

PREPARATION OF THE SITE
FOR THE
WORLD'S FAIR 1964-1965

SECOND SUPPLEMENTARY REPORT
MAINTENANCE OF TRAFFIC
DURING ARTERIAL CONSTRUCTION

FLUSHING MEADOW PARK

WORLD'S FAIR APPROACHES

1. GRAND CENTRAL PARKWAY
BROOKLYN-QUEENS EXPRESSWAY TO NORTHERN BOULEVARD
Widening from 3 to 4 lanes each way
2. GRAND CENTRAL PARKWAY
NORTHERN BOULEVARD TO KEW GARDENS
Widening from 3 to 4 lanes each way
3. GRAND CENTRAL PARKWAY
KEW GARDENS TO CLEARVIEW EXPRESSWAY
Widening from 2 to 3 lanes each way
4. NORTHERN BOULEVARD
Reconstruction to provide expressway connections between White-
stone Expressway and Grand Central Parkway
5. WHITESTONE EXPRESSWAY
Widening from 2 to 4 lanes each way
6. VAN WYCK EXPRESSWAY EXTENSION
New 6-lane expressway from Kew Gardens to Whitestone Expressway

. . THE CITY OF NEW YORK

July 25, 1960

Hon. Robert Moses
Chairman
Triborough Bridge and Tunnel Authority
Randall's Island
New York 35, New York

Dear Sir:

On April 18, 1960, we submitted an illustrated general report and a supplementary detailed report on the development of Flushing Meadow Park as a site for the World's Fair of 1964-1965.

Those reports outlined the problem of traffic maintenance. This second supplementary report expands the previous description and sets forth in detail recommended measures for maintaining traffic during the construction of the network of arterial highways, in the vicinity of Flushing Meadow Park, planned to serve the needs of the future and, at the same time, provide more adequate approaches to the World's Fair of 1964-1965.

The extensive arterial improvements planned in this comparatively restricted area comprise the reconstruction and widening of Grand Central Parkway, Northern Boulevard, Whitestone Expressway, and the construction of Van Wyck Expressway Extension.

Work on all these major routes must be carried out simultaneously in accordance with a rigid time schedule if its completion, within the relatively short time between now and the Fall of 1963, is to be accomplished. Consequently, complex problems of traffic maintenance arise.

The importance of keeping traffic moving during the period of construction, by appropriate staging of work and by convenient detours, cannot be overemphasized.

The recommended measures, which in the opinion of all agencies concerned will be effective in keeping traffic moving reasonably well, are summarized in the following pages.

It would be unrealistic to assume that the recommended staging and detours will eliminate all congestion and delays. At best traffic will move freely most of the time but, in periods of heavy congestion, motorists will automatically seek and use as by-pass routes major streets such as Hillside Avenue, Union Turnpike, 69th Road-Jewel Avenue and other local streets available.

69th Road-Jewel Avenue would need traffic signal work and some pavement widening to make it practicable as a by-pass, however, the traffic relief it would afford would make the expenditure worth while. The small amount of work required on this essential by-pass should be done with state and federal funds as a part of the whole detour system.

Occasional delays and inconvenience unfortunately will be unavoidable in work of such large scope and magnitude. Every effort will be made to keep them to a minimum and the motorist should look upon them with understanding, tolerance and equanimity.

Detailed plans showing the staging and temporary detours have been developed by consultants designated by the State Department of Public Works to prepare contract drawings for the various arterial highways involved. These detailed plans have been reviewed by us and by representatives of the State Department of Public Works, the Port of New York Authority, the Office of the Borough President of Queens, the Department of Traffic and the Police Department, have been modified to include some suggested improvements and have been approved. Complete sets of the detailed plans have been submitted to the Triborough Bridge and Tunnel Authority and the Department of Parks.

Respectfully submitted,

Clarke and Rapuano

Andrews & Clark

Richard C. Guthridge

1—GRAND CENTRAL PARKWAY—Between Brooklyn-Queens Expressway and Northern Boulevard.

This section of the parkway will be widened from six to eight lanes. During reconstruction, traffic in general would remain on the existing pavement. Temporary detours would be constructed at certain locations and when necessary direction of traffic would be reversed on the several roadways. Two lanes in each direction would remain open at all times and three lanes during rush hours.

Construction would be carried out in three stages.

Under Stage I, new bridges at Astoria Boulevard and Ditmars Boulevard would be built and a new span added to the existing 94th Street bridge while the 23rd Avenue bridge to La Guardia Airport, providing two lanes in each direction, would remain open; the three pedestrian bridges east of the airport would be removed; a temporary detour between 24th and 31st Avenues and other temporary connections would be built; portions of Astoria Boulevard, Ditmars Boulevard and the north and south service roads would be paved.

