACTS, 1964—Continued

LOCATION	Started	Finished	Contractor	Length in Feet	Character	Amount Expended in 1964
Dalton street, Boston.....	5-12-1964	1-08-1965	Northgate Construction Company	30.00 10.00 285.00 280.00	12" pipe sewer..... 15" pipe sewer..... 54" pipe sewer..... 60" pipe sewer..... 8 manholes..... 5 catch basins.....	\$359,673 00
Chestnut Hill avenue, Brighton..... Western avenue, Brighton..... Wiltshire road, Brighton.....	5-22-1964	6-22-1964	Charles & Louis	1,019.40 470.00 27.00	10" pipe sewer..... 12" pipe surface drain..... 10" minor drain..... 9 manholes..... 2 catch basins.....	29,154 45
Blue Ledge Drive, West Roxbury... Blue Ledge terrace, West Roxbury... Highest road, West Roxbury... Highest terrace, West Roxbury... June street, West Roxbury.....	6-04-1964	8-28-1964	Z & S Construction Company	4,823.25 463.85 2,886.69 433.75 1,156.89 674.70 414.00	10" pipe sewer..... 12" and 10" pipe sewer..... 18" and 10" pipe surface drain..... 24" and 12" pipe surface drain..... 15" and 10" pipe surface drain..... 10" pipe surface drain..... 10" minor drain..... 45 manholes..... 34 catch basins.....	159,939 91
Woodley avenue, West Roxbury.... Blueview Circle, West Roxbury.... Blueview road, West Roxbury.... Cedercrest Circle, West Roxbury.... Cedercrest road, West Roxbury....	6-30-1964	11-14-1964	Charles & Louis	1,874.18 64.45 1,309.28 551.40 147.00	10" pipe sewer..... 18" pipe surface drain..... 10" pipe surface drain..... 21" pipe surface drain..... 10" minor drain..... 22 manholes..... 11 catch basins.....	60,947 30
Boylston street, West Roxbury.....	8-18-1964	10-14-1964	R. A. Buccella & Sons	1,539.80 1,225.00 535.00	15" and 12" pipe sewer..... 24" pipe surface drain..... 10" minor drain..... 10 manholes..... 1 catch basin.....	76,946 85

Readville street, Hyde Park..... Knight street, Hyde Park..... Private land, Hyde Park.....	8-26-1964	11-10-1964	Susi & DeSantis	3,169.20 587.00	48" and 12" pipe surface drain. 10" and 6" minor drain 15 manholes 11 catch basins 2 drop inlets	76,481.25
Ashland street, Dorchester..... Craunmet street, West Roxbury..... Dedham street, Hyde Park..... Delore Circle, West Roxbury..... Evandale terrace, Dorchester..... Fernwood road, West Roxbury..... Fillis road, Hyde Park..... New Haven street, West Roxbury..... Yuletide street, Dorchester.....	9-02-1964	10-23-1964	Charles & Louis	1,530.80 1,468.10	10" pipe sewer..... 10" pipe surface drain 19 manholes 13 catch basins	45,730.60
Manning street, West Roxbury..... Pleasant Valley Circle, West Roxbury	9-15-1964	11-07-1964	Rosindale Construction	964.30 1,150.70 75.00	10" pipe sewer..... 10" pipe surface drain 10" minor drain 13 manholes 4 catch basins	24,387.31
Itasca street, Dorchester..... Schubert street, West Roxbury.....	10-19-1964	12-07-1964	R. A. Buccella & Sons	174.40 179.00 966.70 180.50	10" pipe sewer..... 10" pipe surface drain 12" pipe surface drain 10" minor drain 6 manholes 8 catch basins	\$22,447.70
First Village Outlet, West Roxbury.. George Wright Golf Course and Pri- vate land	10-20-1964	11-16-1964	R. A. Buccella & Sons	278.00 244.22	12" pipe sewer..... 36" pipe surface drain 3 manholes	18,232.74
Charlene street, Roxbury..... Laurel street, Roxbury..... Humboldt avenue, Roxbury..... Sherman street, Roxbury..... Bower street, Roxbury.....	10-20-1964	Unfinished	Z. & S. Construction Company	313.00 336.00 220.00	12" pipe sewer..... 24" pipe surface drain 10" minor drain 8 manholes 11 catch basins	21,951.50
Furbush road, West Roxbury.....	11-16-1964	11-27-1964	Charles & Lewis	238.50 243.50 24.00	10" pipe sewer..... 10" pipe surface drain 10" minor drain 2 manholes 2 catch basins	4,918.15

