

ANNUAL REPORT
of the
DEPARTMENT OF PARKS
BOROUGH OF QUEENS
CITY OF NEW YORK
For the Year 1926

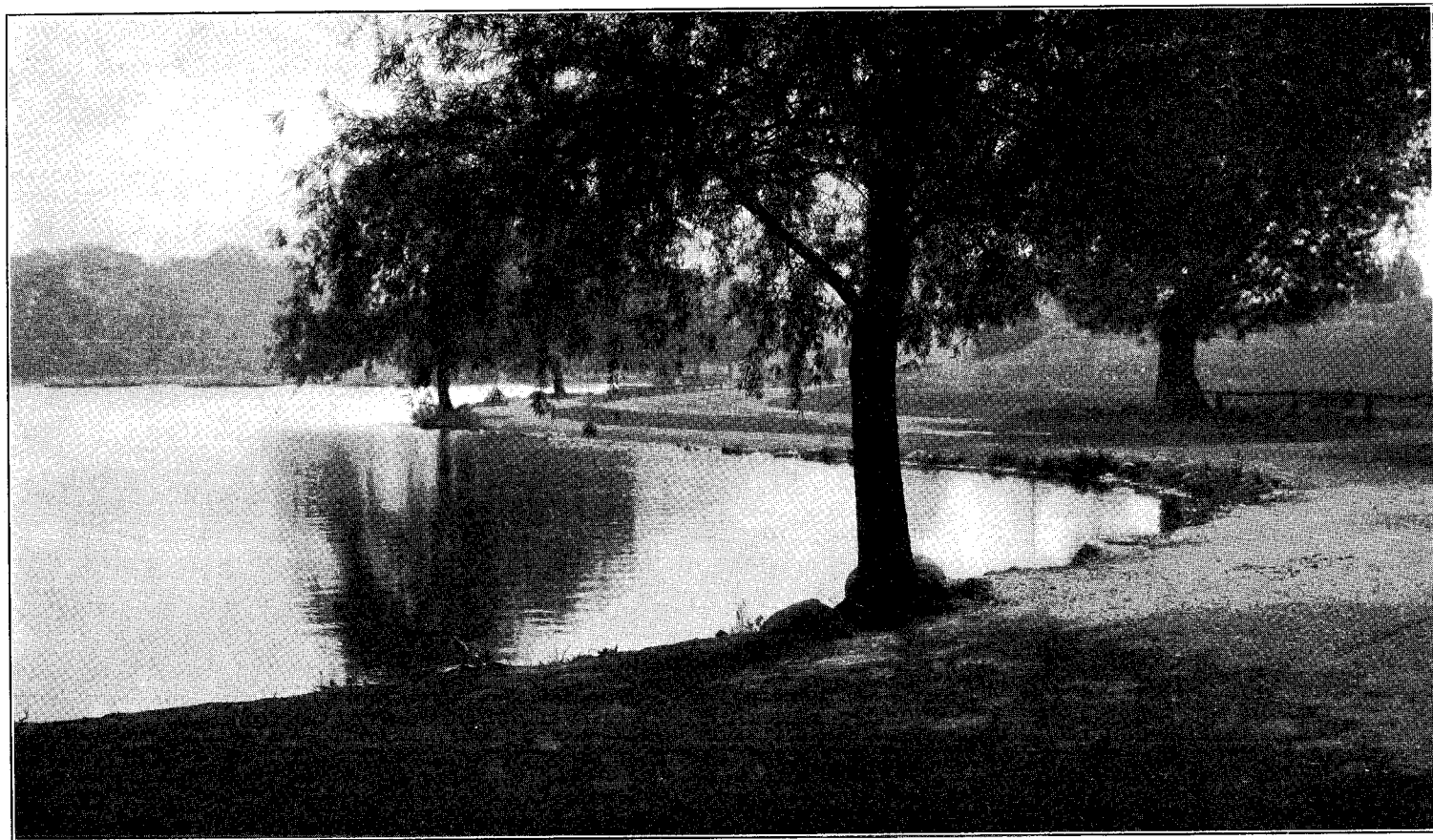
JAMES BUTLER
Commissioner of Parks

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CITY OF NEW YORK

DEPARTMENT OF PARKS

BOROUGH OF QUEENS

March 31, 1927.

Hon. JAMES J. WALKER,
Mayor, City of New York,
City Hall, New York.

Sir:

In accordance with Section 1544 of the Greater New York Charter, I herewith present the Annual Report of the Department of Parks, Borough of Queens, for the year ending December 31st, 1926.

Respectfully yours,

JAMES BUTLER,
Commissioner.

FOREWORD

Before enumerating the outstanding achievements of this department for the year, it seems proper and urgent to point out the nature of the problems confronting us in this Borough.

At the close of the year 1926, it was estimated by the Queensborough Chamber of Commerce that the population of the borough was approximately 966,000; this represents an increase in our population of over one hundred per cent in the last ten years.

According to figures furnished by the Building Bureau of Queens, permits were issued last year for more than 24,000 buildings which would house more than 28,000 families. Ozone Park, South Richmond Hill, Queens, Hollis, Springfield, St. Albans, Flushing, Woodside, Elmhurst, Jackson Heights, and Long Island City being designated as the sections showing the greatest growth.

This phenomenal increase in population has been going on at the rate of 100,000 a year for the last five years. In other words, this borough has been absorbing within its boundaries an influx of people, each year, equivalent in number to the population of such cities as Utica, Schenectady, Yonkers, Harrisburg, Pa., and Jacksonville, Fla. Due to the accessibility of our borough to waterways, railroads, highways, bridges, etc., one hundred and six new industries located in Queens this year, swelling the ranks of the existing 2200, which manufacture yearly over 500 different products. On this computation, the Borough of Queens stands out pre-eminently as the fastest-growing borough in the City of New York.

This rapidly expanding borough, comprising an area of 117 square miles (75,111 acres), represents 37.4 per cent of the total area of Greater New York. Of this great area, 1,365 acres is invested in park land—that is, about two per cent of its total area. Two hundred and eighty (280) acres of our parks are made up of beachland fronting on the Atlantic Ocean—a small part, it will be observed, of our ten miles of magnificent beaches. Of the twenty-four parks under the care of this department, seven are fully developed, three but partially developed, and the remaining fourteen are entirely undeveloped.

It can be readily seen, therefore, that the problem in Queens is not merely one of maintenance, but of development of the present holdings, and the acquisition of additional park lands to keep pace with the phenomenal growth of the borough.

Sound policy dictates that about ten per cent of the total area of a metropolitan district should be set aside for parks and open spaces. Queens at the present time has a park acreage of but two per cent of its area, as compared with Manhattan's twelve per cent, seventeen per cent for The Bronx, and six per cent for Brooklyn. Westchester County, New York, is now setting aside about ten per cent of its metropolitan area for similar purposes, while Union County, N. J., is striving toward the same goal.

There is no longer any need to argue for the value of a park and parkway system in an urban community. Parks are now occupying an outstanding place in the lives of the American people. Their economic, recreational and aesthetic values are firmly established, since they improve the general character of the surrounding territory, increase assessed valuation, utilize waste land, protect water supply and furnish healthful recreation for persons of all ages and classes.

It was the recognition of these substantial vital factors in our community life that prompted the creation of a unified board of control, appointed by Your Honor—the Park Sites Committee of the Board of Estimate and Apportionment—to solve the problem of our metropolitan needs by planning wisely for the future acquisition of desirable sites in all our boroughs.

As Borough President Maurice E. Connolly pointed out some time ago, "land in Queens is now comparatively cheap; large areas may be obtained for parks, but if this land is not purchased in the near future the cost will so increase as to be almost prohibitive."

PLAYGROUNDS

Contemporaneous with the acquisition of new sites and the development of the present ones, exists another great problem, requiring the most sympathetic and intelligent handling if the welfare of our future generations is to be considered. One of our greatest immediate needs is the development of playground activities, the allotment of many more centers devoted to this aim, and the appointment of a Recreation Supervisor who would intelligently direct and control the recreation activities of our young by cooperating with the Board of Education and the various organizations now allied and known as the Queens Recreation Committee.

Such an office, well filled, would greatly facilitate the development of an effective recreation program for Queens. Manhattan, Brooklyn and The Bronx all have strong recreation departments under the Park Commissioner.

Throughout Queens play spaces are everywhere vanishing. In the face of the advancing city, woods and fields shrink to a scattering of vacant lots and open shore lines are honeycombed with pavilions and piers. Where are our children to play? In the formative period of their lives our children spend a large part of their time in the playgrounds. We should see to it that the playgrounds do not follow out the prophecy of their opponents and merely cater to pleasure in the sense of mere relaxation. The idea of the educational value of play did not originate with us; it is as old as our oldest civilization. Plato dealt with the subject at some length in his "Republic." To use his words, "Our youth should be trained from the first in a stricter system, for if their amusements become lawless they can never grow up into well-conducted and virtuous citizens. On the other hand, when they have made a good beginning in play—and by the help of music—have gained the habit of

good order, then this habit of good order will accompany them in all their actions, and be a principle of growth to them."

In other words, we are confronted today with practically the same difficulties that perplexed our ancestors in this matter of rearing the young. Not only do we need a more definite intellectual conception as to the type of citizenship to be produced, but we need policies directly planned to bring out the desirable qualities; and then we need to open playgrounds as rapidly as is consistent with a proper handling of the children committed to our care—not by turning all our parks into play spaces, but enlarging the present facilities wherever it may be accomplished so as to serve the greatest good of the largest number.

The playground is not a panacea. Out of it will come just as much as we put into it—nothing more. If we do not use the playground for development in the best sense of the word, we may well expect the playground to become a positive evil. It is a matter of the first importance to permit the children to come in contact with the principles of fair play and honor among their own playmates. A respect for the rights of others, and their own position as part of an organism, not as a lawless unit—this is the least that the playground should foster. It will do so only if it is in the hands of a proper director.

By this is meant not merely the kind of direction that teaches children how to play games, but the direction that teaches them to play games fairly and honorably. This is why it is almost better not to open new playgrounds until proper supervision can be provided for them. It is true that any playground keeps children off the streets to a certain extent—less so than is popularly imagined by those who do not investigate. For it is a matter of common experience to see a playground lacking any sympathetic and expert direction standing empty, while the streets nearby are packed with children at play; the reason being not far to seek: the street provides excitement and variety which the empty play space cannot rival. What playgrounds we have at present are heavily patronized and present trying situations because of the inadequate facilities of regulation and supervision.