The Port of New York Authority has requested that during the construction of the additional span on the 94th Street bridge a temporary structure be built near it to provide two more lanes in each direction to La Guardia Airport.

Under Stage II, the lengthened 94th Street bridge providing two lanes to and from the airport would be opened and the 23rd Avenue bridge closed and reconstructed; the new Ditmars Boulevard bridge would be opened; traffic would be detoured onto existing and new permanent and temporary roadways; the old Astoria Boulevard bridge would be removed; the Brooklyn-Queens Expressway southbound ramp bridge would be reconstructed; portions of the parkway and temporary detours at the 85th Street and the Ditmars Boulevard bridges would be paved.

Under Stage III, the remaining portions of the parkway, Astoria Boulevard and the Brooklyn-Queens Expressway ramps would be paved while shifting traffic as required between the existing and the new roadways; the new Astoria Boulevard and the 23rd Avenue bridges would be opened to traffic; new pedestrian bridges east of the airport would be built.

BRONX
WHITESTONE
BRIDGE

CROSS ISLAND
PKWY.

WHITESTONE
EXPWY.

5 This eight-lane expressway and service roads will replace the present four-lane parkway and service roads. Service roads and two expressway lanes in each direction will be available throughout the period of reconstruction.

4 This arterial will be reconstructed to provide expressway connections between the Whitestone Expressway and the Van Wyck Expressway Extension on the east and the Grand Central Parkway and other major highways on the west. During construction three lanes in each direction, all permanent interchange connections and access to the Borough's asphalt plant and the Boat Basin would be kept open at all times. Traffic would be shifted from temporary roads to permanent roads as these are built and usable, and when the new Flushing River Bridge is completed, the old and new bridges would be used interchangeably for two-way traffic to permit the completion of construction.

NORTHERN BLVD

LAGUARDIA
AIRPORT

4

GRAND

WORLD'S FAIR

ASTORIA BLVD.

1 This section of the parkway will be widened from six to eight lanes. During reconstruction traffic in general would remain on the existing pavement. Temporary detours would be constructed at certain locations and when necessary direction of traffic would be reversed on the several roadways. Two lanes in each direction would remain open at all times and three lanes during rush hours.

BROOKLYN QUEENS
EXPWY.

LONG
ISLAND

CLEARVIEW EXPWY.
TO THROGS NECK BRIDGE

3 This section of the parkway will be widened from four to six lanes, keeping in use either two parkway lanes or three service road lanes in each direction at all times. In the constricted area between Parsons Boulevard and 164th Place where the right-of-way is only 150 feet wide, this would be accomplished by cantilevering the service roads over the parkway. Elsewhere between Kew Gardens and 170th Street walls would be required to retain the service roads, but the right-of-way is sufficiently wide not to require cantilevering. Necessary changes in profile in this area would require the complete reconstruction of the existing parkway. East of 170th Street the bridges would be widened and the parkway reconstructed with three lanes in each direction.

3

6 This new six-lane arterial will extend from the present northerly terminus of the Van Wyck Expressway to the Whitestone Expressway and Northern Boulevard, with interchanges at the Long Island Expressway, 69th Road-Jewel Avenue and Union Turnpike. Since this expressway is a new facility, there is no traffic on it to maintain or divert.

EXPWY.

JEWEL
AVE.

PARKWAY

VAN WYCK EXPWY.

TO IDLEWILD →

1964-1965

CENTRAL

RD.

2

69TH

2 This portion of the parkway will also be widened from six to eight lanes. This would be accomplished largely by building an additional lane on the outside of the existing lanes. As before, three lanes in each direction would be maintained in operation during rush hours and a minimum of two lanes in each direction at all times.

2—GRAND CENTRAL PARKWAY—Between Northern Boulevard and Kew Gardens.

This portion of the parkway will also be widened from six to eight lanes. This would be accomplished largely by building an additional lane on the outside of the existing lanes. As before, three lanes in each direction would be maintained in operation during rush hours and a minimum of two lanes in each direction at all times.

Construction would be carried out also in three stages.