SEWERAGE WORKS CONTRACTS, 1964—Concluded

LOCATION	Started	Finished	Contractor	Length in Feet	Character	Amount Expended in 1964
Maple street, West Roxbury.....	11-24-1964	Unfinished	R. A. Bucella & Sons	1,880.70 270.00	18" and 10" pipe surface drain... 10" minor drain 7 manholes 1 catch basin	\$37,940.00
Tennis road, Dorchester.....	6-15-1964	7-15-1964	G. M. Real Estate Company	136.40 101.50 30.00	10" pipe sewer. 10" pipe surface drain 10" minor drain 2 manholes 2 catch basins	
Hutcheson street, Dorchester.....	9-28-1964	9-30-1964	McCarthy	125.00	10" pipe sewer 1 manhole	
Prospect Circle, Hyde Park.....	11-23-1964	12-03-1964	DeSantos & Pulgini, Inc.	178.00 178.00	10" pipe sewer 10" pipe surface drain 2 manholes 2 catch basins	
Eldon street, West Roxbury.....	10-26-1964	10-31-1964	Alexander Homes	26.00 72.70 71.70	10" minor drain 10" pipe sewer 10" pipe surface drain 1 manhole	
Soldiers Field road, Brighton.....	10-13-1964	10-23-1964	Bradley Real Estate Company	233.20 233.20	10" pipe sewer 10" pipe surface drain 3 manholes	
Cambridge street, Boston.....	9-24-1964	10-07-1964	Beacon Construction Company	117.00	15" pipe sewer (rebuild) 2 manholes	
Thorne street, Dorchester.....	10-13-1964	10-27-1964	E. Carriere	239.10 244.40	10" pipe sewer 10" pipe surface drain 2 manholes	
Dalton street, Boston.....	11-28-1963	1-29-1964	Perini Corporation	169.00 170.00	60" concrete pipe interceptor 43 1/2" x 68" elliptical conc. pipe	
Stearns road, West Roxbury.....	1-20-1964	4-28-1964	Finn McCarthy	240.00 240.00 24.00	10" pipe sewer 10" pipe surface drain 10" minor drain 1 manhole 2 catch basins	

APPENDIX G

WATER DIVISION

Table 1—Receipts and Expenditures

Table 2—Meters and Connection Pieces

Table 3—Meters Junked

Table 4—Meters Repaired in Shop

Table 5—Meters Repaired in Service

Table 6—Length of Waterpipes

Table 7—Number of Hydrants

Table 8—Cost of Replacement of Mains

Table 9—Cost of Extensions

TABLE 1
1964 WATER DIVISION
RECEIPTS AND EXPENDITURES

Appropriation carried forward from 1963		\$184,934 28
Receipts:		
Water Rates and Service	\$10,082,514 40	
Tax Titles, Water	118,656 29	
	<hr/>	10,201,170 69
		<hr/>
		\$10,386,104 97
Less 1963 Deficit		352,337 82
		<hr/>
		\$10,033,767 15
1964 Expenditures:		
Water Division	\$2,208,154 78	
Department Equipment	173,520 62	
Pensions and Annuities	294,600 02	
Pensions, State-Boston	78,636 49	
Collection Division	196,917 00	
Data Processing	80,499 00	
Public Works — Maintenance . .	214,023 00	
Public Works — Administration and Engineering	86,466 00	
Public Works — Highway	560,028 00	
Metropolitan District Assessment . .	5,315,843 64	
	<hr/>	9,208,688 55
		<hr/>
		\$825,078 60
Water Division carry forward to 1965	\$151,341 03	
Equipment carry forward to 1965 . .	94,496 81	
	<hr/>	245,837 84
		<hr/>
Surplus		\$579,240 76