RECREATIONAL ACTIVITIES

By reason of the ideal location of our parks, their natural beauty and attractiveness, many advantages are offered our communities which perhaps are not so liberally enjoyed by the citizens in other sections of our great city. Sports of every description flourish during the various seasons of the year: boating, bathing, rowing, skating, coasting, skiing, archery, golf, hockey, tennis, baseball, fishing, etc.—in short, all the many outdoor sports which the American public pursues so vigorously and intensely. Attractive picnic grounds abound in beautiful wooded spots, and along the beach fronts, as well as in the forest land, tents are often pitched by those who seek a quiet, natural enjoyment of nature's splendors. In this connection, it is regrettable

to observe that an ideal spot such as the Jacob Riis Park in Neponsit lies practically unused. Only recently, through a highway constructed by this department, this playground was made more accessible to the residents of Brooklyn who utilize the new ferry system plying between Flatbush and Neponsit. Something should be done to make this spot more inviting.

In connection with the recreative facilities which our parks offer, we wish to make mention of the following activities for which permits are issued during the year: May Day festivals, baby parades, Boy Scout jamborees, Girl Scout frolics, bicycle matches (on the cinder track in Victory Field), horse shoe pitching, marble games, picnics and community meets.

During the hot Summer months thousands of people come to the parks for the especial purpose of listening to the band concerts. In 1926 sixty-three such concerts were given in the various parks throughout the borough, demanding an outlay of \$11,635.00. In view of the enthusiasm with which these concerts are received by the public it would seem advisable to increase the appropriation for this purpose so as to amplify this good work.

The one municipal golf course which we maintain in Forest Park continues to be used to the fullest. Last year 23,057 permits were issued to players, brining in a revenue (through caddies, lockers, daily and seasonal permits) of \$37,972.00. Obviously one golf course is insufficient to meet the demands of our thickly populated communities, and this department is continually being bombarded with urgent requests for further improvements of this nature. At the present time land is available for an additional golf course in Kissena Lake Park, and as Your Honor knows, a request has been made for such an appropriation.

Tennis, however, is the one park activity which awakens the most interest in the general public, and as the demand for more facilities is a growing one, we believe that every effort should be made to meet it. At present we have but ten courts: eight in Kissena Lake Park and two in Wayanda Park. Letters of protest pour in from such bodies as the Flushing United Association, the Queensborough Chamber of Commerce, the Lions Club, and from hundreds of private citizens.

It is urgent to provide at least the following additional courts in the near future: sixteen at Forest Park, six in Astoria Park, four at Rainey Park, three at Anawanda Park, twelve at Crocheron Park, and four additional courts in Kissena Lake Park. Our records reveal that last year 958 permits were issued for the ten existing courts, a record which speaks eloquently of the use they were subjected to, and the great popularity of this sport.

PARK MAINTENANCE

Owing to the constantly increasing use of our parks the problem of maintenance has given us considerable concern. In addition to a limited force of gardeners and mechanics we have but 103 laborers to assist in the work of maintaining the parks, gores, malls and plots which are under

our jurisdiction, as well as the grounds adjoining public schools, hospitals and administration buildings. This small force is utterly inadequate as a perusal of the detailed report by the Superintendent, which is subjoined herewith, will reveal. For we are called upon not only to maintain, but to develop our parks. The only parks which can be said to be developed, at the present time, are College Point, Linden, Highland, Upland, Rainey and King.

A brief survey of the work performed by our maintenance forces will disclose the great variety of labor and the multitudinous duties which they are called upon to render. To begin with, extra work is always demanded in the form of assistance rendered other departments of the city government in the delivery of decorative plants, benches, etc., lent for special occasions, the planting and cultivation of trees, shrubs, garden plots, etc. Throughout the entire year the roadway system in the parks is kept in excellent condition; this embraces a variety of work, such as mending the roads, filling in wash-outs, scraping, gravelling, tarring, resurfacing, shoveling snow, sweeping paths, removing litter and debris. In the winter, all the playground apparatus is dismantled and removed to the service shops for thorough repairs, scraping and painting. This is no small job, when one reflects on the severe use to which this equipment is subjected during the season. In some parks, where acts of vandalism are carried to an extreme, the park attendants, of their own volition, take down and set up the apparatus daily in order to facilitate the work of upkeep. Due to the carelessness of automobilists, many sections of iron fence require restoration due to accidents. These catastrophes take place on a far larger scale than is generally imagined.

Rustic fences are constantly being erected and repaired; several hundred rustic benches are constructed annually and over a thousand bench slats renewed, in addition to a variety of restoration work on these benches, such as the making of new posts, knees, backs, etc. Then too, these benches are constantly being shifted from one spot to another because of park activities sponsored by various community organizations, all of which requires the heavy use of our trucks and labor forces. For the many occasions of a festive nature which occur during the year, portable band stands, picnic tables, benches, etc., are constructed and erected in the different parks and triangles. Not only do these conveniences have to be put up, but as much time is consumed in their demolition and removal.

In the service shops a great deal of all-year-round work is carried on by our force of mechanics—especially in the repair and upkeep of our rolling stock. Last year a large swing-saw, with a thirty-foot roller bench, was constructed by departmental labor in order to advance the efficiency of the shop work. Here all our snow-cleaning equipment is given an annual overhauling, skid chains for the trucks are made and adjusted, and metal burning baskets (for litter and refuse) constructed and repaired, and all the benches in the various parks repainted.

To request, therefore, an additional force of 50 laborers is a modest estimate of our needs.

TREES IN CITY STREETS

What is true of our maintenance bureau applies with equal force to the forestry bureau. A force of 62 men is expected to take care of the vast work demanded of this department in the preservation and beautifying of not only our parks, but our gores, malls, plazas—and our city streets, with their immense tree population of 400,000 trees.

With only half the force required to properly carry on our arboricultural work, we have nevertheless accomplished a great deal, as the report of the forester will show. The effort to combat insect pests alone is a tremendous one, and was ably dealt with. The fight against these pests had to be both timely and carefully carried out, with special consideration of the habits and life history of each species of pest. With inadequate spraying equipment it was nevertheless possible to keep all our trees free from pests—amongst which the most formidable ones are such varieties as the elm leaf beetle, the tussock moth, the cottony maple scale, false tinder fungus, Fall webworm and bag worm. Coincident with this work, our force of climbers and pruners engaged in the work of planting and transplanting after having removed all the dead and diseased trees marked out the previous Fall.

So great, however, was the demand made on our small staff, that in order to accomplish these exacting tasks, it was necessary to greatly delay the trimming of trees requested by house-owners in all sections of the borough.

Requests for trees is another source of irritation to our forestry bureau. Floods of requests pour in during the Spring and Summer, and a great many have to be refused because of the scarcity of suitable trees. Even if we had sufficient funds to purchase all that were requested, which we have not, we could not meet the increasing demands. At the old police training grounds in Flushing, we maintain a nursery of twenty-two acres, where at the present time we have only about 3,000 saplings of some twenty varieties. None of these trees cost the city a cent—they are all donations made by private citizens.

In view of the calamitous scarcity of trees throughout this nation, and considering that it takes more than a generation to develop a tree to its full majesty of size, it is imperative to take steps in the very near future to promote our own facilities for growing trees. Owing to lack of available funds, our nursery has been permitted to dwindle in stock in the last eight years so that today it is only about one-fourth its size. With the excellent soil and facilities offered by our nursery grounds, it seems feasible and urgent to push the development of this work to the point where our department may no longer be at the mercy of outside forces and situations.

Our communities are such as display a lively interest and practical appreciation for natural beauty. A ramble through the streets of Queens Borough will reveal sights of great loveliness—beautiful homes with well-kept lawns, close-trimmed hedges, beautiful flower beds and trees of stately grandeur. Such communities do not flourish everywhere. In the confines of those which

we possess realty values are high, and the city reaps a harvest in enhanced taxation. It is therefore highly inconsistent to encourage by neglect the enforced decay of these very precious natural beauties which created land values and paid real tax dividends.

PARK BUILDINGS

Before going on to specify and enumerate the principal engineering feats accomplished during the year, we wish to call Your Honor's attention to a few of the internal improvements which were made, as well as to point out further changes which are deemed necessary and important.

Our two damaged greenhouses, where we cultivate a stock of over 70,000 plants and hold our annual flower shows, were reconstructed and enlarged to meet existing conditions. We plan this year to add two more greenhouses, for which request has been made and granted. What we require, in addition, however, is a new potting shed and storeroom for soil, fertilizer, supplies, etc., and an appropriation of at least \$3,500.00 with which to purchase new stock for our greenhouses.

Our headquarters at "Overlook" is another important item. Since the last extension to the building was made our staff has increased considerably, and our present quarters are seriously cramped.

Also, in place of the present collection of straggling, dilapidated sheds and structures used by our maintenance bureau, an adequate, modern service building needs to be erected.

PARK IMPROVEMENTS

And now I beg to submit a brief recital of our engineering accomplishments during the year.

In April 1926 work was begun on the Shore Road Improvement in Astoria Park. The contract amounted to \$248,122.50. The work calls for the building of a retaining wall along the short front, with a concrete road and sidewalks. The drive will be 3,050 feet long and will form a connecting link between Hoyt and Ditmars Avenues. From Ditmars Avenue the drive will continue as a city street. It is practically the only drive along Astoria's waterfront and offers a pleasant promenade which will greatly improve the beauty of the original site.

In Forest Park a concrete road, 1,500 feet long and 26 feet wide, was constructed. The contract price was \$23,581.00. This road, known as the Freedom Drive, forms a connection between Ashland Avenue, Richmond Hill, and Myrtle Avenue. The road was formerly of dirt and caused considerable annoyance to the neighboring community.

In Jacob Riis Park, Neponsit, a forty-foot concrete transverse road was begun in March and carried to completion. The road was formerly twenty feet wide and was nothing but a dilapidated old macadam road. With

the establishment of a ferry line to Flatbush, Brooklyn, the necessity for building a good road serving as a connecting link between the ferry and Washington Avenue, Neponsit, was immediately evident. The road is an eight-inch reinforced concrete road, laid in slabs approximately ten by thirty feet. The traffic over this road is very heavy and it is therefore unfortunate that this heavy traffic is now obliged to empty into Washington Avenue, which is but twenty feet wide and highly inadequate to meet the demands created by the congestion of traffic. A request has been made to have this avenue widened also. The price bid on the construction of the transverse road was \$49,234.00.