Under Stage I, Roosevelt Avenue traffic would be detoured on temporary one-way structures connecting with 39th and 41st Avenues to permit the construction of a new bridge over the new southbound parkway; at the Long Island Rail Road the superstructure for an addition to the existing bridge would be built adjacent to its final position and rolled in on foundations previously built without interruption to railroad traffic; the existing on and off ramps in the vicinity of Roosevelt Avenue would be closed permanently; other on and off ramps would be replaced by new ramps with construction so phased as to permit traffic to enter and leave the parkway at all times; the existing pedestrian bridges south of the City Building would be reconstructed; the new Long Island Expressway collector-distributor bridges, the new Jewel Avenue bridge, two new pedestrian overpasses, most of the additional parkway lanes, and portions of the interchanges at Long Island Expressway and 69th Road would be constructed.

Under Stage II, temporary detours would be constructed; existing ramps would be closed and traffic diverted to ramps constructed under Stage I; the remaining portions of the parkway would be paved; the remaining portions of the 69th Road-Jewel Avenue interchange and of the Long Island Expressway would be completed; the pedestrian bridges north of the City Building and across the Long Island Expressway near the Amphitheatre would be reconstructed.

Under Stage III, the Long Island Expressway bridge over the Grand Central Parkway and adjacent pavement of the expressway would be rebuilt after traffic is diverted to the expressway collector-distributor roadways; the new span at 69th Road would be constructed with traffic detoured over the new Jewel Avenue bridge and the few small remaining pieces of ramp pavement would be completed.

3—GRAND CENTRAL PARKWAY—Between Kew Gardens and the Clearview Expressway.

This section of the parkway will be widened from four to six lanes, keeping in use either two parkway lanes or three service road lanes in each direction at all times.

In the constricted area between Parsons Boulevard and 164th Place where the right-of-way is only 150 feet wide, this would be accomplished by cantilevering the service roads over the parkway. Elsewhere between Kew Gardens and 170th Street walls would be required to retain the service roads, but the right-of-way is sufficiently wide not to require cantilevering. Necessary changes in profile in this area would require the complete recon-

struction of the existing parkway. During the construction of the bridges and retaining walls through traffic would use the present parkway lanes and local traffic the service roads to the extent permitted by construction. Upon the completion of the service roads traffic would be diverted to them and the parkway reconstructed.

East of 170th Street the bridges would be widened, the westbound parkway temporarily widened to four lanes, traffic diverted to it, the new three-lane eastbound parkway constructed and temporarily widened to four lanes by paving the shoulder, traffic shifted from the westbound to the eastbound lanes and the westbound three-lane parkway reconstructed.

Construction would be carried out in four stages.

Under Stage I, all utilities in the service roads west of 170th Street would be relocated. Traffic would be maintained on the four existing parkway lanes, on all cross streets and at least on a ten-foot emergency lane along each service road.

Under Stage II, temporary bridges would be built at Union Turnpike, Main Street and 188th Street to permit the demolition of the existing bridges and the building of the new ones; the Parsons Boulevard, 164th Street and 168th Street bridges would be rebuilt half at a time keeping one lane in each direction open at all times; a temporary pedestrian bridge would be provided at 168th Street; the existing bridges at Utopia Parkway, Midland Parkway and Francis Lewis Boulevard would be widened; simultaneously with the bridges the retaining walls and the service roads between Union Turnpike and Parsons Boulevard, between 164th and 168th Streets and between Tudor and Avon Roads would also be constructed.

Throughout this work through traffic would be maintained on the existing four-lane parkway, and local traffic would use the present service roads to the extent permitted by the construction operations.

Under Stage III, all bridges under construction in Stage II, except the Union Turnpike bridge, would be opened to traffic; the remaining half of the Parsons Boulevard, 164th Street and 168th Street bridges would be built; walls and service roads from Parsons Boulevard to 164th Street and from 168th Street to 170th Street would be constructed; between 170th Street and the Clearview Expressway the westbound parkway would be widened to provide two 22-foot roadways by a combination of new permanent, temporary and existing pavements, and all traffic would be diverted to it to permit the construction of the new eastbound parkway, center mall and ramps.

Throughout this stage through traffic would be maintained on the existing four lane parkway except for the diversion mentioned above. Local traffic would use the service roads except for the area between Parsons Boulevard and 164th Street where ten-foot lanes would be maintained for emergency traffic only.

Under Stage IV all bridges would be open to traffic; the eastbound and westbound parkway lanes and ramps would be constructed between Kew Gardens and 170th Street after diverting traffic to the service roads where three lanes would be maintained by prohibiting parking; between 170th Street and the Clearview Expressway traffic would be diverted to the east-

bound parkway, widened temporarily to four lanes by paving the shoulder, and the westbound parkway and ramps would then be completed.