TABLE 2
METERS AND CONNECTION PIECES

Number of meters in use December 31, 1964 on old services in use before January 1, 1908	50,899
Number of meters in use December 31, 1964 on new services	33,746
Total meters (old and new services) in use December 31, 1964	84,645
Connecting pieces in service December 31, 1964	5,851
Total meters and connection pieces in service December 31, 1964	90,476
Meters on old services December 31, 1964	55,579
Meters permanently discontinued during 1964	—1,171
	54,408
Meters applied on old services during 1964	+20
Total meters on old services December 31, 1964	54,428
Number of meters in use December 31, 1964 on services installed since 1907	33,029
Balance of meters removed due to vacancy since 1964	—40
	32,989
Balance of meters replaced with connection pieces during 1964	3,097
Meters applied on services (new) in 1964	37,086
Total meters on new services December 31, 1964	37,086
Number of connection pieces in use December 31, 1963	1,015
Balance of meters replaced with connection pieces during 1964	2,064
	3,079
Total connection pieces in service December 31, 1964	3,079
	90,476

TABLE 3
METERS JUNKED IN 1964

MAKE	DIAMETER IN INCHES							Total
	$\frac{1}{8}$	$\frac{1}{4}$	1	1½	2	3	4	
Hersey.....	2,500	.....	.....	.....	.....	.....	.....	2,500
Watch Dog.....	228	26	10	.....	.....	.....	.....	264
Total.....	2,728	26	10	.....	.....	.....	.....	2,764

TABLE 4
METERS REPAIRED IN SHOP, 1964

MAKE	DIAMETER IN INCHES								Total
	$\frac{1}{8}$	$\frac{1}{4}$	1	1½	2	3	4	6	
Hersey.....	1,560	140	75	44	52	7	5	2	1,885

TABLE 5
METERS REPAIRED IN SERVICE

	Defaced Broken Clocks	Spindle Leaks	Coupling Leaks	New Trains	Broken Gears	Exami- nation	Repair Train	Total
January.....	.....	9	2	.....	.....	.....	.....	11
February.....	1	14	7	2	.....	.....	.....	24
March.....	2	14	2	2	.....	.....	.....	20
April.....	3	15	3	.....	.....	.....	.....	21
May.....	5	18	9	3	.....	.....	.....	35
June.....	4	20	4	6	.....	.....	.....	34
July.....	1	16	2	12	.....	.....	.....	31
August.....	.....	13	2	2	.....	.....	.....	17
September.....	2	23	6	.....	.....	.....	1	32
October.....	3	40	3	.....	1	.....	.....	47
November.....	.....	27	.....	.....	.....	.....	.....	27
December.....	7	.....	7	.....	4	.....	4	22
Totals.....	28	209	47	27	5	.....	5	321

TABLE 6
Showing Length of Water Pipes and Connections Owned and Operated by Public Works Department, Water Division,
Water Services, and Number of Valves in Same, December 31, 1964

	DIAMETER OF PIPE IN INCHES															Total
	48	42	40	36	30	24	20	16	12	10	8	6	4	3	2	
Length owned and operated December 31, 1963	56,285	16,191	8,809	30,238	75,205	89,675	108,193	381,010	1,872,924	445,617	1,434,834	896,611	63,156	11,345	6,311	5,496,404
Gate valves in same.....	26	4	5	31	50	78	72	790	5,290	1,565	5,159	3,063	561	16	18	16,728
Air valves in same.	60	5	10	35	113	85	53	105	65	1	5	.....	.....	1	.....	538
Blowoffs in same.	11	5	6	11	33	37	52	77	166	40	203	141	.....	9	.....	791
High pressure fire service.....	.....	.....	.....	.....	.....	.....	20,140	46,433	31,756	.....	.....	.....	.....	.....	.....	98,329
Length laid and relaid during 1964.....	.....	.....	.....	.....	.....	.....	.....	.....	8,594	.....	18,218	663	12	.....	.....	27,487
Gate valves in same. ....	.....	.....	.....	.....	.....	.....	.....	.....	22	.....	36	6	1	.....	.....	65
Air valves in same.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Blowoffs in same.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Length abandoned in 1964.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	324	7,173	.....	.....	.....	7,497
Gates abandoned in 1964.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	12	.....	.....	.....	14
Air valves abandoned in 1964.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Blowoffs abandoned in 1964.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Length owned and operated, high pressure fire service, Decem- ber 31, 1964.....	56,285	16,191	8,809	30,238	75,205	89,675	108,193	381,010	1,881,518	445,617	1,452,728	890,101	63,168	11,345	6,311	5,516,394
Gate valves in same.....	26	4	5	31	50	78	72	790	5,310	1,565	5,195	3,057	562	16	18	16,779
Air valves in same.....	60	5	10	35	113	85	53	105	65	1	5	.....	.....	1	.....	538
Blowoffs in same.....	11	5	6	11	33	37	52	77	166	40	203	141	.....	9	.....	791
High pressure fire service.....	.....	.....	.....	.....	.....	.....	20,140	46,433	31,756	.....	.....	.....	.....	.....	.....	98,329