Work was started in the Fall on the reconstruction of the two old bridges which carry the Main Drive in Forest Park over the Rockaway Beach Division and the Montauk Division of the Long Island Railroad. This road was constructed thirty years ago and was laid out approximately eighteen feet wide to accommodate light carriage traffic. The bridges were therefore of correspondingly light construction. After considerable litigation between the railroad and the Transit Commission, which lasted several years, the railroad finally accepted the Transit's Commission order in October 1925, and signified its willingness to proceed with the work. The original plans of the department called for taking down and cleaning the members and reconstructing to a width of 26 feet, also renewing the wooden decks. The plans finally approved provided for additional lines of columns and girders to carry an overall width of 47 feet, providing for a thirty-foot roadway and two seven-foot sidewalks. The entire structure is to be encased in concrete and a concrete deck—11 inches thick—substituted for the wooden deck formerly proposed. These bridges, as reconstructed, are designed to carry two lines of ten ton motor trucks and a uniform load of 60 pounds on the sidewalks. The original ornamental iron fences will be replaced by massive concrete fences five feet high and eighteen inches thick, creating a very massive effect.

In Rainey Park half the sea wall had been eaten away by erosion and it was necessary to repair the wall with a concrete cavity, reinforced by steel dowels. This work was begun in November, 1925, and completed in the Spring of 1926. A twelve-foot cinder path was laid on the top of the wall when the repairs were finished. The cost of operation was \$5,148.00.

At the Golf House in Forest Park a new triplex pump was installed in order to give an adequate supply of water for showers and general use. Heretofore there was not enough pressure to drive the water from the mains. The supply of water now available from this tank is 127,000 gallons. The pump is electrically driven and pumps 60 gallons to the minute, or a gallon per revolution.

In order to protect the various driveways from baseballs, a chain link fence, twelve feet high, with gates, was erected around Victory Field, Forest Park, at a cost of \$6,411.60.

In the early part of 1926 work was completed on the reconstruction and enlargement of two greenhouses in Forest Park. The existing greenhouse No. 1, and the workroom were demolished and replaced by the erection of a modern palm house and greenhouse. The estimated cost for this job was \$36,953.00.

Another important job completed in the early part of the year was the reconstruction and restoration work on the golf links at Forest Park. This job included the reconstructing of three stone tees, three putting greens, top dressing and seeding of two greens, grading, top-soiling and sodding hills, ploughing, harrowing and seeding fairways, draining and filling in ponds and gullies, and the construction of four sets of wooden stairways, as well as the clearing of trees and the installation of 1,500 linear feet of water supply pipe.

In the Fall of 1926 work was started on the construction of a Comfort Station at Linden Park, Corona. The work, which includes plumbing and heating, will be completed in the Spring of 1927 at an estimated cost of \$25,000.00.

In Astoria Park a beautiful War Memorial was erected. This was a gift to the City of New York from the Long Island Memorial Association. The monument is built of light gray granite with an inscription cut in stone. The estimated cost was \$20,000.00.

Designs were prepared and submitted during the year for the improvement of Anawanda Park, Ridgewood, the northeasterly section of Kissena Lake Park, Flushing, Croucheron Park, Bayside, and Leavitt Park, Flushing. Designs were also made for improvement work on the triangular plot at 51st and Corona Avenue, Corona Heights, for the improvement of the Myrtle Avenue entrance to Forest Park at Dry Harbor Road, and the Richmond Hill entrance to Forest Park at Myrtle Avenue and 109th Street. Preliminary plans were drawn up for the construction of a timber bulkhead and jetties for beach protection at Rockaway Park, and for the proposed additions to the Administration and Service Buildings at Forest Park.

CONCLUSION

Thus briefly has been stated what were among the more important improvements and achievements in the parks under my jurisdiction. In the reports from the various heads of bureaus which are attached hereto and made a part of this report, will be found in greater detail a more comprehensive account of the year's performance.

In conclusion I wish to thank Your Honor for the cooperation given me by you and the members of your staff throughout the year. I am also appreciative of the aid rendered me by my fellow members on the Park Board, the heads of the various city departments, and by the Borough President, Maurice E. Connolly.

REPORT OF THE BUREAU OF MAINTENANCE

Commissioner JAMES BUTLER,

Dear Sir:

The following pages constitute a detail report of the work performed throughout the park system by the Bureau of Maintenance during the year 1926.

A great variety of work is carried out through the various seasons of the year by our staff of mechanics, gardeners and laborers, as will be seen by the appended itemized report for each park.

Not only are the parks proper kept in excellent condition, but we also maintain numerous gores, malls, and plots ceded to us by the city, and the grounds adjoining such institutions as hospitals, administration buildings, etc.

A force is constantly employed to preserve and mend the roads throughout the park system. This embraces such work as scraping, gravelling, tarring, resurfacing, removing snow and ice, clearing litter, filling in wash-outs, etc.

The various Comfort Stations are looked after, repairs made to plumbing when necessary; the band stands are painted and kept in fine condition, the lakes and tennis courts properly maintained for the use of ice skaters during the winter season.

In the winter our entire playground apparatus is dismantled and hauled to the shops for thorough repairs, for scraping and painting. Iron fences are in constant need of repairs owing to the carelessness of autoists. New rustic fences and benches are constructed, and old benches rehabilitated; portable band stands and picnic tables are built and then removed when their use has expired.

A great deal of construction work is always carried out by departmental labor in an effort to save expense. In this connection might be cited the reconstruction work performed by our men at the greenhouses, the building of a bridle path under the supervision of the landscape architect also the splendid piece of reconstruction work on the golf links, the installation of a triplex pump at the golf house and similar undertakings.

All the rolling stock is kept in good working order at the repair shops; the snow-cleaning apparatus is given a thorough overhauling annually, metal burning baskets are built and the old ones repaired and painted. In addition to these items, there are a multitude of lesser accomplishments, which are nevertheless important and require a great deal of time and attention, such as the painting of flag-poles, tree-guards, fences, etc., laying water pipes for lawns, keeping drinking fountains in working order, removing dangerous trees and unsightly boulders, keeping the beaches free from litter, etc.

In the Summer months concerts are given in a number of the parks. These concerts, which are a source of much pleasure and entertainment to

the neighboring communities, are always well attended. This feature of park activities demands the use of a small force for extra duty in supervising and regulating the conduct of the crowds who gather to hear the music. Last year sixty-three concerts were held in nine parks. Judging from the appreciative letters that were received and the comments which appeared in the local papers this feature of park activities was a distinct success. It is urgently requested that still greater appropriations be allotted for this purpose in the future.

Especial attention was given this year to our rolling stock. Not only did we motorize the department, but our vehicles were kept at a maximum of service and efficiency. A laborer was assigned from the mower shop for this duty, and he saw to it that each piece of rolling stock was fully equipped before being driven.

The service garage, in which our auto trucks and lawn mower equipment is housed, was thoroughly cleaned and renovated, and all fire hazards eliminated so as to comply with the wishes of the Bureau of Combustibles.

Eight automobiles were given a general overhauling; six were kept in good running order with minor repairs. Two are now under reconstruction, and one has been recommended to be condemned. All repairs were accomplished by one auto engineman and one laborer, with the help of the driver of the particular car under repair.

Quite a little work was involved in keeping the mowing machinery and equipment in good working order. All the mowers from the various parks had to be brought in to the service shops and thoroughly overhauled. Owing to the heavy demands which were made on them, and due to the fact that these mowers were all of an old type, it was necessary to make constant repairs to this equipment. This work was performed by one machinist and a laborer.

It is necessary, also, to mention in some detail the very important character and amount of work performed during the year by our staff of gardeners, through whose efforts our parks and gores and malls are made so attractive.

Greater facilities were afforded by the demolition of two old greenhouses and the erection of a modern palm house, greenhouse and workroom. In the palm house are cultivated a variety of interesting plants and trees of a tropical and sub-tropical nature, such as the palm, banana, fig, orange, lemon, cactus, etc. This beautiful show house attracts thousands of visitors during the year. Around Thanksgiving time a Chrysanthemum Show is always held for the benefit of the public, and this is always well attended. About 7,000 chrysanthemums are propagated and raised during the year. At the conclusion of the show the flowers are distributed to the hospitals of the borough.

A similar exhibit is given to the public at Christmas time. For this show we propagate and raise about 1,000 poinsettias, 600 cherry plants and 600 stevias.

A total stock of about 70,000 plants are now cultivated at the greenhouses; they vary in value from ten cents apiece to as much as \$30.00 each. About 55,000 bedding plants, comprising over twenty varieties, are annually propagated and raised for use in our park system, for boulevards, memorials, hospitals, public schools, administration buildings, etc. About 7,000 pansy plants alone are raised and planted in parks and memorials, and about 8,000 hardy perennials are raised in outside frames and distributed to the various parks.

Flower beds were planted at the following places:

Golf House—Forest Park	College Point Park
King Park	Rainey Park
Highland Park	Mott Avenue Boulevard, L. I. City
Kissena Lake Park	Courthouse Square, L. I. City—and adjacent flower beds
Astoria Park	St. John's Hospital
Flushing Park	Neponsit and Rockaway Boulevards
Linden Park	

The following materials were used during the year for propagating and growing purposes: approximately 40,000 pots of varying sizes, 225 yards of manure, 400 yards of soil, and 50 yards of sand. We also used about 500 pounds of commercial fertilizers and 150 gallons of spraying and fumigating liquids during the year.

There is, at the present time, a great need for a new potting shed and storeroom for supplies, fertilizers, etc. Funds are also needed, perhaps to the amount of \$3,500, wherewith to secure new stock. A tabulation of the various species of plants which are cultivated at our greenhouses is herewith appended:

Show plants—for stove houses:

Palms	Cactus	Philanthus
Banana	Asparagus	Begonias
Fig	Acalphas	Caladiums
Orange	Pandanas	Crotons
Lemon	Auracareas	Dracaenas

Herbaceous plants:

Delphinium	Rudbeckia	Peonies
Sweet William	Lupinus	Physostegia
Aquilegia	Digitalis	Phlox
Salvias	Bleeding Hearts	Veronica

Bedding plants:

Cannas	Centaureas	Verbenas
Geraniums	Altanantthera	Myzembrianthemum
Salvias	Coleus	Phlox
Ricinus	Achyranthes	Heliotrope
Cuphea	Begonias	Antirrhinum
Penissetum	Fuchsia	Lantana

All plants in the greenhouses were repotted two and three times; they were also sprayed and fumigated for the prevention and check of insects and plant diseases. All flower beds in the parks and boulevards were cared for and weeded, and the grass mowed during the season. Plants were replaced wherever necessary. All shrubs were trimmed and cleaned in the various parks, and in the following parks—Forest, Linden, College Point, Highland, Astoria and Kissena Lake—the lawns were seeded and resodded.