4—NORTHERN BOULEVARD

This arterial will be reconstructed to provide expressway connections between the Whitestone Expressway and the Van Wyck Expressway Extension on the east and the Grand Central Parkway and other major highways on the west. During construction three lanes in each direction, all permanent interchange connections and access to the Borough's asphalt plant and the Boat Basin would be kept open at all times. Traffic would be shifted from temporary roads to permanent roads as these are built and usable, and when the new Flushing River bridge to be constructed as part of the Whitestone Expressway is completed, the old and new bridges would be used interchangeably for two-way traffic to permit the completion of construction.

Construction would be carried out in six stages.

Under Stage I, a six-lane temporary road would be built from Northern Boulevard and 114th Street to 126th Street south of the existing roadways, as well as other minor detours. This would permit the construction of portions of the new Northern Boulevard roadways, portions of the Van Wyck Expressway Extension connections and portions of the northbound and southbound Grand Central Parkway at the new locations.

Under Stage II, another temporary detour would be provided between Northern Boulevard and Ditmars Boulevard, the new Northern Boulevard roadways in the Boat Basin area would be built and temporary access roads to the new Flushing River bridge would be provided.

Under Stage III, the interchange at Astoria Boulevard and Northern Boulevard over Grand Central Parkway would be constructed, and if the new Flushing River bridge is completed traffic would be diverted to it.

Under Stage IV, various existing gaps would be closed, portions of the newly constructed pavement would be utilized and some of the temporary detours discontinued.

Under Stage V, Grand Central Parkway traffic, which hitherto had been using the existing parkway lanes, would be separated, with southbound traffic diverted to the new southbound lanes and northbound traffic using all the old parkway lanes. More of the newly constructed Northern Boulevard roadways would be utilized and only a few minor temporary by-passes would continue in operation. Some additional gaps would be completed.

Under Stage VI, all remaining work would be completed, northbound traffic would be diverted to the old Flushing River bridge, and Whitestone Expressway southbound traffic would use the new Flushing River bridge exclusively.

5—WHITESTONE EXPRESSWAY

This eight-lane expressway and service roads will replace the present four-lane parkway and service roads. Service roads and two expressway lanes in each direction will be available throughout the period of reconstruction.

The work would be carried out in three stages.

Under Stage I, construction of a new four-lane bridge over the Flushing River would be started, and a new west service road from 144th Street to College Point Causeway would be constructed.

Under Stage II, temporary ramps would be provided between the new west service road and the existing parkway; construction of the new Flushing River bridge would continue; the new four-lane southbound parkway would be constructed after diverting traffic from the old to the new west service road; new structures would be built at 14th Avenue and 20th Avenue after detouring cross-traffic onto temporary structures; the realigned portion of the east service road would be constructed.

Under Stage III, a temporary connection would be provided between the new Flushing River bridge and the existing parkway; southbound traffic would be diverted to the new expressway lanes; the existing Flushing River bridge would be closed and two-way traffic would be carried by the new bridge; the southerly approaches to the existing bridge would be reconstructed; the existing parkway would be resurfaced while maintaining northbound traffic thereon, and finally the east service road would be resurfaced.

6—VAN WYCK EXPRESSWAY EXTENSION

This new six-lane arterial will extend from the present northerly terminus of the Van Wyck Expressway to the Whitestone Expressway and Northern Boulevard, with interchanges at the Long Island Expressway, 69th Road-Jewel Avenue and Union Turnpike. Since this expressway is a new facility, there is no traffic on it to maintain or divert.

The expressway will cross Flushing River under Roosevelt Avenue on a trestle, then cross over the Long Island Rail Road and proceed south through Flushing Meadow Park passing over the Long Island Expressway, under 69th Road-Jewel Avenue and over Grand Central Parkway, Interborough Parkway and Union Turnpike.

River traffic and railroad traffic would be maintained at all times; two-way traffic on park roads would be continued; three-lane traffic in each direction would be maintained at the Long Island Expressway where some temporary minor detours would be required; a temporary four-lane detour with necessary pipe culverts would be constructed between Meadow and Willow Lakes to permit the construction of a new bridge over the expressway at 69th Road-Jewel Avenue. The construction of the Interborough Parkway-Union Turnpike interchange would not affect traffic materially but would require the existing entrance from the service road to eastbound Interborough Parkway to be closed permanently. Traffic over the present Hoover Avenue bridge would be detoured on other city streets to permit the reconstruction of the bridge; the pedestrian overpass at 82nd Avenue would be closed during its reconstruction but pedestrian traffic would be maintained at all times by phasing construction so that either the Hoover Avenue bridge or the pedestrian bridge is available; two lanes of traffic both ways would be maintained at all times during the construction of the connection between the new expressway and the existing Van Wyck Expressway.