1,044.71 miles in distribution system, including high pressure fire service.
18.62 miles in high pressure fire service.

TABLE 8
COST OF REPLACEMENT OF MAIN PIPE, 1964

AREA	Dist- rict	STREET	SIZE (INCHES)	LENGTH (FEET)	CONTRACT Cost	ENGINEERING AND INSPECTION Costs	Total Cost	CONTRACTOR
1	10	Charlame street.....	6 W 8	797	.....	.....	.....	.....
1	10	Charlame street.....	8 W 8	20	\$7,228 60	\$722 86	\$7,951 46	Z & S Construction Co., Inc.
2	1	Gardner street.....	6 W 8	193	1,544 00	463 20	2,007 20	A. Singarella & Sons, Inc.
3	5	K street.....	10 W 10	5	100 00	30 00	130 00	City Forces
3	3	Tuttle street.....	6 W 8	1,169	16,923 40	1,692 34	18,615 74	R. A. Buccella & Sons, Inc.
3	3	Harley street.....	6 W 8	664	10,002 05	1,000 21	11,002 26	R. A. Buccella & Sons, Inc.
3	5	East Third street.....	6 W 8	1,142	.....	.....	.....	R. A. Buccella & Sons, Inc.
3	5	East Third street.....	6 W 12	5	17,947 80	1,794 78	19,742 58	R. A. Buccella & Sons, Inc.
3	5	Woodward street.....	6 W 8	627	8,859 75	885 98	9,745 73	R. A. Buccella & Sons, Inc.
3	5	Middle street.....	6 W 8	836	12,368 20	1,236 82	13,605 02	R. A. Buccella & Sons, Inc.
3	5	East Second street.....	6 W 8	1,134	.....	.....	.....	R. A. Buccella & Sons, Inc.
3	5	East Second street.....	6 W 12	10	17,999 60	1,799 96	19,799 56	R. A. Buccella & Sons, Inc.
3	5	East Sixth street.....	6 W 12	650	12,914 32	1,291 43	14,205 75	R. A. Buccella & Sons, Inc.
		Total.....	.....	7,252	\$105,887 72	\$73,917 58	\$116,805 30	