The following pages are a recapitulation of the work performed in each park by the combined forces of laborers, gardeners and mechanics. When it is understood that our work includes not only the maintenance but also the development of our parks, it will easily be seen that a force of 103 laborers is highly inadequate for our needs. The only way in which it was possible to accomplish what we did, was by constantly shifting our tentatively assigned forces from one park to another, a makeshift which involved loss of time and waste motion. The recommendation is respectfully made that our laboring staff be increased one hundred percent to cope with our work efficiently and smoothly.

Respectfully submitted,
WILLIAM M. BLAKE,
Superintendent

Forest Park:

Built bridle path under direction of landscape architect.

Work started on new fairway for golf course necessitating removal of about 75 trees.

Demolished old Golf House with departmental labor.

Constructed new playground at West Park Drive and Myrtle Avenue.

Old greenhouse and potting shed demolished; show house and potting shed reconstructed, with entire new heating equipment. Two new greenhouses completed.

Installed following equipment in playground:

- 2 sets Baby Swings
- 2 sets See Saws
- 2 large Swings
- 2 Giant Strides
- 1 Schoolyard Gym.

Large water tank scraped, redlead and painted inside and out. All seams were electrically welded and reinforced stanchions with concrete piers about ten feet high were erected.

Small water tank tarred inside and screen placed over it.

Golf House roof, porch and cornice repaired.

Large cement bench in old greenhouse reconstructed.

All benches shored up.

The caretaker's house at 102nd Street and Drive was piped for gas, and the porch and window frames repaired.

Constructed storage bins in the basement of "Overlook" House, together with minor alterations.

1,900 plants about Comfort Station and Golf House painted, trimmed, and cultivated.

The trim and iron work on Band Stand was repainted.

All memorial tree boxes repaired and painted.

Windows put in back and front of greenhouse office building.

Replaced broken glass panes in greenhouse.

Built a garret ladder.

Repaired toilets in service shops.

Installed sewer and fountain lines at greenhouse.

Built retaining wall along greenhouse and laid a concrete floor.

Built curb and sidewalk in front of greenhouse.

Built new coal chute.

Built plant stands and flower boxes for greenhouse.

New floor laid in storehouse.

Installed bins and shelves and new water basin.

Inside of store house varnished and trim painted.

Roof and skylights repaired, exterior of storehouse rebuilt.

Flagpole at Golf House painted.

Touring cars, trucks and wagons repainted.

Water shut off (in all parks) and drinking bulbs removed.

All fountains drained and sprays removed.

Window frames, doors and stall repaired in stable.

New floor laid in stalls, roof repaired and tarred.

Railings, gratings, and window bars painted.

Pump and electric motor installed in Golf House.

Pipe rail constructed around pump.

Signs of all description repaired and repainted.

Installed hot water heating plant at Forest Lodge.

Erected rustic fences at approaches of new bridges.

Erected flagpole and Buddy Monument at 108th Street.

Built hanging store closet in garage.

Built and mounted roller bench for swing saw in service shop.

Built new cesspool cover for Overlook House.

Dismantled, repaired and stored all detachable playground apparatus (in all parks).

Benches brought in from all parks where not needed.

Refilling washout at Park Lane, which required about 200 yards of fill; sodding bank to prevent further washouts.

Plowing, harrowing and grading baseball field at Victory Field. Supervision of games and sports there.

Flooding and spraying skating rink at Victory Field, and at Jackson's Pond.

Cleaning and hauling snow off drives and walks in park and on Forest Parkway.

Laying out Plaza at Comfort Station and caring for lawns.

Care and supervision of concerts held at Concert Grove.

Care of picnic grounds at Greenhouse and Dry Harbor Road; also supervision of Comfort Station.

Repairing Dry Harbor Road, section of about 700 feet. Breaking up and hauling away the old concrete, and replacing with new concrete, then resurfacing with Tarvia and screenings.

Repairing road at Forest Parkway.

Hauling sand from sand pit for all outside parks and for repair work.

Hauling ashes from pumping station for roadwork and Plaza at Comfort Station.

Resetting rustic benches, erecting fence around the lawn at Comfort Station.

Turning manure from stable for fertilizer at greenhouse and flower beds.

Kissena Lake Park:

Old Comfort Station demolished, site cleaned up and new structure completed.

Two tennis courts resurfaced and rolled.

Roads resurfaced with blue stone screenings.

Lower roads leading to lake scraped and dressed up.

Rustic railings built around Memorial.

Dangerous trees cut down and sawed up.

Lake cleared of snow and ice and kept in condition for skaters during Winter.

Installed followings new playground equipment:

2 large Swings

1 set of Travelling Rings

2 sets of See Saws

2 Baby Swings

1 Baby Hammock

2 Giant Strides

1 Jungle Gym.

1 Schoolyard Gym.

1,000 feet of rustic fence built around lake.

Constructed wading pool and spillway.

Stone wall built along overflow stream.

Signs of all description erected.

Rebuilt road around lake and drive.

Laid cement floor in caretaker's office.

Roof of office and tool house repaired.

Doors and window frames repaired.

Tennis court back stops taken down and rebuilt.

Repairs to water piping at stables.

Rustic fence repaired.

Cutting grass, weeding flower beds, cultivating evergreens, etc.

Highland Park:

Renewed irrigating systems for lawns and flower gardens.

Reshellaced and varnished the Hero tablet.

Painted Band Stand and benches.

Cleaned and repainted all signs.

Installed following playground equipment:

2 sets of See Saws

2 Baby Swings

3 Large Swings

1 Schoolyard Gym

2 Giant Strides

1 Jungle Gym

Roads to Cypress Avenue resurfaced and repaired in sections.

Filled in and extended area of playground.

Removed 34 dead trees—wood cut up for kindling in boiler room of Comfort Station.

Toilets in Comfort Station repaired; doors and iron grating and trim repainted.

Water piping laid in flower beds.

28,000 feet of flower bedding planted.

17,000 plants of many varieties planted, trimmed and cultivated.

All rubbish and dead branches were burnt and the ashes used for potash on the perennial flower beds.

Astoria Park:

50 new small pines planted.

700 trees planted, trimmed and cultivated.

Comfort Station repainted inside.

New front and rear stoop built at caretaker's dwelling; cellar door repaired.

Constructed shelter for skaters at ball field.

New shelter house erected at playground.

Wire fences placed around shrubbery.

Painted trim work around Band Stand.

New halyards and blocks supplied for large flagpole.

Repaired drinking fountains and water lines.

Flagpole (159 feet high) given two coats of paint.

Memorial tree guards painted and repaired.

All pipe railings painted.

Ball field resurfaced in Summer, kept in condition for skaters during Winter.

Repaired leak in water main, north of Woolsey Avenue.

Filled in wash-outs and repaired culverts.
Portable shanty erected for tool shed.
350 Benches painted.
Cut down 15 old trees and dug out stumps.
Removed 2500 boulders from lawn.
Filled in washouts; also holes in skating rink with clay.
Turning manure heap and making compost of top soil, manure and lime.
Placed benches around running track and made same immovable.
Set posts for fences and wired them.
Removed flag stones on shore road, and filled in ball field with clay and sand.
Pruned about 8,000 shrubs.

Rainey Park:

Office painted inside and out.
Sink installed, water pipe laid and cesspool and drain dug.
50 feet of concrete steps and walk laid running to river front.
Reconstructed old wooden shanty, and made it over into a stucco tool house.
Repaired rustic benches.
Playground apparatus repaired and painted—all apparatus taken down and set up every night and morning.
Put in 2,000 yards of fill on playgrounds and baseball field.
Wire fence railing at waterfront painted.
Following playground equipment installed:
 1 Schoolyard Gym
 2 Slides
 1 Horizontal Ladder
500 feet of sod, cut and laid—bare spots seeded.
300 plants planted, trimmed and cultivated.
Long Island City Bridge Plaza and neighboring gores and malls kept in condition, and flower beds planted and cultivated.

Linden Park:

Started construction of Comfort Station.
Lake basin drained, cleaned out and new sprays put in.
Keeper's house painted outside and extension added.
Signs painted and installed.
Rustic fence built around lake.
Built new rowboat.
Repaired retaining wall of lake in sections.
Drinking fountains repaired.
Pond kept in condition during skating season.
800 plants planted, trimmed and cultivated.

Corona Park:

Laid out foot paths and walks.

Erected drinking fountain.
Built iron railing around park.

Rockaway Park:

Flooring of boardwalk repaired after Winter season; all nails hammered down along mile walk.

Pipe railing repaired in several places.

New aprons built under boardwalk and old ones repaired.

12 iron burning baskets constructed in service shops and distributed along beach.

Benches installed and fastened down.

Portable tool shanty and tool box installed.

New signs erected.

Seven laborers detailed to keep beach free of litter and peddlers during Summer months.

Wayanda Park:

Dike built around tennis courts.

Courts flooded in Winter for skating.

Courts resurfaced and kept in condition.

Watchman's shanty and box removed for Winter.

Paths laid out and gravelled.

Back stops erected at ball fields.

Drinking fountain erected.

Anawanda Park:

Playground fitted out and maintained.

Water fountain repaired.

Football goal posts installed.

Old farm house torn down and spot cleaned up.

New benches constructed and installed.

Baisley Pond Park:

Inside of Comfort Station painted.

Bridge repaired and painted.

New coal box built.

Memorial monument erected.

Following playground equipment installed:

1 Schoolyard Gym

1 set Travelling Rings

Lake kept in condition for skating during season.

Walks and playfields cleared of snow.

King Park:

8,000 plants trimmed and cultivated.

Repaired toilets in Comfort Station.

Repainted band stand.

Repainted Comfort Station, inside and out.

Installed pipe railing at band stand.

Repaired drinking fountains.

Placed temporary shoring at rear porch of King's Mansion; also repaired heating plant and plumbing, roof, chimneys, leaders and building extension.

Flushing Park:

Walk and metal ring around trees reconstructed.

Fountain painted.

Drinking fountain installed.

Jackson Park:

Fence post and signs erected around "Weeping Beech"; grounds adjoining it cared for.

Repaired house and made alterations.

400 plants planted, trimmed and cultivated.

Leavitt Park:

Iron football standards constructed and erected.

Signs erected and distributed.

College Point Park:

Park keeper's office and tool shed repainted and repaired, inside and out.

Old fence removed.

700 plants planted, trimmed and cultivated.

• *Poppenhausen (Memorial) Square:*

Tree guards and cannons repaired and painted.

540 plants planted, trimmed and cultivated.

REPORT OF THE BUREAU OF LANDSCAPE ARCHITECTURE

Commissioner James Butler,

Dear Sir :

I beg to submit a detailed report covering my activities during the past year in connection with my duties as Assistant Landscape Architect.

In addition to my regular duties of preparing plans, specifications and estimates of cost for proposed improvements and developments, for the erection of new structures, for the laying out of flower gardens, the beautification of triangles, malls and plazas, etc., a great deal of time was consumed in the supervision of the actual execution of these designs.

Also all architectural work connected with the erection of new buildings or the reconstruction of old ones, was accomplished by this Bureau.

Since most of our parks are either in a wholly undeveloped state, or a partially developed one, a vast amount of work was accomplished of a permanent nature. Quite a little work was performed entirely by departmental labor under my supervision and inspection.

A detailed summary of these accomplishments follow :

The greenhouses at Woodhaven and Myrtle Avenue, Forest Park, where annually are propagated over 70,000 plants and where a Chrysanthemum Show is given for the public during the three weeks prior to Thanksgiving Day, have been in a dilapidated state for some time. They were also inadequate for the increasing amount of plants that were being raised each year. It was therefore necessary to demolish Greenhouse No. 1 and the work room and in their place to erect a modern palm house and greenhouse and work-room. This job was completed in the early part of 1926 at an estimated cost of \$36,953.00—the work including plumbing and heating installation.

In the early spring of 1926 work was completed on the reconstruction and restoration of the Golf Links in Forest Park. This is the only municipal golf course in the Borough of Queens and is heavily patronized. The problem of keeping this course in first-class condition is therefore a big one. The expenditure of \$45,000 for the permanent improvement of this excellent pleasure ground was considered a wise investment. The work in detail consisted of the following measures :

The reconstruction of three stone tees and three putting greens; top-dressing and seeding of two greens; grading, top-soiling and sodding hills; ploughing, harrowing and seeding fairways; draining and filling in ponds and gullies; construction of four sets of wooden stairways; clearing land of trees; the restoration of two putting greens, and the installation of 1500 linear feet of water supply pipe.

For the benefit of the citizens comprising the Richmond Hill-Kew Gardens-Forest Hills communities a bridle path was constructed in Forest Park in the vicinity of the Richmond Hill entrance. A wooded section with pleas-

ant rolling contours was chosen, beginning at one end of Memorial Drive on the north side of the Main Drive. The path describes an irregular loop about a mile in length; the natural dirt surface of the path provides an ideal cushion for the horses. The work, which was performed entirely by departmental labor, included the necessary grading and clearing of trees; a rustic entrance was also erected.

Plans and specifications were prepared and work supervised for the necessary alterations in Jackson House, which is located adjacent to the plot on which the famous "Weeping Beech" and the "Golden Larch" stand. The house is used as a home for the Caretaker and as a meeting room and reception hall for various historical societies. The property was formerly owned by the Jackson Estate and is now known as Jackson Park. Many visitors are attracted annually to this spot because of the unique tree which is maintained in a fine state of preservation. The tree, which is a freak of nature, is regarded as the finest example of its species in the country. It was brought over from Holland almost 200 years ago. The trunk at the base has a circumference of 20 feet, and the limbs, which reach the ground, have a spread of about 80 feet—enough to entirely conceal about 200 people who might stand near it. The work involved consisted of the removal of two partitions on the first floor, which combined two large rooms and the reception hall, converting these two into one large room for meetings and lectures.

Plans and specifications were prepared and work supervised in the construction of a modern Comfort Station at Linden Park, Corona. This building is the first of its kind in the Borough and is a model of sanitary engineering. It is a one-story structure, of red-faced brick with an asbestos shingle roof. There are concrete floors throughout and a vitrolite tile for toilet partitions. Natural ventilation registers are situated over each compartment and an automatic flushometer system provided. The basement is given over to a boiler room and storage room for tools and supplies, etc. Concrete steps lead up to the front and side entrances which combine to form a terrace. There are also two separate rooms for male and female attendants. The estimated cost for this job amounted to \$25,000; work was begun in the fall of 1926 and will be completed in the late spring of 1927.

Anawanda Park, Ridgewood, located at Stanhope St., and Grand View Avenue, is a site which has been practically undeveloped, although it lies in a thickly populated district and is the only park which the community has. A design was therefore prepared for the approval of the Board of Estimate and Apportionment, showing the proposed development of this tract. The amount estimated to be required for the completion of the proposed improvements was \$188,272. The following features were included in the design:

Baseball diamond, tennis courts, children's playfield, wading pool and running track, the inside area of which was to be flooded in winter for skating. Also a combined comfort station and bandstand, concrete walks, wrought iron boundary fences, trees and shrubbery, and drinking fountains.

The triangular plot bordering the two main highways in Corona was for some time an eyesore to the community. This plot is situated at 51st Avenue, 108th St., and Corona Avenue, Corona Heights. It was finally decided to convert this into a small park where the mothers of the community might take their children and rest in peace and safety. Consequently a design was prepared and the construction work supervised for the improvement of this plot. All the work was performed by departmental labor. It included the following items:

Regulating and grading; installation of water and drainage pipes; construction of cement walks; erection of wrought iron picket fence bordering the entire plot; top-soiling and grass seeding; erection of concrete drinking fountain and of a wooden flagpole.

At Bayside, L. I., is a large tract of beach land known as Crocheron Park, which is in a wholly undeveloped state. This is only one of a number of parks in this borough which are sorely in need of improvement if they are ever to be of service or beauty to the neighboring communities. A preliminary plan was prepared for the proposed development of this site—to cost about \$354,627.00. The main features included:

Baseball grounds, tennis courts, running track, playfield, field house, comfort station and bandstand, together with concert grove, roads, paths, and the enlarging of the existing pond for ice skating use in Winter.

A design was prepared for the development of Leavitt Park, Flushing, which is at present nothing more than a sunken field with an open sewer running through the northern end,—a marshy, ugly sight which provides a fine breeding place for mosquitoes and other pests. The other end has been converted into a rough baseball diamond by the boys of the Flushing High School nearby. The citizens of this community have been agitating for the improvement of this spot for years. The principal features of the proposed development (which would require an expenditure of \$163,012) include:

Walks, water supply system, drainage, baseball grounds, tennis courts, artificial pond to be used for wading and ice skating in Winter; a children's playfield and shelter house, a combined comfort station and field house, wrought iron boundary fence, trees and shrubbery.

Prepared plans and specifications for the erection of a combined Golf House and Comfort Station to be located at the Glendale entrance to Forest Park on the site of the old Brooklyn and Forest Park Golf Club House, which covered an area of two acres. The plans were submitted to the Art Commission and approved. The cost was estimated at \$30,000 and includes the construction, plumbing and heating work. The structure is to be a one-story building and basement, with a concrete foundation, made of stucco with red-faced brick for the base. The roof to be of red asbestos shingle. There will be locker rooms for men and women, showers on the main floor and toilet facilities for men and women, not only for golfers but for the general public also.

A design was also drawn up for the general improvement of this Glendale entrance to Forest Park at Myrtle Avenue and Dry Harbor Road. The estimated cost of the development is \$40,000. The work will include the construction of an asphaltic roadway and concrete walks leading into the park and the proposed golf house. The old bridge over the transverse road, located about 200 feet south of Myrtle Avenue, will be eliminated. The embankments and knolls in this area will be leveled and graded, affording an unobstructed view of the interior of the park from the avenue. This section has long been an eyesore to the community and the proposed changes will work an improvement which has long been desired, making of this entrance, which is one of the principal entrances to the park, a dignified and pleasing sight.

A similar design was prepared for the improvement of the Richmond Hill entrance to Forest Park, at Myrtle Avenue and 109th Street. This entrance has already been enhanced by the erection of the Buddy Memorial monument, a gift from the citizens of Richmond Hill, and by a large wooden flagpole with a costly bronze base. Close by is the little fishing pond known as Jackson's Pond, where children are permitted to fish. This site is a particularly attractive spot but entirely unimproved. It is estimated that at a cost of \$45,000 the entire area could be converted into a charming, dignified entrance, in keeping with the natural endowments of the tract. The present Drive, leading from Myrtle Avenue to the Main Drive and known as Memorial Drive, will be widened from its present dimension of nineteen feet to forty feet. The road will be of asphalt and will be flanked on each side with concrete walks and shade trees. The area in front of the monument will be made into an imposing plaza from which numerous foot-paths will diverge, creating a suitable background for the monument and flagpole (which now stand isolated) and at the same time forming a safety zone at a rather dangerous traffic point. The terrain in the back of the monument, which is now a bare field, will be converted into a beautiful sunken garden patterned with numerous intersecting walks.

At Astoria Park a War Memorial was erected, and for this location plans had to be prepared and the erection of the monument itself supervised. This memorial is a gift to the City of New York from the Long Island City Memorial Association, in memory of those who served and died in the World War. It is built of light gray granite with the inscription cut into the stone. The parapet is about 5 feet 6 inches high, by 22 feet long and the stele is 6 feet wide by 9 feet high. The estimated cost was \$20,000. The memorial is located conspicuously on a slight eminence near the entrance to the Park, and can be easily observed from any point in the park or from the river. It makes a splendid addition to this ideally located pleasure spot.

Preliminary plans were prepared and an estimate of cost in the amount of \$190,000 for the construction of timber bulkhead and jetties at Rockaway Park. Great erosion had taken place at this beach owing to violent storms.



KISSENA LAKE—EAST END BEFORE DREDGING AND CLEANING

The foundations of the boardwalk were seriously threatened and the property lying back of the boardwalk also. The proposed work will prevent further erosion, protect the entire boardwalk and the private property lying back of it, and in addition reclaim all that portion of the beach which was washed away by the storms.

In the early part of 1926 work was completed on the new Comfort Station in Kissena Park, Flushing. Much time was given to the supervision of this work, the contract for which amounted to \$35,000. The building is made of brick with a stone foundation and a copper covered roof. There are toilet rooms for men and women, equipped with all the latest sanitary devices, also separate rooms for male and female attendants. The basement, covering the entire area of the building, is used for a boiler room, and storage space for tools, etc.

Plans were also prepared for proposed concrete steps to be located in the vicinity of the Comfort Station. These steps, connecting the upper level with the lower level, will lead from the entrance to the park lane, and will replace the original dirt walk. The cost of this improvement is estimated at \$5,000.