TABLE 9
COST OF EXTENSION OF MAIN PIPE, 1964

Area	District	Street	Size (Inches)	Length (Feet)	Contract Cost	Engineering and Inspection Costs	Total Cost	Contractor
1	1	Boylston street.....	8	20	—	—	—	City Forces
1	10	Crestwood park.....	8	510	\$6,941 18	\$347 09	\$7,288 27	Mystic Contracting Co., Inc.
1	9	Lawn and Palermo avenues.....	8	764	8,792 90	439 65	9,232 55	Roslindale Contracting Co.
1	10	Charlame street.....	8	340	4,514 50	425 73	4,940 23	Z & S Construction Co., Inc.
2	6	Stearns road.....	8	219	3,179 58	158 98	3,338 56	Z & S Construction Co., Inc.
2	6	Blue Ledge terrace.....	8	351	3,282 10	164 10	3,446 20	{C. Justino Co. { Z & S Construction Co., Inc.
2	6	Blue Ledge Drive.....	12	842	—	—	—	
2	6	Blue Ledge Drive.....	8	2,408	39,841 85	1,992 09	41,833 94	{C. Justino Co. { Z & S Construction Co., Inc.
2	6	June street.....	12	423	5,574 60	278 73	5,853 33	{C. Justino Co. { Z & S Construction Co., Inc.
2	6	Highcrest terrace.....	8	436	3,907 30	195 37	4,102 67	{C. Justino Co. { Z & S Construction Co., Inc.
2	6	Highcrest road.....	8	1,183	14,110 50	705 53	14,816 03	{C. Justino Co. { Z & S Construction Co., Inc.
2	6	Cedarcrest Circle.....	8	546	6,643 40	332 17	6,975 57	Charles & Louis Construction Co., Inc.
2	6	Cedarcrest road.....	12	404	7,497 30	374 87	7,872 17	Charles & Louis Construction Co., Inc.
2	6	Blueview road.....	12	551	10,790 20	539 51	11,329 71	Charles & Louis Construction Co., Inc.
2	6	Vine street, etc.....	12	1,384	17,364 80	868 24	18,233 04	E. Susi & Williams Corp.
2	8	Imbaro road.....	6	155	1,240 00	62 00	1,302 00	R. A. Buccella & Sons, Inc.
2	2	Cataumet street.....	8	226	2,270 50	113 53	2,384 03	R. A. Buccella & Sons, Inc.

2	8	Hillis road.....	6	240	2,422 10	121 11	2,543 21	R. A. Buccella & Sons, Inc.
2	6	Delore Circle.....	6	160	1,440 40	72 02	1,512 42	R. A. Buccella & Sons, Inc.
2	6	New Haven street.....	8	277	2,780 50	139 03	2,919 53	R. A. Buccella & Sons, Inc.
2	1	Gardner Street Dump.....	8	2,151	—	—	—	
2	1	Gardner Street Dump.....	4	11	19,270 80	963 54	20,234 34	A. Singarella & Sons, Inc.
2	2	Manning street.....	8	391	4,711 36	235 57	4,946 93	Rosindale Contracting Co.
2	6	Beechmont Footway.....	12	457	—	368 00	368 00	James Paul Construction Co. (Paving Contract).
2	6	Eldon street.....	8	101	1,038 25	51 91	1,090 16	R. A. Buccella & Sons, Inc.
2	8	Thorn street.....	8	250	2,521 00	126 05	2,647 05	Charles & Louis Construction Co., Inc.
2	6	Pleasant Valley Circle.....	8	547	6,615 00	330 75	6,945 75	Rosindale Contracting Co.
2	4	Soldiers Field road.....	8	698	6,657 80	332 89	6,990 69	R. A. Buccella & Sons, Inc.
2	6	Schubert street.....	8	183	1,943 35	97 17	2,040 52	R. A. Buccella & Sons, Inc.
2	6	Furbush road.....	8	257	3,331 05	166 55	3,497 60	Charles & Louis Construction Co., Inc.
2	6	Blueview Circle.....	8	339	7,732 40	386 62	8,119 02	Charles & Louis Construction Co., Inc.
2	8	Alwin street.....	12	161	2,398 30	119 92	2,518 22	C. Justino Co.
2	8	Dedham Parkway.....	12	973	21,936 50	1,096 83	23,033 33	C. Justino Co.
2	8	Stony Brook Reservation.....	12	2,684	52,976 00	2,648 80	55,624 80	C. Justino Co.
2	6	Cedarcrest Lane.....	12	334	5,418 80	270 94	5,689 74	C. Justino Co.
2	6	Cedarcrest road.....	12	381	6,532 50	326 62	6,859 12	C. Justino Co.
3	7	Delhi street.....	8	297	3,572 70	178 63	3,751 33	R. A. Buccella & Sons, Inc.
3	3	Hutchinson street.....	6	108	1,271 10	63 56	1,334 66	R. A. Buccella & Sons, Inc.
3	7	Tennis road.....	8	130	800 00	40 00	840 00	J. Botti Co. (Agreement)
1	10	New Laurel street.....	8	141	1,318 50	65 92	1,384 42	Z & S Construction Co., Inc.
		Totals.....		22,033	\$292,639 12	\$15,200 02	\$307,839 14	

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