A design was prepared for the improvement of the northeasterly section of this park. The features of the design include the dredging and enlarging of the lake, thus eliminating the waste and marsh land and scrubby undergrowth which has been a breeding place for mosquitoes and other pests, at the same time improving and beautifying the lake itself. A concrete bridge will be constructed over the small stream which feeds the lake; roadways and walks will be laid out, thus providing better facilities for egress from the park at this point, which happens to be the only entrance for visitors using the New York and Queens County trolley system. This entrance to the park has always been a dangerous sector because of the inadequate road system for pedestrians. The trolley line skirts close to the park here and pleasure seekers who have lost the road have occasionally run on the tracks without warning and met with mishap. When the proposed plan is worked out there will be a railing around the danger zone and all paths, clearly marked, will lead to a well-defined trolley stop.

In order to create better facilities and provide the necessary privacy, a cashier's wire cage was constructed in the Golf House at Forest Park. Plans and specifications were prepared and its erection supervised. The contract cost was \$195.00.

Preliminary plans for the proposed additions to the Service Building in Forest Park were prepared. The purpose of this improvement is to provide additional space for garage and store rooms, and to give the climbers and pruners a repair shop. The present facilities are entirely inadequate; the old wooden shacks in the vicinity of the Greenhouses, which are now doing service, are not only inadequate but constitute a serious fire hazard. The estimated cost for this job amounts to \$125,000.

Preliminary plans were also prepared for the proposed additions to the

Administration Building in Forest Park. Conditions at the "Overlook" have changed tremendously since the old wings were added some years ago. In order to provide proper facilities to accommodate the administration staff, now quartered in an overcrowded area, it is proposed to add two more wings, equal in size to at least half the present area. The estimated cost for this undertaking amounts to \$45,000.

Designs were prepared for the erection of ornamental wrought iron fences bordering Linden Park, Corona, and College Point Park. The fences are necessary to protect the lawns, the trees and shrubs, and to give a finished touch to these parks. The estimated cost amounts to \$15,000.

Plans and specifications were prepared, and the erection supervised of a 77-foot steel flagpole, with halyards and large flag. The pole is set in a concrete foundation and is located in Victory Field, Forest Park. The estimated cost for the complete job amounted to \$488.00.

Respectfully submitted,

ANTHONY V. GRANDE,
Assistant Landscape Architect.



KISSENA LAKE—EAST END AFTER DREDGING AND CLEANING

REPORT OF THE ENGINEERING BUREAU

COMMISSIONER JAMES BUTLER,

Dear Sir:

The Engineering Bureau has been engaged in making preliminary surveys, and in the preparation of plans, estimates of cost, contracts, contract drawings and specifications for the development and improvement of various parks throughout the Borough. It has also been occupied with the preparation of data and requests to the Board of Estimate and Apportionment for appropriations of corporate stock and budgetary funds.

Supervision of park forces engaged in engineering maintenance and the supervision of construction work was also performed by employees of this Bureau.

Surveys were made in Kissena Lake Park for new roadways and paths; surveys were also made in connection with the proposed clearing out and deepening of the easterly end of the lake, where it is proposed to relocate the inlet and construct a new roadway from the intersection of Oak Avenue and 164th Street (Fenwick Avenue) crossing the inlet on a rustic stone and concrete bridge. The addition of several new paths in the vicinity should make this portion of the park much more attractive.

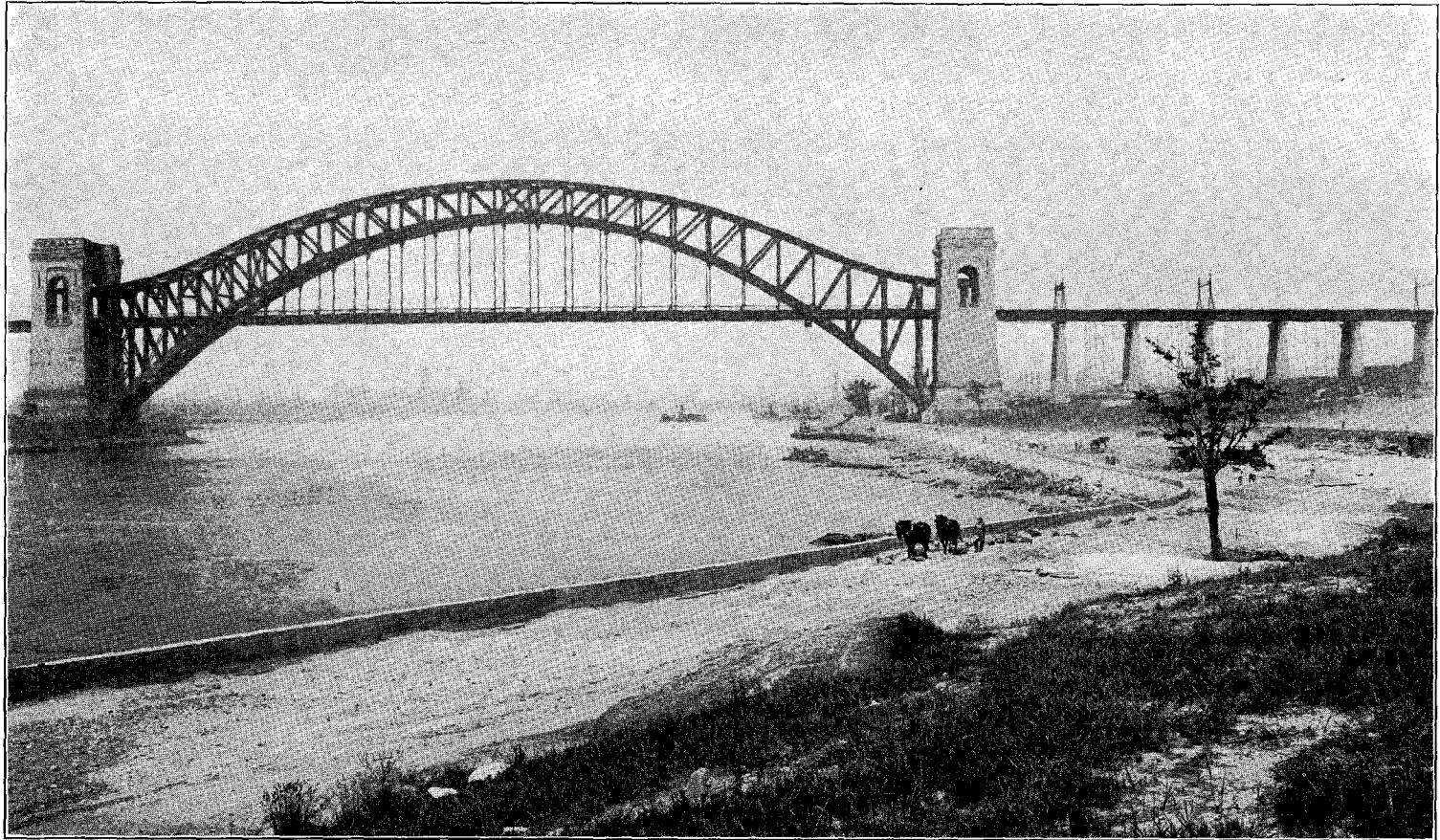
It is proposed to utilize the silt dredged from the lake bottom to convert a low swampy area into lawns and flower beds.

A survey was also made in the vicinity of the Comfort Station for the proposed new walk from the Rose Street entrance to the Pergola. The laying of this walk will permit the further improvement of the area about the Comfort Station.

Surveys were made at Leavitt Park in order to determine the amount of fill necessary to bring this area up to the proper grade for permanent improvements. Leavitt Park in its present condition is most unsightly and a menace to the health of the community.

Surveys were made at Crocheron Park for the improvement of the Pond, and in order to determine the character of the preliminary work necessary to develop this fine tract into an attractive and health-giving recreation center. The survey disclosed the necessity of a general clean up, as well as the removal of the majority of the bungalows before any consistent work of improvement could be started. Funds for the clearing and reconstruction of the dike around the pond will be sought at an early date as a preliminary step toward the complete development of this park.

In the early Fall of 1926 a request was made to the Board of Estimate and Apportionment for funds to pave the West Drive in Forest Park, from the Golf House to Myrtle Avenue. This old carriage road has been almost impassable due to erosion and lack of repairs. It was also desirable to pave this road in order to eliminate the road leading from the Golf House



ASTORIA PARK—SHORE DRIVE UNDER CONSTRUCTION

directly through the golf links to Myrtle Avenue, where traffic was in constant danger from stray golf balls.

This desirable improvement to the links cannot be made until the West Drive is opened to traffic. The sum of \$59,000 was obtained to pave this road with asphalt. The work will be done in such a manner that it may be widened when incorporated as a part of Interboro Parkway—a proposed traffic artery leading from Brooklyn toward the North Shore.

Shore Road Improvement, Astoria Park:

The contract for this improvement having been let to Connor Bros. for the sum of \$248,122.25, work was started in April. The main features of this contract are the construction of a concrete retaining wall, roadway and sidewalk, approximately 3,100 feet in length, extending along the river front from Hoyt to Ditmars Avenues.

Shortly after work had started on the retaining wall, it was found necessary to modify the contract in regard to the trap rock, specified for use in the wall, due to the scarcity of this material and the long delays experienced in obtaining extremely limited quantities. Washed quartzite gravel was finally substituted.

It was also found necessary to modify the type of coffer dam specified. As work progressed it was found that much of the retaining wall could be placed directly on submerged reefs and that the presence of these outcrops would necessitate the construction of other than timber coffer dam. This portion of the work was finally successfully carried out by building a wall of sand bags of rip rap and clay. Work was necessarily slow due to swift tides and heavy wash from passing crafts. Considerable fill will be placed in this work and as much time as possible should be allowed for settlement before either roadway, pavement or sidewalk are laid.

When finished, this driveway will furnish the Astoria section with one of the most attractive water front roads in the Borough, creating a remarkably fine view both up and down the river, with the beautiful New York & Connecting Railroad Bridge as a prominent feature crossing it at the northerly end. The promenade along the sea wall protecting the shore front of Astoria Park will undoubtedly be one of the most popular features of this partially developed park.

Freedom Drive Road, Forest Park:

The contract for the construction of a 26-foot concrete road, approximately 1,500 feet long, from the intersection of Freedom Avenue and Ashland Street to Myrtle Avenue, was completed this year. The price bid for this work was \$23,581.00. This road was formerly a narrow winding dirt road and a source of much annoyance to the neighboring community.

The new road rises gradually from Freedom Avenue, curving between well sodded banks on either side until at the crest of the hill it suddenly

plunges through a well-timbered area and sweeps around into Myrtle Avenue near the Bridge, carrying the Main Drive over that street. The work was done by the Charles Bennett Construction Co.

Jacob Riis Park—Transverse Road:

Work was started in March on the construction of the transverse road between Washington Avenue and the new ferry connecting Neponsit and Flatbush Avenue Extension, Brooklyn. This road, bordering Fort Tilden, consisted of a much worn macadam pavement, approximately twenty feet wide. With the establishment of ferry service the Park Department immediately recognized the necessity of improving this short cut between Brooklyn and the westerly Rockaways.

The new roadway consists of a resurfaced concrete pavement, forty feet wide and eight inches thick, laid in slabs approximately ten feet wide and thirty feet long. Each slab is completely separated from the adjoining slabs by the use of joint material; the slabs are carried over the curbs, which serve primarily to retain the beach sand bed of the road in place. This road receives much traffic and unfortunately empties into Washington Avenue—a narrow concrete road approximately twenty feet wide, which will eventually have to be reconstructed as a much wider thoroughfare.

This work was carried out by Fleming & Shepard, the contract price being \$49,234.00. It was necessary to divert traffic through the roads of the naval reserve during construction. It was found difficult to maintain a large force on this improvement due to remoteness from the labor market. The work on the whole was satisfactory.

Chain Link Fence—Victory Field:

In the early Spring of the year work of constructing the twelve foot chain link fence around three sides of the athletic field in Forest Park was started.

It was found necessary to erect this fence at as early a date as the season would permit in order to protect the field from the public during periods when it was made unsuitable for use due to weather conditions, and secondly, to protect the public on the outside of the field from stray baseballs, etc.

The fence is approximately 2,055 feet long, with gates opening on Myrtle Avenue, Woodhaven Boulevard and Forest Park Drive, giving access to the field from all directions. The specifications called for a chain link mesh twelve feet wide, in one piece, and heavily galvanized after weaving by the hot dip process to insure a heavy coating of spelter. The contract was successfully carried out by the Page Steel & Wire Co. The bid price being \$6,411.60.

Sea Wall—Rainey Park:

In November, 1925, work was started on the repairs to the sea wall at

Rainey Park. Due to the action of the swift tides, ice, and possibly some defect in construction, an alarming amount of erosion had occurred. Cavities extended entirely through the wall in a number of places and along practically its entire length, resulting in the sudden collapse of a portion of the cinder track along its crest.

These cavities were so deep that it was found advisable to insert steel dowels in the wall and place reinforcing bars before pouring the concrete. Much difficulty was experienced with this work due to tides and the difficulty of properly adjusting forms, but the job was finally finished satisfactorily in the early Spring of this year. The work was performed by the C. S. Hogan Co., Inc., the amount being \$5,148.00.

Pump in Golf House, Forest Park:

Much complaint had been made by patrons of the Forest Park Links about the very limited supply of water available for showers and other purposes in the Golf House.

The supply for this building is derived from a tank located on a structure placed on rising ground to the west of the house. Due to the increased demand on the water supply of the Borough, caused by a suddenly accelerated development, it was impossible to maintain sufficient pressure in the mains to furnish a regular and sufficient supply to the tank.

In order to remedy this inconvenient and unsanitary condition, this department installed an electrically driven triplex pump of sufficient duty to keep 27,000 gallons of water in the tank, thereby also removing a serious fire hazard. The work was performed by Helling-Barnes, Inc., price being \$865.00.

Long Island R. R. Bridges:

During the Fall and Winter the work of reconstructing the bridges carrying the Main Drive in Forest Park over the Rockaway Beach Division and the Montauk Division of the Long Island Railroad was undertaken.

The Main Drive in Forest Park was constructed in 1896-7 and was laid out approximately eighteen feet wide to accommodate light carriage traffic. This was before the era of the automobile, and consequently the bridges carrying the driveway over the L. I. R. R. were of correspondingly light construction.

These old bridges were of steel bent and timber deck construction. Bridge No. 1, crossing the Rockaway Beach Division, was approximately 218 feet long, carrying a roadway 19.5 feet wide and two 6.6-foot sidewalks. Bridge No. 3, crossing the Montauk Division, was 127 feet long, with 19.25 roadway and two 8.08-foot sidewalks.

The order of the Transit Commission, in Case No. 2,682, to the L. I. R. R. to reconstruct these bridges was appealed in 1923, and it was not until October, 1925, that the railroad accepted the Commission's order and signified their willingness to proceed with the work.

The original plans of the department called for taking down and cleaning the members and reconstructing to a width of 26 feet, also renewing the wooden decks. The plans finally approved provided for additional lines of columns and girders to carry an over-all width of 47 feet, providing for a 30-foot roadway and two 7-foot sidewalks. The entire structure is to be encased in concrete and a concrete deck—11 inches thick—substituted for the wooden deck formerly proposed.

These bridges, as reconstructed, are designed to carry two lines of ten-ton motor trucks or one fifteen-ton motor truck on the roadway, and a uniform load of 60 lbs. on the sidewalks—all without exceeding the specified unit stresses in either the new work or the parts of the old structure which are retained.

The original ornamental iron fences will be replaced by massive concrete fences five feet high and eighteen inches thick. The bridges were given a panelled effect and those facing the roadway relieved by ribbing. The whole effect is very massive.

The general contract for these bridges was awarded to Henry Steers, Inc., of 17 Battery Place. The work is being carried on through the Winter in order that the public may be inconvenienced as little as possible.

When this improvement is thrown open to the public it will terminate a controversy of long standing and have remedied a very serious menace to the public.

Respectfully submitted,

EDWARD P. KING.

Assistant Engineer

REPORT OF THE FORESTRY BUREAU

COMMISSIONER JAMES BUTLER,

Dear Sir:

I beg to submit herewith a report of the work of the Forestry Bureau during the year 1926.

The labor performed by our staff of 62 men divides itself into a variety of duties, such as planting and transplanting trees and shrubs, trimming and spraying trees, combatting insect pests, developing the nursery stock, removing dead or diseased trees, filling cavities, answering complaints, etc.

The tree population of this Borough, in the city streets alone, now numbers about 400,000. In addition to this there are, of course, all the trees and shrubs to be cared for that flourish in our parks and malls and gores, in our public plazas and about the various public buildings which are given over to our supervision.

The citizens of this Borough take great pride in the appearance of their lawns and gardens. The requests for trimming of trees and for spraying during the season is almost overwhelming. Due to our highly inadequate force, these requests are often seriously delayed.

Great demands are also made upon this Bureau for the planting of trees in our city streets. A great many of these requests we are obliged to turn down because of the very small stock maintained at our nursery, and the inability to secure these saplings from outside nurseries.

The difficulty of purchasing a sufficient supply of saplings is not due entirely to lack of appropriation for this purpose, although that, too, constitutes a big factor. There is a calamitous scarcity of trees throughout this country. Deforestation is going on at a ruinous pace, without proper thought for the needs of the future. To develop a tree to its full growth requires over a generation of growth. When it is realized to what extent the tree life of our cities enhance the realty values of our communities, more attention will be paid to this vital element of our daily life.

For one thing, it is imperative to begin immediately to develop the stock of our own nurseries. At the old police training grounds in Flushing we have a tract of land, set aside for this purpose, which covers an area of twenty-two acres. The site is excellent and the soil is rich. In the course of the last decade this nursery has been allowed to deteriorate, principally because of lack of funds. The stock has diminished to about one-fourth its original quantity. To-day there are not more than 3,000 saplings being cultivated in this rich tract of land. Practically all of this stock has been donated to the City by private citizens who are interested in the work of the Park Department in this Borough.

These saplings comprise some twenty-odd varieties of tree, such as the Norway maple, Japanese maple, Oriental plane, elm, hazelnut, white pine,

Norway spruce, Austrian pine, linden, willow, red oak, viburnum, etc., together with such shrubs as the California privet, the Japanese barberry, and the Japanese euonymus. An adequate appropriation is urgently needed to increase our available stock and thus help to meet the ever-increasing needs of the Borough.

Probably one of the most important functions of the Bureau is its continuous warfare against insect pests. This is a problem which requires constant vigilance throughout the year, since the menace to tree life from this source is a grave one. There have been epidemics of pests in the past which have brought a trail of disaster in their wake. Prevention is the all important thing, and this is a phase of our work which is never neglected no matter how great the pressure may be on our small staff.

Our warfare against these pests has to be properly timed and carefully carried out, with especial consideration of the habits and life history of each species of pest. Among those pests which give us the greatest concern may be mentioned the following: the elm leaf beetle, the tussock moth, the cottony maple scale, the Fall webworm, the bag worm and the false tinder fungus. As a result of our great precautions no inroads were made during the year by any of these dread species. The excellent work that was accomplished in this direction was accomplished with an inadequate assortment of spraying equipment. Too much stress cannot be laid on the extreme importance of additional spraying material, since it is only through these provisions that we can successfully combat these enemies of our tree life.

More men and more materials—more equipment, that is what we respectfully urge to enable us to carry on the very important work of this department, for it must be evident to all concerned that the beauty and preservation of our parks and city streets is dependent in great measure upon the efforts of our staff of climbers and pruners.

Below is given an itemized list of the work carried out during the year:

Nursery:

Trees dug out.....	434
Trees trimmed.....	677
Trees transplanted.....	48
Trees and shrubs sprayed.....	700
Shrubs transplanted.....	93
Cultivating soil and cutting grass.....	342 days consumed
Shoveling snow and repairing tools.....	12 days consumed

City Streets:

Trees trimmed.....	9,273
Trees tarred.....	9,273
Trees removed.....	1,557
Trees inspected.....	5,118
Trees planted.....	1,608

Trees transplanted.....	117
Cavities filled.....	19
Trees sprayed.....	19,463

Parks and Gores:

Trees sprayed.....	1,497
Trees removed.....	192
Stumps removed.....	26
Trees trimmed.....	389

Respectfully submitted,

LOUIS THIESEN.
Forester

Corporate Stock and Tax Note Funds Requested in 1926 for Permanent Improvements

GROUP 1.

1. Rebuilding of Bridge, Forest Park Drive, Myrtle Avenue.....	\$75,000.00
2. Construction of Addition to Administration Building, Forest Park.....	45,000.00
3. Construction of Addition to Service Building, Forest Park.....	125,000.00
4. Construction of Two New Greenhouses, Forest Park.....	40,000.00
5. Construction of Twenty-four Tennis Courts, including Water Supply, Field House and Walks, Forest Park.....	95,000.00
6. Construction of Tennis Courts, Astoria Park.....	10,400.00
7. Anawanda Park Improvement	188,272.00
8. Baisley Park Improvement	100,000.00
9. Construction of Comfort Station and Shelter, Rockaway Park.....	45,000.00
10. Elimination of Old Road between Golf House and Myrtle Avenue, Forest Park	17,500.00
11. Improvement of Horseshoe Drive, Forest Park.....	45,000.00
12. Construction of Service Road, Forest Park.....	30,000.00

GROUP 2.

1. Exterior Sidewalks, Park Lane, from Union Turnpike to 115th St., Forest Park	\$21,200.00
2. Steps and Approach to Administration Building, Forest Park.....	3,700.00
3. Flushing Park, Construction of Fence.....	12,600.00
4. Astoria Park, Construction of Concrete Curbs for Running Track.....	3,400.00
5. Construction of Grand Stand and Locker Room (Victory Field) Forest Park	60,000.00
6. Construction of Walks and Parking Spaces (Victory Field), Forest Park	11,000.00
7. Sidewalks along the east side of Woodhaven Boulevard, from Myrtle Avenue South	5,000.00
8. Jackson Park (Weeping Beech) Fences (Flushing).....	3,500.00
9. Highland Park, Fences	52,500.00
10. Highland Park, Walks	16,540.00
11. Repaving of Forest Parkway.....	50,000.00
12. Improvement of Park Area in Vicinity of Greenhouses, Forest Park..	50,000.00

GROUP 3.

1. King Park, Paving of Bandstand Plaza with Hex. asphalt tile.....	\$4,000.00
2. King Park, General Repairs to King Mansion, including Central Heat- ing Plant, electric light, etc.....	15,000.00
3. Astoria Park, Improvement of North Section.....	85,000.00
4. Leavitt Park Improvement (Flushing).....	163,012.50
5. Construction of Asphaltic Concrete Roadways, Westerly Section of Forest Park	187,000.00
6. Construction of Walks, Westerly Section of Forest Park.....	43,500.00
7. Crocheron Park Improvement.....	354,627.00
8. Bowne Park Improvement, Cleaning Up, Grading, Removing Stumps, etc.	25,000.00
9. Lafayette Park Improvement.....	32,500.00
10. One Mile Mill Pond Park Improvement, Cleaning Up, Grading, Re- moving Stumps, etc.....	25,000.00
11. Upland Park Improvement.....	50,000.00
12. Upland Park, Construction of Comfort Station and Shelter.....	18,000.00

GROUP 4.

1. Rainey Park, Construction of Boundary Fence.....	\$15,000.00
2. Rainey Park, Extension of Concrete Sea Wall in Front of New Addi- tion	36,000.00
3. Rainey Park, Construction of Comfort Station.....	26,250.00
4. Sidewalks along Metropolitan Avenue, Forest Park.....	20,000.00
5. Jacob Riis Park, Washington Avenue, Construction of South Roadway	95,000.00
6. Jacob Riis Park Improvement.....	1,000,000.00
7. Kissena Park, Construction of Golf Course in Newly-acquired Extension	300,000.00
8. Kissena Park, Construction of Roadway and Walks.....	210,000.00
9. Flushing Park, Construction of Comfort Station and Shelter.....	36,500.00
10. Improvement of Triangular Plots and Park Areas in Streets.....	75,000.00

DEPARTMENT OF PARKS—BOROUGH OF QUEENS

PARKS

<i>Park</i>	<i>Acreage</i>	<i>Location</i>
Anawanda	5.1	Grandview Ave., Stanhope St., and Linden Hill Cemetery, Ridgewood.
Ashmead	0.27	Canal St., Park Pl., and South St., Jamaica.
Astoria	56.25	Barclay St., Hoyt Ave., Ditmars Ave. and East River, Astoria.
Baisley's Pond	75.00	Sutphin Blvd., Rockaway Blvd., and Baisley (Locust) Ave., South Jamaica.
Bowne	11.06	155th St., 29th Ave., 159th St., and 32nd Ave., Flushing.
College Point	1.14	5th Ave. and 18th St., College Point.
Crocheron	44.00	215th Pl., 34th (Maxwell) Ave., Little Neck Bay and 35th (Crocheron) Ave., Bayside.
Flushing	1.02	Broadway and Main St., Flushing.
Forest	538.00	Myrtle Ave., Union Turnpike, Park Lane (Ashland Ave.) and Cypress Hills Cemetery.
Highland	49.5	Highland Blvd., Cypress Ave., Vermont Ave., and Borough Line.
Jacob Riis	262.58	Neponsit, Rockaway.
Jackson	0.62	37th Ave. (Washington Pl.), 125th St., West of Parson Blvd., Flushing.
King	11.5	Fulton St., Alsop St., Ray St. and Shelton Ave., Jamaica.
Kissena Lake	219.24	Rose St., Oak Ave., North Hempstead Turnpike, Fresh Meadow Rd. and Jamaica Ave., Flushing.
Lafayette	0.9	Hillside Ave., 175 St., Warwick, Crescent and 173rd Sts., Hillside, Jamaica.
Leavitt	7.61	Myrtle Ave., Leavitt and Congress Sts., Flushing.
Linden	3.0	Lake St., Alburtis Ave., Hunt Pl. & Culver Pl., Corona.
Old Newtown Cemetery	0.87	Toledo and Court St., Elmhurst.
One Mile Pond	16.0	Merrick Road, near Central Ave., Jamaica.
Paupers' Burial Ground	3.2	Queens Ave., bet. 24th and 25th Sts., Flushing.
Rainey	8.09	Vernon Ave., at Graham Ave. and East River, Astoria.
Rockaway	17.87	Atlantic Ocean bet. Beach 110th and 126th Sts.
Upland	7.32	Highland Ave., 165th St. (Clinton Ave.), 85th (Glenn) Ave., and Upland P'kway (Gothic Drive), Jamaica.
Wayanda	3.0	Hollis Ave., near Springfield Rd., Queens.

TRIANGLES

0.5	Jackson Ave. and 5th St., Long Island City.
0.1	Jackson Ave. and 11th St., L. I. City.
0.1	Jackson Ave. and 12th St., Long Island City.
0.8	Vernon and Mott Aves.
0.2	Hoyt and Flushing Aves., Astoria.
0.004	5th St., Woodside and Roosevelt Aves., Woodside.
0.5	College Ave. and 13th St., College Point.
0.01	Myrtle and Cypress Aves., Ridgewood.
0.27	169th (29th) St. and Northern Boulevard (B'way), Flushing.
0.01	Roosevelt and Elmhurst Aves. and Case St., Jackson Heights.
0.23	Stone St. and Foster Ave. and Roosevelt Ave., Woodside.
....	Luona Ave., Way Ave. and Hunt Pl., Corona.
....	Borden Ave., Laurel Hill Blvd. and Laurel Hill Pl., Laurel Hill.
....	Borden, Jay and Willow Aves., Long Island City.
....	108th (51st) St., Corona and 51st Aves. (Radcliffe St.), Corona.
....	Clermont and Hebbard Aves. and Fresh Pond Road, Ridgewood.
....	Hazel and Hood Sts. and Ditmars Ave., Astoria.
....	B'way, 19th St. and Fairbanks Ave., Elmhurst.
....	B'way, Fiske and Polk Aves., Winfield.
....	Penelope St. at its junction with Woodhaven Ave., Woodhaven.
....	Archer Ave., Twombly Rd. and 151st St., Jamaica.

PARKING PLOTS

(Centre of Streets)

- 0.3 Jamaica Ave., from Crescent St. to 3rd Ave., Astoria.
- 0.65 Hayes Ave., from Junction Ave. to 43rd St., Corona.
- 0.91 Nott Ave., from Vernon to Jackson Aves., Long Island City.
- 0.09 4th Ave., between 17th and 18th Sts., College Point.
- 0.76 Rockaway Beach Blvd. (Washington Ave.), from Adirondack
Blvd. to Beach 149th St., Neponsit.
- 0.15 Beach 116th St. (5th Ave.) from Rockaway Beach Blvd.,
(Washington Ave.) to Rockaway Park.

PARKWAY

- 2.5 Forest Parkway—Jamaica Ave. to Forest Park.

STATISTICS OF PARKS AND PLAYGROUNDS INCLUDED IN THE MAP OF THE CITY ON JANUARY 1, 1926.

Borough	Population Bd. of Health Estimate for 1925	Area of Borough in Acres	Area of Parks in Acres	Total Number of Parks	Number of Parks Having Area of One Acre Or More	Population Per Acre of Total Area	Population Per Acre of Park Area	Park Area Expressed in Per Cent of Total Area	1925 Assessed Valu- ation of Real Estate and Special Franchises (Personal Property Excluded)
Manhattan	1,939,813	14,209	1,701.8	69	37	136.5	1,140	12.0	\$6,721,085,292
Brooklyn	2,206,181	47,448	2,572.8	55	41	46.5	857	5.4	2,918,566,535
The Bronx	874,323	27,355	4,046.6	75	28	31.9	216	14.8	1,074,284,721
Queens	718,423	70,321	1,376.8	98	28	10.2	522	1.9	1,013,547,506
Richmond	138,612	38,394	327.1	8	7	3.6	424	0.8	173,864,499
Entire City	5,877,352	197,727	10,025.1	305	141	29.7	586	5.1	\$11,901,348,553

1925 ASSESSED VALUATION OF PARKS

Borough	Parks Now Owned by City		Laid Out But Not Yet Owned by City		Total Assessed Valuation	Valuation of Parks Placed on Map Expressed in Per Cent. of Valuation of Real Estate and Special Franchises	Per Capita Investment in Parks Placed on Maps Based on Assessed Valuation
	Land	Land & Bldgs.	Land	Land & Bldgs.			
Manhattan	\$641,708,900	\$682,279,200	\$1,618,400	\$1,668,400	\$683,947,600	10.2	\$352.58
Brooklyn	90,190,250	95,863,200	1,768,960	1,990,060	97,853,260	3.4	43.45
The Bronx	58,211,600	63,887,100	2,155,100	5,863,100	69,750,200	6.5	79.78
Queens	9,402,820	10,117,520	297,910	412,735	10,530,255	1.0	14.66
Richmond	415,400	430,200	289,500	304,500	734,800	0.4	5.30
Entire City	\$799,928,970	\$852,577,220	\$6,129,870	\$10,238,895	\$862,816,115	7.2	\$146.80

Statistics taken from Report of Chief Engineer of Board of Estimate and Apportionment—1925.